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SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2008

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from to

Commission file number: 001-34207

Dynavax Technologies Corporation

(Exact name of registrant as specified in its charter)

Delaware	**33-0728374**
(State or other jurisdiction of incorporation or organization)	*(IRS Employer Identification No.)*

2929 Seventh Street, Suite 100
Berkeley, CA 94710-2753
(510) 848-5100

(Address, including Zip Code, and telephone number, including area code, of the registrant's principal executive offices)

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class:	**Name of Each Exchange on Which Registered:**
Common Stock, $.001 Par Value	**The Nasdaq Stock Market LLC**
Preferred Shares Purchase Rights	

Securities Registered Pursuant to Section 12(g) of the Act:
Common Stock, par value $0.001 per share
(Title of Class)

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐ No ☒

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of the registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☒

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer ☐	Accelerated filer ☒	Non-accelerated filer ☐ (Do not check if a smaller reporting company)	Smaller reporting company ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes ☐ No ☒

The aggregate market value of the voting stock held by non-affiliates of the registrant, based upon the closing sale price of the common stock on June 30, 2008 as reported on the Nasdaq Global Market, was approximately $56,503,897. Shares of common stock held by each officer and director and by each person known to the Company who owns 5% or more of the outstanding common stock have been excluded in that such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

As of February 27, 2009, the registrant had outstanding 39,922,469 shares of common stock.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Proxy Statement for the registrant's 2009 Annual Meeting of Stockholders are incorporated by reference into Part III of this Form 10-K.

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DYNAVAX TECHNOLOGIES CORPORATION

FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934 which are subject to a number of risks and uncertainties. All statements that are not historical facts are forward-looking statements, including statements about our business strategy, our future research and development, our product development efforts, our ability to commercialize our product candidates, the timing of the introduction of our products, the effect of GAAP accounting pronouncements, the potential for entry into collaborative arrangements, uncertainty regarding our future operating results and our profitability, anticipated sources of funds as well as our plans, objectives, expectations and intentions. These statements appear throughout our document and can be identified by the use of forward-looking language such as "may," "will," "should," "expect," "plan," "anticipate," "believe," "estimate," "predict," "future," "intend," or "certain" or the negative of these terms or other variations or comparable terminology.

Actual results may vary materially from those in our forward-looking statements as a result of various factors that are identified in "Item 7—Management's Discussion and Analysis of Financial Condition and Results of Operations" and elsewhere in this document. No assurance can be given that the risk factors described in this Annual Report on Form 10-K are all of the factors that could cause actual results to vary materially from the forward-looking statements. All forward-looking statements speak only as of the date of this Annual Report on Form 10-K. Readers should not place undue reliance on these forward-looking statements and are cautioned that any such forward-looking statements are not guarantees of future performance. We assume no obligation to update any forward-looking statements.

This Annual Report on Form 10-K includes trademarks and registered trademarks of Dynavax Technologies Corporation. Products or service names of other companies mentioned in this Annual Report on Form 10-K may be trademarks or registered trademarks of their respective owners.

PART I

ITEM 1. BUSINESS

Overview

Dynavax Technologies Corporation, a clinical-stage biopharmaceutical company, discovers and develops a diversified pipeline of novel Toll-like Receptor (TLR) product candidates. Based on our proprietary technologies, these products specifically modify the innate immune response to infectious, respiratory, autoimmune, and inflammatory diseases. We have partnerships with leading pharmaceutical companies such as GlaxoSmithKline (GSK), AstraZeneca AB (AstraZeneca), and Novartis Vaccines and Diagnostics, Inc. (Novartis) as well as funding from Symphony Dynamo, Inc. (SDI) and the National Institutes of Health (NIH).

Our diversified pipeline of product candidates includes:

- HEPLISAV™, a Phase 3 hepatitis B vaccine
- SD-101, a Phase 1b hepatitis C therapy developed under our SDI funding agreement
- DV-601, a Phase 1b proprietary hepatitis B therapy
- Our Universal Flu vaccine, a preclinical vaccine under a supply and option agreement with Novartis
- AZD1419, a preclinical asthma therapy partnered with AstraZeneca
- DV1079, a preclinical autoimmune and inflammatory disease therapy partnered with GSK

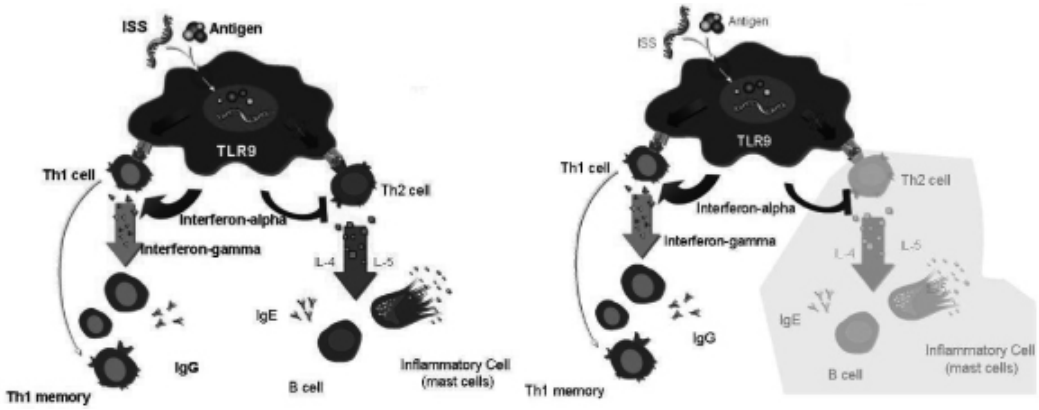
Our objective is to build a product-based business with a portfolio of products focused on serious unmet medical needs. Our diversified pipeline includes TLR agonists and inhibitors and targets infectious, respiratory, autoimmune, and inflammatory diseases. We discover novel TLR product candidates based on our proprietary

technologies, including immunostimulatory sequences (ISS) and immunoregulatory sequences (IRS), which are short DNA sequences. ISS enhance the ability of the immune system to fight disease and control chronic inflammation by specifically targeting TLRs found on a specialized subset of immune cells to alter the innate immune response. IRS specifically inhibit TLRs associated with autoimmune and inflammatory diseases.

Our strategies are focused on discovering novel compounds based on our proprietary technologies and developing our diversified pipeline of product candidates through partnerships with leading pharmaceutical companies or funding agreements. For our partnered products, we seek to leverage the experience and resources of our pharmaceutical partners to further the development and potentially commercialize these product candidates. For our other proprietary product candidates, we are developing these to evaluate the clinical potential with a goal of commercializing these products ourselves or through pharmaceutical partnerships.

The Immune System

The immune system is the body's natural defense mechanism against disease-causing agents, such as bacteria, viruses and parasites, and plays an important role in identifying and eliminating abnormal cells, such as cancer cells. The body's first line of defense is an immediate, rapid response—called innate immunity—that protects the body during the days or weeks needed for a second, longer-term immune response—termed adaptive immunity—to develop.



The diagram above is a visual representation of how the immune system reacts when it encounters antigen, or a foreign substance. The immune system's response to any foreign substance involves a cascade of events orchestrated by specialized immune cells, leading to either a Th1 or a Th2 response, as illustrated in the above diagram. Dendritic cells, a type of immune cell, have two key functions in the initial, innate immune response. First, they produce cytokines that help to kill viruses and bacteria. Second, they ensure that pathogens and other foreign substances are highly visible to specialized helper T cells, called Th1 and Th2 cells, which coordinate the longer-term adaptive immune response. Dendritic cells recognize different types of offending substances and are able to guide the immune system to make the most appropriate response. When viruses, bacteria and abnormal cells are encountered, dendritic cells trigger a Th1 response, whereas when a parasite infection is detected, dendritic cells initiate a Th2 response. Th1 and Th2 responses last for an extended time in the form of Th1 and Th2 memory cells, conferring long-term immunity.

The Th1 Response

The Th1 response involves the production of the body's most potent anti-infective weapons—specific cytokines, including interferon-alpha, interferon-gamma and interleukin 12 (IL-12), as well as killer T cells, a specialized immune cell. In addition, protective IgG antibodies are generated that also help rid the body of foreign antigens and allergens. Once a population of Th1 cells specific to a particular antigen or allergen is produced, it persists for a long time in the form of memory Th1 cells, enabling a more rapid and powerful

immune response the next time exposure to that particular antigen or allergen occurs. An insufficient Th1 response to an infection can result in chronic disease, whereas an inappropriate Th1 response can cause diseases such as rheumatoid arthritis.

The Th2 Response

Activation of the Th2 response involves the production of other cytokines, IL-4, IL-5 and IL-13, which attract inflammatory cells such as eosinophils, basophils and mast cells, to destroy the invading organism. The Th2 response also leads to the generation of a specialized antibody, IgE, which can recognize antigens and allergens, and further enhance the protective response. An inappropriate Th2 immune response to allergens, such as plant pollens, can lead to chronic inflammation and result in allergic rhinitis, asthma and other allergic diseases. Subsequent exposures to the same allergens can reactivate memory Th2 cells, sustaining inflammation and leading to chronic disease.

Immunostimulatory Sequences (ISS)

Our proprietary technology platform includes ISS, which are short DNA sequences that enhance the ability of the immune system to fight disease and control chronic inflammation. ISS activate the innate immune response by specifically targeting TLR9, which is found on a specialized subset of immune cells.

ISS work by changing or reprogramming the immune responses that cause disease rather than just treating the symptoms of the disease. Since TLR9 is found only in a specialized subset of dendritic cells, ISS do not cause a generalized activation of the immune system and redirect the response of only those T cells involved in a given disease. When linked to or combined with antigens, ISS help generate memory Th1 cells that can reprogram the immune system to induce long-lasting therapeutic effects.

We have developed a number of proprietary ISS compositions and formulations that make use of the different ways in which the innate immune system responds to ISS. Depending on the indication for which ISS is being explored as a therapy, we use ISS in different ways.

ISS Linked to or Combined with Antigens

For viral disease and bacterial infections, ISS are linked to or combined with antigens to increase the visibility of the antigen and stimulate an immune response that will attack and destroy infected or abnormal cells. This treatment induces a highly specific Th1 immune response and generates memory T cells for long-term protection. This treatment has the potential to be used synergistically with other therapies.

ISS Alone

For viral and respiratory diseases, ISS can be used alone to modify the course of this disease by reprogramming the immune system. ISS suppress the Th2 inflammatory response caused by any number of allergens to modify the underlying cause of inflammation as well as provide symptomatic relief.

Advanced ISS Technologies

For most of our preclinical programs, we use our advanced proprietary technologies that modify the molecular structure of ISS to significantly increase their versatility and potency, allowing use of less ISS. These second-generation ISS stimulate specific immune responses, including potent interferon-alpha induction.

Immunoregulatory Sequences (IRS)

Our proprietary technology platform includes IRS, which are short DNA sequences that specifically inhibit TLRs associated with autoimmune and inflammatory diseases. TLRs are key receptors of the innate immune

system that can induce strong inflammatory responses. In animal studies as well as in-vitro, our TLR inhibitors have demonstrated broad potential in multiple autoimmune diseases models, such as lupus, inflammatory skin disorders, and rheumatoid arthritis.

These first-in-class endosomal TLR inhibitors specifically target two types of immune cells, B cells and Plasmacytoid dendridtic cells (PDC) that selectively express TLR7 and TLR9. These receptors play a key role in the overproduction of interferon alpha by PDC and in the presence of anti-nuclear autoantibodies generated by B cells, which are hallmarks of some autoimmune diseases such as lupus. Because our TLR inhibitors target only TLR7 and TLR9, they do not inhibit all sources of interferon nor do they affect all antibody responses from B cells. This suggests that these TLR inhibitors would not cause broad immunosuppression.

Primary Development Programs

Our primary development programs are as follows:

Product Candidate	Clinical Indication(s)	Phase	Partnership/Funding Support
Infectious Diseases			
HEPLISAV	Hepatitis B prevention	Phase 3	Dynavax
SD-101	Hepatitis C infection	Phase 1b	Symphony Dynamo Inc.
DV-601	Hepatitis B infection	Phase 1b	Dynavax
Respiratory Diseases			
Universal Flu vaccine	Influenza prevention	Preclinical	Novartis (Supply and Option Agreement); NIH
AZD1419	Asthma	Preclinical	AstraZeneca AB
Autoimmune and Inflammatory Diseases			
DV1079	Autoimmune and inflammatory diseases	Preclinical	GlaxoSmithKline; NIH

HEPLISAV Hepatitis B Vaccine

Our lead product candidate is HEPLISAV, a Phase 3 hepatitis B vaccine that has shown clinical benefits in our trials. Our 9 clinical trials conducted over the past 10 years have included approximately 2,500 individuals vaccinated with HEPLISAV. In August 2008, HEPLISAV met its primary endpoint in the largest clinical trial conducted to date, a Phase 3 trial known as PHAST (Phase 3 HeplisAv Short-regimen Trial).

HEPLISAV is based on our proprietary ISS that specifically target TLR9 to stimulate an innate immune response. This vaccine combines our first generation 1018 ISS with hepatitis B surface antigen (HBsAg) manufactured in our Dynavax Europe facility in Düsseldorf, Germany. HEPLISAV is aimed at unmet needs in the vaccination of adults and end-stage renal disease (ESRD) patients by providing an increased response with fewer doses in a shorter period of time.

Clinical development was suspended in March 2008, when the U.S. Food and Drug Administration (FDA) placed a clinical hold on the two HEPLISAV Investigational New Drug (IND) Applications, one for healthy adults and one for ESRD patients. The FDA requested a review of the clinical and preclinical safety data related to HEPLISAV, including all available information about a single case of Wegener’s granulomatosis, an uncommon form of vasculitis. In October 2008 and February 2009, the FDA requested additional information which the agency indicated may be helpful in its risk assessment of the two INDs and may assist in finding a development path forward for HEPLISAV for healthy adults and ESRD patients. At present, the two INDs remain on clinical hold in the United States. HEPLISAV has not been put on clinical hold by any regulatory authority outside the United States.

We are seeking clarification of the remaining regulatory requirements for the development and licensure of HEPLISAV in the United States and Europe. There can be no assurance as to whether HEPLISAV can be further developed, or even if further development is permitted, that successful clinical development can occur in a timely manner or without significant additional studies or patient data. If the regulatory feedback favors continued development, we plan to pursue a partnership or financing arrangement to complete HEPLISAV's development. Dynavax holds all development, manufacturing, and commercialization rights to HEPLISAV following Merck & Co., Inc's termination of our collaboration agreement in December 2008.

Clinical Results

In the largest clinical trial conducted to date, known as PHAST, HEPLISAV met its primary endpoint. The multi-center PHAST trial evaluated more than 2,400 subjects from 11 to 55 years of age in Canada and Germany. This Phase 3 trial randomized subjects three to one and evaluated a two-dose regimen of HEPLISAV administered at 0 and 1 month, compared to a three-dose regimen of Engerix-B®[1] administered at 0, 1, and 6 months. The primary endpoint was the proportion of subjects who developed protective antibody to hepatitis B after receiving a full course of vaccination.

Immunogenicity results from this trial demonstrated that subjects receiving HEPLISAV were seroprotected with fewer doses and at an earlier time point than subjects receiving Engerix-B. Results showed 95.1 percent of subjects who received two doses of HEPLISAV at 0 and 1 month developed protective antibody to hepatitis B when measured at 12 weeks. This compared to 81.1 percent of subjects who received three doses of Engerix-B at 0, 1, and 6 months when measured at 28 weeks.

Overall safety results in the PHAST trial showed the profile of HEPLISAV appeared similar to Engerix-B, with the exception that subjects who received HEPLISAV had a higher risk of developing injection site swelling, redness, and pain compared to those who received Engerix-B. The incidence of Adverse Events (AE) was 81.9 percent for the HEPLISAV group, compared to 81.4 percent for the Engerix-B group. The incidence of Serious Adverse Events (SAEs) was 1.5 percent for the HEPLISAV group, compared to 2.1 percent for the Engerix-B group. There were two cases of systemic vasculitis reported as SAEs in this trial, a case of Wegener's granulomatosis, or c-ANCA vasculitis, in the HEPLISAV group and a case of p-ANCA systemic vasculitis in the Engerix-B group.

Commercial Opportunity

We estimate the hepatitis B vaccine market for healthy adults and ESRD patients worldwide to be approximately $500 million annually. There can be no assurance that HEPLISAV will be approved for these market segments in any particular territory.

Hepatitis B is a chronic disease which can lead to cirrhosis of the liver and hepatocellular carcinoma. There is no cure for hepatitis B and disease prevention through effective vaccines is critical to reducing the spread of the disease. Available hepatitis B vaccines for adults usually require 3 doses given over 6 months to provide seroprotection of approximately 30%, 75%, and 90% after the first, second, and third doses respectively. Vaccines provide seroprotection to only approximately 75% of persons over 60 years of age after 3 doses and also fail to provide seroprotection to a large percentage of immunocompromised persons, such as ESRD patients. The effectiveness of current vaccines is further compromised because only 30% of people receive all 3 doses.

HEPLISAV is designed to address the limitations of current vaccines by delivering complete vaccination in fewer doses and 5 months earlier than current vaccines. In addition, previous clinical data have demonstrated that HEPLISAV can provide an increased response for older and immunocompromised individuals. Greater prevention of disease could be attained with use of HEPLISAV where individuals could be seroprotected with fewer doses and at an earlier time point than with current vaccines.

[1] Engerix-B® is a registered trademark of GlaxoSmithKline.

SD-101 Hepatitis C Therapy

SD-101 is our hepatitis C therapy and is being evaluated in an ongoing Phase 1b clinical trial. This therapy utilizes a novel Type C TLR9 agonist based on our second-generation ISS and may offer a more effective therapeutic option for patients chronically infected with the hepatitis C virus (HCV). We are developing SD-101 through our Symphony Dynamo, Inc. funding agreement. SD-101 is designed to be a potential replacement for interferon alpha therapy and be used in combination with oral antiviral therapy to stop HCV viral replication and induce a long-lasting immune response.

In April 2006, we entered into a series of related agreements with Symphony Capital Partners, LP and certain of its affiliates (Symphony) to advance specific Dynavax ISS-based programs for cancer, hepatitis B therapy and hepatitis C therapy through certain stages of clinical development (Development Programs). The agreements provided for the formation of Symphony Dynamo, Inc. (SDI). Pursuant to the agreements, Symphony invested $50 million in SDI to fund the Development Programs, and we licensed to SDI our intellectual property rights related to the Development Programs. The current status of SDI is discussed below under “Symphony Dynamo Inc.”

Commercial Opportunity

According to the World Health Organization, there are over 170 million people worldwide chronically infected with HCV. Analysts estimate the worldwide market for HCV therapies will grow from approximately $3 billion in 2008 to over $10 billion by 2015. There is no vaccine available to prevent HCV, a disease of the liver that can lead to cirrhosis of the liver and hepatocellular carcinoma.

Current therapy consists of pegylated interferon alpha and the antiviral drug ribavirin and is effective in treating only half of all patients infected with HCV. This standard of care is significantly less effective in genotype 1 carriers, which represent 70% of all HCV carriers in the United States and Europe. In addition, treatment with these therapies can cause significant side effects, including severe depression and anemia.

Products offering enhanced efficacy and safety profiles are anticipated to increase the number of patients seeking and continuing treatment. SD-101, used in combination with oral antiviral therapy, may stop HCV viral replication and induce a long-lasting immune response and could become a potential replacement for interferon alpha therapy, although there can be no assurance that SDI-101 can achieve such outcome or address the current market for interferon alpha therapy.

DV-601 Hepatitis B Therapy

DV-601 is our proprietary hepatitis B therapy and is in Phase 1 clinical trial development. This novel treatment approach for the first time combines both the surface and core hepatitis B virus (HBV) antigens. DV-601 may induce a potent immune response against HBV-infected cells and offer a more effective and shorter duration therapeutic option for patients chronically infected with HBV.

Commercial Opportunity

Over 350 million individuals worldwide are chronically infected with HBV, which can lead to cirrhosis of the liver and hepatocellular carcinoma. Analysts estimate the current worldwide market for HBV therapies to be approximately $1 billion annually. Current treatment aims to halt progression of the disease and consist of either indefinite use of antiviral medication or treatment with pegylated interferon-alpha. Approximately 30% of treated patients achieve treatment goals and fewer than 10% are ever considered cured. Antiviral therapy may need to continue indefinitely to sustain treatment goals and is increasingly subject to antiviral resistance while treatment with interferon-alpha can cause significant side effects.

Our HBV therapy, being studied in combination with an antiviral, is expected to induce a potent immune response against HBV-infected cells and offer a more effective and shorter duration therapeutic option for chronically infected patients.

Preclinical Programs

In addition to our clinical-stage product candidates, our pipeline includes preclinical programs for influenza, asthma and chronic obstructive pulmonary disease (COPD), and autoimmune and inflammatory diseases.

Universal Flu Vaccine

Our Universal Flu vaccine candidate is being developed to address unmet needs in controlling influenza by providing broad immunity to divergent flu strains and enhanced efficacy against strains in the trivalent seasonal vaccine. Our vaccine candidate will include:

- M2e/NP-ISS: A proprietary fusion protein comprised of two conserved influenza antigens, the extracellular domain of the matrix 2 protein (M2e) and nucleoprotein (NP), linked to our second-generation ISS
- Trivalent influenza vaccine (TIV)

The M2e/NP-ISS fusion protein conjugate may offer the benefits of cross-strain protection, dose sparing, and enhanced immunogenicity. M2e/NP-ISS is expected to enable subjects to generate M2e-specific cytotoxic protective antibodies and NP-specific cytotoxic T-cell protection, as well as enhance the strain-specific neutralizing antibodies induced by the trivalent influenza vaccine.

Novartis is supplying the trivalent influenza vaccine component for clinical and commercial use and has an exclusive option to negotiate a joint development and commercialization agreement. Our research and development program for our Universal Flu vaccine has been partially funded by grants from the NIH.

Commercial Opportunity

Human viral influenza is an acute respiratory disease with high morbidity and mortality that occurs in annual epidemics worldwide. There are an estimated 30,000 to 40,000 viral influenza-associated deaths per year in the United States, primarily in those over 65 years of age. Influenza pandemics occur infrequently, on average every 30 to 40 years, but it is estimated that the next pandemic could result in millions of deaths worldwide. Analysts estimate the current worldwide market opportunity for seasonal influenza vaccines to be approximately $3 billion annually.

Seasonal trivalent influenza vaccines can provide protection against the flu strains predicted to be prevalent during a season. The efficacy of these vaccines is often decreased by unpredictable changes in the actual strains causing influenza. Current vaccines are also least effective in those who need prevention the most, the elderly and others with weaker immune systems. Pandemic vaccination is further complicated by the need to produce large quantities of vaccine in a short time period.

Our Universal Flu vaccine candidate is being developed to address many of the challenges of current vaccines with the goal of providing broad immunity against divergent influenza strains, increasing the efficacy of seasonal vaccines, and potentially providing dose-sparing and increasing the quantity of vaccine available.

AZD1419 Asthma Therapy

Together with our partner AstraZeneca, we are developing AZD1419, a novel candidate drug for asthma. AZD1419 utilizes our proprietary second-generation ISS and represents a new strategy for the treatment of

allergic respiratory diseases such as asthma. This therapy is designed to modify the course of these diseases by changing the basic immune response to environmental allergens, such as house dust and pollens, leading to prolonged reduction in asthma symptoms. We are developing ADZ1419 under our worldwide collaboration with AstraZeneca to discover, develop, and commercialize products for asthma and COPD. We are currently working on a second candidate drug and have extended our research collaboration with AstraZeneca to provide research funding for a third candidate.

Commercial Opportunity

According to the World Health Organization, asthma affects 300 million people worldwide. Asthma is a chronic disease of the lungs and is caused primarily by allergic inflammation of the airways. In addition, 210 million people worldwide are affected by COPD, a term used to describe chronic lung diseases that limit airflow in the lungs. Analysts estimate the current worldwide market opportunity for asthma and COPD therapies to be over $15 billion annually.

Current asthma and COPD therapies include corticosteroids and bronchodilators, which treat the symptoms of these respiratory diseases. AZD1419 is intended to be a disease modifying therapy that has demonstrated the potential to inhibit and induce durable changes to the allergic response that causes asthma symptoms.

DV1079 (IRS) for Autoimmune and Inflammatory Diseases

We have pioneered a new approach to treating autoimmune and inflammatory diseases with our first-in-class TLR inhibitors called IRS. Our lead inhibitor product candidate is DV1079, a bifunctional inhibitor of TLR7 and TLR9. We are developing our TLR inhibitor programs under our worldwide strategic alliance with GSK established in December 2008.

In animal studies as well as in-vitro, our TLR inhibitors have demonstrated broad potential in multiple autoimmune disease models, such as lupus, inflammatory skin disorders, and rheumatoid arthritis. Our inhibitors have a highly-targeted effect on key immune cells and pathways that play a role in autoimmune and inflammatory diseases. Specifically, our TLR inhibitors target two types of immune cells, B cells and PDC, which selectively express TLR7 and TLR9. These receptors play a key role in the overproduction of interferon alpha by PDC and in the presence of anti-nuclear autoantibodies generated by B cells, which are hallmarks of some autoimmune diseases such as lupus.

Commercial Opportunity

Over 20 million individuals in the U.S. and Europe have autoimmune diseases such as lupus, psoriasis, and rheumatoid arthritis. Analysts estimate that key biologic drugs used to treat these conditions generate over $20 billion in worldwide sales each year. Currently marketed therapies are broadly immunosuppressive with variable efficacy and substantial toxicity. Our TLR inhibitors have demonstrated a highly targeted effect on key immune cells and pathways that play a role in multiple autoimmune and inflammatory diseases.

Pharmaceutical Partnerships and Funding Agreements

Our objective is to discover novel therapies based on our proprietary technologies and develop a diversified pipeline of product candidates to build a product-based business. To reach this objective, an important part of our strategy is to establish partnerships with leading pharmaceutical companies and enter into funding agreements. Our pharmaceutical partners provide valuable resources, development expertise, and commercial abilities that allow us to further advance the development of our product candidate programs. We have also established funding agreements with investment entities and U.S. government institutions that focus on biopharmaceutical developments.

GlaxoSmithKline

In December 2008, we entered into a worldwide strategic alliance with GSK to discover, develop, and commercialize endosomal TLR inhibitors for diseases such as lupus, psoriasis, and rheumatoid arthritis. We received an initial payment of $10 million and agreed to conduct research and early clinical development in up to four programs. We are eligible to receive future potential development and commercialization milestones totaling approximately $200 million per program. GSK can exercise its exclusive option to license each program upon achievement of proof-of-concept or earlier upon certain circumstances. After exercising its option, GSK would carry out further development and commercialization of these products. We are eligible to receive tiered, up to double-digit royalties on sales and have retained an option to co-develop and co-promote one specified product under the collaboration.

AstraZeneca AB

In September 2006, we entered into a worldwide research and license agreement with AstraZeneca to discover and develop TLR9 agonist products for asthma and COPD. We are eligible to receive a total of $136 million in payments and, upon commercialization of these products, royalties based on product sales. We also have the opportunity to co-promote in the United States. In September 2008, we received a $4.5 million milestone payment from AstraZeneca for the nomination of the first candidate drug AZD1419 for asthma and we have initiated IND-enabling studies. We are currently working on a second candidate drug, and in February 2009, we extended our research collaboration with AstraZeneca to provide funding for a third candidate drug.

Novartis Vaccines and Diagnostics, Inc.

In July 2008, we entered into a supply and option agreement with Novartis for our Universal Flu vaccine. Under this agreement, Novartis is supplying trivalent influenza vaccine, an essential component of our Universal Flu vaccine. We agreed to conduct early-stage development through a defined proof-of-concept. If Novartis exercises the right to negotiate a further agreement for development and commercialization, we would retain co-commercialization rights in the U.S. and receive product royalties outside of the U.S. Should the option not be exercised, Novartis remains committed to providing commercial supply of trivalent influenza vaccine with pre-agreed commercial terms and we retain the right to independently continue with late-stage development and commercialization.

Symphony Dynamo, Inc.

In April 2006, we entered into a $50 million funding agreement with Symphony Capital Partners, LP and its co-investors. Under this agreement, Symphony Dynamo, Inc. (SDI) was formed to develop novel TLR9 agonist products for hepatitis C, hepatitis B and cancer. Although SDI holds the intellectual property rights to these products, we have an option which allows us the exclusive right, but not the obligation, to acquire certain or all of the programs at specified points of time during the five year agreement. In April 2007, we exercised our option to acquire the rights to our hepatitis B therapy program and triggered a payment obligation of $15 million which is due upon the expiration of the SDI Collaboration in 2011, if the purchase option for all programs is not exercised. In December 2008, we discontinued the cancer program to focus on the hepatitis C therapy program. We have retained the right to seek strategic partners for the future development and commercialization of the cancer and hepatitis C therapy products.

National Institutes of Health and Other Funding

For our TLR agonist programs, since 2003 we have been awarded $11.6 million in grants from the NIH which have helped fund our research and development, of which a substantial portion has been used to support the development of our Universal Flu vaccine. Although the NIH provides program support, we have retained the right to seek strategic partners for the future development and commercialization of our Universal Flu vaccine. In September 2008, we were awarded a $17 million contract to develop our advanced ISS technology using TLR9

agonists as vaccine adjuvants. This five-year contract was awarded by the NIH's National Institute of Allergy and Infectious Diseases (NIAID) and supports adjuvant development for biodefense vaccines, including anthrax as well as other disease models. NIAID is funding 100 percent of the total $17 million cost of our program under Contract No. HHSN272200800038C.

For our TLR inhibitor programs, since 2004 we have been awarded $2.8 million in grants from the NIH and Alliance for Lupus Research. Certain of these grants have been extended through June 2010.

Intellectual Property

Our commercial success depends in part on our ability to obtain and maintain proprietary protection for our drug candidates, technology and know-how, to operate without infringing the proprietary rights of others and to prevent others from infringing our proprietary rights. In addition to seeking patent protection in the United States, we generally file patent applications in Australia, Canada, Japan, Western European countries and additional foreign countries on a selective basis in order to further protect the inventions that we or our partners consider important to the development of our foreign business. We also rely on trade secrets and contracts to protect our proprietary information.

Our intellectual property portfolio includes issued patents and patent applications claiming compositions and formulations of ISS and IRS, their methods of use and processes for their manufacture. Some of these patents and applications are exclusively licensed to us under agreements with the Regents of the University of California.

Under the terms of our license agreements with the Regents of the University of California, we are required to pay license fees, make milestone payments and pay royalties on net sales resulting from successful products originating from the licensed technologies. We may terminate these agreements in whole or in part on 60 days advance notice. The Regents of the University of California may terminate these agreements if we are in breach for failure to make royalty payments, meet diligence requirements, produce required reports or fund internal research and we do not cure such breach within 60 days after being notified of the breach. Otherwise, the agreements generally continue in effect until the last patent claiming a product licensed under the agreement or its manufacture or use expires, or in the absence of patents, until the date the last patent application claiming a licensed product is abandoned.

Individual patents extend for varying periods depending on the date of filing of the patent application or the date of patent issuance and the legal term of patents in the countries in which they are obtained. Generally, patents issued in the United States are effective for:

- the longer of 17 years from the issue date or 20 years from the earliest effective filing date, if the patent application was filed prior to June 8, 1995; and
- 20 years from the earliest effective filing date, if the patent application was filed on or after June 8, 1995.

In addition, in certain instances, a patent term can be extended to recapture a portion of the term effectively lost as a result of the FDA regulatory review period. The duration of foreign patents varies in accordance with provisions of applicable local law, but typically is 20 years from the earliest effective filing date. Our patent estate, based on patents existing now and expected by us to issue based on pending applications, will expire on dates ranging from 2017 to 2029.

The actual protection afforded by a patent varies on a product-by-product basis, from country-to-country and depends upon many factors, including the type of patent, the scope of its coverage, the availability of regulatory related extensions, the availability of legal remedies in a particular country, and the validity and enforceability of the patents.

Because patent applications in the United States and many foreign jurisdictions typically are not published until 18 months after filing and publications of discoveries in the scientific literature often lag behind actual discoveries, we cannot be certain that we were the first to make the inventions claimed in each of our issued patents or pending patent applications or that we were the first to file for protection of the inventions set forth in these patent applications. The U.S. Patent and Trademark Office may declare interference proceedings to determine the priority of inventions with respect to our patent applications and those of other parties or reexamination or reissue proceedings to determine if the scope of a patent should be narrowed.

Our commercial success depends significantly on our ability to operate without infringing patents and proprietary rights of third parties. A number of pharmaceutical companies and biotechnology companies including Pfizer, Inc., as well as universities and research institutions, may have filed patent applications or may have been granted patents that cover inventions similar to the inventions owned or licensed to us. We cannot determine with certainty whether patents or patent applications of other parties may materially affect our ability to make, use or sell any products. If another party controls patents or patent applications covering our products, we may not be able to obtain the rights we need to those patents or patent applications in order to commercialize our products. Litigation may be necessary to enforce patents issued or licensed to us or to determine the scope or validity of another party's proprietary rights. The existence of third-party patent applications and patents could significantly reduce the coverage of the patents owned by or licensed to us and limit our ability to obtain meaningful patent protection. For example, Pfizer has issued U.S. patent claims, as well as patent claims pending with the U.S. Patent and Trademark Office, that, if held to be valid, could require us to obtain a license in order to commercialize one or more of our formulations of ISS in the United States. Litigation or any of these other proceedings, such as patent interferences, could result in substantial costs to and diversion of effort by us, and an adverse outcome in a court or patent office could subject us to significant liabilities, require disputed rights to be licensed from other parties, or require us to cease using some of our technology. We may not prevail in any of these actions or proceedings.

In addition, other parties may duplicate, design around or independently develop similar or alternative technologies to ours or our licensors.

We may rely, in some circumstances, on trade secrets and confidentiality agreements to protect our technology. Although trade secrets are difficult to protect, wherever possible, we use confidential disclosure agreements to protect the proprietary nature of our technology. Our policy is to require each of our commercial partners, employees, consultants and advisors to enter into an agreement before beginning their employment, consulting or advisory relationship with us that in general provides that the individuals must keep confidential and not disclose to other parties any of our confidential information developed or learned by the individuals during the course of their relationship with us except in limited circumstances. These agreements also generally provide that we own all inventions conceived by the individuals in the course of rendering their employment or services to us. However, there can be no assurance that these agreements will not be breached, that we will have adequate remedies for any breach, or that our trade secrets and/or proprietary information will not otherwise become known or be independently discovered by competitors. To the extent that our employees, consultants or contractors use intellectual property owned by others in their work for us, disputes may also arise as to the rights in related or resulting know-how and inventions.

Competition

The biotechnology and pharmaceutical industries are characterized by rapidly advancing technologies, intense competition and a strong emphasis on proprietary products. Many of our competitors, including biotechnology and pharmaceutical companies, academic institutions and other research organizations, are actively engaged in the discovery, research and development of products that could compete directly or indirectly with our products under development.

HEPLISAV, a two-dose hepatitis B vaccine, if developed, approved and commercialized, will compete directly with three-dose marketed vaccines produced by GSK, Merck and Crucell N.V., among others. There are

also modified schedules of conventional hepatitis B vaccines for limited age ranges that are approved in European Union and United States. In addition, HEPLISAV will compete against a number of multivalent vaccines that simultaneously protect against hepatitis B in addition to other diseases.

Our hepatitis C therapy, SD-101, if developed, approved, and commercialized, may compete directly with interferon alpha and indirectly with ribavirin, products currently marketed by Roche and Schering-Plough Corporation. Other companies, such as Vertex Pharmaceuticals, Inc./Tibotec Pharmaceuticals, Schering-Plough, Human Genome Sciences, Inc./Novartis, and Roche/Pharmasset, Inc./InterMune, Inc. are developing direct acting antiviral therapy, including protease inhibitors and polymerase inhibitors, and long-acting interferons. As these products may enter the market within the next two to five years, combination therapy is likely to evolve. Novel therapies aim to improve the efficacy, safety and convenience of current hepatitis C treatment and may compete both directly and indirectly with SD-101.

Our hepatitis B therapy, DV-601, if developed, approved and commercialized, will compete directly with existing hepatitis B therapy products, including antiviral drugs and interferon alpha, manufactured by Roche, Schering-Plough, Gilead Sciences, Inc., Bristol-Myers Squibb, GSK, and Novartis. In addition, our hepatitis B therapy faces competition from several companies developing novel antivirals, including Pharmasset and LG Life Sciences, as well as companies developing therapy vaccines, including Emergent BioSolutions and Genexine Co., Ltd.

Our Universal Flu vaccine, if developed, approved and commercialized, will compete with traditional and emerging influenza vaccines from companies currently marketing these products, including: GSK, Novartis, Sanofi Pasteur MSD, MedImmune/AstraZeneca and CSL Ltd. In addition, there are several companies developing potentially competing universal vaccines for influenza, including Acambis, VaxInnate, Merck and Vical.

Our asthma therapy, AZD1419, if developed, approved and commercialized, will compete indirectly with existing asthma therapies, such as inhaled beta-agonists, corticosteroids, leukotriene inhibitors and IgE monoclonal antibodies, including those marketed by Merck, Genentech, Inc., Novartis, AstraZeneca, Schering-Plough and GSK. In addition, directly competing products are in development by Idera Pharmaceuticals/Novartis and Sanofi-aventis/Pfizer Inc.

Our therapy for autoimmune and inflammatory diseases, DV-1079, is a bifunctional inhibitor of TLR7 and TLR9 that if developed, approved and commercialized will compete with key biologic therapies from companies such as Genentech, Biogen Idec, Roche and Abbott Laboratories. In addition, our product would compete with generic drugs commonly used to treat autoimmune diseases, including corticosteroids, NSAIDs, antimalarials and immunosuppressive agents. Other companies, such as MedImmune, Genentech, Idera, Pfizer, Human Genome Sciences/GSK and UCB/Immunomedics, Inc., are developing anti-IFN-alpha-antibodies, B-cell targeted antibodies, immunosuppressants, and other TLR inhibitors that may compete directly with our product candidate.

Many of the entities developing and marketing these competing products have significantly greater financial resources and expertise in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining regulatory approvals and marketing than Dynavax. Smaller or early-stage companies may also prove to be significant competitors, particularly for collaborative agreements with large, established companies and access to capital. These entities may also compete with us in recruiting and retaining qualified scientific and management personnel, as well as in acquiring technologies complementary to or necessary for our programs.

Regulatory Considerations

The advertising, labeling, storage, record-keeping, safety, efficacy, research, development, testing, manufacture, promotion, marketing and distribution of our potential products are subject to extensive regulation by numerous governmental authorities in the U.S. and other countries. In the U.S., pharmaceutical and biological

products are subject to rigorous review by the FDA under the Federal Food, Drug, and Cosmetic Act, the Public Health Service Act and other federal statutes and regulations. The steps ordinarily required by the FDA before a new drug or biologic may be marketed in the U.S. are similar to steps required in most other countries and include but are not limited to the following:

- completion of preclinical laboratory tests, preclinical trials and formulation studies;
- submission to the FDA of an investigational new drug application, or IND, for a new drug or biologic which must become effective before clinical trials may begin;
- performance of adequate and well-controlled human clinical trials to establish the safety and efficacy of the drug or biologic for each proposed indication;
- the submission of a new drug application, or NDA, or a biologics license application, or BLA, to the FDA; and
- FDA review and approval of the NDA or BLA before any commercial marketing, sale or shipment of the drug.

If we do not comply with applicable requirements, U.S. regulatory authorities may fine us, require that we recall our products, seize our products, require that we totally or partially suspend the production of our products, refuse to approve our marketing applications, criminally prosecute us, and/or revoke previously granted marketing authorizations.

To secure FDA approval, we must submit extensive non-clinical and clinical data, manufacturing information, and other supporting information to the FDA for each indication to establish a product candidate's safety and efficacy. The number of preclinical studies and clinical trials that will be required for FDA and foreign regulatory agency approvals varies depending on the product candidate, the disease or condition for which the product candidate is in development and regulations applicable to any particular drug candidate. Data obtained from preclinical and clinical activities are susceptible to varying interpretations, which could delay, limit or prevent regulatory approval or clearance. Further, the results from preclinical testing and early clinical trials may not be predictive of results obtained in later clinical trials. The approval process takes many years, requires the expenditures of substantial resources, involves post-marketing surveillance and may involve requirements for additional post-marketing studies. The FDA may also require post-marketing testing and surveillance to monitor the effects of approved products or place conditions on any approvals that could restrict the commercial applications of these products. The FDA may withdraw product approvals if we do not continue to comply with regulatory standards or if problems occur following initial marketing. Delays experienced during the governmental approval process may materially reduce the period during which we will have exclusive rights to exploit patented products or technologies. Delays can occur at any stage of drug development and as result of many factors, certain of which are not under our control, including but not limited to the following:

- lack of efficacy, or incomplete or inconclusive results from clinical trials;
- unforeseen safety issues;
- failure by investigators to adhere to protocol requirements, including patient enrollment criteria;
- slower than expected rate of patient recruitment;
- failure by subjects to comply with trial protocol requirements;
- inability to follow patients adequately after treatment;
- inability to qualify and enter into arrangements with third parties to manufacture sufficient quality and quantities of materials for use in clinical trials;
- failure by a contract research organization to fulfill contractual obligations; and
- adverse changes in regulatory policy during the period of product development or the period of review of any application for regulatory approval or clearance.

Non-clinical studies involve laboratory evaluation of product characteristics and animal studies to assess the initial efficacy and safety of the product. The FDA, under its good laboratory practices regulations, regulates non-clinical studies. Violations of these regulations can, in some cases, lead to invalidation of those studies, requiring these studies to be replicated. The results of the non-clinical tests, together with manufacturing information and analytical data, are submitted to the FDA as part of an investigational new drug application, which must be approved by the FDA before we can commence clinical investigations in humans. Unless the FDA objects to an investigational new drug application, the investigational new drug application will become effective 30 days following its receipt by the FDA. Clinical trials involve the administration of the investigational product to humans under the supervision of a qualified principal investigator. We must conduct our clinical trials in accordance with good clinical practice under protocols submitted to the FDA as part of the investigational new drug application. In addition, each clinical trial must be approved and conducted under the auspices of an investigational review board and with patient informed consent. The investigational review board will consider, among other things, ethical factors, the safety of human subjects and the possibility of liability of the institution conducting the trial.

The stages of the FDA regulatory process include research and preclinical studies and clinical trials in three sequential phases that may overlap. Research and preclinical studies do not involve the introduction of a product candidate in human subjects. These activities involve identification of potential product candidates, modification of promising candidates to optimize their biological activity, as well as preclinical studies to assess safety and effectiveness in animals. In clinical trials, the product candidate is administered to humans. Phase 1 clinical trials typically involve the administration of a product candidate into a small group of healthy human subjects. These trials are the first attempt to evaluate a drug's safety, determine a safe dose range and identify side effects. During Phase 2 trials, the product candidate is introduced into patients who suffer from the medical condition that the product candidate is intended to treat. Phase 2 studies are designed to evaluate whether a product candidate shows evidence of effectiveness, to further evaluate dosage, and to identify possible adverse effects and safety risks. When Phase 2 evaluations demonstrate that a product candidate appears to be both safe and effective, Phase 3 trials are undertaken to confirm a product candidate's effectiveness and to test for safety in an expanded patient population. If the results of Phase 3 trials appear to confirm effectiveness and safety, the data gathered in all phases of clinical trials form the basis for an application for FDA regulatory approval of the product candidate.

We and all of our contract manufacturers are required to comply with the applicable FDA current good manufacturing practice (GMP) regulations. Manufacturers of biologics also must comply with FDA's general biological product standards. Failure to comply with the statutory and regulatory requirements subjects the manufacturer to possible legal or regulatory action, such as suspension of manufacturing, seizure of product or voluntary recall of a product. Good manufacturing practice regulations require quality control and quality assurance as well as the corresponding maintenance of records and documentation. Prior to granting product approval, the FDA must determine that our or our third party contractor's manufacturing facilities meet good manufacturing practice requirements before we can use them in the commercial manufacture of our products. In addition, our facilities are subject to periodic inspections by the FDA for continued compliance with good manufacturing practice requirements during clinical development as well as following product approval. Adverse experiences with the product must be reported to the FDA and could result in the imposition of market restriction through labeling changes or in product removal.

Outside the U.S., our ability to market a product is contingent upon receiving marketing authorization and pricing or reimbursement approval from the appropriate regulatory authorities. The requirements governing the conduct of clinical trials, marketing authorization, pricing and reimbursement vary widely from country to country.

At present, foreign marketing authorizations may be applied for at a national level, although within the European Union registration procedures are mandatory for biotechnology and some other drugs and are available to companies wishing to market a product in more than one European Union member state. The regulatory authority generally will grant marketing authorization if it is satisfied that we have presented it with adequate evidence of safety, quality and efficacy.

We are also subject to various federal, state and local laws, regulations and recommendations relating to safe working conditions, laboratory and manufacturing practices, the experimental use of animals and the use and disposal of hazardous or potentially hazardous substances, including radioactive compounds and infectious disease agents, used in connection with our research. We cannot accurately predict the extent of government regulation that might result from any future legislation or administrative action.

Employees

As of December 31, 2008, we had 155 full-time employees, including 28 Ph.D.s, 2 M.D.s and 15 others with advanced degrees. Of the 155 employees, 103 were dedicated to research and development activities. None of our employees is subject to a collective bargaining agreement, and we believe our relations with our employees are good.

Available Information and Website Address

Our website address is www.dynavax.com. We make available free of charge through our website, our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and all amendments to these reports as soon as reasonably practicable after filing, by providing a hyperlink to the SEC's website directly to our reports. The contents of our website are not incorporated by reference into this report.

ITEM 1A. RISK FACTORS.

This Annual Report on Form 10-K contains forward-looking statements concerning our future products, product candidates, development plans, expenses, revenues, liquidity and cash needs, as well as our commercialization plans and strategies. These forward-looking statements are based on current expectations and we assume no obligation to update this information. Numerous factors could cause our actual results to differ significantly from the results described in these forward-looking statements, including the following risk factors.

We have incurred substantial losses since inception and do not have any commercial products that generate significant revenue.

We have experienced significant net losses in each year since our inception. Our accumulated deficit was $248.7 million as of December 31, 2008. To date, our revenue has resulted from collaboration agreements, services and license fees from customers of Dynavax Europe, and government and private agency grants. The grants are subject to annual review based on the achievement of milestones and other factors. Our current grants are scheduled to terminate in 2010, although we recently received a five-year government contract totaling $17 million. We anticipate that we will incur substantial additional net losses for the foreseeable future as the result of our investment in research and development activities.

We do not have any products that generate revenue. The clinical hold on the two U.S. IND Applications for HEPLISAV remains in effect and our partner for this product has notified us of termination of our collaboration agreement. Clinical trials for certain of our other product candidates are ongoing. These and our other product candidates may never be commercialized, and we may never achieve profitability. Our ability to generate revenue depends upon:

- demonstrating in clinical trials that our product candidates are safe and effective, in particular, in the current and planned trials for our product candidates;
- obtaining regulatory approvals for our product candidates; and
- entering into and maintaining successful collaborative relationships.

If we are unable to generate significant revenues or achieve profitability, we may be required to reduce or discontinue our current and planned operations, enter into a transaction that constitutes a change in control of the company, or raise additional capital on less favorable terms.

If we are unable to secure additional funding, we will have to reduce or discontinue operations.

We believe our existing capital resources will be adequate to satisfy our capital needs for at least the next twelve months. Because of the significant time and resources it will take to develop and commercialize our product candidates, we will require substantial additional capital resources in order to continue our operations, and any such funding in the current financing environment may not allow us to continue operations as currently planned. We may be unable to obtain additional capital on acceptable terms, or at all and we may be required to delay, reduce the scope of, or eliminate some or all of our programs, or discontinue our operations.

The success of our product candidates depends on achieving successful clinical results and regulatory approval. Failure to obtain regulatory approvals could require us to discontinue operations.

None of our product candidates have been approved for sale. Any product candidate we develop is subject to extensive regulation by federal, state and local governmental authorities in the United States, including the FDA, and by foreign regulatory agencies. Our success is primarily dependent on our ability to obtain regulatory approval for our most advanced product candidates. The clinical hold on the two U.S. IND Applications for HEPLISAV remains in effect. Approval processes in the United States and in other countries are uncertain, take many years and require the expenditure of substantial resources.

We will need to demonstrate in clinical trials that a product candidate is safe and effective before we can obtain the necessary approvals from the FDA and foreign regulatory agencies. If we identify any safety issues associated with our product candidates, we may be restricted from initiating further trials for those products. Moreover, we may not see sufficient signs of efficacy in those studies. The FDA or foreign regulatory agencies may require us to conduct additional clinical trials prior to approval. For example, in October 2008 the FDA communicated that the balance of risk versus potential benefit no longer favors continued clinical evaluation of HEPLISAV in healthy adults and children, but advised us that there may be an acceptable risk versus potential benefit profile for ESRD patients. In February 2009, the FDA requested additional clinical and safety information which the agency indicated may be helpful in its risk assessment of the two INDs and may assist in finding a development path forward for HEPLISAV, not only in ESRD patients but also in healthy adults. There can be no assurance as to whether HEPLISAV can be further developed, or even if further development is permitted, that successful clinical development can occur in a timely manner or without significant additional studies or patient data. Despite the time and money expended, regulatory approvals are uncertain. Failure to successfully complete clinical trials and show that our products are safe and effective would have a material adverse effect on our business and results of operations.

Our clinical trials may be extended, suspended, delayed or terminated at any time. Even short delays in the commencement and progress of our trials may lead to substantial delays in the regulatory approval process for our product candidates, which will impair our ability to generate revenues.

We may extend, suspend or terminate clinical trials at any time for various reasons, including regulatory actions by the FDA or foreign regulatory agencies, actions by institutional review boards, failure to comply with good clinical practice requirements, concerns regarding health risks to test subjects or inadequate supply of the product candidate. Even a small delay in a trial for any product candidate could require us to delay commencement of the trial until the target population is available for testing, which could result in a delay of a year or more.

Our registration and commercial timelines depend on results of the current and planned clinical trials and further discussions with the FDA. Any extension, suspension, termination or unanticipated delays of our clinical trials could:

- adversely affect our ability to timely and successfully commercialize or market these product candidates;
- result in significant additional costs;

- potentially diminish any competitive advantages for those products;
- adversely affect our ability to enter into collaborations, receive milestone payments or royalties from potential collaborators;
- cause us to abandon the development of the affected product candidate; or
- limit our ability to obtain additional financing on acceptable terms, if at all.

If we receive regulatory approval for our product candidates, we will be subject to ongoing FDA and foreign regulatory obligations and continued regulatory review.

Any regulatory approvals that we receive for our product candidates are likely to contain requirements for post-marketing follow-up studies, which may be costly. Product approvals, once granted, may be modified based on data from subsequent studies or long-term use. As a result, limitations on labeling indications or marketing claims, or withdrawal from the market may be required if problems occur after commercialization.

In addition, we or our contract manufacturers will be required to adhere to federal regulations setting forth current good manufacturing practice. The regulations require that our product candidates be manufactured and our records maintained in a prescribed manner with respect to manufacturing, testing and quality control activities. Furthermore, we or our contract manufacturers must pass a pre-approval inspection of manufacturing facilities by the FDA and foreign regulatory agencies before obtaining marketing approval and will be subject to periodic inspection by the FDA and corresponding foreign regulatory agencies under reciprocal agreements with the FDA. Further, to the extent that we contract with third parties for the manufacture of our products, our ability to control third-party compliance with FDA requirements will be limited to contractual remedies and rights of inspection.

Failure to comply with regulatory requirements could prevent or delay marketing approval or require the expenditure of money or other resources to correct. Failure to comply with applicable requirements may also result in warning letters, fines, injunctions, civil penalties, recall or seizure of products, total or partial suspension of production, refusal of the government to renew marketing applications and criminal prosecution, any of which could be harmful to our ability to generate revenues and our stock price.

Our most advanced product candidate and most of our earlier stage programs rely on ISS-based technology. Serious adverse safety data relating to either 1018 ISS or other ISS-based technology may require us to reduce the scope of or discontinue our operations.

Our most advanced product candidate in clinical trials is based on our 1018 ISS compound, and most of our research and development programs use ISS-based technology. If any of our product candidates in clinical trials produce serious adverse safety data, we may be required to delay or discontinue all of our clinical trials. For example, since March 2008, HEPLISAV has been and remains on clinical hold following a SAE that occurred in the PHAST clinical trial. As most of our clinical product candidates contain ISS, a common safety risk across therapeutic areas may hinder our ability to enter into potential collaborations and if adverse safety data are found to apply to our ISS-based technology as a whole, we may be required to significantly reduce or discontinue our operations.

We rely on third parties and our facility in Düsseldorf, Germany to supply materials necessary to manufacture our clinical product candidates for our clinical trials. Loss of these suppliers or key employees in Düsseldorf, or failure to timely replace them may delay our clinical trials and research and development efforts and may result in additional costs, delays or significantly higher costs in manufacturing our product candidates.

We rely on a number of third parties and our facility in Düsseldorf for the multiple steps involved in the manufacturing process of our product candidates, including, for example, ISS, a key component material that is necessary for our product candidates, the production of certain antigens, the combination of the antigens and ISS, and the fill and finish. Termination or interruption of these relationships may occur due to circumstances that are outside of our control, resulting in higher cost or delays in our product development efforts.

We and these third parties are required to comply with applicable FDA current good manufacturing practice regulations and other international regulatory requirements. If one of these parties fails to maintain compliance with these regulations, the production of our product candidates could be interrupted, resulting in delays and additional costs. Additionally, these third parties and our manufacturing facility must undergo a pre-approval inspection before we can obtain marketing authorization for any of our product candidates.

We have relied on a single supplier to produce our ISS for clinical trials. To date, we have manufactured only small quantities of ISS ourselves for research purposes. If we were unable to maintain or replace our existing source for ISS, we would have to establish internal ISS manufacturing capability which would result in increased capital and operating costs and delays in developing and commercializing our product candidates. We or other third parties may not be able to produce ISS at a cost, quantity and quality that are available from our current third-party supplier.

We currently utilize our facility in Düsseldorf to manufacture the hepatitis B surface antigen for HEPLISAV. The clinical hold on the two U.S. IND Applications for HEPLISAV has remained in effect since March 2008. There can be no assurance as to whether HEPLISAV can be further developed. Moreover, if HEPLISAV can not be successfully developed, we will have to re-purpose our Düsseldorf facility toward alternative manufacturing or research activities that may not fully utilize the facility's capacity, resulting in continued operating costs that may not be offset by corresponding revenues.

We rely on contract research organizations to conduct our clinical trials. If these third parties do not fulfill their contractual obligations or meet expected deadlines, our planned clinical trials may be delayed and we may fail to obtain the regulatory approvals necessary to commercialize our product candidates.

We rely on third parties to conduct our clinical trials. If these third parties do not perform their obligations or meet expected deadlines our planned clinical trials may be extended, delayed or terminated. Any extension, delay or termination of our clinical trials would delay our ability to commercialize our products and could have a material adverse effect on our business and operations.

If any products we develop are not accepted by the market or if regulatory agencies limit our labeling indications or marketing claims, we may be unable to generate significant revenues, if any.

Even if we obtain regulatory approval for our product candidates and are able to successfully commercialize them, our products may not gain market acceptance among physicians, patients, health care payors and the medical community. The FDA or other regulatory agencies could limit the labeling indication for which our product candidates may be marketed or could otherwise limit marketing efforts for our products. If we are unable to successfully market any approved product candidates, or marketing efforts are restricted by regulatory limits, our ability to generate revenues could be significantly impaired.

A key part of our business strategy is to establish collaborative relationships to commercialize and fund development of our product candidates. We may not succeed in establishing and maintaining collaborative relationships, which may significantly limit our ability to develop and commercialize our products successfully, if at all.

We will need to establish collaborative relationships to obtain domestic and international sales, marketing and distribution capabilities for our product candidates. We also intend to enter into collaborative relationships to provide funding to support our research and development programs. The process of establishing collaborative relationships is difficult, time-consuming and involves significant uncertainty. Moreover, even if we do establish collaborative relationships, our collaborators may seek to renegotiate or terminate their relationships with us due to unsatisfactory clinical results, a change in business strategy, a change of control or other reasons. If any collaborator fails to fulfill its responsibilities in a timely manner, or at all, our research, clinical development or commercialization efforts related to that collaboration could be delayed or terminated, or it may be necessary for

us to assume responsibility for expenses or activities that would otherwise have been the responsibility of our collaborator. If we are unable to establish and maintain collaborative relationships on acceptable terms or to successfully transition terminated collaborative agreements, we may have to delay or discontinue further development of one or more of our product candidates, undertake development and commercialization activities at our own expense or find alternative sources of capital.

Many of our competitors have greater financial resources and expertise than we do. If we are unable to successfully compete with existing or potential competitors despite these disadvantages we may be unable to generate revenues and our business will be harmed.

We compete with pharmaceutical companies, biotechnology companies, academic institutions and research organizations, in developing therapies to treat or prevent infectious diseases, allergy, asthma and cancer, as well as those focusing more generally on the immune system. Competitors may develop more effective, more affordable or more convenient products or may achieve earlier patent protection or commercialization of their products. These competitive products may render our product candidates obsolete or limit our ability to generate revenues from our product candidates. Many of the companies developing competing technologies and products have significantly greater financial resources and expertise in research and development, manufacturing, preclinical and clinical testing, obtaining regulatory approvals and marketing than we do.

Existing and potential competitors may also compete with us for qualified scientific and management personnel, as well as for technology that would be advantageous to our business. If we are unable to compete successfully, we may not be able to obtain financing, enter into collaborative arrangements, sell our product candidates or generate revenues.

We depend on key employees in a competitive market for skilled personnel, and the loss of the services of any of our key employees would affect our ability to develop and commercialize our product candidates and achieve our objectives.

We are highly dependent on the principal members of our management, operations and scientific staff, including our Chief Executive Officer, Dr. Dino Dina. We experience intense competition for qualified personnel. Our future success also depends in part on the continued service of our executive management team, key scientific and management personnel and our ability to recruit, train and retain essential scientific personnel for our drug discovery and development programs, including those who will be responsible for overseeing our preclinical testing and clinical trials as well as for the establishment of collaborations with other companies. If we lose the services of any key personnel, our research and product development goals, including the identification and establishment of key collaborations, operations and marketing efforts could be delayed or curtailed.

We may develop, seek regulatory approval for and market our product candidates outside the United States, requiring a significant commitment of resources. Failure to successfully manage our international operations could result in significant unanticipated costs and delays in regulatory approval or commercialization of our product candidates.

We may introduce certain of our product candidates in various markets outside the United States. Developing, seeking regulatory approval for and marketing our product candidates outside the United States could impose substantial burdens on our resources and divert management’s attention from domestic operations. International operations are subject to risk, including:

- the difficulty of managing geographically distant operations, including recruiting and retaining qualified employees, locating adequate facilities and establishing useful business support relationships in the local community;
- compliance with varying international regulatory requirements, laws and treaties;
- securing international distribution, marketing and sales capabilities;
- adequate protection of our intellectual property rights;

- legal uncertainties and potential timing delays associated with tariffs, export licenses and other trade barriers;
- adverse tax consequences;
- the fluctuation of conversion rates between foreign currencies and the U.S. dollar; and
- regional and geopolitical risks.

If we are unable to successfully manage our international operations, we may incur significant unanticipated costs and delays in regulatory approval or commercialization of our product candidates, which would impair our ability to generate revenues.

We rely on our licenses from the Regents of the University of California. Impairment of these licenses or our inability to maintain them would severely harm our business.

Our current research and development efforts depend upon our license arrangements with the Regents of the University of California, or UC. Our dependence on these licenses subjects us to numerous risks, such as disputes regarding the creation or use of intellectual property by us and UC, or scientific collaborators. Additionally, our agreements with UC generally contain diligence or milestone-based termination provisions. Our failure to meet any obligations pursuant to these provisions could allow UC to terminate our agreements or convert exclusive to non-exclusive licenses. In addition, our license agreements with UC may be terminated or may expire by their terms, and we may not be able to maintain the exclusivity of these licenses. If we cannot maintain licenses that are advantageous or necessary to the development or the commercialization of our product candidates, we may be required to expend significant time and resources to develop or license similar technology.

If third parties successfully assert that we have infringed their patents and proprietary rights or challenge the validity of our patents and proprietary rights, we may become involved in intellectual property disputes and litigation that would be costly, time consuming, and delay or prevent development or commercialization of our product candidates.

We may be exposed to future litigation by third parties based on claims that our product candidates or proprietary technologies infringe their intellectual property rights, or we may be required to enter into litigation to enforce patents issued or licensed to us or to determine the scope or validity of our or another party's proprietary rights, including a challenge as to the validity of our issued and pending claims. We are involved in various interference and other administrative proceedings related to our intellectual property which has caused us to incur certain legal expenses. If we become involved in any litigation and/or other significant interference proceedings related to our intellectual property or the intellectual property of others, we will incur substantial additional expenses and it will divert the efforts of our technical and management personnel.

If we or our collaborators are unsuccessful in defending or prosecuting our issued and pending claims or in defending potential claims against our products, for example, as may arise in the commercialization of HEPLISAV or any similar product candidate in the United States, we or our collaborator could be required to pay substantial damages or be unable to commercialize our product candidates or use our proprietary technologies without a license from such third party. A license may require the payment of substantial fees or royalties, require a grant of a cross-license to our technology or may not be available on acceptable terms, if at all. In addition, we may be required to redesign our technology so it does not infringe a third party's patents, which may not be possible or could require substantial funds and time. Any of these outcomes could require us to change our business strategy and could materially impact our business and operations.

One of our potential competitors, Pfizer, has issued U.S. patent claims, as well as patent claims pending with the U.S. Patent and Trademark Office, or PTO, that may be asserted against our ISS products. We may need to obtain a license to one or more of these patent claims held by Pfizer by paying fees or royalties or offering rights to our own proprietary technologies in order to commercialize one or more of our formulations of ISS in the U.S. other than with respect to HEPLISAV. Such a license may not be available to us on acceptable terms, if at all, which could preclude or limit our ability to commercialize our products.

If the combination of patents, trade secrets and contractual provisions that we rely on to protect our intellectual property is inadequate, the value of our product candidates will decrease.

Our success depends on our ability to:

- obtain and protect commercially valuable patents or the rights to patents both domestically and abroad;
- operate without infringing upon the proprietary rights of others; and
- prevent others from successfully challenging or infringing our proprietary rights.

We will be able to protect our proprietary rights from unauthorized use only to the extent that these rights are covered by valid and enforceable patents or are effectively maintained as trade secrets. We try to protect our proprietary rights by filing and prosecuting United States and foreign patent applications. However, in certain cases such protection may be limited, depending in part on existing patents held by third parties, which may only allow us to obtain relatively narrow patent protection. In the United States, legal standards relating to the validity and scope of patent claims in the biopharmaceutical field can be highly uncertain, are still evolving and involve complex legal and factual questions for which important legal principles remain unresolved.

The biopharmaceutical patent environment outside the United States is even more uncertain. We may be particularly affected by this uncertainty since several of our product candidates may initially address market opportunities outside the United States, where we may only be able to obtain limited patent protection.

The risks and uncertainties that we face with respect to our patents and other proprietary rights include the following:

- we may not receive an issued patent for any of our patent applications or for any patent applications that we have exclusively licensed;
- the pending patent applications we have filed or to which we have exclusive rights may take longer than we expect to result in issued patents;
- the claims of any patents that are issued may not provide meaningful protection or may not be valid or enforceable;
- we might not be able to develop additional proprietary technologies that are patentable;
- the patents licensed or issued to us or our collaborators may not provide a competitive advantage;
- patents issued to other parties may limit our intellectual property protection or harm our ability to do business;
- other parties may independently develop similar or alternative technologies or duplicate our technologies and commercialize discoveries that we attempt to patent; and
- other parties may design around technologies we have licensed, patented or developed.

We also rely on trade secret protection and confidentiality agreements to protect our interests in proprietary know-how that is not patentable and for processes for which patents are difficult to enforce. We cannot be certain that we will be able to protect our trade secrets adequately. Any disclosure of confidential data in the public domain or to third parties could allow our competitors to learn our trade secrets. If we are unable to adequately obtain or enforce proprietary rights we may be unable to commercialize our products, enter into collaborations, generate revenues or maintain any advantage we may have with respect to existing or potential competitors.

We have licensed some of our development and commercialization rights to certain of our development programs in connection with our Symphony Dynamo funding arrangement and will not receive any future royalties or revenues with respect to this intellectual property unless we exercise an option to repurchase some

or all of the programs in the future. We may not obtain sufficient clinical data in order to determine whether we should exercise our option prior to the expiration of the development period, and even if we decide to exercise, we may not have the financial resources to exercise our option in a timely manner.

In April 2006, we granted an exclusive license to the intellectual property for certain ISS compounds for cancer, hepatitis B and hepatitis C therapies (Development Programs) to Symphony Dynamo, Inc. (SDI) in consideration for a commitment from Symphony Capital Partners, LP and certain of its affiliates (Symphony) to provide $50 million of capital to advance the Development Programs. As part of the arrangement, we received an exclusive purchase option (Purchase Option) to acquire all of the Development Programs through the purchase of all of the equity in SDI during the five-year term at specified prices ranging from $89.4 million as of January 1, 2009, increasing quarterly up to $144.1 million at the end of the five-year term. The Purchase Option exercise price is payable in cash or a combination of cash and shares of Dynavax common stock, at our sole discretion. We also received an exclusive option to purchase either the hepatitis B or hepatitis C program (Program Option) during the first year of the arrangement. In April 2007, we exercised our Program Option for the hepatitis B program. The exercise of this Program Option triggered a payment obligation of $15 million which will either be (a) due to Symphony upon the expiration of the SDI collaboration in 2011 if the Purchase Option is not exercised; or (b) included as part of the applicable purchase price upon exercise of the Purchase Option. The intellectual property rights to the remaining cancer and hepatitis C therapy programs not purchased through the exercise of the Purchase Option will remain with SDI.

We and SDI jointly manage the Development Programs and there can be no assurance that we will agree on various decisions that will enable us to successfully develop the potential products, or even if we are in agreement on the development plans, that the development efforts will result in sufficient clinical data to make a fully informed decision with respect to the exercise of our Purchase Option. If we do not exercise the Purchase Option prior to its expiration, then our rights in and with respect to the Development Programs will terminate and we will no longer have rights to any of the programs licensed to SDI under the arrangement.

If we elect to exercise the Purchase Option, we will be required to make a payment of at least $89.4 million, increasing thereafter quarterly, which at our discretion may be paid partially in shares of our common stock. As a result, in order to exercise the Purchase Option, we will be required to make a substantial payment of cash and possibly issue a substantial number of shares of our common stock. We do not currently have the resources to exercise the Purchase Option and we may be required to enter into a financing arrangement or license arrangement with one or more third parties, or some combination of these in order to exercise the Purchase Option, even if we paid a portion of the purchase price with our common stock. There can be no assurance that any financing or licensing arrangement will be available or even if available, that the terms would be favorable to us and our stockholders.

We face product liability exposure, which, if not covered by insurance, could result in significant financial liability.

While we have not experienced any product liability claims to date, the use of any of our product candidates in clinical trials and the sale of any approved products will subject us to potential product liability claims and may raise questions about a product's safety and efficacy. As a result, we could experience a delay in our ability to commercialize one or more of our product candidates or reduced sales of any approved product candidates. In addition, a product liability claim may exceed the limits of our insurance policies and exhaust our internal resources. We have obtained limited product liability insurance coverage in the amount of $1 million for each occurrence for clinical trials with umbrella coverage of an additional $4 million. This coverage may not be adequate or may not continue to be available in sufficient amounts, at an acceptable cost or at all. We also may not be able to obtain commercially reasonable product liability insurance for any product approved for marketing in the future. A product liability claim, product recalls or other claims, as well as any claims for uninsured liabilities or in excess of insured liabilities, would divert our management's attention from our business and could result in significant financial liability.

We face uncertainty related to coverage, pricing and reimbursement and the practices of third party payors, which may make it difficult or impossible to sell our product candidates on commercially reasonable terms.

In both domestic and foreign markets, our ability to achieve profitability will depend in part on the negotiation of a favorable price or the availability of appropriate reimbursement from third party payors. Existing laws affecting the pricing and coverage of pharmaceuticals and other medical products by government programs and other third party payors may change before any of our product candidates are approved for marketing. In addition, third party payors are increasingly challenging the price and cost-effectiveness of medical products and services. Because we intend to offer products, if approved, that involve new technologies and new approaches to treating disease, the willingness of third party payors to reimburse for our products is particularly uncertain. We will have to charge a price for our products that is sufficiently high to enable us to recover our considerable investment in product development. Adequate third-party reimbursement may not be available to enable us to maintain price levels sufficient to achieve profitability and could harm our future prospects and reduce our stock price.

We use hazardous materials in our business. Any claims or liabilities relating to improper handling, storage or disposal of these materials could be time consuming and costly to resolve.

Our research and product development activities involve the controlled storage, use and disposal of hazardous and radioactive materials and biological waste. We are subject to federal, state and local laws and regulations governing the use, manufacture, storage, handling and disposal of these materials and certain waste products. We are currently in compliance with all government permits that are required for the storage, use and disposal of these materials. However, we cannot eliminate the risk of accidental contamination or injury to persons or property from these materials. In the event of an accident related to hazardous materials, we could be held liable for damages, cleanup costs or penalized with fines, and this liability could exceed the limits of our insurance policies and exhaust our internal resources. We may have to incur significant costs to comply with future environmental laws and regulations.

Our stock price is subject to volatility, and your investment may suffer a decline in value.

The market prices for securities of biopharmaceutical companies have in the past been, and are likely to continue in the future to be, very volatile. The market price of our common stock is subject to substantial volatility depending upon many factors, many of which are beyond our control, including:

- progress or results of any of our clinical trials or regulatory efforts, in particular any announcements regarding the progress or results of our planned trials and communications from the FDA;
- our ability to establish and maintain collaborations for the development and commercialization of our product candidates;
- our ability to raise additional capital to fund our operations;
- technological innovations, new commercial products or drug discovery efforts and preclinical and clinical activities by us or our competitors;
- changes in our intellectual property portfolio or developments or disputes concerning the proprietary rights of our products or product candidates;
- our ability to obtain component materials and successfully enter into manufacturing relationships for our product candidates or establish manufacturing capacity on our own;
- our ability to enter into and maintain collaborations;
- maintenance of our existing exclusive licensing agreements with the Regents of the University of California;

- changes in government regulations, general economic conditions, industry announcements;
- issuance of new or changed securities analysts' reports or recommendations;
- actual or anticipated fluctuations in our quarterly financial and operating results;
- our ability to maintain continued listing on the Nasdaq markets or similar exchanges; and
- volume of trading in our common stock

One or more of these factors could cause a substantial decline in the price of our common stock. In October 2008, we experienced a decline in our market capitalization of nearly 80% based on the FDA's communication to us regarding the continuation of a clinical hold on two U.S. IND Applications for HEPLISAV. In November 2008, we transferred our listing of Dynavax shares to The Nasdaq Capital Market from The Nasdaq Global Market. We may be delisted from the Nasdaq Capital Market if our share price or market value of publicly held shares does not meet certain thresholds. In addition, securities class action litigation has often been brought against a company following a decline in the market price of its securities. This risk may be particularly relevant for us because we have experienced greater than average stock price volatility, as have other biotechnology companies in recent years. We may in the future be the target of similar litigation. Securities litigation could result in substantial costs, and divert management's attention and resources, which could harm our business, operating results and financial conditions.

The anti-takeover provisions of our certificate of incorporation, bylaws, Delaware law and our share purchase rights plan may prevent or frustrate a change in control, even if an acquisition would be beneficial to our stockholders, which could affect our stock price adversely and prevent attempts by our stockholders to replace or remove our current management.

Provisions of our certificate of incorporation and bylaws may delay or prevent a change in control, discourage bids at a premium over the market price of our common stock and adversely affect the market price of our common stock and the voting or other rights of the holders of our common stock. These provisions include:

- authorizing our Board of Directors to issue additional preferred stock with voting rights to be determined by the Board of Directors;
- limiting the persons who can call special meetings of stockholders;
- prohibiting stockholder actions by written consent;
- creating a classified board of directors pursuant to which our directors are elected for staggered three year terms;
- providing that a supermajority vote of our stockholders is required for amendment to certain provisions of our certificate of incorporation and bylaws; and
- establishing advance notice requirements for nominations for election to our Board of Directors or for proposing matters that can be acted on by stockholders at stockholder meetings.

Our recently adopted share purchase rights plan may have certain anti-takeover effects. Specifically, the rights issued pursuant to the plan will cause substantial dilution to a person or group that attempts to acquire the Company on terms not approved by the Company's Board of Directors. Although the rights should not interfere with any merger or other business combination approved by the Board of Directors since the rights issued may be amended to permit such acquisition or redeemed by the Company at $0.001 per right prior to the earliest of (i) the time that a person or group has acquired beneficial ownership of 20% or more of the Common Shares or (ii) the final expiration date of the rights, the effect of the rights plan may deter a potential acquisition of the Company. In addition, we remain subject to the provisions of the Delaware corporation law that, in general, prohibit any business combination with a beneficial owner of 15% or more of our common stock for three years unless the holder's acquisition of our stock was approved in advance by our Board of Directors.

We will continue to implement additional financial and accounting systems, procedures or controls as our business and organization changes and to satisfy new reporting requirements.

We are required to comply with the Sarbanes-Oxley Act of 2002 and the related rules and regulations of the SEC. Compliance with Section 404 of the Sarbanes-Oxley Act of 2002, or Section 404, and other requirements may increase our costs and require additional management resources. We may need to continue to implement additional finance and accounting systems, procedures and controls in order to accommodate changes in our business and organization and to comply with new reporting requirements. There can be no assurance that we will be able to maintain a favorable assessment as to the adequacy of our internal control over financial reporting. If we are unable to reach an unqualified assessment, or our independent auditors are unable to issue an unqualified attestation as to the effectiveness of our internal controls over financial reporting, investors could lose confidence in the reliability of our financial reporting which could harm our business and could impact the price of our common stock.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

We lease approximately 67,000 square feet of laboratory and office space in Berkeley, California (the Berkeley Lease) under agreements expiring in September 2014, of which approximately 3,000 square feet is subleased through August 2010. The Berkeley Lease can be terminated at no cost to us in February 2011 but otherwise extends automatically until September 2014. We also lease approximately 5,600 square meters of laboratory and office space in Düsseldorf, Germany (the Düsseldorf Lease) under lease agreements expiring in March 2023.

ITEM 3. LEGAL PROCEEDINGS

None.

ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

None.

PART II

ITEM 5. MARKET FOR THE REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Market Information and Holders

Our common stock is traded on the Nasdaq Capital Market under the symbol "DVAX". Public trading of our common stock commenced on February 19, 2004. The following table sets forth for the periods indicated the high and low sale prices per share of our common stock.

	Common Stock Price	
	High	Low
2008		
First Quarter	$6.55	$ 1.87
Second Quarter	$2.59	$ 1.40
Third Quarter	$2.04	$ 0.97
Fourth Quarter	$2.60	$ 0.15
2007		
First Quarter	$9.24	$ 4.56
Second Quarter	$5.81	$ 3.98
Third Quarter	$5.19	$ 3.60
Fourth Quarter	$5.80	$ 4.17

As of February 27, 2009, there were approximately 104 holders of record of our common stock, as shown on the records of our transfer agent. The number of record holders does not include shares held in "street name" through brokers.

Dividends

We do not pay any cash dividends on our common stock. We currently expect to retain future earnings, if any, for use in the operation and expansion of our business and do not anticipate paying any cash dividends in the foreseeable future.

Use of Proceeds from Sales of Registered Securities

On December 27, 2007, pursuant to agreements with Deerfield, we issued to Deerfield Management and their affiliates warrants to purchase 1,000,000 shares of our common stock at a price of $5.65 per share, representing a 20% premium over the applicable 15-day trading range average of $4.71 per share. We filed a registration statement on Form S-3 (File No. 333-149117) on February 8, 2008 with the Securities and Exchange Commission and the related prospectus supplement dated May 9, 2008 with respect to the shares subject to purchase upon exercise of the warrants issued to Deerfield Management and their affiliates. In August 2008, the Company and Deerfield entered into a Settlement and Mutual Release agreement to amend this warrant to provide a termination date of February 26, 2014. In addition, 700,000 of the 1,000,000 shares issued on December 27, 2007, have been amended to allow for a reduction in exercise price equal to the average daily volume weighted average price over the 15 trading days prior to August 26, 2009, if such weighted average price is below $4.00 per share.

On October 18, 2007, pursuant to agreements with Deerfield, we issued to Deerfield Management and their affiliates warrants to purchase 1,300,000 shares of our common stock at a price of $5.75 per share, representing a 20% premium over the applicable 15-day trading range average of $4.79 per share. We filed a registration statement on Form S-3 (File No. 333-147455) on November 16, 2007, as amended on November 30, 2007 with

the Securities and Exchange Commission and the related prospectus supplement dated December 5, 2007 with respect to the shares subject to purchase upon exercise of the warrants issued to Deerfield Management and their affiliates. In August 2008, the Company and Deerfield entered into a Settlement and Mutual Release agreement to amend this warrant to provide a termination date of February 26, 2014 and a reduction in exercise price to $1.68 per share.

On July 18, 2007, pursuant to agreements with Deerfield, we issued to Deerfield Management and their affiliates warrants to purchase 1,250,000 shares of our common stock at a price of $5.13 per share, representing a 20% premium over the applicable 15-day trading range average of $4.36 per share. We filed a registration statement on Form S-3 (File No. 333-145836) on August 31, 2007 with the Securities and Exchange Commission and the related prospectus supplement dated September 14, 2007 with respect to the shares subject to purchase upon exercise of the warrants issued to Deerfield Management and their affiliates. In August 2008, the Company and Deerfield entered into a Settlement and Mutual Release agreement to amend this warrant to provide a termination date of February 26, 2014.

On December 6, 2006, pursuant to agreements with Azimuth Opportunity Ltd., we issued 1,663,456 shares at a weighted average price of $9.02 per share and realized aggregate proceeds of $15.0 million. The shares were issued pursuant to the Registration Statement on Form S-3 (File No. 333-127930) filed on August 29, 2005 with the Securities and Exchange Commission and the related prospectus supplement dated December 6, 2006.

On October 10, 2006, we completed an underwritten public offering of 7,130,000 shares of common stock, including 930,000 shares subject to the underwriters' over-allotment option at a public offering price of $4.40 per share and realized aggregate proceeds of $31.4 million. The offering was made pursuant to the Registration Statement on Form S-3 (File No. 333-137608) filed on September 27, 2006 with the Securities and Exchange Commission and the related prospectus supplement dated October 4, 2006.

On April 18, 2006, pursuant to agreements with Symphony Capital Partners, LP, we issued to Symphony Dynamo Holdings LLC a five-year warrant to purchase 2,000,000 shares of our common stock at a price of $7.32 per share, representing a 25% premium over the applicable 60-day trading range average of $5.86 per share. The warrant exercise price is subject to reduction to $5.86 per share under certain circumstances. We filed a registration statement on Form S-3 (File No. 333-134688) on June 1, 2006 covering the resale of share of common stock subject to purchase pursuant to the warrants, and the warrants were issued pursuant to Rule 506 promulgated under Regulation D.

On November 10, 2005, we completed an underwritten public offering of 5,720,000 shares of common stock, including 720,000 shares subject to the underwriters' over-allotment option at a public offering price of $6.25 per share and realized aggregate proceeds of $35.7 million. The offering was made pursuant to the Registration Statement on Form S-3 (File No. 333-127930) filed on August 29, 2005 with the Securities and Exchange Commission and the related prospectus supplement dated October 10, 2005.

On February 24, 2004, we completed our initial public offering of 6,900,000 shares of common stock, including 900,000 shares subject to the underwriters' over-allotment option at a public offering price of $7.50 per share and realized aggregate proceeds of $51.8 million. Our registration statement on Form S-1 (Reg. No. 333-109965) was declared effective by the Securities and Exchange Commission on February 11, 2004.

We retain broad discretion over the use of the net proceeds received from our offerings. The amount and timing of our actual expenditures may vary significantly depending on numerous factors, such as the progress of our product candidate development and commercialization efforts and the amount of cash used by our operations.

ITEM 6. SELECTED FINANCIAL DATA

The following selected financial data should be read in conjunction with Management's Discussion and Analysis of Financial Condition and Results of Operations, and with the Consolidated Financial Statements and Notes thereto which are included elsewhere in this Form 10-K. The Consolidated Statements of Operations Data for the years ended December 31, 2008, 2007 and 2006 and the Consolidated Balance Sheets Data as of December 31, 2008 and 2007 are derived from the audited Consolidated Financial Statements included elsewhere in this Form 10-K. The Consolidated Statements of Operations Data for the years ended December 31, 2005 and 2004 and the Consolidated Balance Sheets Data as of December 31, 2006, 2005 and 2004 are derived from Consolidated Financial Statements that are not included in this Form 10-K. Historical results are not necessarily indicative of results to be anticipated in the future.

	Years Ended December 31,				
	2008(1)	2007(1)	2006(1)	2005	2004
	(In thousands, except per share data)				
Consolidated Statements of Operations Data:					
Total revenues	$ 37,094	$ 14,093	$ 4,847	$ 14,655	$ 14,812
Operating expenses:					
Research and development(2)	44,771	65,888	50,116	27,887	23,129
General and administrative	15,463	18,293	14,836	9,258	8,543
Acquired in-process research and development(3)	—	—	4,180	—	—
Amortization of intangible assets	980	1,004	698	—	—
Total operating expenses	61,214	85,185	69,830	37,145	31,672
Loss from operations	(24,120)	(71,092)	(64,983)	(22,490)	(16,860)
Interest and other income, net	1,741	4,165	3,287	2,125	919
Debt forgiveness	5,000	—	—	—	—
Interest expense	(9,157)	(1,719)	(99)	(190)	(30)
Loss including noncontrolling interest in Symphony Dynamo, Inc.	(26,536)	(68,646)	(61,795)	(20,555)	(15,971)
Amount attributed to noncontrolling interest in Symphony Dynamo, Inc.	5,707	8,675	9,743	—	—
Net loss	$(20,829)	$(59,971)	$(52,052)	$(20,555)	$(15,971)
Basic and diluted net loss per share	$ (0.52)	$ (1.51)	$ (1.61)	$ (0.79)	$ (0.75)
Shares used in computing basic and diluted net loss per share	39,819	39,746	32,339	25,914	21,187

(1) Our net loss for the years ended December 31, 2008, 2007, and 2006 includes approximately $3.2 million, $3.5 million, and $3.2 million, respectively, in stock-based compensation expense for our employee stock option and employee stock purchase plans that we recorded as a result of adopting Statement of Financial Accounting Standards No. 123R, "Share-Based Compensation."

(2) Research and development expenses for the year ended December 31, 2007 include an impairment charge of approximately $0.4 million for certain intangible assets and related inventory. For a description of these charges, see Note 6 to the Consolidated Financial Statements.

(3) Represents acquired in-process research and development. The amount for 2006 relates to the Rhein Biotech GmbH acquisition. For description of these charges, see Note 6 to the Consolidated Financial Statements.

	December 31,				
	2008	2007	2006	2005	2004
			(In thousands)		
Consolidated Balance Sheets Data:					
Cash, cash equivalents and marketable securities	$ 43,367	$ 56,617	$ 72,831	$ 75,110	$ 65,844
Investments held by Symphony Dynamo, Inc.	25,109	31,631	13,363	—	—
Working capital	35,688	82,035	75,985	71,941	64,017
Total assets	90,623	120,449	102,890	80,093	73,646
Noncontrolling interest in Symphony Dynamo, Inc.	2,634	8,341	2,016	—	—
Accumulated deficit	(248,743)	(227,914)	(167,943)	(115,891)	(95,336)
Total stockholders' equity	13,522	30,790	77,056	74,363	59,876

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following Management's Discussion and Analysis of Financial Condition and Results of Operations contains forward-looking statements that involve a number of risks and uncertainties. Our actual results could differ materially from those indicated by forward-looking statements as a result of various factors, including but not limited to those set forth under "Risk Factors" and those that may be identified from time to time in our reports and registration statements filed with the Securities and Exchange Commission.

The following discussion and analysis is intended to provide an investor with a narrative of our financial results and an evaluation of our financial condition and results of operations. The discussion should be read in conjunction with "Item 6—Selected Financial Data" and the Consolidated Financial Statements and the related notes thereto set forth in "Item 8—Financial Statements and Supplementary Data."

Overview

Dynavax Technologies Corporation, a clinical-stage biopharmaceutical company, discovers and develops a diversified pipeline of novel Toll-like Receptor (TLR) product candidates. Based on our proprietary technologies, these products specifically modify the innate immune response to infectious, respiratory, autoimmune, and inflammatory diseases. We have partnerships with leading pharmaceutical companies such as GlaxoSmithKline (GSK), AstraZeneca AB (AstraZeneca), and Novartis Vaccines and Diagnostics, Inc. (Novartis) as well as funding from Symphony Dynamo, Inc. (SDI) and the National Institutes of Health (NIH).

Our diversified pipeline of product candidates includes:

- HEPLISAV™, a Phase 3 hepatitis B vaccine
- SD-101, a Phase 1b hepatitis C therapy developed under our SDI funding agreement
- DV-601, a Phase 1b proprietary hepatitis B therapy
- Our Universal Flu vaccine, a preclinical vaccine under a supply and option agreement with Novartis
- AZD1419, a preclinical asthma therapy partnered with AstraZeneca
- DV1079, a preclinical autoimmune and inflammatory disease therapy partnered with GSK

Our objective is to build a product-based business with a portfolio of products focused on serious unmet medical needs. Our diversified pipeline includes TLR agonists and inhibitors and targets infectious, respiratory, autoimmune, and inflammatory diseases. We discover novel TLR product candidates based on our proprietary technologies, including immunostimulatory sequences (ISS) and immunoregulatory sequences (IRS), which are

short DNA sequences. ISS enhance the ability of the immune system to fight disease and control chronic inflammation by specifically targeting TLRs found on a specialized subset of immune cells to alter the innate immune response. IRS specifically inhibit TLRs associated with autoimmune and inflammatory diseases.

Our strategies are focused on discovering novel compounds based on our proprietary technologies and developing our diversified pipeline of product candidates through partnerships with leading pharmaceutical companies or funding agreements. For our partnered products, we seek to leverage the experience and resources of our pharmaceutical partners to further the development and potentially commercialize these product candidates. For our other proprietary product candidates, we are developing these to evaluate the clinical potential with a goal of commercializing these products ourselves or through pharmaceutical partnerships.

Critical Accounting Policies and the Use of Estimates

The accompanying discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements and the related disclosures, which have been prepared in accordance with U.S. generally accepted accounting principles. The preparation of these financial statements requires us to make estimates, assumptions and judgments that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the balance sheet dates and the reported amounts of revenues and expenses for the periods presented. On an ongoing basis, we evaluate our estimates, including those related to revenue recognition, research and development activities, stock-based compensation, investments, asset impairment, the estimated useful life of assets, income taxes and contingencies. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

While our significant accounting policies are more fully described in Note 2 to the consolidated financial statements, we believe the following critical accounting policies reflect the more significant judgments and estimates used in the preparation of our financial statements.

Revenue Recognition

Our revenues are derived from collaborative agreements as well as grants. Collaborative agreements may include upfront license payments, cost reimbursement for the performance of research and development, milestone payments, contract manufacturing services, and royalty fees. In accordance with SAB 104, we recognize revenue when there is persuasive evidence that an arrangement exists, delivery has occurred or services have been rendered, the price is fixed or determinable and collectibility is reasonably assured. Our revenue arrangements that contain multiple elements are evaluated under the provisions of EITF 00-21. The different elements of the revenue arrangement are divided into separate units of accounting if certain criteria are met, including whether the delivered element has stand-alone value to the customer and whether there is objective and reliable evidence of the fair value of the undelivered items. The consideration we receive is allocated among the separate units based on their respective fair values, and the applicable revenue recognition criteria are applied to each of the separate units. Advance payments received in excess of amounts earned are classified as deferred revenue until earned. For agreements which do not meet the criteria of separate units of accounting under the provisions of EITF 00-21, the total consideration received is grouped as one unit and the applicable revenue recognition methodology is applied to the single unit.

Revenue from non-refundable upfront license fees and other payments under collaboration agreements where we have continuing performance obligations is deferred and recognized as performance occurs. Revenue is recognized on a ratable basis, unless we determine that another methodology is more appropriate, through the date at which our performance obligations are completed. We recognize cost reimbursement revenue under collaborative agreements as the related research and development costs are incurred, as provided for under the terms of these agreements.

Revenue from milestones that are contingent upon the achievement of substantive at-risk performance criteria is recognized in full upon achievement of those milestone events in accordance with the terms of the agreement and assuming all other revenue recognition criteria have been met. All revenue recognized to date under our collaborative agreements has been nonrefundable.

Revenues from the manufacturing and sale of vaccine and other materials are recognized upon meeting the criteria for substantial performance and acceptance by the customer.

Revenue from royalty payments is contingent on future sales activities by our licensees. As a result, we recognize royalty revenue when reported by our licensees and when collection is reasonably assured.

Revenue from government and private agency grants are recognized as the related research expenses are incurred and to the extent that funding is approved. Additionally, we recognize revenue based on the facilities and administrative cost rate reimbursable per the terms of the grant awards. Any amounts received in advance of performance are recorded as deferred revenue until earned.

Research and Development Expenses and Accruals

Research and development expenses include personnel and facility-related expenses, outside contracted services including clinical trial costs, manufacturing and process development costs, research costs and other consulting services, and non-cash stock-based compensation. Research and development costs are expensed as incurred. For agreements with third parties for clinical trials, manufacturing and process development, research and other consulting activities entered into prior to January 1, 2008, costs were expensed upon the earlier of when non-refundable amounts were due or as services were performed. Amounts due under such arrangements may be either fixed fee or fee for service, and may include upfront payments, monthly payments, and payments upon the completion of milestones or receipt of deliverables. Agreements entered into after January 1, 2008 are evaluated under the provisions of EITF 07-3, “Accounting for Nonrefundable Advance Payments for Goods or Services to Be Used in Future Research and Development Activities” which requires the Company to defer and capitalize costs related to non-refundable advance payments for good or services to be received in the future for use in research and development activity. The capitalized amounts are expensed as the related goods are delivered or services are performed.

Our accruals for clinical trials are based on estimates of the services received and efforts expended pursuant to contracts with clinical trial centers and clinical research organizations. We contract with third parties to perform various clinical trial activities in the on-going development of potential products. The financial terms of these agreements are subject to negotiation and vary from contract to contract and may result in uneven payment flows to our vendors. Payments under the contracts depend on factors such as the achievement of certain events, the successful enrollment of patients, the completion of portions of the clinical trial or similar conditions. We may terminate these contracts upon written notice and we are generally only liable for actual effort expended by the organizations to the date of termination, although in certain instances we may be further responsible for termination fees and penalties.

Stock-Based Compensation

On January 1, 2006, we adopted the fair value recognition provisions of Statement of Financial Accounting Standards 123R, “Share-Based Payment,” or FAS 123R, using the modified-prospective transition method. Under this transition method, compensation cost includes: (a) compensation cost for all stock-based payments granted prior to, but not yet vested as of January 1, 2006, based on the grant date fair value estimated in accordance with the original provisions of FAS 123 and (b) compensation cost for all stock-based payments granted subsequent to January 1, 2006, based on the grant date fair value estimated in accordance with the provisions of FAS 123R. Results for prior periods have not been restated.

On November 10, 2005, the FASB issued FASB Staff Position No. FAS 123(R)-3, "Transition Election Related to Accounting for Tax Effects of Share-Based Payment Awards." We have elected to adopt the alternative transition method provided in the FASB Staff Position for calculating the tax effects, if any, of stock-based compensation expense pursuant to FAS 123R. The alternative transition method includes simplified methods to establish the beginning balance of the additional paid-in capital pool (APIC pool) related to the tax effects of employee stock-based compensation, and to determine the subsequent impact to the APIC pool and the consolidated statements of operations and cash flows of the tax effects of employee stock-based compensation awards that are outstanding upon adoption of FAS 123R.

Determining the appropriate fair value model and calculating the fair value of stock-based awards at the grant date requires judgment and estimates. The fair value of each option is amortized on a straight-line basis over the option's vesting period, assuming an annual forfeiture rate of 15% for both the executive level and non-executive level employee groups, and is estimated on the date of grant using the Black-Scholes option valuation model, which requires the input of highly subjective assumptions, including the expected forfeiture rate, expected life of the option and expected stock price volatility. The expected life of options granted is estimated based on historical option exercise and employee termination data. Executive level and non-executive employees were grouped and considered separately for valuation purposes. In 2008, based on employee termination data we adjusted the expected life of the options for both groups of employees to 4 years. Expected volatility is based on historical volatility of our stock and comparable peer data over the life of the options granted to executive and non-executive level employees.

Acquired In-process Research and Development

We allocate the purchase price of acquisitions based on the estimated fair value of the assets acquired and liabilities assumed. To determine the value of the acquired in-process research and development associated with the Rhein Biotech GmbH transaction, we used the income approach and the cost approach. The income approach is based on the premise that the value of an asset is the present value of the future earning capacity that is available for distribution to the investors in the asset. We performed a discounted cash flow analysis, utilizing anticipated revenues, expenses and net cash flow forecasts related to the technology. Given the high risk associated with the development of new drugs, we adjust the revenue and expense forecasts to reflect the probability and risk of advancement through the regulatory approval process based on the stage of development in the regulatory process. Such a valuation requires significant estimates and assumptions. We believe the estimated fair value assigned to the in-process research and development is based on reasonable assumptions. However, these assumptions may be incomplete or inaccurate, and unanticipated events and circumstances may occur.

Goodwill and Other Intangible Assets

Goodwill amounts are recorded as the excess purchase price over tangible assets, liabilities and intangible assets acquired based on their estimated fair value, by applying the purchase method of accounting. The valuation in connection with the initial purchase price allocation and the ongoing evaluation for impairment of goodwill and intangible assets requires significant management estimates and judgment. The purchase price allocation process requires management estimates and judgment as to expectations for various products and business strategies. If any of the significant assumptions differ from the estimates and judgments used in the purchase price allocation, this could result in different valuations for goodwill and intangible assets. The Company operates in one segment and we evaluate goodwill for impairment on an annual basis and on an interim basis if events or changes in circumstances between annual impairment tests indicate that the asset might be impaired as required by SFAS No. 142, "Goodwill and Other Intangible Assets."

Impairment of Long-lived Assets

Long-lived assets to be held and used, including property and equipment and identified intangible assets, are reviewed for impairment in accordance with SFAS No. 144, "Accounting for the Impairment or Disposal of

Long-Lived Assets" whenever events or changes in circumstances indicate that the carrying value of such assets may not be recoverable. Factors we consider important that could indicate the need for an impairment review include the following:

- significant changes in the strategy for our overall business;
- significant underperformance relative to expected historical or projected future operating results;
- significant changes in the manner of our use of acquired assets;
- significant negative industry or economic trends;
- significant decline in our stock price for a sustained period
- a current expectation that, more likely than not, a long lived asset (asset group) will be sold or otherwise disposed of significantly before the end of its previously estimated useful life; and
- our market capitalization relative to net book value.

Determination of recoverability is based on an estimate of undiscounted cash flows resulting from the use of the asset and its eventual disposition. Measurement of impairment charges for long-lived assets that management expects to hold and use are based on the fair value of such assets.

Consolidation of Variable Interest Entities

In April 2006, we entered into a series of related agreements with Symphony Capital Partners, LP and certain of its affiliates (Symphony) to advance specific Dynavax ISS-based programs for cancer, hepatitis B therapy and hepatitis C therapy through certain stages of clinical development (Development Programs). The material agreements included:

- the Amended and Restated Limited Liability Corporation Agreement of Symphony Dynamo Holdings LLC (LLC Agreement);
- the Funding Agreement by and among Dynavax Technologies Corporation, Symphony Capital Partners LP, Symphony Dynamo Holdings LLC, and Symphony Dynamo Investors LLC (Funding Agreement);
- the Amended and Restated Research and Development Agreement among Dynavax Technologies Corporation, Symphony Dynamo Holdings LLC and Symphony Dynamo, Inc. (R&D Agreement);
- the Novated and Restated Technology License Agreement among Dynavax Technologies Corporation, Symphony Dynamo Holdings LLC and Symphony Dynamo, Inc. (License Agreement);
- the Purchase Option Agreement among Dynavax Technologies Corporation, Symphony Dynamo Holdings LLC and Symphony Dynamo, Inc. (Purchase Option Agreement);
- the Registration Rights Agreement between Dynavax Technologies Corporation and Symphony Dynamo Holdings LLC (Registration Rights Agreement); and
- the Warrant Purchase Agreement between Dynavax Technologies Corporation and Symphony Dynamo Holdings LLC (Warrant Agreement).

The LLC Agreement provided for the formation of Symphony Dynamo Holdings LLC (Holdings) and its wholly-owned subsidiary SDI. Pursuant to the Funding Agreement, Symphony invested $50.0 million in Holdings ($20.0 million at closing and an additional $30.0 million in April 2007), which was invested into SDI to fund the Development Programs. Pursuant to the License Agreement, we licensed to Holdings our intellectual property rights related to the Development Programs, which were assigned to SDI. Pursuant to the R&D Agreement, which was also assigned to SDI, we are primarily responsible for performing the work required to proceed with the Development Programs unless we determine that certain work should be undertaken by third party contractors retained by SDI. As a result of these agreements, Symphony owns 100% of the equity of Holdings, which owns 100% of the equity of SDI.

Pursuant to the Warrant Agreement, we issued to Holdings a five-year warrant to purchase 2,000,000 shares of our common stock, which Holdings distributed to Symphony, at $7.32 per share, representing a 25% premium over the applicable 60-day trading range average of $5.86 per share. The warrant exercise price is subject to reduction to $5.86 per share if either of two events occurs: (a) we enter into a collaboration agreement with a third party for a specified oncology program; or (b) the Purchase Option is terminated or expires unexercised. The warrant may be exercised or surrendered for a cash payment upon consummation of an all cash merger or acquisition of Dynavax, the obligation for which would be settled by the surviving entity. The warrant, issued upon closing, was assigned a value of $5.6 million using the Black-Scholes valuation model and was recorded in additional paid in capital.

SDI is governed by a separate board of directors, which is comprised of 5 members. Our CEO serves as a board member and we have the right to approve the two independent directors serving on the board. Additionally, our Chief Scientific Officer serves as the chairman of the SDI joint development committee, which is responsible for overseeing and monitoring the Development Programs for which we have been contracted to perform services.

Under FASB Interpretation No. 46 (FIN 46R), “Consolidation of Variable Interest Entities,” a variable interest entity (VIE) is (1) an entity that has equity that is insufficient to permit the entity to finance its activities without additional subordinated financial support, or (2) an entity that has equity investors that cannot make significant decisions about the entity’s operations or that do not absorb their proportionate share of the expected losses or do not receive the expected residual returns of the entity. FIN 46R requires a VIE to be consolidated by the party that is deemed to be the primary beneficiary, which is the party that has exposure to a majority of the potential variability in the VIE’s outcomes. The application of FIN 46R to a given arrangement requires significant management judgment.

We have consolidated the financial position and results of operations of SDI in accordance with FIN 46R. We have not consolidated Holdings because we believe our variable interest, the Purchase Option, is on the stock of SDI. We believe SDI is a VIE because we have the Purchase Option to acquire its outstanding voting stock at prices that were fixed upon entry into the arrangement, with the specific price based upon the date the option is exercised. The fixed nature of the Purchase Option price limits Symphony’s returns, as the investor in SDI.

FIN 46R deems parties to be de facto agents if they cannot sell, transfer, or encumber their interests without the prior approval of an enterprise. Symphony is considered to be a de facto agent of the Company pursuant to this provision, and because we and Symphony as a related party group absorb a majority of SDI’s variability, we evaluated whether, pursuant to FIN 46R’s requirements, we are most closely associated with SDI. We concluded that we are most closely associated with SDI and should consolidate SDI because (1) we originally developed the technology that was assigned to SDI, (2) we will continue to oversee and monitor the Development Programs, (3) our employees will continue to perform substantially all of the development work, (4) we significantly influenced the design of the responsibilities and management structure of SDI, (5) SDI’s operations are substantially similar to our activities, and (6) through the Purchase Option, we have the ability to participate in the benefits of a successful development effort.

Symphony will be required to absorb the development risk for its equity investment in SDI. Pursuant to FIN 46R’s requirements, Symphony’s equity investment in SDI is classified as noncontrolling interest in the consolidated balance sheet. The noncontrolling interest held by Symphony has been reduced by the $5.6 million fair value of the warrants it received and $2.6 million of fees we immediately paid to Symphony upon the transaction’s closing because the total consideration provided by us to Symphony effectively reduces Symphony’s at-risk equity investment in SDI. While we perform the research and development on behalf of SDI, our development risk is limited to the consideration we provided to Symphony (the warrants and fees). We exercised the Program Option in April 2007, which resulted in the recognition of a $15.0 million liability to Symphony. The noncontrolling interest was further reduced for this obligation as it will be paid to Symphony at the expiration of the SDI collaboration in 2011 if we do not exercise the Purchase Option, or will be included as part of the applicable purchase price upon exercise of the Purchase Option.

Net losses incurred by SDI are charged to the noncontrolling interest until that balance has been reduced to zero, at which point our net loss will be increased for the losses incurred by SDI subsequent to that date. At December 31, 2008, the noncontrolling interest balance was $2.6 million, which we currently expect to be exhausted in 2010. As of December 31, 2008, the investments held by SDI were $25.1 million, which we expect will be spent on the Development Programs through the term of the collaboration in 2011.

If we do not exercise the Purchase Option, we would remain obligated to pay Symphony $15.0 million for the Program Option, which we have reflected as a liability at December 31, 2008. Furthermore, if the Purchase Option expires unexercised, we would then be required to deconsolidate SDI. That potential deconsolidation would not be expected to impact our earnings because the carrying value of the net assets of SDI would be expected to be zero.

In contrast, if we exercise the Purchase Option, we will gain control of SDI. As such, we would expect to record the exercise of the Purchase Option as a return to the noncontrolling interest. We do not expect to recognize an asset for the Purchase Option payment to be made to Symphony. Instead, the payment is expected to be accounted for as a capital transaction that would not affect our net income or loss. However, because the exercise of the Purchase Option will be accounted for as a capital transaction, it will be treated as a deemed dividend for purposes of reporting earnings per share, increasing loss per share or decreasing income per share, as the case may be, in the period we exercise the Purchase Option. If the Development Programs are successful and the resources are available, we currently expect to exercise the Purchase Option.

Results of Operations

Revenues

Revenues consist of amounts earned from collaborations, grants, services and license fees. Collaboration revenue includes revenue recognized under our collaboration agreements. Grant revenue includes amounts earned under government and private agency grants. Services and license fees include research and development and contract manufacturing services, license fees and royalty payments.

The following is a summary of our revenues for the years ended December 31, 2008, 2007 and 2006 (in thousands, except for percentages):

	Years Ended December 31,			Increase (Decrease) from 2007 to 2008		Increase (Decrease) from 2006 to 2007	
Revenues:	**2008**	**2007**	**2006**	**$**	**%**	**$**	**%**
Collaboration revenue	$31,666	$ 9,315	$1,557	$22,351	240%	$ 7,758	498%
Grant revenue	2,999	3,046	1,549	(47)	(2)%	1,497	97%
Services and license revenue	2,429	1,732	1,741	697	40%	(9)	(1)%
Total revenues	$37,094	$14,093	$4,847	$23,001	163%	$ 9,246	191%

Total revenues for the year ended December 31, 2008 increased by $23.0 million, or 163%, over the same period in 2007 primarily due to an increase in revenue recognized from our collaboration agreements with Merck and AstraZeneca. Collaboration revenue in 2008 included the recognition of $5 million of previously deferred revenue associated with the upfront payment from Merck, a portion of which was accelerated due to Merck's termination of the collaboration in December 2008. In addition, collaboration revenue from AstraZeneca increased by $2 million, resulting from the receipt of a milestone payment in the third quarter of 2008. Grant revenue for the year ended December 31, 2008 included revenue recognized from NIH awards to continue development of our Universal Flu vaccine, a therapy for systemic lupus erythematosus (SLE) and our advanced ISS technology using TLR9 agonists as vaccine adjuvants. Services and license revenue of $2.4 million for the year ended December 31, 2008, was derived primarily from royalties received from customers of Dynavax Europe.

Total revenues for the year ended December 31, 2007 increased by $9.2 million, or 191%, over the same period in 2006 primarily due to an increase in revenue recognized from our collaboration agreements with Merck and AstraZeneca, which we entered into in October 2007 and September 2006, respectively. Grant revenue for the year ended December 31, 2007 included an increase of $0.6 million associated with our NIH awards, following the resolution of a vendor restriction. In addition, the Company recognized approximately $0.5 million in revenue for the year ended December 31, 2007 related to the August 2007 grant from the NIH for development of our Universal Flu vaccine. Services and license revenue of $1.7 million was derived primarily from R&D services provided to customers of Dynavax Europe.

We anticipate that our revenues will increase in 2009 as compared to 2008. As a result of Merck's termination of the collaboration, we expect to recognize approximately $28.5 million of remaining deferred revenue associated with the upfront payment from Merck on a ratable basis through the effective date of the termination, which is June 2009. In addition, Merck is obligated to make certain mutually agreed-upon payments to us for the 180-day wind down period through June 2009.

Research and Development

Research and development expenses consist of compensation and related personnel costs which include benefits, recruitment, travel and supply costs; outside services; allocated facility costs and non-cash stock-based compensation. Outside services relate to our preclinical experiments and clinical trials, regulatory filings, manufacturing our product candidates, and cost of sales relating to service and license revenue.

The following is a summary of our research and development expense (in thousands, except percentages):

	Years Ended December 31,			Increase (Decrease) from 2007 to 2008		Increase (Decrease) from 2006 to 2007	
Research and Development:	**2008**	**2007**	**2006**	**$**	**%**	**$**	**%**
Compensation and related personnel costs	$18,020	$19,170	$13,006	$ (1,150)	(6)%	$ 6,164	47%
Outside services	18,477	38,726	31,042	(20,249)	(52)%	7,684	25%
Facility costs	6,872	6,414	4,988	458	7%	1,426	29%
Impairment	—	444	—	(444)	(100)%	444	100%
Non-cash stock-based compensation	1,402	1,134	1,080	268	24%	54	5%
Total research and development	$44,771	$65,888	$50,116	$ (21,117)	(32)%	$ 15,772	31%

Research and development expenses for the year ended December 31, 2008 decreased by $21.1 million, or 32%, compared to the same period in 2007. The decrease from fiscal 2007 was due primarily to a reduction in outside services which included a non-recurring $5 million payment in June 2007 for a non-exclusive license to certain patents and patent applications for the purpose of commercializing HEPLISAV. The remaining decline in outside services resulted primarily from a reduction in clinical development costs associated with HEPLISAV and the discontinuation of clinical development for the TOLAMBA ragweed allergy program. We discontinued clinical development of TOLAMBA, our ragweed allergy product candidate, in May 2008.

Research and development expenses for the year ended December 31, 2007 increased by $15.8 million, or 31%, over the same period in 2006. The increase from fiscal 2006 was primarily due to outside services. In addition to the non-recurring $5 million license payment, the remaining growth in outside services was due to increased clinical trial costs related to our product candidates HEPLISAV and TOLAMBA and expenses incurred to support SDI programs and Dynavax Europe operations. Compensation and related personnel costs increased in 2007 due to continued organizational growth to further develop our clinical candidates and the impact of a full year of operations from Dynavax Europe. Facility costs increased primarily due to rent expense for Dynavax Europe and higher operating costs in the U.S.

Research and development expenses for 2007 also included approximately $0.4 million of impairment charges related to the Supervax program. In 2006, we acquired the Supervax hepatitis B vaccine manufactured by Dynavax Europe. Supervax was launched in Argentina in December 2006 and was approved for marketing and sales through a third party distributor. We recorded immaterial revenues and expenses related to the manufacture and sale of formulated bulk vaccine in 2006 to the third party distributor. During the fourth quarter of 2007, we were notified that the distributor was unable to meet its annual commitment to order additional bulk vaccine due to its inability to sell all of the previously purchased Supervax product in the Argentine market. The underperformance of the Supervax program relative to originally expected future sales caused us to discontinue our marketing efforts of Supervax in territories outside of Argentina. As a result, we determined that estimated future cash flows from sales of Supervax were significantly less than the projection established at the time of acquisition, and we considered this an indicator of impairment. As of November 2007, we performed our impairment test of long-lived assets. Based on our analysis, the fair value of the acquired intangible asset (developed technology) and inventory associated with the Supervax program was estimated to be zero; therefore, we recorded a permanent write down of these assets in accordance with SFAS No. 144.

We anticipate that our research and development expenses in 2009 will remain consistent with 2008 expenses, if HEPLISAV development continues.

General and Administrative

General and administrative expenses consist primarily of compensation and related personnel costs; outside services such as accounting, consulting, business development, investor relations and insurance; legal costs that include corporate and patent expenses; allocated facility costs; and non-cash stock-based compensation. The following is a summary of our general and administrative expenses (in thousands, except for percentages):

	Years Ended December 31,			Increase (Decrease) from 2007 to 2008		Increase (Decrease) from 2006 to 2007	
General and Administrative:	**2008**	**2007**	**2006**	**$**	**%**	**$**	**%**
Compensation and related personnel costs	$ 6,810	$ 7,101	$ 6,264	$ (291)	(4)%	$ 837	13%
Outside services	4,209	5,248	4,008	(1,039)	(20)%	1,240	31%
Legal costs	1,696	2,951	1,727	(1,255)	(43)%	1,224	71%
Facility costs	973	610	591	363	60%	19	3%
Other	—	—	43	—	—	(43)	(100)%
Non-cash stock-based compensation	1,775	2,383	2,203	(608)	(26)%	180	8%
Total general and administrative	$15,463	$18,293	$14,836	$(2,830)	(15)%	$3,457	23%

General and administrative expenses for the year ended December 31, 2008 decreased by $2.8 million, or 15%, compared to the same period in 2007. The decrease is primarily due to a reduction in legal costs related to patent activities. Outside services decreased in 2008 due to the decline in consulting and other professional fees incurred in conjunction with various corporate activities.

General and administrative expenses for the year ended December 31, 2007 increased by $3.5 million, or 23%, compared to the same period in 2006. The increase primarily reflects additional legal costs associated with patent activities. Compensation and related personnel costs increased in 2007 as a result of overall organizational growth including the operations of Dynavax Europe. Outside services increased in 2007 related to higher professional fees incurred to support various corporate activities, SDI programs and Dynavax Europe operations.

We expect general and administrative expenses to decline in 2009 as compared to 2008, resulting from continued efforts to reduce outside service costs.

Acquired In-process Research and Development

Following our April 2006 acquisition of Rhein Biotech GmbH (Rhein), we recorded the assets acquired and liabilities assumed based on their estimated fair values at the date of acquisition. As a result, we recorded net tangible assets of $3.0 million, goodwill of $2.3 million, other intangible assets of $5.1 million, and expense associated with the acquired in-process research and development of $4.2 million, representing the fair value of research projects that had not yet reached technological feasibility and that had no alternative future use.

A summary of the acquired in-process research and development programs and of the value assigned and recognized as expense as of the acquisition date is as follows (in thousands):

Program	Description	Estimated Acquisition Date Fair Value
Supervax	A hepatitis B vaccine launched in Argentina in December 2006 and approved for marketing and sales through a third party distributor	$ 890
Theravax	A potential therapy for treatment of chronic Hepatitis B infection	2,740
Cytovax	A potential prophylactic vaccine to prevent infection from cytomegalovirus	550
		$ 4,180

At the time of the acquisition, the estimated fair value of the acquired in-process research and development for the Supervax program was determined using the income approach, which discounts expected future cash flows to present value. We estimated the related future net cash flows between 2006 and 2020 and discounted them to their present value using a risk-adjusted discount rate of 50%, which was based on the estimated internal rate of return for Rhein's operations and was comparable to the estimated weighted average cost of capital for companies with Rhein's profile. The projected cash flows from the Supervax program were based on key assumptions such as estimates of revenues and operating profits related to the program considering its stage of development; the time and resources needed to complete the development and approval of the related product; the life of the potential commercialized product and associated risks, including the inherent difficulties and uncertainties in developing a drug compound such as obtaining FDA and other regulatory approvals; and risks related to the viability of and potential alternative treatments in any future target markets. Given the high risk associated with the development of new drugs, we adjusted the revenue and expense forecasts to reflect the probability and risk of advancement through the regulatory approval process based on the stage of development in the regulatory process.

From the acquisition date through the year ended December 31, 2006, we continued registration activities for Supervax in territories other than Argentina. Actual sales for the fiscal year ended 2006 of Supervax in Argentina, while immaterial, were substantially in accordance with the original projections at the valuation date. During fiscal year 2007, we continued to monitor sales of Supervax in Argentina and we continued efforts to market Supervax in order to determine if we could achieve planned regulatory approvals in other markets. However, the lack of performance of the Supervax program under our distribution arrangement caused us to discontinue our marketing efforts of Supervax in territories outside of Argentina. For the year ended December 31, 2007, we recorded an impairment charge of $0.4 million to write off the intangible asset and inventory associated with the Supervax program.

At the time of the acquisition, the estimated fair value of the acquired in-process research and development for the Theravax and Cytovax programs was determined using the cost approach. We considered the stage of product development and the nature of these projects. At the valuation date, both Theravax and Cytovax were in early stages of development and were many years away from obtaining regulatory approval, if at all, and the risks associated with identifying material cash flows as well as the nature, timing and projected costs associated with the remaining efforts for completion of the projects were not reasonably estimable. However, we were able to estimate the cost involved in recreating the technology using historical data from Rhein, including cost and effort

applied to the development of the technology prior to the acquisition date. We did not anticipate significant cash inflows for Theravax or Cytovax. Significant appraisal assumptions included historical data related to personnel effort, costs associated with those efforts, and external costs in order to estimate the fair value of these products as of the acquisition date.

In early 2007, we made a strategic decision to discontinue development of Cytovax in order to focus on other opportunities in our product pipeline; however, due to the early stage of development, there was no impact to our results of operations and financial condition. We intend to continue further development of our therapy to treat chronic hepatitis B infection, DV-601.

Amortization of Intangible Assets

Intangible assets consist primarily of the manufacturing process and customer relationships resulting from our April 2006 acquisition of Rhein and are being amortized over 5 years from the date of acquisition. Amortization of intangible assets was $1.0 million, $1.0 million and $0.7 million for the years ended December 31, 2008, 2007 and 2006, respectively.

Interest and Other Income, Loan Forgiveness and Interest Expense

Interest income is reported net of amortization of premiums and discounts on marketable securities and realized gains and losses on investments. Other income includes gains and losses on foreign currency translation of our activities primarily with Dynavax Europe and gains and losses on disposals of property and equipment. Interest expense includes amortization of deferred transaction costs and commitment fees related to the Deerfield financing agreement. The following is a summary of our interest and other income, loan forgiveness and interest expense (in thousands, except for percentages):

	Years Ended December 31,			Increase (Decrease) from 2007 to 2008		Increase (Decrease) from 2006 to 2007	
	2008	2007	2006	$	%	$	%
Interest and other income	$ 1,741	$ 4,165	$3,287	$(2,424)	(58)%	$ 878	27%
Loan forgiveness	$ 5,000	$ —	$ —	$ 5,000	100%	$ —	—
Interest expense	$(9,157)	$(1,719)	$ (99)	$ 7,438	433%	$1,620	1,636%

Interest and other income for the year ended December 31, 2008 decreased by $2.4 million, or 58%, compared to the same period in 2007 due primarily to lower investment balances and the decline in returns on our investment portfolio resulting from current market conditions. Interest and other income for the year ended December 31, 2007 increased by $0.9 million, or 27%, over the same period in 2006. The increase reflects additional interest earned on the investments held by SDI and the investment of proceeds from upfront fees received in the fourth quarter of 2007.

Loan forgiveness represents a $5.0 million portion of the loan from Deerfield that was forgiven upon termination of the loan agreement.

Interest expense for the year ended December 31, 2008 increased by $7.4 million, or 433%, compared to the same period in 2007 due to interest expense incurred from the termination of the loan agreement with Deerfield and amendments to warrants issued to Deerfield. Interest expense for the year ended December 31, 2007 increased by $1.6 million, or 1,636%, over the same period in 2006 due to interest expense incurred from the commitment fees and warrants issued under the Deerfield financing agreement.

Amount Attributed to Noncontrolling Interest in Symphony Dynamo, Inc.

Pursuant to the agreements that we entered into with SDI in April 2006 and, in accordance with FIN 46R, the results of operations of SDI have been included in our consolidated financial statements from the date of formation on April 18, 2006. In accordance with FIN 46R, we have deducted the losses attributed to the

noncontrolling interest in the determination of net loss in our consolidated statements of operations, and we will continue to deduct such losses until the carrying amount of the noncontrolling interest in the consolidated balance sheet is reduced to zero. For the fiscal years ended December 31, 2008, 2007 and 2006, the loss attributed to the noncontrolling interest was $5.7 million, $8.7 million, and $9.7 million, respectively.

Recent Accounting Pronouncements

In December 2007, the Financial Accounting Standards Board (FASB) issued SFAS No. 160, "Noncontrolling Interests in Consolidated Financial Statements—an amendment of Accounting Research Bulletin No. 51" (SFAS 160). SFAS 160 establishes accounting and reporting standards for ownership interests in subsidiaries held by parties other than the parent, the amount of consolidated net income attributable to the parent and to the noncontrolling interest, changes in a parent's ownership interest and the valuation of retained noncontrolling equity investments when a subsidiary is deconsolidated. SFAS 160 also establishes disclosure requirements that clearly identify and distinguish between the interests of the parent and the interests of the noncontrolling owners. SFAS 160 is effective for financial statements issued for fiscal years beginning after December 15, 2008, and will be adopted by us in the first quarter of fiscal 2009. We are currently evaluating the potential impact of the adoption of SFAS 160 on our consolidated results of operations and financial condition. SFAS 160 could change our accounting for the noncontrolling interest in SDI, a variable interest entity which we consolidate. Under current accounting standards, we do not reduce the carrying value of the noncontrolling interest below zero. Under SFAS 160, the noncontrolling interest could have a negative carrying value. In addition, upon adoption, we plan to reclassify the noncontrolling interest on our consolidated balance sheet from mezzanine to stockholders' equity.

In December 2007, the FASB ratified the final consensus in Emerging Issues Task Force (EITF) Issue No. 07-1, "Accounting for Collaboration Agreements", which required certain income statement presentation of transactions with third parties and of payments between parties to the collaboration arrangement, along with disclosure about the nature of the arrangement. EITF 07-1 is effective for us beginning January 1, 2009. We do not expect the adoption of EITF 07-1 to have a material effect on our consolidated results of operations and financial condition.

In March 2007, the FASB discussed EITF Issue No. 07-3, "Accounting for Nonrefundable Advance Payments for Goods or Services to Be Used in Future Research and Development Activities", which addressed the accounting for nonrefundable advance payments. The EITF concluded that nonrefundable advance payments for goods or services to be received in the future for use in research and development activities should be deferred and capitalized. The capitalized amounts should be expensed as the related goods are delivered or the services performed. If an entity's expectations change such that it does not expect it will need the goods to be delivered or the services to be rendered, capitalized nonrefundable advance payment should be charged to expense. EITF 07-3 is effective for new contracts entered into during fiscal years beginning after December 15, 2007, including interim periods within those fiscal years. Early adoption of the provision of the consensus was not permitted. Accordingly, we adopted EITF 07-3 in the first quarter of fiscal 2008. There was no material impact on our consolidated financial position, results of operations and cash flows as a result of adoption.

In September 2006, the FASB issued SFAS 157, "Fair Value Measurements." SFAS 157 provides guidance for using fair value to measure assets and liabilities. It also responds to investors' requests for expanded information about the extent to which companies measure assets and liabilities at fair value, the information used to measure fair value, and the effect of fair value measurements on earnings. SFAS 157 is effective for financial statements issued for fiscal years beginning after November 15, 2007. Accordingly, we adopted SFAS 157 in the first quarter of fiscal 2008. In February 2008, the FASB issued FASB Staff Position No. (FSP) FAS 157-2, "Effective Date of FASB Statement No. 157", which provides a one year deferral of the effective date of SFAS 157 for non-financial assets and non-financial liabilities, except those that are recognized or disclosed in the financial statements at fair value at least annually. On October 10, 2008, the FASB issued FSP FAS 157-3, "Determining the Fair Value of a Financial Asset When the Market for That Asset Is Not Active", which clarifies

the application of SFAS 157 in a market that is not active and provides examples to illustrate key considerations in determining the fair value of the financial asset when the market for that financial asset is not active. Therefore, we adopted the provisions of SFAS 157 and FSP FAS 157-3 with respect to our financial assets and liabilities only. The FASB also issued SFAS No. 159, "The Fair Value Option for Financial Assets and Financial Liabilities—Including an amendment of FASB Statement No. 115", (SFAS 159) in February 2007, which permits entities to choose to measure at fair value, at specified election dates, many financial instruments and certain other items that are not currently required to be measured at fair value. The statement does not affect any existing accounting literature that requires certain assets and liabilities to be carried at fair value. SFAS 159 is an elective standard which permits an entity to choose to measure many financial instruments and certain other items at fair value at specified election dates. Subsequent unrealized gains and losses on items for which the fair value option has been elected will be reported in earnings. We have not elected the fair value option for any assets or liabilities under SFAS 159. There was no impact on our consolidated financial position, results of operations and cash flows as a result of adoption of these pronouncements.

Liquidity and Capital Resources

As of December 31, 2008, we had $43.4 million in cash, cash equivalents and marketable securities and $25.1 million in investments held by SDI. Our funds are currently invested in a variety of securities, including highly liquid institutional money market funds, government agency securities and corporate obligations, some of which are government-secured.

Cash used in operating activities during the year ended December 31, 2008 was $17.0 million compared to $32.0 million for the same period in 2007. The decrease in cash usage over the prior year was due primarily to the reduction in our net loss for 2008. The improvement in net loss reflected the increase in revenues, in particular, revenue associated with the Merck collaboration for HEPLISAV. Cash used in operating activities during the year ended December 31, 2007 was $32.0 million compared to $37.2 million for the same period in 2006. The decrease in cash usage was due primarily to the receipt of $31.5 million in upfront fees from our collaboration with Merck, offset by our net loss and the amount attributed to the noncontrolling interest in SDI.

Cash provided by investing activities during the year ended December 31, 2008 was $30.1 million compared to cash used of $3.6 million for the same period in 2007. The increase in cash provided was primarily attributed to higher net proceeds from maturities of marketable securities. Cash used in investing activities during the year ended December 31, 2007 was $3.6 million compared to $20.4 million for the same period in 2006. The decrease in cash usage was primarily due to the $14.0 million that was paid to acquire Rhein in 2006 as well as higher net proceeds from maturities of marketable securities in 2007.

Cash provided by financing activities during the year ended December 31, 2008 was $1.4 million compared to $35.7 million for the same period in 2007. Cash provided by financing activities primarily included $2 million in loan proceeds from Deerfield, offset by a $0.8 million cash repayment to Deerfield upon termination of the loan agreement. Cash provided by financing activities during the year ended December 31, 2007 was $35.7 million compared to $62.9 million for the same period in 2006. Cash provided by financing activities in 2007 primarily included $30 million in proceeds from the purchase of the noncontrolling interest in SDI and $5.5 million in loan proceeds from Deerfield.

We currently anticipate that our cash and marketable securities, collaboration agreements, and investments held by SDI will enable us to maintain our operations for at least the next twelve months. Because of the significant time it will take for any of our product candidates to complete clinical trials, achieve regulatory approval and generate significant revenue, we will require substantial additional capital resources. We may raise additional funds through public or private equity offerings, debt financings, capital lease transactions, corporate collaborations or other means. We may attempt to raise additional capital due to favorable market conditions or strategic considerations even if we have sufficient funds for planned operations.

Additional financing may not be available on acceptable terms, if at all and therefore may adversely affect our ability to operate as a going concern. If at any time sufficient capital is not available, either through existing capital resources or through raising additional funds, we may be required to delay, scale back or eliminate some or all of our research or development programs, fail to meet the diligence obligations under existing licenses or enter into collaborative agreements at an earlier stage of development on less favorable terms than we would otherwise choose.

Contractual Obligations

The following summarizes our significant contractual obligations as of December 31, 2008 and the effect those obligations are expected to have on our liquidity and cash flow in future periods (in thousands):

Contractual Obligations:	Total	Less Than 1 Year	1-3 Years	4-5 Years	More Than 5 Years
Future minimum payments under our operating leases, excluding payments from the sublease agreement	$19,714	$2,400	$ 7,890	$4,724	$4,700
Long-term liability from the program option exercised under the SDI collaboration	15,000	—	15,000	—	—
Total	$34,714	$2,400	$22,890	$4,724	$4,700

We lease our facilities in Berkeley, California, or the Berkeley Lease, and Düsseldorf, Germany, or the Düsseldorf Lease, under operating leases that expire in September 2014 and March 2023, respectively. The Berkeley Lease can be terminated at no cost to us in February 2011 but otherwise extends automatically until September 2014. We have entered into a sublease agreement under the Berkeley Lease for a certain portion of the leased space with scheduled payments to us totaling $56 thousand through 2008, $58 thousand through 2009 and $40 thousand thereafter until August 2010. The sublease rental income is offset against rent expense.

In April 2007, we exercised an option to repurchase our hepatitis B program from SDI. The exercise of the program option triggered a payment obligation of $15 million which will be due upon the expiration of the SDI collaboration in 2011, if the purchase option for all programs is not exercised. The price for the program option is payable in cash only and will be fully creditable against the exercise price for any exercise of the purchase option.

During the fourth quarter of 2004, we established a letter of credit with Silicon Valley Bank as security for our Berkeley Lease in the amount of $0.4 million. The letter of credit remained outstanding as of December 31, 2008 and is collateralized by a certificate of deposit which has been included in restricted cash in the consolidated balance sheets as of December 31, 2008 and 2007. Under the terms of the Berkeley Lease, if the total amount of our cash, cash equivalents and marketable securities falls below $20.0 million for a period of more than 30 consecutive days during the lease term, the amount of the required security deposit will increase to $1.1 million, until such time as our projected cash and cash equivalents will exceed $20.0 million for the remainder of the lease term, or until our actual cash and cash equivalents remains above $20.0 million for a period of 12 consecutive months.

We established a letter of credit with Deutsche Bank as security for our Düsseldorf Lease in the amount of $0.3 million. The letter of credit remained outstanding as of December 31, 2008 and is collateralized by a certificate of deposit which has been included in restricted cash in the consolidated balance sheet as of December 31, 2008.

In addition to the non-cancelable commitments included above, we have entered into contractual arrangements that obligate us to make payments to the contractual counterparties upon the occurrence of future events. In the normal course of operations, we have entered into license and other agreements and intend to continue to seek additional rights relating to compounds or technologies in connection with our discovery,

manufacturing and development programs. Under the terms of the agreements, we may be required to pay future up-front fees, milestones and royalties on net sales of products originating from the licensed technologies. We consider these potential obligations to be contingent and have summarized all significant arrangements below.

We rely on research institutions, contract research organizations, clinical investigators and clinical material manufacturers. As of December 31, 2008, under the terms of our agreements, we are obligated to make future payments as services are provided of approximately $3 million through 2010. These agreements are terminable by us upon written notice. We are generally only liable for actual effort expended by the organizations at any point in time during the contract, subject to certain termination fees and penalties.

Under the terms of our exclusive license agreements with the Regents of the University of California, as amended, for certain technology and related patent rights and materials, we pay annual license or maintenance fees and will be required to pay milestones and royalties on net sales of products originating from the licensed technologies. As of December 31, 2008, such fees and milestone payments to the Regents could approximate $1 million in 2009.

Off-balance Sheet Arrangements

We do not have any off-balance sheet arrangements as defined by rules enacted by the SEC and Financial Accounting Standards Board, and accordingly, no such arrangements are likely to have a current or future effect on our financial position. As described above, SDI is considered a variable interest entity and included in our financial statements. Our financing arrangement with SDI does not qualify as an off-balance sheet arrangement as defined by applicable SEC regulations.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Quantitative and Qualitative Disclosure About Market Risk

The primary objective of our investment activities is to preserve principal while at the same time maximize the income we receive from our investments without significantly increasing risk. Some of the securities that we invest in may have market risk. This means that a change in prevailing interest rates may cause the principal amount of the investment to fluctuate. To minimize this risk, we currently maintain our portfolio of cash equivalents and investments in a variety of securities, including money market funds, government agency securities and corporate obligations, some of which are government-secured. We do not invest in auction rate securities or securities collateralized by home mortgages, mortgage bank debt, or home equity loans. Because of the short-term maturities of our cash equivalents and marketable securities, we do not believe that an increase in market rates would have any significant negative impact on the realized value of our investments.

Interest Rate Risk. We do not use derivative financial instruments in our investment portfolio. Due to the short duration and conservative nature of our cash equivalents and marketable securities, we do not expect any material loss with respect to our investment portfolio.

Foreign Currency Risk. We have certain investments outside the U.S. for the operations of Dynavax Europe and have some exposure to foreign exchange rate fluctuations. The cumulative translation adjustment reported in the consolidated balance sheet as of December 31, 2008 was $0.4 million primarily related to translation of Dynavax Europe activities from Euro to U.S. dollars.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

Report of Independent Registered Public Accounting Firm

To The Board of Directors and Stockholders
Dynavax Technologies Corporation

We have audited the accompanying consolidated balance sheets of Dynavax Technologies Corporation as of December 31, 2008 and 2007, and the related consolidated statements of operations, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2008. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Dynavax Technologies Corporation at December 31, 2008 and 2007, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2008, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Dynavax Technologies Corporation's internal control over financial reporting as of December 31, 2008, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated March 4, 2009, expressed an unqualified opinion thereon.

/s/ ERNST & YOUNG LLP

San Francisco, California
March 4, 2009

DYNAVAX TECHNOLOGIES CORPORATION
CONSOLIDATED BALANCE SHEETS

(In thousands, except per share amounts)

	December 31, 2008	December 31, 2007
Assets		
Current assets:		
Cash and cash equivalents	$ 28,103	$ 14,293
Marketable securities	15,264	42,324
Investments held by Symphony Dynamo, Inc. (SDI)	25,109	31,631
Restricted cash	668	408
Accounts receivable	6,407	7,234
Prepaid expenses and other current assets	991	6,049
Total current assets	76,542	101,939
Property and equipment, net	9,510	7,314
Goodwill	2,312	2,312
Other intangible assets, net	2,259	3,239
Other assets	—	5,645
Total assets	$ 90,623	$ 120,449
Liabilities, noncontrolling interest and stockholders' equity		
Current liabilities:		
Accounts payable	$ 905	$ 4,418
Accrued liabilities	6,816	12,059
Deferred revenues	33,133	3,427
Total current liabilities	40,854	19,904
Deferred revenues, noncurrent	18,512	40,792
Liability from program option exercised under the SDI collaboration	15,000	15,000
Other long-term liabilities	101	5,622
Noncontrolling interest in SDI	2,634	8,341
Commitments and contingencies (Note 10)		
Stockholders' equity:		
Preferred stock: $0.001 par value; 5,000 shares authorized and no shares issued and outstanding at December 31, 2008 and 2007	—	—
Common stock: $0.001 par value; 100,000 shares authorized at December 31, 2008 and 2007; 39,854 and 39,765 shares issued and outstanding at December 31, 2008 and 2007, respectively	40	40
Additional paid-in capital	262,579	258,266
Accumulated other comprehensive income (loss):		
Unrealized gain on marketable securities available-for-sale	49	138
Cumulative translation adjustment	(403)	260
Accumulated other comprehensive income (loss)	(354)	398
Accumulated deficit	(248,743)	(227,914)
Total stockholders' equity	13,522	30,790
Total liabilities, noncontrolling interest and stockholders' equity	$ 90,623	$ 120,449

See accompanying notes.

DYNAVAX TECHNOLOGIES CORPORATION
CONSOLIDATED STATEMENTS OF OPERATIONS

(In thousands, except per share amounts)

	Years Ended December 31,		
	2008	2007	2006
Revenues:			
Collaboration revenue	$ 31,666	$ 9,315	$ 1,557
Grant revenue	2,999	3,046	1,549
Service and license revenue	2,429	1,732	1,741
Total revenues	37,094	14,093	4,847
Operating expenses:			
Research and development	44,771	65,888	50,116
General and administrative	15,463	18,293	14,836
Acquired in-process research and development	—	—	4,180
Amortization of intangible assets	980	1,004	698
Total operating expenses	61,214	85,185	69,830
Loss from operations	(24,120)	(71,092)	(64,983)
Interest and other income	1,741	4,165	3,287
Loan forgiveness	5,000	—	—
Interest expense	(9,157)	(1,719)	(99)
Loss including noncontrolling interest in SDI	(26,536)	(68,646)	(61,795)
Amount attributed to noncontrolling interest in SDI	5,707	8,675	9,743
Net loss	$(20,829)	$(59,971)	$(52,052)
Basic and diluted net loss per share	$ (0.52)	$ (1.51)	$ (1.61)
Shares used to compute basic and diluted net loss per share	39,819	39,746	32,339

See accompanying notes.

DYNAVAX TECHNOLOGIES CORPORATION
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

(In thousands)

	Common Stock		Additional Paid-In Capital	Deferred Stock Compensation	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Stockholders' Equity
	Shares	Par Amount					
Balances at December 31, 2005	30,482	$ 30	$192,840	$ (2,467)	$ (149)	$ (115,891)	$ 74,363
Issuance of common stock upon equity offerings	8,794	9	44,032	—	—	—	44,041
Exercise of stock options	412	1	1,339	—	—	—	1,340
Issuance of common stock under Employee Stock Purchase Plan	27	—	114	—	—	—	114
Issuance of warrants in conjunction with Symphony Dynamo, Inc. transaction	—	—	5,646	—	—	—	5,646
Stock compensation expense	—	—	3,283	—	—	—	3,283
Reclassification of deferred stock compensation balance upon adoption of FAS 123R	—	—	(2,467)	2,467	—	—	—
Comprehensive loss:							
Change in unrealized gain on marketable securities	—	—	—	—	172	—	172
Cumulative translation adjustment	—	—	—	—	149	—	149
Net loss	—	—	—	—	—	(52,052)	(52,052)
Comprehensive loss							(51,731)
Balances at December 31, 2006	39,715	40	244,787	—	172	(167,943)	77,056
Exercise of stock options	6	—	22	—	—	—	22
Issuance of common stock under Employee Stock Purchase Plan	44	—	149	—	—	—	149
Proceeds from issuance of common stock, net of fees	—	—	(19)	—	—	—	(19)
Issuance of warrants in conjunction with Deerfield financing agreement	—	—	9,796	—	—	—	9,796
Stock compensation expense	—	—	3,531	—	—	—	3,531
Comprehensive loss:							
Change in unrealized gain on marketable securities	—	—	—	—	110	—	110
Cumulative translation adjustment	—	—	—	—	116	—	116
Net loss	—	—	—	—	—	(59,971)	(59,971)
Comprehensive loss							(59,745)
Balances at December 31, 2007	39,765	40	258,266	—	398	(227,914)	30,790
Exercise of stock options	2	—	5	—	—	—	5
Issuance of common stock under Employee Stock Purchase Plan	87	—	204	—	—	—	204
Modification of warrants in conjunction with Deerfield financing agreement	—	—	899	—	—	—	899
Stock compensation expense	—	—	3,205	—	—	—	3,205
Comprehensive loss:							
Change in unrealized gain on marketable securities	—	—	—	—	(89)	—	(89)
Cumulative translation adjustment	—	—	—	—	(663)	—	(663)
Net loss	—	—	—	—	—	(20,829)	(20,829)
Comprehensive loss							(21,581)
Balances at December 31, 2008	39,854	$ 40	$262,579	$ —	$ (354)	$ (248,743)	$ 13,522

See accompanying notes.

DYNAVAX TECHNOLOGIES CORPORATION
CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands)

	Years Ended December 31,		
	2008	2007	2006
Operating activities			
Net loss	$ (20,829)	$ (59,971)	$ (52,052)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	1,850	1,483	1,130
Amount attributed to noncontrolling interest in SDI	(5,707)	(8,675)	(9,743)
Acquired in-process research and development	—	—	4,180
Amortization of intangible assets	980	1,004	698
(Gain) loss on disposal of property and equipment	32	—	(36)
Accretion and amortization on marketable securities	(721)	(1,855)	(296)
Realized loss on investments	—	—	23
Interest associated with Deerfield financing agreement	9,090	1,248	—
Loan forgiveness	(5,000)	—	—
Stock-based compensation expense	3,205	3,531	3,283
Changes in operating assets and liabilities:			
Accounts receivable	827	(5,080)	(976)
Prepaid expenses and other current assets	1,533	(1,851)	604
Inventory	—	257	(257)
Other assets	(79)	1,269	(513)
Accounts payable	(3,513)	2,237	1,006
Accrued liabilities	(6,129)	930	5,847
Deferred revenues	7,426	33,441	9,862
Net cash used in operating activities	(17,035)	(32,032)	(37,240)
Investing activities			
Change in investments held by SDI	6,522	(18,268)	(13,363)
Cash paid for acquisition, net of cash acquired	—	—	(14,045)
Purchases of marketable securities	(35,755)	(80,232)	(65,842)
Proceeds from maturities of marketable securities	59,401	98,550	63,008
Proceeds from sales of marketable securities	4,046	—	10,987
Purchases of property and equipment	(4,098)	(3,647)	(1,125)
Net cash provided by (used in) investing activities	30,116	(3,597)	(20,380)
Financing activities			
Proceeds from purchase of noncontrolling interest by shareholders in SDI, net of fees	—	30,000	17,405
Proceeds from notes payable issued to Deerfield	2,000	5,500	—
Repayment of notes payable issued to Deerfield	(817)	—	—
Proceeds from issuance of common stock, net of issuance costs	—	(19)	44,041
Proceeds from exercise of stock options	5	22	1,340
Proceeds from employee stock purchase plan	204	149	114
Net cash provided by financing activities	1,392	35,652	62,900
Effect of exchange rate on cash and cash equivalents	(663)	116	149
Net increase in cash and cash equivalents	13,810	139	5,429
Cash and cash equivalents at beginning of year	14,293	14,154	8,725
Cash and cash equivalents at end of year	$ 28,103	$ 14,293	$ 14,154
Supplemental disclosure of cash flow information			
Cash paid during the year for interest	$ 885	$ 356	$ —
Non-cash activities:			
Liability from program option exercised under the SDI collaboration	$ —	$ 15,000	$ —
Warrants issued in conjunction with the SDI transaction	$ —	$ —	$ 5,646
Warrants issued in conjunction with the Deerfield financing agreement	$ —	$ 9,796	$ —
Loan forgiveness	$ 5,000	$ —	$ —
Modification of warrants previously issued to Deerfield	$ 899	$ —	$ —
Disposal of fully depreciated property and equipment	$ —	$ 238	$ 395

See accompanying notes.

DYNAVAX TECHNOLOGIES CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Organization

Dynavax Technologies Corporation, a clinical-stage biopharmaceutical company, discovers and develops a diversified pipeline of novel Toll-like Receptor (TLR) product candidates. Based on our proprietary technologies, these products specifically modify the innate immune response to infectious, respiratory, autoimmune, and inflammatory diseases. We have partnerships with leading pharmaceutical companies such as GlaxoSmithKline (GSK), AstraZeneca AB (AstraZeneca), and Novartis Vaccines and Diagnostics, Inc. (Novartis) as well as funding from Symphony Dynamo, Inc. (SDI) and the National Institutes of Health (NIH). We originally incorporated in California on August 29, 1996 under the name Double Helix Corporation, and we changed our name to Dynavax Technologies Corporation in September 1996. We reincorporated in Delaware on March 26, 2001.

Subsidiaries

In April 2006, we completed the acquisition of Rhein Biotech GmbH, or Rhein, a wholly-owned subsidiary in Düsseldorf, Germany. Our wholly-owned subsidiary in Japan formed in December 2004, Ryden Therapeutics KK, was liquidated in the fourth quarter of 2006. Our wholly-owned subsidiary in Singapore formed in October 2003, Dynavax Asia Pte. Ltd., was liquidated in the fourth quarter of 2007.

2. Summary of Significant Accounting Policies

Basis of Presentation

The consolidated financial statements include the accounts of Dynavax and our wholly-owned subsidiaries as well as the accounts of a variable interest entity, Symphony Dynamo, Inc. (SDI), which we consolidate pursuant to Financial Accounting Standards Board Interpretation No. 46 (revised 2003), “Consolidation of Variable Interest Entities,” or FIN 46R. All significant intercompany accounts and transactions have been eliminated. In accordance with SFAS No. 131, “Disclosure About Segments of an Enterprise and Related Information,” we are required to report operating segments and make related disclosures about our revenues and long-lived assets by geographic area. We operate in one business segment, which is the discovery and development of biopharmaceutical products. In fiscal years 2008, 2007 and 2006, respectively, 93%, 88% and 64% of our revenues were earned in the U.S. and the remaining revenues were earned in Europe. As of December 31, 2008 and 2007, respectively, 48% and 73% of our long-lived assets were located in the U.S. and the remaining assets were located in Europe.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. Actual results may differ from these estimates.

Foreign Currency

We consider the local currency to be the functional currency for our international subsidiaries. Accordingly, assets and liabilities denominated in foreign currencies are translated into U.S. dollars using the exchange rate on the balance sheet date. Revenues and expenses are translated at average exchange rates prevailing throughout the year. Currency translation adjustments are charged or credited to accumulated other comprehensive income (loss) in the consolidated balance sheets. Gains and losses resulting from currency transactions are included in the consolidated statements of operations.

Cash, Cash Equivalents, Marketable Securities and Investments held by Symphony Dynamo, Inc.

We consider all highly liquid investments purchased with an original maturity of three months or less to be cash equivalents. Management determines the appropriate classification of marketable securities at the time of purchase. We invest in short-term money market funds, government agency securities and corporate obligations,

some of which are government-secured. We believe these types of investments are subject to minimal credit and market risk. We do not invest in auction rate securities or securities collateralized by home mortgages, mortgage bank debt, or home equity loans.

Investments held by SDI consist of investments in money market funds. As of December 31, 2008, we had investments held by SDI of $25.1 million.

We have classified our entire investment portfolio as available-for-sale. We view our available-for-sale portfolio as available for use in current operations, and accordingly, have classified all investments as short-term. As of December 31, 2008 the stated maturity of our investments is within one year of the current balance sheet date. In accordance with SFAS 115, “Accounting for Certain Investments in Debt and Equity Securities,” available-for-sale securities are carried at fair value based on quoted market prices, with unrealized gains and losses included in accumulated other comprehensive income in stockholders’ equity. Realized gains and losses and declines in value, if any, judged to be other than temporary on available-for-sale securities are included in interest income or expense. The cost of securities sold is based on the specific identification method. Management assesses whether declines in the fair value of investment securities are other than temporary. In determining whether a decline is other than temporary, management considers the following factors:

- Length of the time and the extent to which the market value has been less than cost;
- The financial condition and near-term prospects of the issuer; and
- Our intent and ability to retain our investment in the issuer for a period of time sufficient to allow for any anticipated recovery in market value.

To date, there have been no declines in fair value that have been identified as other than temporary.

Concentration of Credit Risk and Other Risks and Uncertainties

Financial instruments that are subject to concentration of credit risk consist primarily of cash and cash equivalents, accounts receivable, and marketable securities. Our policy is to invest cash in institutional money market funds and marketable securities of U.S. government and corporate issuers with high credit quality in order to limit the amount of credit exposure. We currently maintain a portfolio of cash equivalents and investments in a variety of securities, including money market funds, government agency securities and corporate obligations, some of which are government-secured. We do not invest in auction rate securities or securities collateralized by home mortgages, mortgage bank debt, or home equity loans. We have not experienced any losses on our cash and cash equivalents and marketable securities.

Trade accounts receivable are recorded at invoice value. We review our exposure to accounts receivable, including the potential for allowances based on management’s judgment. We have not historically experienced any significant losses. We do not currently require collateral for any of our trade accounts receivable.

Our future products will require approval from the U.S. Food and Drug Administration and foreign regulatory agencies before commercial sales can commence. There can be no assurance that our products will receive any of these required approvals. The denial or delay of such approvals would have a material adverse impact on our consolidated financial position and results of operations.

We rely on a single contract manufacturer to produce material for certain of our clinical trials. The loss of our current supplier could delay development or commercialization of our product candidates. To date, we have manufactured only small quantities of material for research purposes.

We are subject to risks common to companies in the biopharmaceutical industry, including, but not limited to, new technological innovations, clinical development risk, protection of proprietary technology, compliance with government and environmental regulations, uncertainty of market acceptance of products, product liability, the volatility of our stock price and the need to obtain additional financing.

Property and Equipment

Property and equipment are recorded at cost. Depreciation is computed using the straight-line method over the estimated useful lives of the respective assets. The assets held in the Berkeley facility have estimated useful lives of three years for computer equipment and furniture, and five years for laboratory equipment. The assets in the Düsseldorf, Germany facility have estimated useful lives of three years for computer equipment and thirteen years for furniture and laboratory equipment. Leasehold improvements in both facilities are amortized over the remaining life of the initial lease term or the estimated useful lives of the assets, whichever is shorter. Repair and maintenance costs are charged to expense as incurred.

Long-lived Assets

Long-lived assets to be held and used, including property and equipment and identified intangible assets, are reviewed for impairment in accordance with SFAS No. 144, “Accounting for the Impairment or Disposal of Long-Lived Assets” whenever events or changes in circumstances indicate that the carrying value of such assets may not be recoverable. Factors we consider important that could indicate the need for an impairment review include the following:

- significant changes in the strategy for our overall business;
- significant underperformance relative to expected historical or projected future operating results;
- significant changes in the manner of our use of acquired assets;
- significant negative industry or economic trends;
- significant decline in our stock price for a sustained period
- a current expectation that, more likely than not, a long lived asset (asset group) will be sold or otherwise disposed of significantly before the end of its previously estimated useful life; and
- our market capitalization relative to net book value.

Recoverability is measured by comparison of the assets’ carrying amounts to the future net undiscounted cash flows resulting from the use of the asset and its eventual disposition. If these assets are considered impaired, the impairment recognized is measured by the amount by which the carrying value of the assets exceed the projected discounted future net cash flows associated with the assets. For the year ended December 31, 2008 we recognized no impairment charge as it relates to our long-lived assets. For the year ended December 31, 2007, we recognized an impairment charge included in research and development expenses of $0.4 million to write off the carrying amount of the intangible asset related to the Supervax developed technology acquired as part of the Rhein Biotech GmbH acquisition and related inventory (See Note 6).

Revenue Recognition

Our revenues derive from collaborative agreements as well as grants. Collaborative agreements may include upfront license payments, cost reimbursement for the performance of research and development, milestone payments, contract manufacturing services, and royalty fees. In accordance with SAB 104, we recognize revenue when there is persuasive evidence that an arrangement exists, delivery has occurred or services have been rendered, the price is fixed or determinable and collectibility is reasonably assured. Our revenue arrangements that contain multiple elements are evaluated under the provisions of EITF 00-21. The different elements of the revenue arrangement are divided into separate units of accounting if certain criteria are met, including whether the delivered element has stand-alone value to the customer and whether there is objective and reliable evidence of the fair value of the undelivered items. The consideration we receive is allocated among the separate units based on their respective fair values, and the applicable revenue recognition criteria are applied to each of the separate units. Advance payments received in excess of amounts earned are classified as deferred revenue until earned. For agreements which do not meet the criteria of separate units of accounting under the provisions of EITF 00-21, the total consideration received is grouped as one unit and the applicable revenue recognition methodology is applied to the single unit.

Revenue from non-refundable upfront license fees and other payments under collaboration agreements where we have continuing performance obligations is deferred and recognized as performance occurs. Revenue is recognized on a ratable basis, unless we determine that another methodology is more appropriate, through the date at which our performance obligations are completed. We recognize cost reimbursement revenue under collaborative agreements as the related research and development costs are incurred, as provided for under the terms of these agreements.

Revenue from milestones that are contingent upon the achievement of substantive at-risk performance criteria is recognized in full upon achievement of those milestone events in accordance with the terms of the agreement and assuming all other revenue recognition criteria have been met. All revenue recognized to date under our collaborative agreements has been nonrefundable.

Revenues from the manufacturing and sale of vaccine and other materials are recognized upon meeting the criteria for substantial performance and acceptance by the customer.

Revenue from royalty payments is contingent on future sales activities by our licensees. As a result, we recognize royalty revenue when reported by our licensees and when collection is reasonably assured.

Revenue from government and private agency grants are recognized as the related research expenses are incurred and to the extent that funding is approved. Additionally, we recognize revenue based on the facilities and administrative cost rate reimbursable per the terms of the grant awards. Any amounts received in advance of performance are recorded as deferred revenue until earned.

Research and Development Expenses and Accruals

Research and development expenses include personnel and facility-related expenses, outside contracted services including clinical trial costs, manufacturing and process development costs, research costs and other consulting services, and non-cash stock-based compensation. Research and development costs are expensed as incurred. For agreements with third parties for clinical trials, manufacturing and process development, research and other consulting activities entered into prior to January 1, 2008, costs were expensed upon the earlier of when non-refundable amounts were due or as services were performed. Amounts due under such arrangements may be either fixed fee or fee for service, and may include upfront payments, monthly payments, and payments upon the completion of milestones or receipt of deliverables. Agreements entered into after January 1, 2008 are evaluated under the provisions of EITF 07-3, “Accounting for Nonrefundable Advance Payments for Goods or Services to Be Used in Future Research and Development Activities” which requires the Company to defer and capitalize costs related to non-refundable advance payments for good or services to be received in the future for use in research and development activity. The capitalized amounts are expensed as the related goods are delivered or services are performed.

Our accruals for clinical trials are based on estimates of the services received and efforts expended pursuant to contracts with clinical trial centers and clinical research organizations. We contract with third parties to perform various clinical trial activities in the on-going development of potential products. The financial terms of these agreements are subject to negotiation and vary from contract to contract and may result in uneven payment flows to our vendors. Payments under the contracts depend on factors such as the achievement of certain events, the successful enrollment of patients, and the completion of portions of the clinical trial or similar conditions. We may terminate these contracts upon written notice and we are generally only liable for actual effort expended by the organizations to the date of termination, although in certain instances we may be further responsible for termination fees and penalties.

Acquired In-process Research and Development

We allocate the purchase price of acquisitions based on the estimated fair value of the assets acquired and liabilities assumed. To determine the value of the acquired in-process research and development, or in-process R&D associated with the Rhein Biotech GmbH transaction discussed in Note 6, we used the income approach

and the cost approach to value in-process research and development. The income approach is based on the premise that the value of an asset is the present value of the future earning capacity that is available for distribution to the investors in the asset. We performed a discounted cash flow analysis, utilizing anticipated revenues, expenses and net cash flow forecasts related to the technology. The cost approach is based on the theory that a prudent investor would pay no more than the cost of constructing a similar asset of like utility at prices applicable at the time of the appraisal. We estimate the costs involved in re-creating the technology using the historical cost and effort applied to the development of the technology prior to the valuation date. Given the high risk associated with the development of new drugs, we adjust the revenue and expense forecasts to reflect the probability and risk of advancement through the regulatory approval process based on the stage of development in the regulatory process. Such a valuation requires significant estimates and assumptions. We believe the estimated fair value assigned to the in-process R&D is based on reasonable assumptions. However, these assumptions may be incomplete or inaccurate, and unanticipated events and circumstances may occur.

Goodwill and Other Intangible Assets

Goodwill amounts are recorded as the excess purchase price over tangible assets, liabilities and intangible assets acquired based on their estimated fair value, by applying the purchase method of accounting. The valuation in connection with the initial purchase price allocation and the ongoing evaluation for impairment of goodwill and intangible assets requires significant management estimates and judgment. The purchase price allocation process requires management estimates and judgment as to expectations for various products and business strategies. If any of the significant assumptions differ from the estimates and judgments used in the purchase price allocation, this could result in different valuations for goodwill and intangible assets. We evaluate goodwill for impairment on an annual basis and on an interim basis if events or changes in circumstances between annual impairment tests indicate that the asset might be impaired as required by SFAS No. 142, “Goodwill and Other Intangible Assets.”

Consolidation of Variable Interest Entities

Under FIN 46R, “Consolidation of Variable Interest Entities,” arrangements that are not controlled through voting or similar rights are accounted for as variable interest entities, or VIEs. An enterprise is required to consolidate a VIE if it is the primary beneficiary of the VIE. The enterprise that is deemed to absorb a majority of the expected losses or receive a majority of expected residual returns of the VIE is considered the primary beneficiary.

Based on the provisions of FIN 46R, we have concluded that under certain circumstances when we enter into agreements that contain an option to purchase assets or equity securities from an entity, or enter into an arrangement with a financial partner for the formation of joint ventures which engage in research and development projects, a VIE may be created. For each VIE created, we compute expected losses and residual returns based on the probability of future cash flows. If we are determined to be the primary beneficiary of the VIE, the assets, liabilities and operations of the VIE will be consolidated with our financial statements. Our consolidated financial statements include the accounts of Symphony Dynamo, Inc., a variable interest entity, of which we are the primary beneficiary, as discussed in Note 8.

Stock-Based Compensation

On January 1, 2006, we adopted the fair value recognition provisions of Statement of Financial Accounting Standards 123R, “Share-Based Payment,” or FAS 123R, using the modified-prospective transition method. Under this transition method, compensation cost includes: (a) compensation cost for all stock-based payments granted prior to, but not yet vested as of January 1, 2006, based on the grant date fair value estimated in accordance with the original provisions of FAS 123 and (b) compensation cost for all stock-based payments granted subsequent to January 1, 2006, based on the grant date fair value estimated in accordance with the provisions of FAS 123R. Results for prior periods have not been restated.

On November 10, 2005, the FASB issued FASB Staff Position No. FAS 123(R)-3, “Transition Election Related to Accounting for Tax Effects of Share-Based Payment Awards.” We have elected to adopt the

alternative transition method provided in the FASB Staff Position for calculating the tax effects, if any, of stock- based compensation expense pursuant to FAS 123R. The alternative transition method includes simplified methods to establish the beginning balance of the additional paid-in capital pool (APIC pool) related to the tax effects of employee stock-based compensation, and to determine the subsequent impact to the APIC pool and the consolidated statements of operations and cash flows of the tax effects of employee stock-based compensation awards that are outstanding upon adoption of FAS 123R.

Determining the appropriate fair value model and calculating the fair value of stock-based awards at the grant date requires judgment and estimates. The fair value of each option is amortized on a straight-line basis over the option's vesting period, assuming an annual forfeiture rate of 15% for both the executive level and non-executive level employee groups, and is estimated on the date of grant using the Black-Scholes option valuation model, which requires the input of highly subjective assumptions, including the expected forfeiture rate, expected life of the option and expected stock price volatility. The expected life of options granted is estimated based on historical option exercise and employee termination data. Executive level and non-executive employees were grouped and considered separately for valuation purposes. In 2008, based on employee termination data we adjusted the expected life of the options for both groups of employees to 4 years. Expected volatility is based on historical volatility of our stock and comparable peer data over the life of the options granted to executive and non-executive level employees.

Income Taxes

We account for income taxes using the liability method under FAS 109, "Accounting for Income Taxes." Under this method, deferred tax assets and liabilities are determined based on temporary differences resulting from the different treatment of items for tax and financial reporting purposes. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to reverse. Additionally, we must assess the likelihood that deferred tax assets will be recovered as deductions from future taxable income. We have provided a full valuation allowance on our deferred tax assets because we believe it is more likely than not that our deferred tax assets will not be realized. We evaluate the realizability of our deferred tax assets on a quarterly basis. Currently, there is no provision for income taxes as we have incurred losses to date.

Effective January 1, 2007, we adopted the provisions of FIN 48, "Accounting for Uncertainty in Income Taxes—an interpretation of FASB Statement No. 109." FIN 48 specifies how tax benefits for uncertain tax positions are to be recognized, measured and derecognized in financial statements; requires certain disclosures of uncertain tax matters; specifies how reserves for uncertain tax positions should be classified on the balance sheet; and provides transition and interim-period guidance, among other provisions.

At the date of adoption of FIN 48, there was no impact on our consolidated financial position, results of operations and cash flows as a result of adoption. We have no unrecognized tax benefit as of December 31, 2007, including no accrued amounts for interest and penalties. Our policy will be to recognize interest and penalties related to income taxes as a component of general and administrative expense. We are subject to income tax examinations for U.S. incomes taxes and state income taxes from 1996 forward. We are subject to tax examinations in Singapore and Germany from 2003 and 2004 forward, respectively. We do not anticipate that total unrecognized tax benefits will significantly change prior to December 31, 2009.

Recent Accounting Pronouncements

In December 2007, the Financial Accounting Standards Board (FASB) issued SFAS No. 160, "Noncontrolling Interests in Consolidated Financial Statements—an amendment of Accounting Research Bulletin No. 51" (SFAS 160). SFAS 160 establishes accounting and reporting standards for ownership interests in subsidiaries held by parties other than the parent, the amount of consolidated net income attributable to the parent and to the noncontrolling interest, changes in a parent's ownership interest and the valuation of retained noncontrolling equity investments when a subsidiary is deconsolidated. SFAS 160 also establishes disclosure

requirements that clearly identify and distinguish between the interests of the parent and the interests of the noncontrolling owners. SFAS 160 is effective for financial statements issued for fiscal years beginning after December 15, 2008, and will be adopted by us in the first quarter of fiscal 2009. We are currently evaluating the potential impact of the adoption of SFAS 160 on our consolidated results of operations and financial condition. SFAS 160 could change our accounting for the noncontrolling interest in SDI, a variable interest entity which we consolidate. Under current accounting standards, we do not reduce the carrying value of the noncontrolling interest below zero. Under SFAS 160, the noncontrolling interest could have a negative carrying value. In addition, upon adoption, we plan to reclassify the noncontrolling interest, on our consolidated balance sheet from mezzanine to stockholders' equity.

In December 2007, the FASB ratified the final consensus in Emerging Issues Task Force (EITF) Issue No. 07-1, "Accounting for Collaboration Agreements", which required certain income statement presentation of transactions with third parties and of payments between parties to the collaboration arrangement, along with disclosure about the nature of the arrangement. EITF 07-1 is effective for us beginning January 1, 2009. We do not expect the adoption of EITF 07-1 to have a material effect on our consolidated results of operations and financial condition.

In March 2007, the FASB discussed EITF Issue No. 07-3, "Accounting for Nonrefundable Advance Payments for Goods or Services to Be Used in Future Research and Development Activities", which addressed the accounting for nonrefundable advance payments. The EITF concluded that nonrefundable advance payments for goods or services to be received in the future for use in research and development activities should be deferred and capitalized. The capitalized amounts should be expensed as the related goods are delivered or the services performed. If an entity's expectations change such that it does not expect it will need the goods to be delivered or the services to be rendered, capitalized nonrefundable advance payment should be charged to expense. EITF 07-3 is effective for new contracts entered into during fiscal years beginning after December 15, 2007, including interim periods within those fiscal years. Early adoption of the provision of the consensus was not permitted. Accordingly, we adopted EITF 07-3 in the first quarter of fiscal 2008. There was no material impact on our consolidated financial position, results of operations and cash flows as a result of adoption.

In September 2006, the FASB issued SFAS 157, "Fair Value Measurements." SFAS 157 provides guidance for using fair value to measure assets and liabilities. It also responds to investors' requests for expanded information about the extent to which companies measure assets and liabilities at fair value, the information used to measure fair value, and the effect of fair value measurements on earnings. SFAS 157 is effective for financial statements issued for fiscal years beginning after November 15, 2007. Accordingly, we adopted SFAS 157 in the first quarter of fiscal 2008. In February 2008, the FASB issued FASB Staff Position No. (FSP) FAS 157-2, "Effective Date of FASB Statement No. 157", which provides a one year deferral of the effective date of SFAS 157 for non-financial assets and non-financial liabilities, except those that are recognized or disclosed in the financial statements at fair value at least annually. On October 10, 2008, the FASB issued FSP FAS 157-3, "Determining the Fair Value of a Financial Asset When the Market for That Asset Is Not Active", which clarifies the application of SFAS 157 in a market that is not active and provides examples to illustrate key considerations in determining the fair value of the financial asset when the market for that financial asset is not active. Therefore, we adopted the provisions of SFAS 157 and FSP FAS 157-3 with respect to our financial assets and liabilities only. The FASB also issued SFAS No. 159, "The Fair Value Option for Financial Assets and Financial Liabilities—Including an amendment of FASB Statement No. 115", (SFAS 159) in February 2007, which permits entities to choose to measure at fair value, at specified election dates, many financial instruments and certain other items that are not currently required to be measured at fair value. The statement does not affect any existing accounting literature that requires certain assets and liabilities to be carried at fair value. SFAS 159 is an elective standard which permits an entity to choose to measure many financial instruments and certain other items at fair value at specified election dates. Subsequent unrealized gains and losses on items for which the fair value option has been elected will be reported in earnings. We have not elected the fair value option for any assets or liabilities under SFAS 159. There was no impact on our consolidated financial position, results of operations and cash flows as a result of adoption of these pronouncements.

3. Fair Value Measurements

SFAS 157 defines fair value, establishes a framework for measuring fair value under generally accepted accounting principles and enhances disclosures about fair value measurements. Fair value is defined under SFAS 157 as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value under SFAS 157 must maximize the use of observable inputs and minimize the use of unobservable inputs. The standard describes a fair value hierarchy based on three levels of inputs, of which the first two are considered observable and the last unobservable, that may be used to measure fair value which are the following:

- Level 1 - Quoted prices in active markets for identical assets or liabilities;
- Level 2 - Inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities; and
- Level 3 - Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

In accordance with SFAS 157, the following table represents the fair value hierarchy for our financial assets (cash equivalents and marketable securities) and investments held by SDI measured at fair value on a recurring basis as of December 31, 2008 (in thousands):

	Level 1	Level 2	Level 3	Total
Money market funds	$43,773	$ —	$ —	$43,773
U.S. Government agency securities	—	12,774	—	12,774
FDIC insured corporate debt securities	—	3,749	—	3,500
Corporate debt securities	—	2,500	—	2,749
Total	$43,773	$19,023	$ —	$62,796

4. Available-for-Sale Securities

The following is a summary of available-for-sale securities included in cash and cash equivalents, marketable securities, investments held by SDI and restricted cash as of December 31, 2008 and 2007 (in thousands):

	Amortized Cost	Unrealized Gains	Unrealized Losses	Estimated Fair Value
December 31, 2008:				
Certificates of deposit and money market funds	$ 44,498	$ —	$ —	$ 44,498
U.S. Government agency securities	12,743	31	—	12,774
FDIC insured corporate debt securities	3,736	13	—	3,749
Corporate debt securities	2,495	5	—	2,500
Total	$ 63,472	$ 49	$ —	$ 63,521
December 31, 2007:				
Certificates of deposit and money market funds	$ 42,290	$ —	$ —	$ 42,290
Corporate debt securities	44,684	140	(2)	44,822
Total	$ 86,974	$ 140	$ (2)	$ 87,112

There were immaterial realized gains from the sale of marketable securities for the year ended December 31, 2008 and no realized gain for the year ended December 31, 2007 and 2006. Realized losses from the sale of marketable securities were zero in 2008 and 2007 and immaterial in 2006. As of December 31, 2008 and 2007,

all of our investments have a stated maturity date that is within one year of the current balance sheet date. All of our investments are classified as short-term and available-for-sale, as we may not hold our investments until maturity. As of December 31, 2008, our marketable securities had the following maturities (in thousands):

Maturities:	Amortized Cost	Estimated Fair Value
Within 1 year	$ 63,472	$ 63,521
Total	$ 63,472	$ 63,521

5. Property and Equipment

Property and equipment as of December 31, 2008 and 2007 consist of the following (in thousands):

	December 31,	
	2008	2007
Laboratory equipment	$ 15,433	$ 12,824
Computer equipment	1,461	1,403
Furniture and fixtures	1,810	1,525
Leasehold improvements	3,593	2,810
	22,297	18,562
Less accumulated depreciation and amortization	(12,787)	(11,248)
Total	$ 9,510	$ 7,314

Depreciation and amortization expense on property and equipment was $1.9 million, $1.5 million and $1.2 million for the years ended December 31, 2008, 2007, and 2006, respectively.

6. Acquisition of Rhein Biotech GmbH

On April 21, 2006, we completed the acquisition of Rhein Biotech GmbH, or Rhein, from Rhein Biotech NV, a subsidiary of Berna Biotech AG, or Berna. As a result, the financial position and results of operations of Rhein have been included in our consolidated financial statements as of December 31, 2008 and 2007 and the period from April 21, 2006 through December 31, 2006. Rhein, located in Düsseldorf, Germany, became a wholly-owned subsidiary which we refer to as Dynavax Europe. Through this acquisition, we gained ownership of a certified current Good Manufacturing Practice, or GMP, vaccine manufacturing facility in the European Union, control over the production and supply of its hepatitis B surface antigen and potentially other antigens to support clinical and commercial programs, management and personnel with expertise in biopharmaceutical product development and production and a complementary pipeline of vaccine and antiviral products. Upon closing of the transaction, our license and supply agreement with Berna for the supply of hepatitis B surface antigen used in our HEPLISAV vaccine was terminated, eliminating Berna's option to commercialize HEPLISAV.

Under the terms of the transaction, we purchased all of the outstanding capital stock of Rhein, which included the satisfaction of outstanding debt and certain employee and acquisition costs for an aggregate purchase price of approximately $14.6 million. The components of the purchase price are summarized in the following table (in thousands):

Consideration and acquisition costs:	
Cash paid for common stock	$ 7,925
Cash paid to satisfy outstanding debt	4,550
Employee costs	745
Acquisition costs	1,338
Total purchase price	$ 14,558

Under the purchase method of accounting, the total purchase price is allocated to the tangible and identifiable intangible assets acquired and liabilities assumed based on their estimated fair values as of the date of the acquisition. Certain purchase accounting adjustments were made in order to state the tangible assets acquired and liabilities assumed at their estimated fair values and in accordance with our accounting policies and U.S. generally accepted accounting principles. These adjustments primarily impacted deferred revenue and acquired property and equipment. We assessed the fair value of the identifiable intangible assets acquired, as well as in-process research and development. Our methodology for allocating the purchase price to in-process R&D was determined through established valuation techniques in the biotechnology industry. In-process R&D is expensed upon acquisition because technological feasibility had not been established at that date and no future alternative uses exist. The purchase price was allocated using information available at the time of acquisition. The excess of purchase price over the aggregate fair values was recorded as goodwill.

The allocation of the total purchase price is as follows (in thousands):

Allocation of purchase price:	
Cash and cash equivalents	$ 513
Accounts receivable	489
Other current assets	385
Property, plant and equipment	3,092
Goodwill	2,312
Intangible assets	5,080
In-process research and development	4,180
Accounts payable	(273)
Deferred revenue	(166)
Other current liabilities	(1,054)
Total purchase price	$14,558

Intangible assets consist primarily of manufacturing process, customer relationships, and developed technology. The manufacturing process derives from the methods for making proteins in Hansenula yeast, which is a key component in the production of hepatitis B vaccine. The customer relationships derive from Rhein's ability to sell existing, in-process and future products to its existing customers. The developed technology derives from a licensed hepatitis B vaccine product called Supervax, which was written off as an impairment charge in 2007. Purchased intangible assets other than goodwill are amortized on a straight-line basis over their respective useful lives. The following tables present details of the purchased intangible assets at December 31, 2008 and December 31, 2007 (in thousands, except years):

		December 31, 2008			December 31, 2007		
	Estimated Useful Life (In years)	Gross	Accumulated Amortization	Net	Gross	Accumulated Amortization	Net
Intangible Assets:							
Manufacturing process	5	$3,670	$ (1,978)	$1,692	$3,670	$ (1,244)	$2,426
Customer relationships	5	1,230	(663)	567	1,230	(417)	813
Developed Technology	—	180	—	—	180	—	—
Total	5	$5,080	$ (2,641)	$2,259	$5,080	$ (1,661)	$3,239

The estimated future amortization expense of purchased intangible assets is as follows (in thousands):

Year ending December 31,	
2009	980
2010	980
2011	299
Total	$2,259

A summary of the acquired in-process research and development programs, and of the value assigned and recognized as expense as of the acquisition date is as follows (in thousands):

Program	Description	Estimated Acquisition Date Fair Value
Supervax	A hepatitis B vaccine launched in Argentina in December 2006 and approved for marketing and sales through a third party distributor	$ 890
Theravax	A potential therapy for treatment of chronic Hepatitis B infection	2,740
Cytovax	A potential prophylactic vaccine to prevent infection from cytomegalovirus	550
		$ 4,180

At the time of the acquisition, the estimated fair value of the acquired in-process research and development for the Supervax program was determined using the income approach, which discounts expected future cash flows to present value. We estimated the related future net cash flows between 2006 and 2020 and discounted them to their present value using a risk-adjusted discount rate of 50%, which was based on the estimated internal rate of return for Rhein's operations and was comparable to the estimated weighted average cost of capital for companies with Rhein's profile. The projected cash flows from the Supervax program were based on key assumptions such as estimates of revenues and operating profits related to the program considering its stage of development; the time and resources needed to complete the development and approval of the related product; the life of the potential commercialized product and associated risks, including the inherent difficulties and uncertainties in developing a drug compound such as obtaining FDA and other regulatory approvals; and risks related to the viability of and potential alternative treatments in any future target markets. Given the high risk associated with the development of new drugs, we adjusted the revenue and expense forecasts to reflect the probability and risk of advancement through the regulatory approval process based on the stage of development in the regulatory process.

From the acquisition date through the year ended December 31, 2006, we continued registration activities for Supervax in territories other than Argentina. Actual sales for the fiscal year ended 2006 of Supervax in Argentina, while immaterial, were substantially in accordance with the original projections at the valuation date. During fiscal year 2007, we continued to monitor sales of Supervax in Argentina and we continued efforts to market Supervax in order to determine if we could achieve planned regulatory approvals in other markets. We recorded immaterial revenues and expenses related to the manufacture and sale of formulated bulk vaccine in 2006 to the third party distributor. During the fourth quarter of 2007, we were notified that the distributor was unable to meet its annual commitment to order additional bulk vaccine due to its inability to sell all of the previously purchased Supervax product in the Argentine market. The underperformance of the Supervax program relative to originally expected future sales caused us to discontinue our marketing efforts of Supervax in territories outside of Argentina. As a result, we determined that estimated future cash flows from sales of Supervax were significantly less than the projection established at the time of acquisition, and we considered this an indicator of impairment. As of November 2007, we performed our impairment test of long-lived assets. Based on our analysis, the fair value of the Supervax developed technology and related inventory was estimated to be zero; therefore, we recorded a permanent write down of these assets in accordance with SFAS No. 144. For the year ended December 31, 2007, we recognized an impairment charge included in research and development expenses of $0.4 million to write off the carrying amounts of the intangible asset of $0.1 million and the related inventory of $0.3 million.

At the time of the acquisition, the estimated fair value of the acquired in-process research and development for the Theravax and Cytovax programs was determined using the cost approach. We considered the stage of product development and the nature of these projects. At the valuation date, both Theravax and Cytovax were in early stages of development and were many years away from obtaining regulatory approval, if at all, and the risks associated with identifying material cash flows as well as the nature, timing and projected costs associated with the remaining efforts for completion of the projects were not reasonably estimable. However, we were able to

estimate the cost involved in recreating the technology using historical data from Rhein, including cost and effort applied to the development of the technology prior to the acquisition date. We did not anticipate significant cash inflows for Theravax or Cytovax. Significant appraisal assumptions included historical data related to personnel effort, costs associated with those efforts, and external costs in order to estimate the fair value of these products as of the acquisition date.

In early 2007, we made a strategic decision to discontinue development of Cytovax in order to focus on other opportunities in our product pipeline; however, due to the early stage of development, there was no impact to our results of operations and financial condition. We intend to continue further development of our therapy to treat chronic hepatitis B infection, DV-601.

7. Current Accrued Liabilities

Current accrued liabilities as of December 31, 2008 and 2007 consist of the following (in thousands):

	December 31,	
	2008	2007
Payroll and related expenses	$2,419	$ 2,892
Legal expenses	1,387	1,708
Third party scientific research expense	1,730	6,044
Other accrued liabilities	1,280	1,415
Total	$6,816	$12,059

8. Symphony Dynamo, Inc.

In April 2006, we entered into a series of related agreements with Symphony Capital Partners, LP and certain of its affiliates (Symphony) to advance specific Dynavax ISS-based programs for cancer, hepatitis B therapy and hepatitis C therapy through certain stages of clinical development (Development Programs). The material agreements included:

- the Amended and Restated Limited Liability Corporation Agreement of Symphony Dynamo Holdings LLC (LLC Agreement);
- the Funding Agreement by and among Dynavax Technologies Corporation, Symphony Capital Partners LP, Symphony Dynamo Holdings LLC, and Symphony Dynamo Investors LLC (Funding Agreement);
- the Amended and Restated Research and Development Agreement among Dynavax Technologies Corporation, Symphony Dynamo Holdings LLC and Symphony Dynamo, Inc. (R&D Agreement);
- the Novated and Restated Technology License Agreement among Dynavax Technologies Corporation, Symphony Dynamo Holdings LLC and Symphony Dynamo, Inc. (License Agreement);
- the Purchase Option Agreement among Dynavax Technologies Corporation, Symphony Dynamo Holdings LLC and Symphony Dynamo, Inc. (Purchase Option Agreement);
- the Registration Rights Agreement between Dynavax Technologies Corporation and Symphony Dynamo Holdings LLC (Registration Rights Agreement); and
- the Warrant Purchase Agreement between Dynavax Technologies Corporation and Symphony Dynamo Holdings LLC (Warrant Agreement).

The LLC Agreement provided for the formation of Symphony Dynamo Holdings LLC (Holdings) and its wholly-owned subsidiary, Symphony Dynamo, Inc. (SDI). Pursuant to the Funding Agreement, Symphony invested $50 million in Holdings ($20 million at closing and an additional $30 million in April 2007), which was invested into SDI to fund the Development Programs. Pursuant to the License Agreement, we licensed to Holdings our intellectual property rights related to the Development Programs, which were assigned to SDI. Pursuant to the R&D Agreement, which was also assigned to SDI, we are primarily responsible for performing

the work required to proceed with the Development Programs unless we determine that certain work should be undertaken by third party contractors retained by SDI. As a result of these agreements, Symphony owns 100% of the equity of Holdings, which owns 100% of the equity of SDI.

Pursuant to the Warrant Agreement, we issued to Holdings a five-year warrant to purchase 2,000,000 shares of our common stock, which Holdings distributed to Symphony, at $7.32 per share, representing a 25% premium over the applicable 60-day trading range average of $5.86 per share. The warrant exercise price is subject to reduction to $5.86 per share if either of two events occurs: (a) we enter into a collaboration agreement with a third party for a specified oncology program; or (b) the Purchase Option is terminated or expires unexercised. The warrant may be exercised or surrendered for a cash payment upon consummation of an all cash merger or acquisition of Dynavax, the obligation for which would be settled by the surviving entity. The warrant, issued upon closing, was assigned a value of $5.6 million using the Black-Scholes valuation model and was recorded in additional paid in capital.

In consideration for the warrant, we received an exclusive purchase option (Purchase Option) to acquire the Development Programs through the purchase of all of the equity in SDI during the five-year term at specified prices that range from $84.2 million as of October 1, 2008, increasing quarterly up to $144.1 million at the end of the five-year term. The Purchase Option exercise price is payable in cash or a combination of cash and shares of Dynavax common stock, at our sole discretion. We also received an exclusive option to purchase either the hepatitis B or hepatitis C program (Program Option) during the first year of the arrangement. In April 2007, we exercised our Program Option for the hepatitis B program. The exercise of this Program Option triggered a payment obligation of $15 million which will either be (a) due to Symphony upon the expiration of the SDI collaboration in 2011 if the Purchase Option is not exercised; or (b) included as part of the applicable purchase price upon exercise of the Purchase Option. The intellectual property rights to the remaining cancer and hepatitis C therapy programs, if not purchased through the exercise of the Purchase Option, will remain with SDI.

We have determined, pursuant to the guidance in FIN 46R, that SDI is a variable interest entity and we are its primary beneficiary. As a result, the financial position and results of operations of SDI have been included in our consolidated financial statements from the date of formation on April 18, 2006.

At December 31, 2008, the investments held by SDI were $25.1 million. The investments held by SDI in the consolidated balance sheet include the aggregate $50 million of funding, less funds spent on the Development Programs as of the end of each reporting period.

At December 31, 2008, the noncontrolling interest balance was $2.6 million. The noncontrolling interest in SDI in the consolidated balance sheet represents Symphony’s equity investment in SDI of $50 million, reduced by the $5.6 million fair value of the warrants we issued and $2.6 million of fees we paid to Symphony upon the transaction’s closing, and the losses attributed to the noncontrolling interest since its inception in April 2006. The noncontrolling interest was further reduced when we recorded the $15 million liability upon our exercise of the Program Option in April 2007, as that amount will either be (a) due to Symphony upon the expiration of the SDI collaboration in 2011 if the Purchase Option is not exercised; or (b) included as part of the applicable purchase price upon exercise of the Purchase Option.

Net losses incurred by SDI and charged to the noncontrolling interest were $5.7 million and $8.7 million for the year ended December 31, 2008 and 2007, respectively. In accordance with FIN 46R, we have deducted the losses attributed to the noncontrolling interest in the determination of net loss in our consolidated statements of operations.

9. Financing Agreement

On August 26, 2008, Dynavax and Deerfield Management, a healthcare investment fund, and its affiliates (Deerfield) entered into a Settlement Agreement and Mutual General Release (Settlement Agreement) under which the parties agreed to terminate the Loan Agreement dated July 18, 2007 (Loan Agreement) and also to provide for an amendment of the warrants previously issued to Deerfield pursuant to the Loan Agreement. The Settlement Agreement terminated any further obligations under the Loan Agreement.

Under the Loan Agreement, Deerfield agreed to advance to Dynavax loans that could be drawn down over a three-year period in the aggregate principal amount of up to $30 million, subject to achievement of specific milestones in relation to the development of certain products in Dynavax's allergy franchise. Repayment of a portion of the loans to Deerfield was contingent upon the positive outcome of studies related to TOLAMBA™, Dynavax's product candidate for the treatment of ragweed allergy. If the TOLAMBA program was discontinued, Dynavax would have had no obligation to repay Deerfield up to $9 million of the funds earmarked for that program; any other remaining outstanding principal was slated to be due in July 2010. Deerfield received an annual 5.9% cash commitment fee as well as milestone-driven payments in the form of warrants issued or issuable at an exercise premium of 20% over the VWAP in the 15-day period prior to achievement of certain milestones.

Under the Loan Agreement, through August 26, 2008 (date of termination), we had received $7.5 million in cash from Deerfield, which was recorded as a long-term liability in our consolidated balance sheet. Additionally, we paid and recognized as interest expense $1.7 million of commitment fees and, we issued to Deerfield warrants to purchase up to 3,550,000 shares of our common stock. The warrants were valued on the issuance date using the Black-Scholes valuation model. The original warrants issued and their related assumptions under the Black-Scholes option valuation model are as follows (in thousands, except for Black-Scholes Assumptions):

			Black-Scholes Assumptions				
	Shares Issued	Expiration Date	Risk-Free Interest Rate	Expected Life (in years)	Volatility	Exercise Price per Share	Assigned Value using Black-Scholes
Warrant Issuance Date:							
July 18, 2007	1,250	1/17/2013	4.9%	5.5	0.7	$ 5.13	$ 3,350
October 18, 2007	1,300	4/17/2013	4.2%	5.5	0.7	$ 5.75	3,700
December 27, 2007	1,000	6/26/2013	3.6%	5.5	0.7	$ 5.65	2,746
Total	3,550						$ 9,796

At the date of each issuance, the warrant valuation was recorded as a deferred transaction cost in other assets and an increase in additional paid in capital. The deferred transaction cost was amortized on a straight-line basis and recognized as interest expense through the termination of the Loan Agreement. We amortized $9.0 million and $0.8 million of deferred transaction cost in interest expense for the years ended December 31, 2008 and 2007, respectively.

Under the Settlement Agreement, $5.0 million of funds received for the TOLAMBA program were forgiven, resulting in loan forgiveness in the statement of operations and a reduction in long-term liabilities as of and for the fiscal year ended December 31, 2008. All commitment fees paid to date, which totaled $1.7 million, were applied to the loan, resulting in a reduction in interest expense and long-term liabilities as of and for the fiscal ended December 31, 2008. We paid the remaining loan balance of $0.8 million in cash to Deerfield. In addition, the warrants previously issued to Deerfield were amended as follows:

	Shares Issued (in thousands)	Expiration Date	Exercise Price per Share
Warrant Issuance Date:			
July 18, 2007	1,250	2/26/2014	$ 5.13
October 18, 2007	1,300	2/26/2014	$ 1.68
December 27, 2007	300	2/26/2014	$ 5.65
December 27, 2007	700	2/26/2014	$ 5.65(1)
Total	3,550		

(1) The warrants to purchase an aggregate of 700,000 shares of our common stock issued on December 27, 2007 were amended to provide for a termination date of February 26, 2014 at the existing exercise price of $5.65 and if Dynavax's average daily volume weighted average price (VWAP) over the 15 trading days prior to August 26, 2009 is below $4.00 per share then such warrants will be amended to provide an exercise price equal to the VWAP over the 15 trading days prior to August 26, 2009.

The amendments to the warrants resulted in a re-measurement of the fair value based on the amended terms and current period assumptions and were accounted for as modifications to equity awards under the provisions of SFAS 123R, “Share-Based Payment.” We recorded interest expense and an increase of additional paid in capital of $0.9 million for the fiscal year ended December 31, 2008 due to these modifications.

10. Commitments and Contingencies

We lease our facilities in Berkeley, California, or the Berkeley Lease, and Düsseldorf, Germany, or the Düsseldorf Lease, under operating leases that expire in September 2014 and March 2023, respectively. The Berkeley Lease can be terminated in September 2009 at no cost to us but otherwise extends automatically until September 2014. The Berkeley Lease provides for periods of escalating rent. The total cash payments over the life of the lease were divided by the total number of months in the lease period and the average rent is charged to expense each month during the lease period. In addition, our Berkeley Lease provided a tenant improvement allowance of $0.4 million, which is considered a lease incentive and accordingly, has been included in accrued liabilities and other long-term liabilities in the consolidated balance sheets as of December 31, 2008 and December 31, 2007. The Berkeley Lease incentive is amortized as an offset to rent expense over the estimated initial lease term, through September 2014. Total net rent expense related to our operating leases for the years ended December 31, 2008, 2007 and 2006, was $2.5 million, $2.1 million and $1.8 million, respectively. Deferred rent was $0.7 million as of December 31, 2008.

We have entered into a sublease agreement under the Berkeley Lease for a certain portion of the leased space with scheduled payments to us totaling $56 thousand through 2008, $58 thousand through 2009, and $40 thousand thereafter until August 2010. The sublease rental income is offset against rent expense.

Future minimum payments under the non-cancelable portion of our operating leases at December 31, 2008, excluding payments from the sublease agreement, are as follows (in thousands):

Year ending December 31,	
2009	2,400
2010	2,572
2011	2,629
2012	2,689
2013	2,734
Thereafter	6,690
Total	$19,714

During the fourth quarter of 2004, we established a letter of credit with Silicon Valley Bank as security for our Berkeley Lease in the amount of $0.4 million. The letter of credit remained outstanding as of December 31, 2008 and is collateralized by a certificate of deposit which has been included in restricted cash in the consolidated balance sheets as of December 31, 2008 and December 31, 2007. Under the terms of the Berkeley Lease, if the total amount of our cash, cash equivalents and marketable securities falls below $20.0 million for a period of more than 30 consecutive days during the lease term, the amount of the required security deposit will increase to $1.1 million, until such time as our projected cash and cash equivalents will exceed $20.0 million for the remainder of the lease term, or until our actual cash and cash equivalents remains above $20.0 million for a period of 12 consecutive months.

We established a letter of credit with Deutsche Bank as security for our Düsseldorf Lease in the amount of $0.3 million. The letter of credit remained outstanding as of December 31, 2008 and is collateralized by a certificate of deposit which has been included in restricted cash in the consolidated balance sheet as of December 31, 2008.

In addition to the non-cancelable commitments included above, we have entered into contractual arrangements that obligate us to make payments to the contractual counterparties upon the occurrence of future events. In the normal course of operations, we have entered into license and other agreements and intend to continue to seek additional rights relating to compounds or technologies in connection with our discovery, manufacturing and development programs. Under the terms of the agreements, we may be required to pay future up-front fees, milestones and royalties on net sales of products originating from the licensed technologies. We consider these potential obligations to be contingent and have summarized all significant arrangements below.

We rely on research institutions, contract research organizations, clinical investigators and clinical material manufacturers. As of December 31, 2008, under the terms of our agreements, we are obligated to make future payments as services are provided of approximately $3 million through 2010. These agreements are terminable by us upon written notice. We are generally only liable for actual effort expended by the organizations at any point in time during the contract, subject to certain termination fees and penalties.

Under the terms of our exclusive license agreements with the Regents of the University of California, as amended, for certain technology and related patent rights and materials, we pay annual license or maintenance fees and will be required to pay milestones and royalties on net sales of products originating from the licensed technologies. Under the terms of our license agreements, we could be expected to pay approximately $1 million in 2009 related to such fees and milestone payments to the Regents.

11. Collaborative Research, Development, and License Agreements

GlaxoSmithKline

In December 2008, we entered into a worldwide strategic alliance with GSK to discover, develop, and commercialize endosomal TLR inhibitors for diseases such as lupus, psoriasis, and rheumatoid arthritis. We received an initial payment of $10 million and agreed to conduct research and early clinical development in up to four programs and are eligible to receive future potential development and commercialization milestones totaling approximately $200 million per program. GSK can exercise its exclusive option to license each program upon achievement of proof-of-concept or earlier upon certain circumstances. After exercising its option, GSK would carry out further development and commercialization of these products. We are eligible to receive tiered, up to double-digit royalties on sales and have retained an option to co-develop and co-promote one product. Revenue from the initial payment is deferred and is being recognized over the expected period of performance which is estimated to be seven years. For the year ended December 31, 2008, we recognized revenue of $60 thousand related to the initial payment.

Merck & Co., Inc.

In October 2007, we entered into a global license and development collaboration agreement and a related manufacturing agreement with Merck to jointly develop HEPLISAV, a novel investigational hepatitis B vaccine. Under the terms of the agreement, Merck received worldwide exclusive rights to HEPLISAV, and agreed to fund future vaccine development and be responsible for commercialization. We received a non-refundable upfront payment of $31.5 million. Revenue from the initial payment was deferred and recognized ratably over the estimated performance period of the collaboration agreement.

On December 18, 2008, Merck provided notice of its termination of the collaboration. As a result of the termination, all development, manufacturing and commercialization rights to HEPLISAV reverted to Dynavax. Merck is obligated to make certain mutually agreed-upon payments to Dynavax for the 180-day wind down period following Merck’s written notice of termination. As a result of Merck’s termination, we accelerated the applicable performance period over which we ratably recognize revenue from the upfront fee through the effective date of the termination, which is June 2009. For the years ended December 31, 2008 and 2007, we recognized revenue of $5 million and $0.4 million, respectively, related to the upfront fee. Collaboration revenue

resulting from the performance of research and development services are recognized as related research and development costs are incurred. Cost reimbursement revenue under this collaboration agreement totaled $20.2 million and $5.8 million for the years ended December 31, 2008 and 2007, respectively.

AstraZeneca

In September 2006, we entered into a three-year research collaboration and license agreement with AstraZeneca for the discovery and development of TLR9 agonist-based therapies for the treatment of asthma and chronic obstructive pulmonary disease. The collaboration is using our proprietary second-generation TLR9 agonist immunostimulatory sequences or ISS. Under the terms of the agreement, we are collaborating with AstraZeneca to identify lead TLR9 agonists and conduct appropriate research phase studies. AstraZeneca is responsible for any development and worldwide commercialization of products arising out of the research program. We have the option to co-promote in the United States products arising from the collaboration. We received an upfront payment of $10 million, and are eligible to receive research funding, preclinical milestone payments, and potential future development milestones of up to $126 million. Upon commercialization, we are also eligible to receive royalties based on product sales. We are currently working on a second candidate drug, and in February 2009, we extended our research collaboration with AstraZeneca though July 2010 to provide funding for a third candidate drug.

In September 2008, we received a $4.5 million milestone payment from AstraZeneca for the nomination of a candidate drug. Revenue from milestones received during the development plan is deferred and recognized ratably over estimated performance period of the collaboration agreement. For the year ended December 31, 2008, we recognized revenue of $2.0 million related to the milestone for the nomination of a candidate drug. Collaboration revenue resulting from the performance of research services amounted to $3.2 million and $3.1 million for the years ended December 31, 2008, and 2007, respectively. As of December 31, 2008, we recorded deferred revenue of $13 million associated with the milestone for the nomination of a candidate drug, upfront fee and amounts billed in advance for research services per the contract terms.

National Institutes of Health and Other Funding

In September 2008, we were awarded a five-year $17 million contract to develop our ISS technology using TLR9 agonists as vaccine adjuvants. The contract was awarded by the NIH's National Institute of Allergy and Infectious Diseases (NIAID) to develop novel vaccine adjuvant candidates that signal through receptors of the innate immune system. The contract supports adjuvant development for anthrax as well as other disease models. NIAID is funding 100% of the total $17 million cost of Dynavax's program under Contract No. HHSN272200800038C. For the year ended December 31, 2008, we recognized revenue of approximately $0.2 million.

In July 2008, we were awarded a two-year $1.8 million grant from the NIH to develop a therapy for systemic lupus erythematosus (SLE), an autoimmune disease. Revenue associated with this grant is recognized as the related expenses are incurred. For the year ended December 31, 2008, we recognized revenue of approximately $0.4 million.

In 2004, we were awarded $0.5 million from the Alliance for Lupus Research to fund research and development of new treatment approaches for lupus. We recognized revenue associated with the lupus grant of approximately $0.1 million and $0.2 million for the years ended December 31, 2007 and 2006, respectively.

In 2003, we were awarded government grants totaling $8.3 million to fund research and development. Certain of these grants have been extended through the second quarter of 2009. In August 2007, we were awarded a two-year $3.3 million grant to continue development of a novel universal influenza vaccine for controlling seasonal and emerging pandemic flu strains. Revenue associated with these grants is recognized as the related expenses are incurred. For years ended December 31, 2008, 2007 and 2006, we recognized revenue of approximately $3.0 million, $3.0 million and $1.3 million, respectively.

12. Net Loss Per Share

Basic net loss per share is calculated by dividing the net loss by the weighted-average number of common shares outstanding during the period. Diluted net loss per share is computed by dividing the net loss by the weighted-average number of common shares outstanding during the period and dilutive potential common shares using the treasury-stock method. For purposes of this calculation, common stock subject to repurchase by us, preferred stock, options and warrants are considered to be dilutive potential common shares and are only included in the calculation of diluted net loss per share when their effect is dilutive.

	Years Ended December 31,		
	2008	2007	2006
Historical (in thousands, except per share amounts):			
Numerator:			
Net loss	$(20,829)	$(59,971)	$(52,052)
Denominator:			
Weighted-average common shares outstanding	39,819	39,746	32,340
Less: Weighted-average unvested common shares subject to repurchase	—	—	(1)
Denominator for basic and diluted net loss per share	39,819	39,746	32,339
Basic and diluted net loss per share	$ (0.52)	$ (1.51)	$ (1.61)
Historical outstanding securities not included in diluted net loss per share calculation (in thousands):			
Options to purchase common stock	5,173	4,282	3,421
Warrants	5,550	5,550	2,084
	10,723	9,832	5,505

13. Stockholders' Equity

Stock Option Plans

As of December 31, 2008, we had three stock-based compensation plans: the 1997 Equity Incentive Plan; the 2004 Stock Incentive Plan, which includes the 2004 Non-Employee Director Option Program; and the 2004 Employee Stock Purchase Plan.

In January 1997, we adopted the 1997 Equity Incentive Plan (the "1997 Plan"). The 1997 Plan provides for the granting of stock options to employees and non-employees of the Company. Options granted under the 1997 Plan may be either incentive stock options ("ISOs") or nonqualified stock options ("NSOs"). ISOs may be granted to employees, including directors who are also considered employees. NSOs may be granted to employees and non-employees. Options under the 1997 Plan may be granted for periods of up to ten years and at prices no less than 85% of the estimated fair value of the shares on the date of grant as determined by the Board of Directors, provided, however, that (i) the exercise price of an ISO shall not be less than 100% of the estimated fair value of the shares on the date of grant, and (ii) the exercise price of an ISO granted to a 10% stockholder shall not be less than 110% of the estimated fair value of the shares on the date of grant. The options are exercisable immediately and generally vest over a four-year period (generally 25% after one year and in monthly ratable increments thereafter) for stock options issued to employees, directors and scientific advisors, and quarterly vesting over a four-year period or immediate vesting for stock options issued all other non-employees. All unvested shares issued under the 1997 Plan are subject to repurchase rights by the Company under such conditions as agreed to by the Company and the optionee. The 1997 Plan expired in the first quarter of 2007. Upon expiration of the 1997 Plan, 273,188 shares previously available for grant expired. Any outstanding options under the 1997 Plan that are cancelled in future periods will automatically expire and will no longer be available for grant.

In January 2004, the Board of Directors and stockholders adopted the 2004 Stock Incentive Plan (the "2004 Plan") which became effective on February 11, 2004. Subsequently, we discontinued granting stock options under the 1997 Plan. The exercise price of all incentive stock options granted under the 2004 Plan is at least equal to 100% of the fair market value of the common stock on the date of grant. If, however, incentive stock options are granted to an employee who owns stock possessing more than 10% of the voting power of all classes of the Company's stock or the stock of any parent or subsidiary of the Company, the exercise price of any incentive stock option granted must equal at least 110% of the fair market value on the grant date and the maximum term of these incentive stock options must not exceed five years. The maximum of an incentive stock option granted to any other participant must not exceed ten years.

As of December 31, 2008, 5,100,000 shares have been reserved and approved for issuance under the Plan, subject to adjustment for a stock split, any future stock dividend or other similar change in our common stock or capital structure.

Activity under our stock option plans is set forth below:

	Options Available for Grant	Number of Options Outstanding	Weighted-Average Price Per Share
Balance at December 31, 2007	1,257,171	4,282,455	$ 5.36
Options authorized	400,000	—	—
Options granted	(2,199,700)	2,199,700	$ 3.95
Options exercised	—	—	—
1997 Plan options exercised	—	(1,833)	$ 2.59
Options cancelled:			
Options forfeited (unvested)	1,035,547	(1,035,547)	$ 5.37
Options expired (vested)	167,635	(167,635)	$ 4.82
1997 Plan options expired (vested)	—	(104,164)	$ 4.82
Balance at December 31, 2008	660,653	5,172,976	$ 4.79

Employee Stock Purchase Plan

In January 2004, the Board of Directors and stockholders adopted the 2004 Employee Stock Purchase Plan (the "Purchase Plan"). The Purchase Plan provides for the purchase of common stock by eligible employees and became effective on February 11, 2004. The purchase price per share is the lesser of (i) 85% of the fair market value of the common stock on the commencement of the offer period (generally, the fifteenth day in February or August) or (ii) 85% of the fair market value of the common stock on the exercise date, which is the last day of a purchase period (generally, the fourteenth day in February or August).

As of December 31, 2008, 496,000 shares were reserved and approved for issuance under the Purchase Plan, subject to adjustment for a stock split, or any future stock dividend or other similar change in our common stock or capital structure. To date, employees acquired 193,868 shares of our common stock under the Purchase Plan. At December 31, 2008, 302,132 shares of our common stock remained available for future purchases.

Preferred Stock Rights

On November 4, 2008, the Board of Directors of the Company declared a dividend of one preferred share purchase right (a "Right") for each outstanding share of Common Stock, par value $0.001 per share (the "Common Shares"), of the Company. The dividend was payable on November 17, 2008 (the "Record Date") to the stockholders of record on that date. Each Right entitles the registered holder to purchase from the Company one one-hundredth of a share of Series A Junior Participating Preferred Stock, par value $0.001 per share (the "Preferred Shares"), at a price of $6.00 per one one-hundredth of a Preferred Share (the "Purchase Price"),

subject to adjustment. Upon the acquisition of, or announcement of the intent to acquire, 20 percent or more of the Company's outstanding Common Shares by a person, entity or group of affiliated or associated persons ("Acquiring Person"), each holder of a Right, other than Rights held by the Acquiring Person, will have the right to purchase that number of Common Shares having a market value of two times the exercise price of the Right. If the Company is acquired in a merger or other business combination transaction or 50 percent or more its assets or earning power are sold to an Acquiring Person, each holder of a Right will thereafter have the right to purchase, at the then current exercise price of the Right, that number of shares of common stock of the acquiring company which at the time of the such transaction will have a market value of two times the exercise price of the Right. The Rights plan is intended to maximize the value of the Company in the event of an unsolicited attempt to take over the Company in a manner or on terms not approved by the Company's Board of Directors. The Rights will expire on November 17, 2018, unless the Rights are earlier redeemed or exchanged by the Company.

Stock-Based Compensation

Under our stock-based compensation plans, option awards generally vest over a 4-year period contingent upon continuous service and expire 10 years from the date of grant (or earlier upon termination of continuous service). The fair value of each option is estimated on the date of grant using the Black-Scholes option valuation model and the following weighted-average assumptions:

	Employee Stock Options			Employee Stock Purchase Plan		
	2008	2007	2006	2008	2007	2006
Weighted-average fair value	$2.29	$3.53	$4.04	$0.93	$1.96	$2.28
Risk-free interest rate	2.7%	4.7%	4.7%	2.4%	4.6%	4.9%
Expected life (in years)	4.4	4.5	5.6	1.3	1.2	1.2
Volatility	0.8	0.8	0.8	0.8	0.7	0.7

Expected volatility is based on historical volatility of our stock and comparable peer data. The expected life of options granted is estimated based on historical option exercise and employee termination data. Executive level employees, who hold a majority of the options outstanding, and non-executive level employees were grouped and considered separately for valuation purposes. In 2008, based on employee termination data we adjusted the expected life of the options for both groups of employees to 4 years. The risk-free rate for periods within the contractual life of the option is based on the U.S. Treasury yield curve in effect at the time of grant.

We recognized the following amounts of stock-based compensation expense (in thousands):

	Years Ended December 31,		
	2008	2007	2006
Employees and directors stock-based compensation expense	$3,183	$3,462	$3,153
Non-employees stock-based compensation expense	22	69	130
Total	$3,205	$3,531	$3,283

The fair value of the options is amortized to expense on a straight-line basis over the vesting periods of the options. Compensation expense recognized for the year ended December 31, 2008 was based on awards ultimately expected to vest and reflects estimated forfeitures at an annual rate of 15% for both the executive level and non-executive level employee groups. As of December 31, 2008, the total unrecognized compensation cost related to non-vested options granted amounted to $5.1 million, which is expected to be recognized over the options' remaining weighted-average vesting period of 1.5 years.

Total options exercised during the years ended December 31, 2008, 2007 and 2006 were 1,833, 5,666 and 411,985, respectively. The total intrinsic value of the options exercised during the years ended December 31, 2008, 2007 and 2006 was approximately $6 thousand, $6 thousand and $1.3 million, respectively. No income tax benefits have been realized by us in 2008, 2007 and 2006, as we reported a net loss in each year.

The following table summarizes outstanding options that are net of expected forfeitures (vested and expected to vest) and options exercisable under our stock option plans as of December 31, 2008:

	Number of Shares	Weighted-Average Exercise Price Per Share	Weighted-Average Remaining Contractual Term (In years)	Aggregate Intrinsic Value (In thousands)
Outstanding options (vested and expected to vest)	4,632,030	$ 4.84	7.3	$ —
Options exercisable	2,536,286	$ 5.09	6.3	$ —

Prior to January 1, 2006, we accounted for our stock-based compensation plans under the recognition and measurement provisions of APB Opinion No. 25, “Accounting for Stock Issued to Employees,” or APB 25, and related interpretations, as permitted by FASB Statement No. 123, “Accounting for Stock-Based Compensation,” or FAS 123. On January 1, 2006, we adopted the fair value recognition provisions of FAS 123R using the modified-prospective transition method. Under this transition method, compensation cost includes: (a) compensation cost for all stock-based payments granted prior to, but not yet vested as of January 1, 2006, based on the grant date fair value estimated in accordance with the original provisions of FAS 123, and (b) compensation cost for all stock-based payments granted subsequent to January 1, 2006, based on the grant date fair value estimated in accordance with the provisions of FAS 123R. Results for prior periods have not been restated.

As a result of the adoption of FAS 123R, we reduced our deferred stock compensation balance and additional paid in capital previously associated with APB 25 accounting by $2.5 million as of January 1, 2006.

14. Employee Benefit Plan

Effective September 1997, we adopted the Dynavax Technologies Corporation 401(k) Plan (the “401(k) Plan”), which qualifies as a deferred salary arrangement under Section 401(k) of the Internal Revenue Code. Under the 401(k) Plan, participating employees may defer a portion of their pretax earnings. We may, at our discretion, contribute for the benefit of eligible employees. To date, we have not contributed to the 401(k) Plan.

15. Income Taxes

Loss including noncontrolling interest in SDI before provision for income taxes on a worldwide basis consists of the following (in thousands):

	Years Ended December 31,		
	2008	2007	2006
U.S.	$(19,265)	$(58,521)	$(59,862)
Non U.S.	(1,564)	(1,450)	(1,933)
Total	$(20,829)	$(59,971)	$(61,795)

No income tax expense was recorded for the years ended December 31, 2008, 2007 and 2006 due to net operating losses in all jurisdictions. The difference between the income tax benefit and the amount computed by applying the federal statutory income tax rate to loss before income taxes is as follows (in thousands):

	2008	2007	2006
Income tax benefit at federal statutory rate	$ (7,082)	$(20,390)	$(21,045)
State tax	(1,601)	(2,600)	(3,852)
Unbenefitted foreign losses	—	—	(269)
Tax credits	(672)	(2,594)	(3,088)
Deferred compensation charges	503	495	(534)
In-process research and development	—	—	1,421
Change in valuation allowance	13,792	20,680	27,391
Change in foreign tax rates	—	1,966	—
Change in NOL	(4,810)	2,356	—
Other	(130)	87	(24)
	$ —	$ —	$ —

Deferred tax assets and liabilities as of December 31, 2008 and 2007 consist of the following (in thousands):

	December 31, 2008	December 31, 2007
Deferred tax assets:		
Net operating loss carry forwards	$ 64,967	$ 63,406
Research tax credit carry forwards	10,517	9,328
Accruals and reserves	3,483	7,067
Capitalized research costs	8,108	8,789
Deferred Revenue	14,788	—
Other	2,431	2,279
	104,294	90,869
Less valuation allowance	(103,431)	(89,640)
Total deferred tax assets	$ 863	$ 1,229
Deferred tax liabilities:		
Other	—	—
Acquired intangible assets.	(863)	(1,229)
Total deferred tax liabilities	$ (863)	$ (1,229)
Net deferred tax assets	$ —	$ —

SFAS 109 requires that the tax benefit of net operating losses, temporary differences and credit carryforwards be recorded as an asset to the extent that management assesses that realization is “more likely than not.” Realization of the future tax benefits is dependent on the Company’s ability to generate sufficient taxable income within the carryforward period. Because of the Company’s recent history of operating losses, management believes that recognition of the deferred tax assets arising from the above-mentioned future tax benefits is currently not likely to be realized and, accordingly, has provided a valuation allowance. Accordingly, a full valuation allowance has been recorded for the net deferred tax assets at December 31, 2008 and 2007. The valuation allowance increased by $13.8 million, $20.7 million and $27.4 million during the years ended December 31, 2008, 2007 and 2006, respectively. The amount of the valuation allowance for deferred tax assets associated with excess tax deduction from stock based compensation arrangement that is allocated to contributed capital if the future tax benefits are subsequently recognized is $0.4 million.

A provision has not been made at December 31, 2008, for U.S. or additional foreign withholding taxes on undistributed earnings of the foreign subsidiary because it is the present intention of management to reinvest the undistributed earnings indefinitely in foreign operations. Currently there are no undistributed earnings in the foreign subsidiary as it has current and cumulative losses and thus no deferred tax liability would be necessary.

As of December 31, 2008, we had federal net operating loss carryforwards of approximately $156.1 million, which will expire in the years 2011 through 2028 and federal research and development tax credits of approximately $6.2 million, which expire in the years 2018 through 2028. Of these net operating losses, approximately $25.6 million are attributable to Symphony Dynamo, Inc., which expire in the years 2026 through 2028.

As of December 31, 2008, we had net operating loss carryforwards for California state income tax purposes of approximately $83.6 million, which expire in the years 2012 through 2028, and California state research and development tax credits of approximately $6.5 million which do not expire.

As of December 31, 2008, we had net operating loss carryforwards for foreign income tax purposes of approximately $19.3 million, which do not expire.

The Tax Reform Act of 1986 limits the annual use of net operating loss and tax credit carryforwards in certain situations where changes occur in stock ownership of a company. In the event the Company has a change in ownership, as defined, the annual utilization of such carryforwards could be limited. FIN 48 had no impact on the reported carryforwards at December 31, 2007 and 2008.

16. Selected Quarterly Financial Data (Unaudited; in thousands, except per share amounts)

	Year Ended December 31,2008				Year Ended December 31, 2007			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Revenues	$ 6,314	$ 9,978	$ 8,857	$11,945	$ 1,984	$ 1,800	$ 1,014	$ 9,295
Net income (loss)	$(12,429)	$ (6,079)	$ (5,420)	$ 3,099	$(13,090)	$(17,704)	$(17,101)	$(12,076)
Basic net income (loss) per share	$ (0.31)	$ (0.15)	$ (0.14)	$ 0.08	$ (0.33)	$ (0.45)	$ (0.43)	$ (0.30)
Weighted-average shares used in computing basic net income (loss) per share	39,785	39,806	39,831	39,854	39,727	39,741	39,753	39,765
Diluted net income (loss) per share	$ (0.31)	$ (0.15)	$ (0.14)	$ 0.08	$ (0.33)	$ (0.45)	$ (0.43)	$ (0.30)
Weighted-average shares used in computing diluted net income (loss) per share	39,785	39,806	39,831	39,854	39,727	39,741	39,753	39,765

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURES

Not applicable.

ITEM 9A. CONTROLS AND PROCEDURES

(a) Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934 (the “Exchange Act”)) that are designed to ensure that information required to be disclosed in our Exchange Act reports is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission rules and forms and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow for timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can only provide reasonable, not absolute, assurance of achieving the desired control objectives.

Based on their evaluation as of the end of the period covered by this report, our management, with the participation of our Chief Executive Officer and our Chief Financial Officer, concluded that our disclosure controls and procedures are effective to ensure that information required to be disclosed by us in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission rules and forms.

(b) Management’s Annual Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on that evaluation, our management concluded that our internal control over financial reporting was effective as of December 31, 2008. The Company’s independent registered public accountants, Ernst & Young LLP, audited the consolidated financial statements included in this Annual Report on Form 10-K and have issued an attestation report on the Company’s internal control over financial reporting. The report on the audit of internal control over financial reporting appears below.

Report of Independent Registered Public Accounting Firm

To The Board of Directors and Stockholders
Dynavax Technologies Corporation

We have audited Dynavax Technologies Corporation's internal control over financial reporting as of December 31, 2008, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (the COSO criteria). Dynavax Technologies Corporation's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Annual Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, Dynavax Technologies Corporation maintained, in all material respects, effective internal control over financial reporting as of December 31, 2008 based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the 2008 consolidated financial statements of Dynavax Technologies Corporation and our report dated March 4, 2009 expressed an unqualified opinion thereon.

/s/ ERNST & YOUNG LLP

San Francisco, California
March 4, 2009

(c) Changes in Internal Control Over Financial Reporting

There has been no change in our internal controls over financial reporting during our most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, our internal controls over financial reporting.

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Information required by this Item is incorporated by reference to the sections entitled “Proposal One —Elections of Directors,” “Executive Compensation,” and “Section 16(a) Beneficial Ownership Reporting Compliance” in our Definitive Proxy Statement in connection with the 2009 Annual Meeting of Stockholders (the “Proxy Statement”), which will be filed with the Securities and Exchange Commission within 120 days after the fiscal year ended December 31, 2008.

We have adopted the Dynavax Code of Business Conduct and Ethics, a code of ethics that applies to our employees, including our Chief Executive Officer, Chief Financial Officer, Chief Accounting Officer, and to our non-employee directors. We will provide a written copy of the Dynavax Code of Business Conduct and Ethics to anyone without charge, upon request written to Dynavax, Attention: Deborah A. Smeltzer, 2929 Seventh Street, Suite 100, Berkeley, CA 94710-2753, (510) 848-5100.

ITEM 11. EXECUTIVE COMPENSATION

Information required by this Item is incorporated by reference to the section entitled “Executive Compensation” in the Proxy Statement.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Information regarding security ownership of certain beneficial owners and management is incorporated by reference to the section entitled “Security Ownership of Certain Beneficial Owners and Management” in the Proxy Statement. Information regarding our stockholder approved and non-approved equity compensation plans are incorporated by reference to the section entitled “Equity Compensation Plans” in the Proxy Statement.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

Information required by this Item is incorporated by reference to the sections entitled “Certain Relationships and Related Transactions” and “Compensation Committee Interlocks and Insider Participation” in the Proxy Statement.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

Information required by this Item is incorporated by reference to the section entitled “Audit Fees” in the Proxy Statement.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(a) Documents filed as part of this report:

1. Financial Statements

Report of Independent Registered Public Accounting Firm

Consolidated Balance Sheets

Consolidated Statements of Operations

Consolidated Statements of Stockholders’ Equity

Consolidated Statements of Cash Flows

Notes to Consolidated Financial Statements

2. Financial Statement Schedules

None, as all required disclosures have been made in the Consolidated Financial Statements and notes thereto or are not applicable.

(b) Exhibits

Exhibit Number	Document
3.1(1)	Sixth Amended and Restated Certificate of Incorporation
3.2(1)	Amended and Restated Bylaws
3.3(2)	Form of Certificate of Designation of Series A Junior Participating Preferred Stock
4.1(3)	Registration Rights Agreement
4.2(3)	Form of Warrant
4.3(4)	Form of Specimen Common Stock Certificate
4.4(2)	Rights Agreement dated as of November 5, 2008, by and between the Company and Mellon Investor Services LLC
4.5(2)	Form of Rights Certificate
4.6	Form of Restricted Stock Unit Award Agreement.
10.32 (5)†	License Agreement, dated June 26, 2007, between Coley Pharmaceuticals Group, Inc. and Dynavax Technologies Corporation
10.33 (6)†	Loan Agreement, dated July 18, 2007, between Deerfield Private design Fund, L.P., Deerfield Special Situations Fund, L.P, Deerfield Special Situations Fund International Limited and Deerfield Private Design International. L.P., and Dynavax Technologies Corporation
10.34(7)†	Merck Exclusive License and Development Collaboration Agreement, dated October 31, 2007
10.35(7)†	Merck Manufacturing Agreement, dated October 31, 2007
10.36(8)	Amendment No. 1 to Common Stock Purchase Agreement, dated February 22, 2008, between Azimuth Opportunity Ltd., and Dynavax Technologies Corporation
10.37	Amended Management Continuity Agreement, dated as of October 3, 2008, between Dynavax Technologies Corporation and Dino Dina
10.38	Form of Amended Management Continuity Agreement between Dynavax Technologies Corporation and each of its executive officers
10.39†	Research and Development Collaboration and License Agreement, dated December 15, 2008, between Glaxo Group Limited and Dynavax Technologies Corporation
21.1	List of Subsidiaries
23.1	Consent of Independent Registered Public Accounting Firm
31.1	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1	Certification of Chief Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2	Certification of Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

(1) Incorporated by reference from such document filed with the SEC as an exhibit to Dynavax's Amendment No. 4 to Registration Statement on Form S-1/A, as filed with the SEC on February 5, 2004 (Commission File No. 000- 50577).

(2) Incorporated by reference from such document filed with the SEC as an exhibit to Dynavax's Current Report on Form 8-K, as filed with the SEC on November 6, 2008.
(3) Incorporated by reference to Dynavax Technologies Corporation's Registration Statement (File No. 333-145836) on Form S-3 filed on August 31, 2007.
(4) Incorporated by reference to Dynavax Technologies Corporation's Registration Statement (File No. 333-109965) on Form S-1 filed on January 16, 2004.
(5) Incorporated by reference from such document filed with the SEC as an exhibit to Dynavax's Quarterly Report on Form 10-Q for the quarter ended June 30, 2007, as filed with the SEC.
(6) Incorporated by reference from such document filed with the SEC as an exhibit to Dynavax's Quarterly Report on Form 10-Q for the quarter ended September 30, 2007, as filed with the SEC.
(7) Incorporated by reference from such document filed with the SEC as an exhibit to Dynavax's Annual Report on Form 10-K for the year ended December 31, 2007, as filed with the SEC.
(8) Incorporated by reference from such document filed with the SEC as an exhibit to Dynavax's Quarterly Report on Form 10-Q for the quarter ended March 31, 2008, as filed with the SEC.
† We have been granted confidential treatment with respect to certain portions of this agreement. Omitted portions have been filed separately with the Securities and Exchange Commission.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has caused this report to be signed on its behalf by the undersigned, thereunto due authorized, in the City of Berkeley, State of California.

DYNAVAX TECHNOLOGIES CORPORATION

By: /S/ DINO DINA, M.D.
Dino Dina, M.D.
President and Chief Executive Officer
(Principal Executive Officer)

Date: March 6, 2009

By: /S/ DEBORAH A. SMELTZER
Deborah A. Smeltzer
Vice President, Operations and
Chief Financial Officer
(Principal Financial Officer)

Date: March 6, 2009

Signature	Title	Date
/S/ DINO DINA, M.D. **Dino Dina, M.D.**	President and Chief Executive Officer (Principal Executive Officer)	March 6, 2009
/S/ DEBORAH A. SMELTZER **Deborah A. Smeltzer**	Vice President, Operations and Chief Financial Officer (Principal Financial Officer)	March 6, 2009
/S/ ARNOLD ORONSKY, PH.D. **Arnold Oronsky, Ph.D.**	Chairman of the Board	March 6, 2009
/S/ NANCY L. BUC **Nancy L. Buc**	Director	March 6, 2009
Dennis Carson, M.D.	Director	
/S/ DENISE M. GILBERT, PH.D. **Denise M. Gilbert, Ph.D.**	Director	March 6, 2009
David M. Lawrence, M.D.	Director	
/S/ PEGGY V. PHILLIPS **Peggy V. Phillips**	Director	March 6, 2009
/S/ STANLEY A. PLOTKIN, M.D. **Stanley A. Plotkin, M.D.**	Director	March 6, 2009

DYNAVAX TECHNOLOGIES CORPORATION
RESTRICTED STOCK UNIT GRANT NOTICE
(2004 STOCK INCENTIVE PLAN)

Dynavax Technologies Corporation (the "***Company***"), pursuant to the Company's 2004 Stock Incentive Plan (the "***Plan***"), hereby grants to Participant a delayed award of Restricted Stock covering the number of restricted stock units (the "***RSUs***") set forth below (the "***Award***"). This Award shall be evidenced by this Restricted Stock Unit Grant Notice (the "***Grant Notice***") and a Restricted Stock Unit Award Agreement (the "***Agreement***"). This Award is subject to all of the terms and conditions as set forth herein, the Agreement, and the Plan, each of which are attached hereto and incorporated herein in their entirety. Capitalized terms not otherwise defined herein shall have the meanings set forth in the Plan and Agreement. Except as expressly provided in the Agreement, in the event of any conflict between the terms of the Award and the Plan, the terms of the Plan shall control.

Participant:	
Date of Grant:	
Vesting Commencement Date:	
Number of RSUs:	
Consideration:	Participant's services to the Company

Vesting Schedule: The RSUs will vest in full on the third anniversary of the Vesting Commencement Date, provided that vesting shall cease upon Participant's termination of Continuous Service.

Delivery Schedule: Delivery of one share of Common Stock for each RSU which vests shall occur on the applicable vesting date, provided that delivery may be delayed as provided in Section 5 of the Agreement.

Additional Terms/Acknowledgements: Participant acknowledges receipt of, and understands and agrees to, this Grant Notice, the Agreement, and the Plan. Participant further acknowledges that as of the Date of Grant, this Grant Notice, the Agreement and the Plan set forth the entire understanding between Participant and the Company regarding the award of the RSUs and the underlying Common Stock issuable thereunder and supersede all prior oral and written agreements on that subject with the exception of Awards previously granted and delivered to Participant under the Plan.

DYNAVAX TECHNOLOGIES CORPORATION

By: _____
Signature

Title: _____

Date _____

PARTICIPANT

_____
Signature

Date: _____

ATTACHMENTS: Agreement

DYNAVAX TECHNOLOGIES CORPORATION
2004 STOCK INCENTIVE PLAN
RESTRICTED STOCK UNIT AWARD AGREEMENT

Pursuant to the Restricted Stock Unit Grant Notice ("***Grant Notice***") and this Restricted Stock Unit Award Agreement ("***Agreement***"), Dynavax Technologies Corporation (the "***Company***") has granted you a delayed award of Restricted Stock pursuant to the Company's 2004 Stock Incentive Plan (the "***Plan***") covering the number of restricted stock units ("***RSUs***") as indicated in the Grant Notice (collectively, the "***Award***"). This Agreement shall be deemed to be signed by the Company and you upon your signing of the Grant Notice. Defined terms not explicitly defined in this Agreement but defined in the Plan shall have the same definitions as in the Plan. Except as expressly provided herein, in the event of any conflict between the terms of this Agreement and the Plan, the terms of the Plan shall control. The details of this Award, in addition to those set forth in the Grant Notice, are as follows.

1. GRANT OF AWARD. This Award represents the right to earn and be issued on a future date the number of shares of Common Stock as indicated in the Grant Notice. Subject to adjustment and the terms and conditions as provided herein and in the Plan, each RSU shall represent the right to receive one share of Common Stock. As of the Date of Grant, the Company will credit to a bookkeeping account maintained by the Company for your benefit (the "***Account***") the number of shares of Common Stock subject to this Award. This Award was granted in consideration of your services to the Company. Except as provided in Section 12, you will not be required to make any payment to the Company (other than services to the Company) with respect to your receipt of this Award, the vesting of the RSUs, or the delivery of the shares of underlying Common Stock.

2. VESTING. The RSUs will vest, if at all, as provided in the Vesting Schedule set forth in your Grant Notice and the Plan, provided that vesting shall cease upon the termination of your Continuous Service. Upon such termination of your Continuous Service, the shares credited to the Account that were not vested on the date of such termination shall be forfeited to the Company and you shall have no further right, title or interest in or to such underlying shares of Common Stock.

3. VESTING ACCELERATION.

(a) If your employment is terminated in an Involuntary Termination except following a Change of Control, then you will be entitled to receive *pro rata* vesting credit under this Award, such that a number of RSUs will vest equal to the product of (i) the number of RSUs subject to this Award, and (ii) the quotient obtained by dividing (x) the number of full calendar years between the Vesting Commencement Date specified in the Grant Notice and the date of the termination of your employment in an Involuntary Termination, by (y) 3.

(b) In the event of a Change of Control and you: (i) are offered and accept a position with the New Company, or (ii) are not offered a position with the New Company that is "comparable" to your position with the Company, then immediately prior to the effective date of the Change of Control this Award shall immediately vest in full. For purposes of this Section 3(b), a position with the New Company shall be considered "comparable" to your position with

the Company if such position would not form the basis for your voluntary termination of employment that would constitute an Involuntary Termination; *provided, however*, that for purposes of this Section 3(b) only, clause (ii)(A) of the definition of Involuntary Termination shall be applied in a manner that presumes that there is a material reduction of job duties or responsibilities if your position with the New Company is as part of a subsidiary or division of the New Company and the scope of such duties or responsibilities is limited to such subsidiary or division and does not include the entire business operations of the New Company.

4. NUMBER OF RSUS AND SHARES OF COMMON STOCK.

(a) The number of RSUs subject to this Award and the number of shares of Common Stock deliverable with respect to such RSUs may be adjusted from time to time for changes in capitalization as described in Section 10 of the Plan. You shall receive no benefit or adjustment to this Award with respect to any cash dividend or other distribution that does not result from changes in capitalization as described in Section 10 of the Plan; *provided, however,* that this sentence shall not apply with respect to any shares of Common Stock that are delivered to you in connection with this Award after such shares have been delivered to you.

(b) Any additional RSUs, shares of Common Stock, cash or other property that becomes subject to the Award pursuant to this Section 4 shall be subject, in a manner determined by the Board, to the same forfeiture restrictions, restrictions on transferability, and time and manner of delivery as applicable to the other RSUs and Common Stock covered by this Award.

(c) Notwithstanding the provisions of this Section 4, no fractional RSUs or rights for fractional shares of Common Stock shall be created pursuant to this Section 4. The Board shall, in its discretion, determine an equivalent benefit for any fractional RSUs or fractional shares that might be created by the adjustments referred to in this Section 4.

5. DELIVERY OF SHARES OF COMMON STOCK.

(a) Subject to the provisions of this Agreement, in the event one or more RSUs vests, the Company shall deliver to you one share of Common Stock for each RSU that vests on the applicable vesting date. However, if a scheduled delivery date falls on a date that is not a business day, such delivery date shall instead fall on the next following business day. The form of such delivery (*e.g.*, a stock certificate or electronic entry evidencing such shares) shall be determined by the Company.

(b) Notwithstanding the foregoing, in the event that you are subject to the Company's *Insider Trading Policy* in effect from time to time and any shares covered by this Award are scheduled to be delivered on a day (the "***Original Delivery Date***") that occurs during a "blackout period" applicable to you, as determined by the Company in accordance with such policy, then such shares shall not be delivered on such Original Delivery Date and shall instead be delivered on the first business day after the end of the "blackout period" applicable to you, but in no event later than the later of: (i) December 31st of the calendar year of the Original Delivery Date, or (ii) the fifteenth (15th) day of the third calendar month following the Original Delivery Date.

6. DIVIDENDS. You shall receive no benefit or adjustment to your Award with respect to any cash dividend, stock dividend or other distribution that does not result from a change in capitalization as described in Section 10 of the Plan; *provided*, *however*, that upon delivery of shares of Common Stock, you shall exercise all rights and privileges of a stockholder of the Company with respect to such shares including the right to receive any dividends which may be paid with respect to such shares.

7. SECURITIES LAW COMPLIANCE. You may not be issued any Common Stock under this Award unless either (i) the shares of Common Stock are then registered under the Securities Act, or (ii) the Company has determined that such issuance would be exempt from the registration requirements of the Securities Act. This Award must also comply with other applicable laws and regulations governing the Award, and you shall not receive such Common Stock if the Company determines that such receipt would not be in material compliance with such laws and regulations.

8. RESTRICTIVE LEGENDS. The Common Stock issued under this Award shall be endorsed with appropriate legends, if any, determined by the Company.

9. TRANSFER RESTRICTIONS. Prior to the time that shares of Common Stock have been delivered to you, you may not transfer, pledge, sell or otherwise dispose of the shares in respect of this Award. This Award is not transferable, except by will or by the laws of descent and distribution. Notwithstanding the foregoing, by delivering written notice to the Company, in a form satisfactory to the Company, you may designate a third party who, in the event of your death, shall thereafter be entitled to receive any distribution of Common Stock to which you were entitled at the time of your death pursuant to this Agreement.

10. AWARD NOT A SERVICE CONTRACT. This Award is not an employment or service contract, and nothing in this Award shall be deemed to create in any way whatsoever any obligation on your part to continue in the service of the Company or any Related Entity, or on the part of the Company or any Related Entity to continue such service. In addition, nothing in this Award shall obligate the Company or any Related Entity, their respective stockholders, boards of directors or employees to continue any relationship that you might have as an Employee or Consultant of the Company or any Related Entity.

11. UNSECURED OBLIGATION. This Award is unfunded, and even as to any RSUs that vest, you shall be considered an unsecured creditor of the Company with respect to the Company's obligation, if any, to issue Common Stock pursuant to this Agreement. You shall not have voting or any other rights as a stockholder of the Company with respect to the Common Stock acquired pursuant to this Agreement until such Common Stock is issued to you pursuant to Section 5. Upon such issuance, you will obtain full voting and other rights as a stockholder of the Company with respect to the Common Stock so issued. Nothing contained in this Agreement, and no action taken pursuant to its provisions, shall create or be construed to create a trust of any kind or a fiduciary relationship between you and the Company or any other person.

12. WITHHOLDING OBLIGATIONS.

(a) On or before the time you vest in your RSUs or receive a distribution of Common Stock pursuant to this Award, or at any time thereafter as requested by the Company, you hereby authorize any required withholding from payroll, other any amounts payable to you, and any shares of Common Stock issuable to you, and you otherwise agree to make adequate provision for any sums required to satisfy the federal, state, local and foreign tax withholding obligations of the Company or any Related Entity which arise in connection with this Award (the "***Withholding Taxes***").

(b) If expressly permitted by the Company, you may direct the Company to withhold shares of Common Stock with a Fair Market Value (measured as of the date shares of Common Stock are delivered pursuant to Section 5) equal to the amount of such Withholding Taxes; *provided, however*, that the number of such shares of Common Stock so withheld shall not exceed the amount necessary to satisfy the Company's required tax withholding obligations using the minimum statutory withholding rates for federal, state, local and foreign tax purposes, including payroll taxes, that are applicable to supplemental taxable income.

(c) Unless the tax withholding obligations of the Company and/or any Related Entity are satisfied, the Company shall have no obligation to deliver to you any Common Stock.

(d) In the event the Company's obligation to withhold arises prior to the delivery to you of shares of Common Stock or it is determined after the delivery of Common Stock to you that the amount of the Company's withholding obligation was greater than the amount withheld by the Company, you agree to indemnify and hold the Company harmless from any failure by the Company to withhold the proper amount.

13. BEST AFTER-TAX.

(a) If any payment or benefit you would receive pursuant to an event described in Section 280G(b)(2)(A)(i) of the Code from the Company or otherwise ("***Payment***") would (i) constitute a "parachute payment" within the meaning of Section 280G of the Code, and (ii) but for this sentence, be subject to the excise tax imposed by Section 4999 of the Code (the "***Excise Tax***"), then such Payment shall be equal to the Reduced Amount. The "***Reduced Amount***" shall be either (x) the largest portion of the Payment that would result in no portion of the Payment being subject to the Excise Tax, or (y) the largest portion, up to and including the total, of the Payment, whichever amount, after taking into account all applicable federal, state and local employment taxes, income taxes, and the Excise Tax (all computed at the highest applicable marginal rate), results in your receipt of the greatest economic benefit notwithstanding that all or some portion of the Payment may be subject to the Excise Tax. If a reduction in payments or benefits constituting "parachute payments" is necessary so that the Payment equals the Reduced Amount, reduction shall occur in a manner necessary to provide you with the greatest economic benefit. If more than one manner of reduction of payments or benefits necessary to arrive at the Reduced Amount yields the greatest economic benefit, the payments and benefits shall be reduced *pro rata*.

(b) The independent registered public accounting firm engaged by the Company for general audit purposes as of the day prior to the effective date of the event described in Section 280G(b)(2)(A)(i) of the Code shall perform the foregoing calculations. If the independent registered public accounting firm so engaged by the Company is serving as accountant or auditor for the individual, entity or group effecting such event, the Company shall appoint a nationally recognized independent registered public accounting firm to make the determinations required hereunder. The Company shall bear all expenses with respect to the determinations by such independent registered public accounting firm required to be made hereunder. The independent registered public accounting firm engaged to make the determinations hereunder shall provide its calculations, together with detailed supporting documentation, to the Company and you within 30 calendar days after the date on which your right to a Payment is triggered (if requested at that time by the Company or you) or such other time as requested by the Company or you. Any good faith determinations of the independent registered public accounting firm made hereunder shall be final, binding and conclusive upon the Company and you.

14. NOTICES. Any notices required to be given or delivered to the Company under the terms of this Award shall be in writing and addressed to the Company at its principal corporate offices. Any notice required to be given or delivered to you shall be in writing and addressed to your address as on file with the Company at the time notice is given. All notices shall be deemed effective upon personal delivery or upon deposit in the U.S. mail, postage prepaid and properly addressed to the party to be notified.

15. HEADINGS. The headings of the Sections in this Agreement are inserted for convenience only and shall not be deemed to constitute a part of this Agreement or to affect the meaning of this Agreement.

16. AMENDMENT. This Agreement may be amended only by a writing executed by the Company and you which specifically states that it is amending this Agreement. Notwithstanding the foregoing, this Agreement may be amended solely by the Company by a writing which specifically states that it is amending this Agreement, so long as a copy of such amendment is delivered to you, and provided that no such amendment adversely affecting your rights hereunder may be made without your written consent. Without limiting the foregoing, the Company reserves the right to change, by written notice to you, the provisions of this Agreement in any way it may deem necessary or advisable to carry out the purpose of the grant as a result of any change in applicable laws or regulations or any future law, regulation, ruling, or judicial decision, provided that any such change shall be applicable only to rights relating to that portion of the Award that has not been delivered to you in Common Stock pursuant to Section 5.

17. MISCELLANEOUS.

(a) The rights and obligations of the Company under this Award shall be transferable by the Company to any one or more persons or entities, and all covenants and agreements hereunder shall inure to the benefit of, and be enforceable by the Company’s successors and assigns.

(b) You agree upon request to execute any further documents or instruments necessary or desirable in the sole determination of the Company to carry out the purposes or intent of this Award.

(c) You acknowledge and agree that you have reviewed this Award in its entirety, have had an opportunity to obtain the advice of counsel prior to executing and accepting this Award and fully understand all provisions of this Award.

(d) This Agreement shall be subject to all applicable laws, rules, and regulations, and to such approvals by any governmental agencies or national securities exchanges as may be required.

(e) All obligations of the Company under the Plan and this Agreement shall be binding on any successor to the Company, whether the existence of such successor is the result of a direct or indirect purchase, merger, consolidation, or otherwise, of all or substantially all of the business and/or assets of the Company.

18. GOVERNING PLAN DOCUMENT. This Award is subject to all the provisions of the Plan, the provisions of which are hereby made a part of this Award, and is further subject to all interpretations, amendments, rules and regulations which may from time to time be promulgated and adopted pursuant to the Plan. In the event of any conflict between the provisions of this Award and those of the Plan, the provisions of the Plan shall control; *provided, however*, that Section 5 of this Agreement shall govern the timing of any distribution of Common Stock under this Award. The Company shall have the power to interpret the Plan and this Agreement and to adopt such rules for the administration, interpretation, and application of the Plan as are consistent therewith and to interpret or revoke any such rules. All actions taken and all interpretations and determinations made by the Board shall be final and binding upon you, the Company, and all other interested persons. No member of the Board shall be personally liable for any action, determination, or interpretation made in good faith with respect to the Plan or this Agreement.

19. EFFECT ON OTHER EMPLOYEE BENEFIT PLANS. The value of the Award subject to this Agreement shall not be included as compensation, earnings, salaries, or other similar terms used when calculating benefits under any employee benefit plan (other than the Plan) sponsored by the Company or any Related Entity except as such plan otherwise expressly provides. The Company expressly reserves its rights to amend, modify, or terminate any or all of the employee benefit plans of the Company or any Related Entity.

20. CHOICE OF LAW. The interpretation, performance and enforcement of this Agreement shall be governed by the law of the state of California without regard to such state's conflicts of laws rules.

21. SEVERABILITY. If all or any part of this Agreement or the Plan is declared by any court or governmental authority to be unlawful or invalid, such unlawfulness or invalidity shall not invalidate any portion of this Agreement or the Plan not declared to be unlawful or invalid. Any Section of this Agreement (or part of such a Section) so declared to be unlawful or invalid

shall, if possible, be construed in a manner which will give effect to the terms of such Section or part of a Section to the fullest extent possible while remaining lawful and valid.

22. OTHER DOCUMENTS. You hereby acknowledge receipt or the right to receive a prospectus providing the information required by Rule 428(b)(1) promulgated under the Securities Act. In addition, you acknowledge receipt of the Company's *Insider Trading Policy*.

23. DEFINITIONS. For purposes of this Agreement, the following definitions shall apply:

(a) "***Cause***" shall mean: (i) gross negligence or willful misconduct in the performance of your duties to the Company, where such gross negligence or willful misconduct has resulted or is likely to result in substantial and material damage to the Company or its subsidiaries; (ii) repeated unexplained or unjustified absence from the Company; (iii) a material and willful violation of any federal or state law; (iv) commission of any act of fraud with respect to the Company; or (v) conviction of a felony or a crime involving moral turpitude causing material harm to the standing and reputation of the Company, in each case as determined in good faith by the Board.

(b) "***Change of Control***" shall mean the occurrence of any of the following events: (i) a Change of Ownership, (ii) a Merger, or (iii) a Sale of Assets.

(c) "***Change of Ownership***" shall mean the time that any "Person" (as such term is used in Sections 13(d) and 14(d) of the Exchange Act) is or becomes the "Beneficial Owner" (as defined in Rule 13d-3 under the Exchange Act), directly or indirectly, of securities of the Company representing 50% or more of the total voting power represented by the Company's then outstanding voting securities.

(d) "***Involuntary Termination***" shall mean: (i) any termination by the Company other than for Cause; or (ii) your voluntary termination following (A) a material reduction or change in job duties, responsibilities, and requirements inconsistent with your position with the Company and your prior duties, responsibilities, and requirements, or a material change in the level of management to which you report; (B) any material reduction of your base compensation (other than in connection with a general decrease in base salaries for most officers of the successor corporation); or (C) your refusal to relocate to a facility or location more than 35 miles from the Company's current location. Notwithstanding the foregoing, an Involuntary Termination pursuant to the foregoing clause (ii) shall only be considered to occur if (x) you provide written notice to the Company of the existence of the condition that forms the basis for such resignation within 90 days following its initial existence; (y) upon such notice, the Company does not cure such condition within 30 days thereafter; and (z) your resignation occurs not later than 180 days after the occurrence of the condition giving rise to the resignation right.

(e) "***Merger***" shall mean a merger or consolidation of the Company whether or not approved by the Board, other than a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving

entity) at least 50% of the total voting power represented by the voting securities of the Company or such surviving entity outstanding immediately after such merger or consolidation, or the stockholders of the Company approve a plan of complete liquidation of the Company.

(f) "***New Company***" shall mean: (i) in the case of a Change of Ownership, the Company; (ii) in the case of a Merger, the surviving entity; or (iii) in the case of a Sale of Assets, the purchaser of all or substantially all of the Company's assets.

(g) "***Sale of Assets***" shall mean the stockholders of the Company approve an agreement for the sale or disposition by the Company of all or substantially all of the Company's assets.

(h) "***Securities Act***" shall mean the Securities Act of 1933, as amended.

DYNAVAX TECHNOLOGIES CORPORATION

MANAGEMENT CONTINUITY AND SEVERANCE AGREEMENT

Amended October 3, 2008

This Management Continuity and Severance Agreement (the "Agreement") is dated as of October 15, 2003, by and between Dino Dina, President and Chief Executive Officer, Dynavax Technologies Corporation ("Employee"), and Dynavax Technologies Corporation, a Delaware corporation (the "Company" or "Dynavax").

RECITALS

A. It is expected that another company may from time to time consider the possibility of acquiring the Company or that a change in control may otherwise occur, with or without the approval of the Company's Board of Directors. The Board of Directors recognizes that such consideration can be a distraction to Employee and can cause Employee to consider alternative employment opportunities. The Board of Directors has determined that it is in the best interests of the Company to assure that the Company will have the continued dedication and objectivity of the Employee, notwithstanding the possibility, threat, or occurrence of a Change of Control (as defined below) of the Company.

B. The Company's Board of Directors believes it is in the best interests of the Company to retain Employee and provide incentives to Employee to continue in the service of the Company.

C. The Board of Directors further believes that it is imperative to provide Employee with certain benefits upon a Change of Control and, under certain circumstances, upon termination of Employee's employment in connection with a Change of Control and independent of a Change of Control, which benefits are intended to provide Employee with encouragement to Employee to remain with the Company, notwithstanding the possibility of a Change of Control or an employment termination.

D. To accomplish the foregoing objectives, the Board of Directors has directed the Company, upon execution of this Agreement by Employee, to agree to the terms provided in this Agreement.

Now therefore, in consideration of the mutual promises, covenants, and agreements contained herein, and in consideration of the continuing employment of Employee by the Company, the parties hereto agree as follows:

1. At-Will Employment. The Company and Employee acknowledge that Employee's employment is and shall continue to be at-will, as defined under applicable law, and that Employee's employment with the Company may be terminated by either party at any time for any or no reason. If Employee's employment terminates for any reason, Employee shall not

be entitled to any payments, benefits, damages, award, or compensation other than as provided in this Agreement, and as may otherwise be available in accordance with the terms of the Company's established employee plans and written policies at the time of termination. The terms of this Agreement shall terminate upon the earlier of: (i) the date on which Employee ceases to be employed by the Company, other than as a result of an Involuntary Termination by the Company without Cause; or (ii) the date that all obligations of the parties hereunder have been satisfied. A termination of the terms of this Agreement pursuant to the preceding sentence shall be effective for all purposes, except that such termination shall not affect the payment or provision of compensation or benefits on account of a termination of employment occurring prior to the termination of the terms of this Agreement. The rights and duties created by this Section 1 may not be modified in any way except by a written agreement executed by the Chief Executive Officer ("CEO") of the Company upon direction from the Board of Directors, or by the Chairman of the Board in the case of the CEO.

2. Benefits upon Termination of Employment.

(a) Termination for Cause. If Employee's employment is terminated for Cause at any time, then Employee shall not be entitled to receive payment of any severance benefits. Employee will receive payment for all salary as of the date of Employee's termination of employment and Employee's benefits will be continued under the Company's then existing benefit plans and policies in accordance with such plans and policies in effect on the date of termination and in accordance with applicable law.

(b) Voluntary Resignation. If Employee voluntarily resigns from the Company (the Employee's employment does not end by reason of Involuntary Termination), then Employee shall not be entitled to receive payment of any severance benefits. Employee will receive payment for all salary as of the date of Employee's termination of employment and Employee's benefits will be continued under the Company's then existing benefit plans and policies in accordance with such plans and policies in effect on the date of termination and in accordance with applicable law.

(c) Involuntary Termination. If Employee's employment is terminated in an Involuntary Termination except following a Change of Control, then Employee shall be entitled to: (1) a lump-sum cash severance payment equal to twelve (12) months of Employee's then current annual base salary (less appropriate withholding deductions); (2) twelve (12) months of COBRA Continuation paid by the Company if COBRA Continuation is elected; (3) an additional twelve (12) months vesting of Employee's stock options to purchase the Company's Common Stock; and (4) pursuant to the Dynavax Technologies Corporation 2004 Stock Incentive Plan, ninety (90) days to exercise vested options.

(d) Termination for Death or Disability. If Employee's employment terminates due to Employee's death, then Employee's beneficiary will receive any salary earned (less appropriate withholding deductions) through the date of termination of employment. If Employee's employment terminates due to becoming disabled, all salaries due to Employee will be paid through the date of inception of Employee's disability.

In the event of termination for either death or disability, the exercise period of all vested options granted to Employee by the Company is extended to twelve (12) months from the date of termination of employment.

3. Benefits upon a Change of Control.

(a) Treatment of Stock Options. In the event of a Change of Control and the Employee: (i) is offered and accepts a position with the New Company, or (ii) is not offered a position with the New Company that is comparable to the Employee's position with the Company, then immediately prior to the effective date of the Change of Control an additional two (2) years vesting of Employee's stock options to purchase the Company's Common Stock granted to Employee over the course of his employment with the Company and held by Employee on the effective date of a Change of Control shall immediately vest on such date as to that number of shares that would have vested in accordance with the terms of the Stock Incentive Plan, as amended. "New Company," as used in this Section 3(a), shall mean: (a) in the case of a Change of Ownership (as defined in Section 4(a)(i) below), the Company; (b) in the case of a Merger (as defined in Section 4(a)(ii) below), the surviving entity; or (c) in the case of a Sale of Assets (as described in section 4(a)(ii) below), the purchaser of all or substantially all of the Company's assets. For purposes of this Section 3(a), a position with the New Company shall be considered "comparable" to the Employee's position with the Company if such position would not form the basis for Employee's voluntary termination of employment that would constitute an Involuntary Termination; provided, however, that for purposes of this Section 3(a) only, Section 4(c)(ii)(A) shall be applied in a manner that presumes that there is a material reduction of job duties or responsibilities if Employee's position with the New Company is as part of a subsidiary or division of the New Company and the scope of such duties or responsibilities is limited to such subsidiary or division and does not include the entire business operations of the New Company.

(b) Severance. In the event of a Change of Control and Employee's employment is terminated for any reason, including voluntary resignation, and such termination results in a "separation from service" within the meaning of Treasury Regulation Section 1.409A-1(h) without regard to any permissible alternative definition thereunder (a "Termination") within twenty-four (24) months following such Change of Control, Employee shall be entitled to: (1) a lump-sum cash severance payment equal to twelve (12) months of Employee's then current annual base salary, less applicable withholding deductions, payable six (6) months after the date of the Termination; (2) a lump-sum cash payment equal to the Employee's target incentive bonus of sixty percent (60%) (or such higher percentage then in effect under the management incentive program or other similar bonus program) of the Employee's then current annual base salary, less applicable withholding deductions, payable six (6) months after the date of the Termination; (3) twelve (12) months Company-paid COBRA continuation coverage upon Employee's election of COBRA Continuation Coverage; and (4) the extension of exercisability of all stock options to purchase the Company's Common Stock for a period of three (3) years following termination of employment (but in any event not beyond each option's expiration date).

4. Definition of Terms. The following terms referred to in this Agreement shall have the following meanings:

(a) Change of Control. "Change of Control" shall mean the occurrence of any of the following events:

(i) Change of Ownership. Any "Person" (as such term is used in Sections 13(d) and 14(d) of the Securities Exchange Act of 1934, as amended) is or becomes the "Beneficial Owner" (as defined in Rule 13d-3 under said Act), directly or indirectly, of securities of the Company representing 50% or more of the total voting power represented by the Company's then outstanding voting securities; or

(ii) Merger/Sale of Assets. A merger or consolidation of the Company whether or not approved by the Board, other than a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity) at least 50% of the total voting power represented by the voting securities of the Company or such surviving entity outstanding immediately after such merger or consolidation, or the stockholders of the Company approve a plan of complete liquidation of the Company or an agreement for the sale or disposition by the Company of all or substantially all of the Company's assets.

(b) Cause. "Cause" shall mean: (i) gross negligence or willful misconduct in the performance of Employee's duties to the Company, where such gross negligence or willful misconduct has resulted or is likely to result in substantial and material damage to the Company or its subsidiaries; (ii) repeated unexplained or unjustified absence from the Company; (iii) a material and willful violation of any federal or state law; (iv) commission of any act of fraud with respect to the Company; or (v) conviction of a felony or a crime involving moral turpitude causing material harm to the standing and reputation of the Company, in each case as determined in good faith by the Board.

(c) Involuntary Termination. "Involuntary Termination" shall mean: (i) any termination by the Company other than for Cause; or (ii) Employee's voluntary termination following (A) a material reduction or change in job duties, responsibilities, and requirements inconsistent with the Employee's position with the Company and the Employee's prior duties, responsibilities, and requirements, or a material change in the level of management to which the Employee reports; (B) any material reduction of Employee's base compensation (other than in connection with a general decrease in base salaries for most officers of the successor corporation); or (C) Employee's refusal to relocate to a facility or location more than 35 miles from the Company's current location. Notwithstanding the foregoing, an Involuntary Termination pursuant to the foregoing clause (ii) shall only be considered to occur if (x) Employee provides written notice to the Company of the existence of the condition that forms the basis for such resignation within 90 days following its initial existence; (y) upon such notice, the Company does not cure such condition within 30 days thereafter; and (z) Employee's resignation occurs not later than 180 days after the occurrence of the condition giving rise to the resignation right.

5. Conflicts. Employee represents that his performance of all the terms of this Agreement will not breach any other agreement to which Employee is a party. Employee has not entered, and will not during the term of this Agreement enter, into any oral or written agreement in conflict with any of the provisions of this Agreement. Employee further represents that he is entering into or has entered into an employment relationship with the Company of his own free will and that he has not been solicited as an employee in any way by the Company.

6. Successors. Any successor to the Company (whether direct or indirect and whether by purchase, lease, merger, consolidation, liquidation, or otherwise) to all or substantially all of the Company's business and/or assets shall assume the obligations under this Agreement and agree expressly to perform the obligations under this Agreement in the same manner and to the same extent as the Company would be required to perform such obligations in the absence of a succession. The terms of this Agreement and all of Employee's rights hereunder and thereunder shall inure to the benefit of, and be enforceable by, Employee's personal or legal representatives, executors, administrators, successors, heirs, distributees, devisees, and legatees.

7. Notice. Notices and all other communications contemplated by this Agreement shall be in writing and shall be deemed to have been duly given when personally delivered or when mailed by U.S. registered or certified mail, return receipt requested and postage prepaid. Mailed notices to Employee shall be addressed to Employee at the home address that Employee most recently communicated to the Company in writing. In the case of the Company, mailed notices shall be addressed to its corporate headquarters, and all notices shall be directed to the attention of its Secretary.

8. Parachute Payments.

(a) If any payment or benefit Employee would receive pursuant to a Change of Control from the Company or otherwise ("Payment") would (i) constitute a "parachute payment" within the meaning of Section 280G of the Internal Revenue Code of 1988, as amended (the "Code"), and (ii) but for this sentence, be subject to the excise tax imposed by Section 4999 of the Code (the "Excise Tax"), then such Payment shall be equal to the Reduced Amount. The "Reduced Amount" shall be either (x) the largest portion of the Payment that would result in no portion of the Payment being subject to the Excise Tax, or (y) the largest portion, up to and including the total, of the Payment, whichever amount, after taking into account all applicable federal, state and local employment taxes, income taxes, and the Excise Tax (all computed at the highest applicable marginal rate), results in Employee's receipt of the greatest economic benefit notwithstanding that all or some portion of the Payment may be subject to the Excise Tax. If a reduction in payments or benefits constituting "parachute payments" is necessary so that the Payment equals the Reduced Amount, reduction shall occur in a manner necessary to provide Employee with the greatest economic benefit. If more than one manner of reduction of payments or benefits necessary to arrive at the Reduced Amount yields the greatest economic benefit, the payments and benefits shall be reduced pro rata.

(b) The independent registered public accounting firm engaged by the Company for general audit purposes as of the day prior to the effective date of the event described in Section 280G(b)(2)(A)(i) of the Code shall perform the foregoing calculations. If

the independent registered public accounting firm so engaged by the Company is serving as accountant or auditor for the individual, entity or group effecting such event, the Company shall appoint a nationally recognized independent registered public accounting firm to make the determinations required hereunder. The Company shall bear all expenses with respect to the determinations by such independent registered public accounting firm required to be made hereunder. The independent registered public accounting firm engaged to make the determinations hereunder shall provide its calculations, together with detailed supporting documentation, to the Company and Employee within thirty (30) calendar days after the date on which Employee's right to a Payment is triggered (if requested at that time by the Company or Employee) or such other time as requested by the Company or Employee. Any good faith determinations of the independent registered public accounting firm made hereunder shall be final, binding and conclusive upon the Company and Employee.

9. Miscellaneous Provisions.

(a) No Duty to Mitigate. Employee shall not be required to mitigate the amount of any payment contemplated by this Agreement (whether by seeking new employment or in any other manner), nor shall any such payment be reduced by any earnings that Employee may receive from any other source.

(b) Waiver. No provision of this Agreement shall be modified, waived, or discharged unless the modification, waiver, or discharge is agreed to in writing and signed by Employee and by an authorized officer of the Company (other than Employee). No waiver by either party of any breach of, or of compliance with, any condition or provision of this Agreement by the other party shall be considered a waiver of any other condition or provision or of the same condition or provision at another time.

(c) Whole Agreement. No agreements, representations, or understandings (whether oral or written and whether expressed or implied) which are not expressly set forth in this Agreement have been made or entered into by either party with respect to the subject matter hereof, except as set forth in the employment offer letter from the Company to the Employee dated July 14, 1998. This Agreement supersedes any agreement of the same title and concerning similar subject matter dated prior to the date of this Agreement, and by execution of this Agreement both parties agree that any such predecessor agreement shall be deemed null and void.

(d) Choice of Law. The validity, interpretation, construction and performance of this Agreement shall be governed by the laws of the State of California without reference to conflict of laws provisions.

(e) Severability. If any term or provision of this Agreement or the application thereof to any circumstance shall, in any jurisdiction and to any extent, be invalid or unenforceable, such term or provision shall be ineffective as to such jurisdiction to the extent of such invalidity or unenforceability without invalidating or rendering unenforceable the remaining terms and provisions of this Agreement or the application of such terms and provisions to circumstances other than those as to which it is held invalid or unenforceable, and a suitable and

equitable term or provision shall be substituted therefore to carry out, insofar as may be valid and enforceable, the intent and purpose of the invalid or unenforceable term or provision.

(f) Arbitration. Any dispute or controversy arising under or in connection with this Agreement may be settled at the option of either party by binding arbitration in the County of Alameda, California, in accordance with the rules of the American Arbitration Association then in effect before a single arbitrator. The judgment may be entered on the arbitrator's award in any court having jurisdiction. Punitive damages shall not be awarded.

(g) Legal Fees and Expenses. The parties shall each bear their own expenses, legal fees, and other fees incurred in connection with this Agreement. This means the Company pays its own legal fees in connection with this Agreement and the Employee is responsible for his own legal fees in connection with this Agreement. However, the arbitrator may award legal fees and expenses in connection with any arbitration as deemed appropriate.

(h) No Assignment of Benefits. The rights of any person to payments or benefits under this Agreement shall not be made subject to option or assignment, either by voluntary or involuntary assignment or by operation of law, including (without limitation) bankruptcy, garnishment, attachment, or other creditor's process, and any action in violation of this Section 9(h) shall be void.

(i) Employment Taxes. All payments made pursuant to this Agreement will be subject to withholding of applicable income and employment taxes.

(j) Assignment by Company. The Company may assign its rights under this Agreement to an affiliate, and an affiliate may assign its rights under this Agreement to another affiliate of the Company or to the Company; provided, however, that such assignee is the employer of the Employee. In the case of any such assignment, the term "Company" when used in a section of this Agreement shall mean the corporation that actually employs the Employee except that the term "Company" shall continue to mean Dynavax Technologies Corporation with regard to the definition of a Change of Control.

(k) Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together will constitute one and the same instrument.

[SIGNATURE PAGE FOLLOWS]

The parties have executed this Agreement on the date first written above.

DYNAVAX TECHNOLOGIES CORPORATION

By: /s/ ARNOLD ORONSKY, PH.D.

Title: Chairman of the Board

Address: 2929 Seventh Street
Suite #100
Berkeley, CA 94710

DINO DINA

Signature: /s/ DINO DINA, M.D.

Address: 2929 Seventh Street
Suite 100
Berkeley, CA 94710

DYNAVAX TECHNOLOGIES CORPORATION

MANAGEMENT CONTINUITY AND SEVERANCE AGREEMENT

Amended October 3, 2008

This Management Continuity and Severance Agreement (the "Agreement") is dated as of [DATE], by and between [NAME OF EXECUTIVE OFFICER], [TITLE OF EXECUTIVE OFFICER], Dynavax Technologies Corporation ("Employee"), and Dynavax Technologies Corporation, a Delaware corporation (the "Company" or "Dynavax").

RECITALS

A. It is expected that another company may from time to time consider the possibility of acquiring the Company or that a change in control may otherwise occur, with or without the approval of the Company's Board of Directors. The Board of Directors recognizes that such consideration can be a distraction to Employee and can cause Employee to consider alternative employment opportunities. The Board of Directors has determined that it is in the best interests of the Company to assure that the Company will have the continued dedication and objectivity of the Employee, notwithstanding the possibility, threat, or occurrence of a Change of Control (as defined below) of the Company.

B. The Company's Board of Directors believes it is in the best interests of the Company to retain Employee and provide incentives to Employee to continue in the service of the Company.

C. The Board of Directors further believes that it is imperative to provide Employee with certain benefits upon a Change of Control and, under certain circumstances, upon termination of Employee's employment in connection with a Change of Control and independent of a Change of Control, which benefits are intended to provide Employee with encouragement to Employee to remain with the Company, notwithstanding the possibility of a Change of Control or an employment termination.

D. To accomplish the foregoing objectives, the Board of Directors has directed the Company, upon execution of this Agreement by Employee, to agree to the terms provided in this Agreement.

Now therefore, in consideration of the mutual promises, covenants, and agreements contained herein, and in consideration of the continuing employment of Employee by the Company, the parties hereto agree as follows:

1. At-Will Employment. The Company and Employee acknowledge that Employee's employment is and shall continue to be at-will, as defined under applicable law, and that Employee's employment with the Company may be terminated by either party at any time for any or no reason. If Employee's employment terminates for any reason, Employee shall not

be entitled to any payments, benefits, damages, award, or compensation other than as provided in this Agreement, and as may otherwise be available in accordance with the terms of the Company's established employee plans and written policies at the time of termination. The terms of this Agreement shall terminate upon the earlier of: (i) the date on which Employee ceases to be employed by the Company, other than as a result of an Involuntary Termination by the Company without Cause; or (ii) the date that all obligations of the parties hereunder have been satisfied. A termination of the terms of this Agreement pursuant to the preceding sentence shall be effective for all purposes, except that such termination shall not affect the payment or provision of compensation or benefits on account of a termination of employment occurring prior to the termination of the terms of this Agreement. The rights and duties created by this Section 1 may not be modified in any way except by a written agreement executed by the Chief Executive Officer ("CEO") of the Company upon direction from the Board of Directors, or by the Chairman of the Board in the case of the CEO.

2. Benefits upon Termination of Employment.

(a) Termination for Cause. If Employee's employment is terminated for Cause at any time, then Employee shall not be entitled to receive payment of any severance benefits. Employee will receive payment for all salary as of the date of Employee's termination of employment and Employee's benefits will be continued under the Company's then existing benefit plans and policies in accordance with such plans and policies in effect on the date of termination and in accordance with applicable law.

(b) Voluntary Resignation. If Employee voluntarily resigns from the Company (the Employee's employment does not end by reason of Involuntary Termination), then Employee shall not be entitled to receive payment of any severance benefits. Employee will receive payment for all salary as of the date of Employee's termination of employment and Employee's benefits will be continued under the Company's then existing benefit plans and policies in accordance with such plans and policies in effect on the date of termination and in accordance with applicable law.

(c) Involuntary Termination. If Employee's employment is terminated in an Involuntary Termination except following a Change of Control, then Employee shall be entitled to: (1) a lump-sum cash severance payment equal to six (6) months of Employee's then current annual base salary (less appropriate withholding deductions); (2) six (6) months of COBRA Continuation paid by the Company if COBRA Continuation is elected; (3) an additional six (6) months vesting of Employee's stock options to purchase the Company's Common Stock; and (4) pursuant to the Dynavax Technologies Corporation 2004 Stock Incentive Plan, ninety (90) days to exercise vested options.

(d) Termination for Death or Disability. If Employee's employment terminates due to Employee's death, then Employee's beneficiary will receive any salary earned (less appropriate withholding deductions) through the date of termination of employment. If Employee's employment terminates due to becoming disabled, all salaries due to Employee will be paid through the date of inception of Employee's disability.

In the event of termination for either death or disability, the exercise period of all vested options granted to Employee by the Company is extended to twelve (12) months from the date of termination of employment.

3. Benefits upon a Change of Control.

(a) Treatment of Stock Options. In the event of a Change of Control and the Employee: (i) is offered and accepts a position with the New Company, or (ii) is not offered a position with the New Company that is comparable to the Employee's position with the Company, then immediately prior to the effective date of the Change of Control an additional two (2) years vesting of Employee's stock options to purchase the Company's Common Stock granted to Employee over the course of his employment with the Company and held by Employee on the effective date of a Change of Control shall immediately vest on such date as to that number of shares that would have vested in accordance with the terms of the Stock Incentive Plan, as amended. "New Company," as used in this Section 3(a), shall mean: (a) in the case of a Change of Ownership (as defined in Section 4(a)(i) below), the Company; (b) in the case of a Merger (as defined in Section 4(a)(ii) below), the surviving entity; or (c) in the case of a Sale of Assets (as described in section 4(a)(ii) below), the purchaser of all or substantially all of the Company's assets. For purposes of this Section 3(a), a position with the New Company shall be considered "comparable" to the Employee's position with the Company if such position would not form the basis for Employee's voluntary termination of employment that would constitute an Involuntary Termination; provided, however, that for purposes of this Section 3(a) only, Section 4(c)(ii)(A) shall be applied in a manner that presumes that there is a material reduction of job duties or responsibilities if Employee's position with the New Company is as part of a subsidiary or division of the New Company and the scope of such duties or responsibilities is limited to such subsidiary or division and does not include the entire business operations of the New Company.

(b) Severance. In the event of a Change of Control and Employee's employment is terminated for any reason, including voluntary resignation, and such termination results in a "separation from service" within the meaning of Treasury Regulation Section 1.409A-1(h) without regard to any permissible alternative definition thereunder (a "Termination") within twenty-four (24) months following such Change of Control, Employee shall be entitled to: (1) a lump-sum cash severance payment equal to twelve (12) months of Employee's then current annual base salary, less applicable withholding deductions, payable six (6) months after the date of the Termination; (2) a lump-sum cash payment equal to the Employee's target incentive bonus of fifty percent (50%) (or such higher percentage then in effect under the management incentive program or other similar bonus program) of the Employee's then current annual base salary, less applicable withholding deductions, payable six (6) months after the date of the Termination; (3) twelve (12) months Company-paid COBRA continuation coverage upon Employee's election of COBRA Continuation Coverage; and (4) the extension of exercisability of all stock options to purchase the Company's Common Stock for a period of three (3) years following termination of employment (but in any event not beyond each option's expiration date).

4. Definition of Terms. The following terms referred to in this Agreement shall have the following meanings:

(a) Change of Control. "Change of Control" shall mean the occurrence of any of the following events:

(i) Change of Ownership. Any "Person" (as such term is used in Sections 13(d) and 14(d) of the Securities Exchange Act of 1934, as amended) is or becomes the "Beneficial Owner" (as defined in Rule 13d-3 under said Act), directly or indirectly, of securities of the Company representing 50% or more of the total voting power represented by the Company's then outstanding voting securities; or

(ii) Merger/Sale of Assets. A merger or consolidation of the Company whether or not approved by the Board, other than a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity) at least 50% of the total voting power represented by the voting securities of the Company or such surviving entity outstanding immediately after such merger or consolidation, or the stockholders of the Company approve a plan of complete liquidation of the Company or an agreement for the sale or disposition by the Company of all or substantially all of the Company's assets.

(b) Cause. "Cause" shall mean: (i) gross negligence or willful misconduct in the performance of Employee's duties to the Company, where such gross negligence or willful misconduct has resulted or is likely to result in substantial and material damage to the Company or its subsidiaries; (ii) repeated unexplained or unjustified absence from the Company; (iii) a material and willful violation of any federal or state law; (iv) commission of any act of fraud with respect to the Company; or (v) conviction of a felony or a crime involving moral turpitude causing material harm to the standing and reputation of the Company, in each case as determined in good faith by the Board.

(c) Involuntary Termination. "Involuntary Termination" shall mean: (i) any termination by the Company other than for Cause; or (ii) Employee's voluntary termination following (A) a material reduction or change in job duties, responsibilities, and requirements inconsistent with the Employee's position with the Company and the Employee's prior duties, responsibilities, and requirements, or a material change in the level of management to which the Employee reports; (B) any material reduction of Employee's base compensation (other than in connection with a general decrease in base salaries for most officers of the successor corporation); or (C) Employee's refusal to relocate to a facility or location more than 35 miles from the Company's current location. Notwithstanding the foregoing, an Involuntary Termination pursuant to the foregoing clause (ii) shall only be considered to occur if (x) Employee provides written notice to the Company of the existence of the condition that forms the basis for such resignation within 90 days following its initial existence; (y) upon such notice, the Company does not cure such condition within 30 days thereafter; and (z) Employee's resignation occurs not later than 180 days after the occurrence of the condition giving rise to the resignation right.

5. Conflicts. Employee represents that his performance of all the terms of this Agreement will not breach any other agreement to which Employee is a party. Employee has not entered, and will not during the term of this Agreement enter, into any oral or written agreement in conflict with any of the provisions of this Agreement. Employee further represents that he is entering into or has entered into an employment relationship with the Company of his own free will and that he has not been solicited as an employee in any way by the Company.

6. Successors. Any successor to the Company (whether direct or indirect and whether by purchase, lease, merger, consolidation, liquidation, or otherwise) to all or substantially all of the Company's business and/or assets shall assume the obligations under this Agreement and agree expressly to perform the obligations under this Agreement in the same manner and to the same extent as the Company would be required to perform such obligations in the absence of a succession. The terms of this Agreement and all of Employee's rights hereunder and thereunder shall inure to the benefit of, and be enforceable by, Employee's personal or legal representatives, executors, administrators, successors, heirs, distributees, devisees, and legatees.

7. Notice. Notices and all other communications contemplated by this Agreement shall be in writing and shall be deemed to have been duly given when personally delivered or when mailed by U.S. registered or certified mail, return receipt requested and postage prepaid. Mailed notices to Employee shall be addressed to Employee at the home address that Employee most recently communicated to the Company in writing. In the case of the Company, mailed notices shall be addressed to its corporate headquarters, and all notices shall be directed to the attention of its Secretary.

8. Parachute Payments.

(a) If any payment or benefit Employee would receive pursuant to a Change of Control from the Company or otherwise ("Payment") would (i) constitute a "parachute payment" within the meaning of Section 280G of the Internal Revenue Code of 1988, as amended (the "Code"), and (ii) but for this sentence, be subject to the excise tax imposed by Section 4999 of the Code (the "Excise Tax"), then such Payment shall be equal to the Reduced Amount. The "Reduced Amount" shall be either (x) the largest portion of the Payment that would result in no portion of the Payment being subject to the Excise Tax, or (y) the largest portion, up to and including the total, of the Payment, whichever amount, after taking into account all applicable federal, state and local employment taxes, income taxes, and the Excise Tax (all computed at the highest applicable marginal rate), results in Employee's receipt of the greatest economic benefit notwithstanding that all or some portion of the Payment may be subject to the Excise Tax. If a reduction in payments or benefits constituting "parachute payments" is necessary so that the Payment equals the Reduced Amount, reduction shall occur in a manner necessary to provide Employee with the greatest economic benefit. If more than one manner of reduction of payments or benefits necessary to arrive at the Reduced Amount yields the greatest economic benefit, the payments and benefits shall be reduced pro rata.

(b) The independent registered public accounting firm engaged by the Company for general audit purposes as of the day prior to the effective date of the event described in Section 280G(b)(2)(A)(i) of the Code shall perform the foregoing calculations. If the

independent registered public accounting firm so engaged by the Company is serving as accountant or auditor for the individual, entity or group effecting such event, the Company shall appoint a nationally recognized independent registered public accounting firm to make the determinations required hereunder. The Company shall bear all expenses with respect to the determinations by such independent registered public accounting firm required to be made hereunder. The independent registered public accounting firm engaged to make the determinations hereunder shall provide its calculations, together with detailed supporting documentation, to the Company and Employee within thirty (30) calendar days after the date on which Employee's right to a Payment is triggered (if requested at that time by the Company or Employee) or such other time as requested by the Company or Employee. Any good faith determinations of the independent registered public accounting firm made hereunder shall be final, binding and conclusive upon the Company and Employee.

9. Miscellaneous Provisions.

(a) No Duty to Mitigate. Employee shall not be required to mitigate the amount of any payment contemplated by this Agreement (whether by seeking new employment or in any other manner), nor shall any such payment be reduced by any earnings that Employee may receive from any other source.

(b) Waiver. No provision of this Agreement shall be modified, waived, or discharged unless the modification, waiver, or discharge is agreed to in writing and signed by Employee and by an authorized officer of the Company (other than Employee). No waiver by either party of any breach of, or of compliance with, any condition or provision of this Agreement by the other party shall be considered a waiver of any other condition or provision or of the same condition or provision at another time.

(c) Whole Agreement. No agreements, representations, or understandings (whether oral or written and whether expressed or implied) which are not expressly set forth in this Agreement have been made or entered into by either party with respect to the subject matter hereof, except as set forth in the employment offer letter from the Company to the Employee dated [DATE]. This Agreement supersedes any agreement of the same title and concerning similar subject matter dated prior to the date of this Agreement, and by execution of this Agreement both parties agree that any such predecessor agreement shall be deemed null and void.

(d) Choice of Law. The validity, interpretation, construction and performance of this Agreement shall be governed by the laws of the State of California without reference to conflict of laws provisions.

(e) Severability. If any term or provision of this Agreement or the application thereof to any circumstance shall, in any jurisdiction and to any extent, be invalid or unenforceable, such term or provision shall be ineffective as to such jurisdiction to the extent of such invalidity or unenforceability without invalidating or rendering unenforceable the remaining terms and provisions of this Agreement or the application of such terms and provisions to circumstances other than those as to which it is held invalid or unenforceable, and a suitable and

equitable term or provision shall be substituted therefore to carry out, insofar as may be valid and enforceable, the intent and purpose of the invalid or unenforceable term or provision.

(f) Arbitration. Any dispute or controversy arising under or in connection with this Agreement may be settled at the option of either party by binding arbitration in the County of Alameda, California, in accordance with the rules of the American Arbitration Association then in effect before a single arbitrator. The judgment may be entered on the arbitrator's award in any court having jurisdiction. Punitive damages shall not be awarded.

(g) Legal Fees and Expenses. The parties shall each bear their own expenses, legal fees, and other fees incurred in connection with this Agreement. This means the Company pays its own legal fees in connection with this Agreement and the Employee is responsible for his own legal fees in connection with this Agreement. However, the arbitrator may award legal fees and expenses in connection with any arbitration as deemed appropriate.

(h) No Assignment of Benefits. The rights of any person to payments or benefits under this Agreement shall not be made subject to option or assignment, either by voluntary or involuntary assignment or by operation of law, including (without limitation) bankruptcy, garnishment, attachment, or other creditor's process, and any action in violation of this Section 9(h) shall be void.

(i) Employment Taxes. All payments made pursuant to this Agreement will be subject to withholding of applicable income and employment taxes.

(j) Assignment by Company. The Company may assign its rights under this Agreement to an affiliate, and an affiliate may assign its rights under this Agreement to another affiliate of the Company or to the Company; provided, however, that such assignee is the employer of the Employee. In the case of any such assignment, the term "Company" when used in a section of this Agreement shall mean the corporation that actually employs the Employee except that the term "Company" shall continue to mean Dynavax Technologies Corporation with regard to the definition of a Change of Control.

(k) Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together will constitute one and the same instrument.

[SIGNATURE PAGE FOLLOWS]

The parties have executed this Agreement on the date first written above.

DYNAVAX TECHNOLOGIES CORPORATION

By: _____

Title: President and Chief Executive Officer

Address: 2929 Seventh Street
Suite #100
Berkeley, CA 94710

[NAME OF EXECUTIVE OFFICER]

Signature: _____

Address:

Exhibit 10.39

[*] = CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, IS FILED WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24B-2 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.

RESEARCH AND DEVELOPMENT COLLABORATION AND LICENSE AGREEMENT
BETWEEN

GLAXO GROUP LIMITED

AND

DYNAVAX TECHNOLOGIES CORPORATION

RESEARCH AND DEVELOPMENT COLLABORATION
AND LICENSE AGREEMENT

This **RESEARCH AND DEVELOPMENT COLLABORATION AND LICENSE AGREEMENT** (the "**Agreement**") is entered into and made effective as of the 15th day of December, 2008 (the "**Effective Date**") by and between Dynavax Technologies Corporation, a Delaware corporation having its principal place of business at 2929 Seventh Street, Suite 100, Berkeley, CA 94710 ("**Dynavax**"), and Glaxo Group Limited, a company existing under the laws of England and Wales, having its registered office at Glaxo Wellcome House, Berkeley Avenue, Greenford, Middlesex, UB6 0NN, England ("**GSK**"). Dynavax and GSK are each referred to herein by name or as a "**Party**" or, collectively, as "**Parties.**"

RECITALS

WHEREAS, Dynavax possesses proprietary technology and know-how related to the discovery, identification, synthesis and development of oligonucleotides as drug candidates;

WHEREAS, GSK possesses expertise in the research, development, manufacturing and commercialization of human pharmaceuticals, and GSK is interested in developing such oligonucleotides as drug products;

WHEREAS, GSK desires to engage in a collaborative effort with Dynavax pursuant to which Dynavax will carry out up to three (3) different research and development programs to discover and develop oligonucleotides as inhibitors of certain toll-like receptors (or combinations thereof), and pursuant to which GSK will have certain options, exercisable at GSK's sole discretion, to further develop and commercialize such oligonucleotides for any and all uses in the Territory (as defined below), all on the terms and conditions set forth herein.

NOW, THEREFORE, in consideration of the premises and mutual covenants herein contained, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereto agree as follows:

ARTICLE 1

DEFINITIONS

As used in this Agreement, the following terms will have the meanings set forth in this Article 1 unless context dictates otherwise:

1.1 "Acceptance" means with respect to an NDA or MAA filed for a Product, (a) in the United States, the receipt by GSK or its Affiliate or Sublicensee of written notice from the FDA in accordance with 21 CFR 314.101(a)(2) that such NDA is officially "filed", (b) in the European Union, receipt by GSK or its Affiliate or Sublicensee of written notice of acceptance by the EMEA of such MAA for filing under the centralized European procedure in accordance with any feedback received from European Regulatory Authorities; provided, that if the

centralized filing procedure is not used, then Acceptance shall be determined upon the acceptance of such MAA by the applicable Regulatory Authority in the third Major Country in the EU, and (c) in Japan, receipt by GSK or its Affiliate or Sublicensee of written notice of acceptance of filing of such MAA from the MHLW.

1.2 "Affiliate" means any Person, whether *de jure* or *de facto*, which, directly or indirectly through one (1) or more intermediaries, controls, is controlled by or is under common control with a Party to this Agreement, regardless of whether such Affiliate is or becomes an Affiliate on or after the Effective Date. A Person shall be deemed to "control" another Person if it (a) owns, directly or indirectly, beneficially or legally, at least fifty percent (50%) of the outstanding voting securities or capital stock (or such lesser percentage which is the maximum allowed to be owned by a Person in a particular jurisdiction) of such other Person, or has other comparable ownership interest with respect to any Person other than a corporation; or (b) has the power, whether pursuant to contract, ownership of securities or otherwise, to direct the management and policies of the Person.

1.3 "Alliance Manager" has the meaning assigned to such term in Section 3.2.

1.4 "Annual Net Sales" means total Net Sales in the Territory in a particular Calendar Year.

1.5 "Arbitration Request" has the meaning assigned to such term in Section 13.2.

1.6 [*] means that certain **[*]**, as amended from time to time.

1.7 "Back-up Compound" means, with respect to a lead Compound in a Dynavax Program, a Compound in such Dynavax Program that (i) may or may not be a **[*]** to such lead Compound, (ii) has been or is expected to be advanced to the **[*]** stage by Dynavax, (iii) is expected to reasonably address **[*]** associated with such lead Compound, and (iv) is not a **[*]**.

1.8 "Breaching Party" has the meaning assigned to such term in Section 12.2.1.

1.9 "Business Day" means a day on which banking institutions in New York, New York, United States, and London, England are open for business, excluding any Saturday or Sunday.

1.10 "Calendar Day" means any day, including a Saturday, Sunday, Business Day or public or company holiday.

1.11 "Calendar Quarter" means a period of three (3) consecutive months ending on the last day of March, June, September, or December, respectively.

1.12 "Calendar Year" means a period of twelve (12) consecutive months beginning on January 1 and ending on December 31.

1.13 "**cGMP**" means all applicable standards relating to manufacturing practicves for fine chemicals, intermediates, bulk products or Products, including (i) the principles detailed in the U.S. Current Good Manufacturing Practices, 21 CFR Parts 210 and 211 and The Rules Governing Medicinal Products in the European Community, Volume IV, Good Manufacturing Practice for Medicinal Products, as each may be amended from time to time or (ii) standards promulgated by any governmental body having jurisdiction over the manufacture of a Compound, in the form of laws or regulations.

1.14 "Chairperson" has the meaning assigned to such term in Section 3.1.1.

1.15 "Change of Control Event" has the meaning assigned to such term in Section 13.4.

1.16 "Claims" has the meaning assigned to such term in Section 11.1.

1.17 "Clinical Trial" means a Phase 1 Clinical Trial, Phase 2 Clinical Trial, Phase 3 Clinical Trial, **[*]** or Proof of Concept Study.

1.18 "Co-Development Costs" means, with respect to a GSK Product, the sum of the following costs to the extent incurred after the exercise by GSK of an Option with respect to the GSK Development Program containing such GSK Product:

1.18.1 All direct internal and external Research and Development costs incurred by or on behalf of GSK or its Affiliates or Sublicensees or Dynavax and/or their respective Affiliates during such period in the conduct of the GSK Development Program (including but not limited to both Clinical Trials and any non-clinical activities or studies) that are required by a Regulatory Authority to support and obtain Regulatory Approval for such GSK Product in the U.S. (collectively, the **"Co-Development Studies"**), and for product material, comparator drug and placebo used in the Co-Development Studies.

1.18.2 Allocable overhead as included **[*]**, for **[*]** costs described in Section 1.18.1, to the extent **[*]** described in Section 1.18.1, where allocable overhead shall mean costs incurred by GSK or its Affiliates or Sublicensees or Dynavax or its Affiliates that are attributable to the costs of **[*]** or such other generally accepted methods, in all cases as applied by the Party in accordance with its accounting standards on a consistent basis. Without limitation, allocable overhead shall not include the costs of **[*]**, including, by way of example, **[*]**.

Such costs as described in Section 1.18.1 and 1.18.2 shall be determined in accordance with applicable Generally Accepted Accounting Principles (GAAP) and in accordance with the Party's accounting standards applied on a consistent basis.

1.19 "Co-Development Option" has the meaning assigned to such term in Section 5.5.1(a).

1.20 "Collaboration IP" means the Collaboration Know-How and the Collaboration Patents.

1.21 "Collaboration Know-How" means any Information pertaining to a Compound that is discovered, developed, invented or created solely by a Party or jointly by both Parties, or their respective agents, contractors, or Affiliates, during the Research Term and pursuant to a Dynavax Program, but prior to the earlier of GSK's exercise of the Option or expiration of the Option with respect to such Dynavax Program.

1.22 "Collaboration Patent" means any Patent that claims or covers Collaboration Know-How that is not specifically disclosed, included, claimed or covered in the Dynavax Compound IP or the GSK Development IP.

1.23 "**Commercially Reasonable Efforts**" means the following: (a) with respect to Dynavax, such efforts that are consistent with the efforts and resources normally used by **[*]** in the exercise of its reasonable business discretion relating to the research, development and commercial progression of a potential pharmaceutical product owned by it or to which it has exclusive rights, with similar product characteristics as the relevant Compound or Product, which is of similar market potential at a similar stage in its development or product life as the relevant Compound or Product, taking into account issues of patent coverage, safety and efficacy, product profile, competitiveness of the marketplace, proprietary position, **[*]**, and profitability (including pricing and reimbursement status achieved or likely to be achieved); and (b) with respect to GSK, such efforts that are consistent with the efforts and resources normally used by **[*]** in the exercise of its reasonable business discretion relating to the development and commercialization of a prescription pharmaceutical product or over-the-counter product as appropriate owned by it or to which it has exclusive rights, with similar product characteristics as the relevant Compound or Product, which is of similar market potential at a similar stage in its development or product life as the relevant Compound or Product, taking into account issues of patent coverage, safety and efficacy, product profile, the competitiveness of the marketplace, the proprietary position, **[*]** and profitability (including pricing and reimbursement status achieved or likely to be achieved).

1.24 "Competitive Infringement" has the meaning assigned to such term in Section 8.5.1.

1.25 "**Compound**" means each compound comprising an oligonucleotide-based immunoregulatory sequence ("IRS") that inhibits (**[*]** unless otherwise mutually agreed by the JSC without escalation pursuant to Section 3.1.4) in a **[*]** (such **[*]** to be mutually agreed by the Parties through the JSC) for **[*]** or **[*]**, as applicable for that Program, and all derivatives and improvements of such compound, (a) that are existing as of the Effective Date or (b) that are Researched and/or Developed by Dynavax under a Dynavax Program or (c) as identified, further modified, optimized or otherwise Researched or Developed by GSK under a GSK Development Program. In particular, for the TLR 7/9 directed compounds, the oligonucleotide-based IRS must have **[*]** unless otherwise mutually agreed by the JSC without escalation pursuant to

Section 3.1.4. For those Programs involving **[*]**, the JSC may establish criteria by mutual agreement for **[*]** of a Compound with respect to **[*]** TLR in such Program. For clarity, nothing in this Section 1.25 or elsewhere in this Agreement shall require Dynavax to measure the **[*]**.

1.26 "Confidential Information" has the meaning assigned to such term in Section 9.1.

1.27 "Control," "Controls," "Controlled" or "Controlling" means, with respect to any intellectual property, possession of the ability to grant the licenses or sublicenses as provided herein without violating the terms of any agreement or other arrangement with any Third Party. A Party shall be deemed to Control Collaboration IP to the extent of its individual or joint interest therein, as applicable.

1.28 "Co-Promotion Agreement" has the meaning assigned to such term in Section 5.5.2(a).

1.29 "Develop" or **"Development"** means pre-clinical and clinical drug development activities relating to the development of Compounds, Products and/or processes and submission of information to a Regulatory Authority for the purpose of obtaining Regulatory Approval of a product, and activities to develop manufacturing capabilities for products. Development includes, but is not limited to, pre-clinical activities, pharmacology studies, toxicology studies, formulation, manufacturing process development and scale-up (including bulk compound production), manufacturing Compound or Product for Clinical Trials, quality assurance and quality control, technical support, pharmacokinetic studies, clinical studies and regulatory affairs activities.

1.30 "Development Plan" has the meaning assigned to such term in Section 2.2.

1.31 "Disclosing Party" has the meaning assigned to such term in Section 9.1.

1.32 "Dollars" or **"$"** means the legal tender of the U.S.

1.33 "Dynavax Compound IP" means Dynavax's and its Affiliates' interest in any: (a) Patents in the Territory that claim or cover the composition of matter or any method of making, use or sale of a Compound in the Field; and (b) Information that **[*]** for the making, use or sale of a Compound in the Field, in each case to the extent such Patents or Information are Controlled by Dynavax or its Affiliates (i) on the **[*]**, or (ii) thereafter **[*]** for any Patents which claim priority to any Patent filed during the Research Term. The Dynavax Compound IP excludes the Collaboration IP.

1.34 "Dynavax Compound Patents" means Patents in the Dynavax Compound IP.

1.35 "Dynavax Development Program" means a Dynavax Program for which GSK fails to exercise its Option before expiration or GSK declines its Option, a Dynavax Program that is terminated by the JSC or GSK, or a terminated GSK Development Program containing Compounds and Products that Dynavax elects to further Develop and commercialize.

1.36 "Dynavax Product" means a Product Developed and commercialized by Dynavax under a Dynavax Development Program.

1.37 "Dynavax Program" means Dynavax's Research and Development of Compounds through to either the **[*]** or completion of a **[*]** or Proof of Concept Study, as applicable. For clarity, there will be a maximum of **[*]** potential Dynavax Programs under this Agreement, which shall be the TLR 7/9 Program **[*]**, each of which is subject to the relevant diligence provisions and milestones as if separate programs hereunder) and up to two (2) additional Dynavax Programs as identified pursuant to Section 2.5.

1.38 "EMEA" means the European Medicines Evaluation Agency, and any successor entity thereto.

1.39 "**European Commission**" means the executive body of the European Union that has legal authority to grant marketing authorization approvals for pharmaceutical products in the European Union following scientific evaluation and recommendation from the EMEA or other applicable Regulatory Authorities.

1.40 "European Union" or **"EU"** means all countries that are officially recognized as member states of the European Union at any particular time during the Term.

1.41 "Exclusively Licensed IP" means, with respect to each Compound in a Dynavax Program for which GSK exercises the Option and receives rights upon exercise pursuant to Section 4.1, (a) Information in the Dynavax Compound IP and Dynavax's and its Affiliates' interest in the Collaboration Know-How, in each case that **[*]** for the making, use or sale of such Compound **[*]**, and (b) Dynavax Compound Patents and Dynavax's and its Affiliates' interest in the Collaboration Patents, in each case that claims or covers the **[*]** of such Compound.

1.42 "Executive Officers" has the meaning assigned to such term in Section 3.1.4.

1.43 "FDA" means the U.S. Food and Drug Administration, and any successor entity thereto.

1.44 "Field" means **[*]** the treatment, palliation, prevention and/or diagnosis of **[*]**.

1.45 "First Commercial Sale" means, with respect to each Product, the first sale for which revenue has been recognized by GSK or Dynavax or their respective Affiliate or Sublicensees for use or consumption by the general public of such Product in any country in the Territory after all required Regulatory Approvals (including, where applicable, pricing and reimbursement approval which is acceptable to GSK or Dynavax, as applicable depending upon which Party is going to be selling Product) have been granted, or such sale is otherwise

permitted, by the Regulatory Authority in such country, provided, that, the following shall not constitute a First Commercial Sale: (a) any sale to an Affiliate or Sublicensee unless the Affiliate or Sublicensee is the last entity in the distribution chain of the Product, (b) any use of such Product in Clinical Trials, preclinical activities or other Research or Development activities, or disposal or transfer of Products for a bona fide charitable purpose, (c) compassionate use, (d) so called "treatment IND sales" and "named patient sales," and (e) use under the ATU system in France or other equivalent systems.

1.46 "[*]" means a Compound in Development in the **[*]** that (a) is or is reasonably expected to be **[*]** and (b) has **[*]**.

1.47 "[*]" means the Research and Development, within the **[*]**, of **[*]** to Compounds in the **[*]**.

1.48 "FTC" has the meaning assigned to such term in Section 4.1.5.

1.49 "FTE" means a full-time individual's work time dedicated by Dynavax to the Dynavax Programs or by GSK to the GSK Development Programs, or in the case of less than a full-time dedicated individual, a full-time equivalent person year, based upon a total of **[*]** hours per year of Research, Development, manufacturing and commercialization work on or directly related to the Dynavax Programs or GSK Development Programs.

1.50 "Generic Product" has the meaning assigned to such term in Section 6.4.2(b).

1.51 "**GSK Development Compound**" means any Compound, including Back-up Compounds, within a Dynavax Program that has become a GSK Development Program upon GSK's exercise of the Option.

1.52 "GSK Development IP" means any (a) Patents that claim or cover the composition of matter of a GSK Development Compound or GSK Product or the making, use, sale, **[*]** of a GSK Development Compound or GSK Product; and (b) any Information that **[*]** of a GSK Development Compound or GSK Product **[*]**, in each case to the extent such Patents or Information are Controlled by GSK or its Affiliates, but excluding any Collaboration IP and any Dynavax Compound IP or Exclusively Licensed IP.

1.53 "GSK Development Patent" has the meaning assigned to such term in Section 8.2.2.

1.54 "GSK Development Plan and Budget" has the meaning assigned to such term in Section 5.5.1(a).

1.55 "**GSK Development Program**" means a Dynavax Program for which GSK exercises its Option and that has not been terminated by GSK.

1.56 "GSK Product" means a Product Developed and commercialized by GSK or its Affiliate or Sublicensee under a GSK Development Program.

1.57 "HSR" has the meaning assigned to such term in Section 4.1.5.

1.58 "IND" means an investigational new drug application filed with the FDA pursuant to Part 312 of Title 21 of the U.S. Code of Federal Regulations, including any amendments thereto. References herein to IND shall include, to the extent applicable, any comparable filing(s) outside the U.S. (such as a clinical trial application in the European Union).

1.59 "Indemnitee" has the meaning assigned to such term in Section 11.3.

1.60 "Information" means all tangible and intangible (a) information, techniques, technology, practices, trade secrets, inventions (whether patentable or not), methods, knowledge, know-how, skill, experience, data, results (including pharmacological, toxicological and clinical test data and results, and Research or Development data, reports and batch records), analytical and quality control data, analytical methods (including applicable reference standards), full batch documentation, packaging records, release, stability, storage and shelf-life data, and manufacturing process information, results or descriptions, software and algorithms and (b) compositions of matter, cells, cell lines, assays, animal models and physical, biological or chemical material. As used in this Section 1.60, "**clinical test data**" shall be deemed to include all information related to the clinical or pre-clinical testing of a Compound or Product, including without limitation patient report forms, investigators' reports, biostatistical, pharmaco-economic and other related analyses, regulatory filings and communications, and the like.

1.61 "Joint Steering Committee" or **"JSC"** has the meaning assigned to such term in Section 3.1.

1.62 "Know-How Royalty" has the meaning assigned to such term in Section 6.4.2(a).

1.63 "[*]" means the research and development of **[*]**, as of the Effective Date, in the TLR 7/9 Program and its Back-up Compounds.

1.64 "Losses" has the meaning assigned to such term in Section 11.1.

1.65 "Major EU Country" means any of the **[*]**.

1.66 "MAA" means a regulatory application filed with the EMEA or MHLW seeking Regulatory Approval of a Product, and all amendments and supplements thereto filed with the EMEA or MHLW.

1.67 "Materials" has the meaning assigned to such term in Section 2.10.

1.68 "MHLW" means the Ministry of Health, Labour and Welfare of Japan, or the Pharmaceuticals and Medical Devices Agency (the "PMDA," formerly known as IYAKUHIN SOGO KIKO), or any successor to either of them, as the case may be.

1.69 "NDA" means a New Drug Application (as more fully defined in 21 C.F.R. 314.5 *et seq.* or its successor regulation) and all amendments and supplements thereto filed with the FDA.

1.70 "Net Sales" means, with respect to any Product, the gross invoiced sales price of such Product sold by GSK or Dynavax or their respective Affiliates or Sublicensees (the "**Selling Party**") in finished product form, packaged and labeled for sale, under this Agreement in arm's length sales to Third Parties, less deductions allowed to the Third Party customer by the Selling Party and actually incurred, allowed, paid, accrued or specifically allocated as reported by the Selling Party in its financial statements in accordance with the International Financial Reporting Standards ("IFRS") for GSK (or any other Selling Party which accounts in accordance with IFRS) or US (as appropriate) Generally Accepted Accounting Principles for Dynavax (or any other Selling Party which accounts in accordance with US or UK (as appropriate) Generally Accepted Accounting Principles), applied on a consistent basis, for:

1.70.1 customary and reasonable trade, quantity, and cash discounts and wholesaler allowances; provided that, in the case of pharmacy incentive research programs, hospital performance incentive research program chargebacks, disease management research programs, similar research programs or discounts and wholesaler allowances on "bundles" of products, all discounts, wholesaler allowances and the like shall be **[*]**;

1.70.2 customary and reasonable credits, rebates and chargebacks (including those to managed-care entities and government agencies), and allowances or credits to customers on account of rejection or returns (including, but not limited to, wholesaler and retailer returns) or on account of retroactive price reductions affecting such Product;

1.70.3 freight, postage and duties, and transportation charges relating to such Product, including handling and insurance thereto;

1.70.4 sales (such as VAT or its equivalent) and excise taxes, other consumption taxes, customs duties and compulsory payments to governmental authorities and any other governmental charges imposed upon the importation, use or sale of such Product to Third Parties (excluding any taxes paid on the income from such sales) to the extent the Selling Party is not otherwise entitled to a credit or a refund for such taxes, duties or payments made;

1.70.5 [*]; and

1.70.6 other items actually deducted from gross sales in relation to changes in accounting guidelines as per IFRS and to the extent that such deductions are consistently applied across the relevant Party's business.

Sales between GSK and its Affiliates or Sublicensees, or Dynavax and its Affiliates or Sublicensees, as applicable, shall be excluded from the computation of Net Sales, and no payments will be payable on such sales except where such Affiliate or Sublicensee is the last entity in the distribution chain for the Product and is purchasing it for its own commercial use, in which case such sales shall be deemed to be at **[*]**. In addition, Product provided to patients for compassionate use will not be included in Net Sales. **[*]**.

For purposes of determining Royalties and sales milestones payable on Combination Products, Net Sales will be calculated as follows, in each calendar quarter:

In the event that Compound is sold as part of a Combination Product (as defined below), the Net Sales from the Combination Product will be determined by multiplying the Net Sales (as determined without reference to this paragraph) of the Combination Product by the fraction **[*]**, where **[*]** is the **[*]** of the Compound **[*]** when sold separately in finished form and **[*]** is the **[*]** of the other therapeutically active pharmaceutical compound(s) included in the Combination Product when sold separately in finished **[*]**, each during the applicable royalty period or, if sales of all compounds did not occur in such period, then **[*]**. In the event that such **[*]** cannot be determined for both the Compound and all other therapeutically active pharmaceutical compounds included in the Combination Product **[*]**, Net Sales for the purposes of determining royalty payments will be calculated as above, but the **[*]** in the above equation will be replaced by **[*]** of the compound(s) for which no such price exists. As used above, the term **"Combination Product"** shall mean any pharmaceutical product which contains a Compound together with at least one other therapeutically active pharmaceutical compound (whether or not co-formulated or co-packaged with the Compound in such Product) which is not a Compound. To be a Combination Product, products must be invoiced as one product. Notwithstanding the foregoing, drug delivery vehicles, adjuvants and excipients shall not be deemed to be active pharmaceutical compounds and their presence shall not be deemed to create a Combination Product. **[*]**.

To the extent the Net Sales is used herein with respect to Dynavax Products, Net Sales shall have the meaning set forth above, with all references to "GSK" replaced by "Dynavax."

1.71 "Non-breaching Party" has the meaning assigned to such term in Section 12.2.1.

1.72 "[*]" has the meaning assigned to such term in Section 2.8.

1.73 "Option" has the meaning assigned to such term in Section 4.1.1.

1.74 "Option Deadline Extension Period" has the meaning assigned to such term in Section 4.1.5.

1.75 "Option Deadline Period" has the meaning assigned to such term in Section 4.1.5.

1.76 "Option Period Start" has the meaning assigned to such term in Section 4.1.2.

1.77 "Party" or "Parties" has the meaning assigned to such term in the Preamble.

1.78 "Patent" means (a) all patents and patent applications in any country or supranational jurisdiction in the Territory, (b) any substitutions, divisions, continuations, continuations-in-part, provisional applications, reissues, renewals, registrations, confirmations, re-examinations, extensions, supplementary protection certificates and the like of any such patents or patent applications, and (c) foreign counterparts of any of the foregoing.

1.79 "Patent Costs" means the reasonable fees and expenses paid to outside legal counsel, and filing, maintenance and other out-of-pocket expenses paid to Third Parties, incurred in connection with the Prosecution and Maintenance of Patents.

1.80 "Patent Royalty" has the meaning assigned to such term in Section 6.4.1.

1.81 "Payee" has the meaning assigned to such term in Section 6.9.

1.82 "Payor" has the meaning assigned to such term in Section 6.9.

1.83 "Person" means any individual, partnership, joint venture, limited liability company, corporation, firm, trust, association, unincorporated organization, governmental authority or agency, or any other entity not specifically listed herein.

1.84 "Phase 1 Clinical Trial" means a human clinical trial of a product, the principal purpose of which is a preliminary determination of safety in healthy individuals or patients, as described in 21 C.F.R. 312.21(a), or a similar clinical study prescribed by the relevant Regulatory Authorities in a country other than the United States.

1.85 "Phase 2 Clinical Trial" means a human clinical trial of a product in any country that would satisfy the requirements of 21 C.F.R. 312.21(b) and is intended to explore a variety of doses, dose response, and duration of effect, and to generate initial evidence of clinical safety and activity in a target patient population, or a similar clinical study prescribed by the relevant Regulatory Authorities in a country other than the United States.

1.86 "Phase 3 Clinical Trial" means a human clinical trial of a product in any country that would satisfy the requirements of 21 C.F.R. 312.21(c) and is intended to (a) establish that the product is safe and efficacious for its intended use, (b) define warnings, precautions and adverse reactions that are associated with the product in the dosage range to be prescribed, and (c) support Regulatory Approval for such product.

1.87 "Phase I Ready Compound" means a Compound (including all Back-up Compounds if progressed to this stage) from a Dynavax Program that has met the applicable Phase I Ready Criteria, or is **[*]** such criteria.

1.88 "Phase I Ready Criteria" means the clinical and/or non-clinical criteria (a) set forth in Exhibit C and as modified by the JSC **[*]** for the **[*]** TLR 7/9 Program and (b) established and as modified by the JSC pursuant to Section 2.6.2 for the other Dynavax Programs (including the **[*]**), for advancement of a Pre-Candidate Selection Compound from a Dynavax Program into clinical Development. In general, Phase I Ready Criteria for a particular Compound will be reasonable and appropriate for **[*]** and generally may include: **[*]**.

1.89 "Phase I Ready Report" has the meaning assigned to such term in Section 2.7.2.

1.90 "Pre-Candidate Selection Criteria" means the criteria established by the JSC pursuant to Section 2.6.1 for **[*]** in the **[*]** TLR 7/9 Program and for Compounds in the **[*]** and the other Dynavax Programs, for advancement of a Compound from a Dynavax Program into IND-enabling studies. In general, the Pre-Candidate Selection Criteria for a particular Compound will be reasonable and appropriate for **[*]** and may include **[*]**.

1.91 "Pre-Candidate Selection Report" has the meaning assigned to such term in Section 2.7.1.

1.92 "Product" means any product that includes a Compound, whether or not as the sole active ingredient and in any dosage form or formulation.

1.93 "Product Marketing Plan" has the meaning assigned to such term in Section 5.5.2.

1.94 "Program" means a Dynavax Program, Dynavax Development Program, or GSK Development Program, as applicable.

1.95 "Proof of Concept" or **"PoC"** means the stage of Development at which a Phase I Ready Compound has successfully satisfied the Proof of Concept Criteria, as such criteria are determined by GSK.

1.96 "Proof of Concept Criteria" means the clinical and/or non-clinical criteria established **[*]**, pursuant to Section 2.6.5 and in accordance with the guidelines attached hereto as Exhibit D, to determine whether a Phase I Ready Compound demonstrates **[*]**. This shall include **[*]** and any other reasonable parameters. The Proof of Concept Criteria shall include, without limitation, **[*]**. The criteria may be different for each Dynavax Program.

1.97 "Proof of Concept Study" means a human clinical trial for a particular Phase I Ready Compound that meets the requirements of 21 C.F.R. Section 312.21(b) and is intended to explore **[*]**.

1.98 "Proof of Concept Study Design" or **"PoC Study Design"** means the design, content and endpoints for a Proof of Concept Study.

1.99 "Proof of Concept Study Report" or **"PoC Study Report"** has the meaning assigned to such term in Section 2.7.4.

1.100 "[*]" or "[*]" means the stage of Development at which a Phase I Ready Compound has successfully satisfied the **[*]** Criteria, as such criteria are determined by **[*]**.

1.101 "[*] Criteria" means the criteria established by **[*]** pursuant to Section 2.6.3 and in accordance with the guidelines attached hereto as Exhibit E.

1.102 "[*]" or "[*] Study" means a study performed in humans in order to **[*]** of a particular Phase I Ready Compound in humans and to guide **[*]**.

1.103 "[*] Design" or **"[*] Study Design"** means the design, content and endpoints for a **[*]**.

1.104 "[*] Report" or **"[*] Study Report"** has the meaning assigned to such term in Section 2.7.3.

1.105 "Prosecuting Party" has the meaning assigned to such term in Section 8.2.3.

1.106 "Prosecution and Maintenance" or **"Prosecute and Maintain"** means, with regard to a Patent, the preparing, filing, prosecuting and maintenance of such Patent, as well as re-examinations, reissues, and requests for patent term adjustments and patent term extensions with respect to such Patent, together with the initiation or defense of interferences, the initiation or defense of oppositions and other similar proceedings with respect to the particular Patent, and any appeals therefrom. For clarification, "Prosecution and Maintenance" or "Prosecute and Maintain" shall not include any other enforcement actions taken with respect to a Patent.

1.107 "Receiving Party" has the meaning assigned to such term in Section 9.1.

1.108 "Regulatory Approval" means any and all approvals, licenses, registrations, or authorizations of any country, federal, supranational, state or local regulatory agency, department, bureau or other government entity that are necessary for the manufacture, use, storage, import, transport and/or sale of a particular Product in the applicable jurisdiction.

1.109 "Regulatory Authority" means the FDA in the U.S. or any health regulatory authority in another country in the Territory that is a counterpart to the FDA and holds responsibility for granting regulatory marketing approval for a Product in such country, including the European Commission and the MHLW, and any successor(s) thereto.

1.110 "Research" means the discovery, identification, research, characterization, modification, derivatization, optimization, and pre-clinical testing of pharmaceutical compounds.

1.111 "Research Term" has the meaning assigned to such term in Section 2.3.

1.112 "Senior Executive Officers" has the meaning assigned to such term in Section 5.1.2.

1.113 "Subcommittee" has the meaning assigned to such term in Section 3.1.7.

1.114 "Sublicensee" means, with respect to a particular Product, a Third Party to whom GSK or Dynavax, as applicable, has granted a sublicense or license under any Dynavax Compound IP and/or Collaboration IP and/or Exclusively Licensed IP and/or GSK Development IP licensed to such Party pursuant to this Agreement, but excluding any Third Party acting solely as a distributor.

1.115 "[*]" means **[*]**.

1.116 "[*]" means that certain **[*]**, as amended from time to time, to the extent pertaining to **[*]** of TLRs.

1.117 "Term" has the meaning assigned to such term in Section 12.1.

1.118 "Territory" means the entire world.

1.119 "Third Party" means any entity other than Dynavax or GSK or an Affiliate of Dynavax or GSK.

1.120 "TLR" means any of the human toll-like receptors **[*]**, **[*]**, **[*]** and **[*]**.

1.121 "TLR 7/9 Program" means, collectively, the Dynavax Program directed toward the discovery, Research and Development of Compounds that inhibit both TLR 7 and TLR 9, **[*]**.

1.122 "United States" or "U.S." means the United States of America and all of its territories and possessions.

1.123 "Valid Claim" means any claim within a pending (**[*]**), allowed or issued U.S. patent application or patent, or pending, accepted or issued patent application or patent in a jurisdiction outside the U.S., that has not expired, lapsed, been cancelled or abandoned, or been dedicated to the public, disclaimed, or held unenforceable, invalid, or cancelled by a court or administrative agency of competent jurisdiction in an order or decision from which no appeal has been or can be taken, including without limitation through opposition, reexamination, reissue or disclaimer.

ARTICLE 2

RESEARCH AND DEVELOPMENT

2.1 Overview. Pursuant to this Agreement and as further provided in this Article 2, Dynavax will undertake the TLR 7/9 Program and, if identified and agreed pursuant to Section 2.5, one (1) or two (2) additional Dynavax Programs under the supervision of the JSC during the Research Term. The objective of the Dynavax Programs is the identification, optimization, Research and Development of Compounds, which Compounds GSK shall have Options to exclusively license on a worldwide basis, as provided in Article 4.

2.2 Development Plans. Each Dynavax Program will be carried out by Dynavax pursuant to a development plan (each, a **"Development Plan"**) that will outline anticipated Research and Development activities to be conducted by Dynavax and **[*]**. Any estimates regarding **[*]** shall be intended as a general guide only, and Dynavax shall continue to progress each Dynavax Program with Commercially Reasonable Efforts, even if Commercially Reasonable Efforts would require a **[*]** set forth in the Development Plan. The initial Development Plan for the **[*]** TLR 7/9 Program has been agreed to by the Parties and is attached hereto as Exhibit A. Development Plans for the other Dynavax Programs will be prepared in accordance with Section 2.5. The Development Plan for the **[*]** will be prepared within **[*]** after the Effective Date, unless otherwise agreed by the JSC. From time to time during the Research Term **[*]**, Dynavax shall update each Development Plan (or applicable portion thereof) and shall submit such updated Development Plan to the JSC for review and comment. Dynavax shall consider all such comments in good faith before preparing an updated Development Plan, however each such Development Plan will be designed with the objective of enabling a determination upon completion of the Development Plan as to whether all of the criteria (either Pre-Candidate Selection Criteria, Phase I Ready Criteria, **[*]** Criteria or PoC Criteria) have been met. Each updated Development Plan shall replace the Development Plan previously in effect. Each Development Plan will be reviewed as necessary at each meeting of the JSC, and at any other time upon the request of either Party, and the JSC may suggest modifications, as appropriate, to reflect material scientific or commercial developments. In the event of any inconsistency between any Development Plan and this Agreement, the terms of this Agreement shall prevail and any such inconsistent portion of a Development Plan is hereby expressly rejected.

2.3 Research Term. The Research term shall commence on the Effective Date and shall expire **[*]** thereafter (the "**Initial Research Term**"), subject to extension (a) for up to **[*]** of the Parties, or (b) **[*]** no later than **[*]** prior to expiration of the Initial Research Term, if **[*]**, as applicable, before the expiration of the Initial Research Term (as may be extended, the "**Research Term**"), and in such case, the Research Term shall be extended **[*]**.

2.4 Dynavax Programs.

2.4.1 *Dynavax Responsibility.* Prior to GSK's exercise of an Option with respect to a Dynavax Program, Dynavax shall have primary responsibility for the Research and Development of each Compound (including, but not limited to, clinical trials and submissions to regulatory agencies) under such Dynavax Program in accordance with the applicable Development Plan. Subject to Sections 2.6.4 and 2.6.6, Dynavax shall be solely responsible for

all internal and external expenses in connection with the Dynavax Programs. Subject to Section 5.2, Dynavax's obligation to conduct each Dynavax Program shall terminate at the earlier of (a) GSK's exercise of the Option with respect to such Dynavax Program, (b) expiration of the Research Term, as may be extended pursuant to Section 2.3, or (c) **[*]** decision to terminate such Dynavax Program.

2.4.2 *Diligence.* The objective of each Dynavax Program is to discover and Develop **[*]** and, if applicable under **[*]**, Compounds satisfying the Proof of Concept Criteria or **[*]** Criteria, as applicable. During the Research Term, Dynavax shall use Commercially Reasonable Efforts to conduct each Dynavax Program and related Research and Development activities for such Dynavax Program in accordance with the applicable Development Plan. In particular and without limiting the generality of the foregoing, and subject to Sections 2.6.4 and 2.6.6, for each Dynavax Program, Dynavax shall use Commercially Reasonable Efforts to conduct Research and Development activities to identify **[*]** that satisfy the **[*]** for each Dynavax Program and, if determined pursuant to **[*]**, progress **[*]** through to either (i) completion of a **[*]** Study in an effort to achieve the **[*]** Criteria, or (ii) completion of a Proof of Concept Study in an effort to achieve the Proof of Concept Criteria, as determined pursuant to Section 2.6.5.

2.4.3 *TLR 7/9 Program*. The TLR 7/9 Program shall include efforts to discover, Research and Develop Compounds for **[*]** dual inhibitors of TLR 7 and TLR 9.

2.4.4 *GSK Research Activities*. GSK shall, upon Dynavax's request, consult with Dynavax regarding the Research and Development of Compounds under each Dynavax Program. On a Dynavax Program-by-Dynavax Program basis, the Parties shall discuss and consider in good faith **[*]**, prior to GSK's exercise of an Option with respect to such Dynavax Program in order to **[*]**. Dynavax shall **[*]**.

2.5 Identification of Additional Programs. [*] may propose to the JSC up to two (2) additional Dynavax Programs to be conducted by Dynavax during the **[*]**. Upon GSK's request during the **[*]** of the **[*]**, GSK and Dynavax will identify and agree upon, through the JSC, such additional two (2) Dynavax Programs to include under this Agreement, which during the **[*]** of the **[*]**, would involve Research and Development of inhibitors of **[*]**, and during the **[*]** of the **[*]**, would involve Research and Development of inhibitors of **[*]**. If the JSC cannot reach consensus on the selection of one or both of such additional Dynavax Programs, then **[*]** in accordance with Section 3.1.4(c). Promptly after each such Dynavax Program is selected, Dynavax shall prepare a Development Plan for such Program for submission to the JSC for review and comment. Dynavax shall consider all such comments in good faith before finalizing such Development Plan, after which Dynavax shall promptly commence and conduct such Program with its Commercially Reasonable Efforts.

2.6 Compound Criteria; [*] and Proof of Concept Study Designs.

2.6.1 *Pre-Candidate Selection Criteria*. The JSC shall establish the Pre-Candidate Selection Criteria for each Dynavax Program within (a) **[*]** of the Effective Date for

Back-up Compounds in the **[*]** TLR 7/9 Program and for the **[*]**, or (b) **[*]** of the identification of each other Dynavax Program under Section 2.5. Such Pre-Candidate Selection Criteria shall be consistent with the generic criteria attached in Exhibit B, modified as necessary by mutual agreement of the JSC **[*]**.

2.6.2 *Phase I Ready Criteria*. As of the Effective Date, the Parties have agreed upon the Phase I Ready Criteria for the **[*]** TLR 7/9 Program, which criteria may be modified by mutual agreement of the JSC **[*]**. The JSC shall establish the Phase I Ready Criteria for the **[*]** within **[*]** TLR 7/9 Program. Within **[*]** after the identification of a Dynavax Program under Section 2.5, the JSC shall establish Phase I Ready Criteria for such Dynavax Program, which shall be substantially similar to the example of Phase I Ready Criteria set forth in Exhibit C.

2.6.3 ***[*]*** *Criteria*. Prior to the determination by the JSC of a Phase 1 Ready Compound for a given Dynavax Program, GSK or Dynavax may propose that Dynavax **[*]** for such Program, by submitting to the JSC proposed **[*]** Criteria and **[*]** Study Design that are reasonably consistent with the guidelines attached hereto as Exhibit E. The JSC shall consider such proposal and determine, **[*]**, whether such Dynavax Program will include a **[*]**. Promptly following a decision by the JSC to conduct a **[*]** Study, but in no event later than **[*]** over the **[*]** Criteria.

2.6.4 ***[*]*** *Design.* The JSC shall be responsible for establishing the **[*]** Design for each Dynavax Program for which a **[*]** Study will be conducted. Notwithstanding **[*]** with respect to the **[*]** Study Design, as set forth in Section 3.1.4(c), in no event shall Dynavax be obligated to **[*]** for any single **[*]** Study and all Development activities required specifically for such **[*]** Study. In the event that the **[*]** Study conducted in accordance with the applicable **[*]** Study Design and Development Plan, and all Development activities required specifically for such **[*]** Study, **[*]**, then **[*]**, except to the extent due to **[*]**. In the event that Dynavax **[*]** for a PoC Study and all Development activities required specifically for such PoC Study, **[*]**, as such PoC Study and all Development activities required specifically for such **[*]** at the time of a JSC decision **[*]** for any single **[*]** Study and all Development activities required specifically for such **[*]** Study, **[*]** for such **[*]** Study and all Development activities required specifically for such **[*]** Study against **[*]** for such Dynavax Program after the completion of such **[*]** Study. In the event that Dynavax **[*]** of **[*]** for any single **[*]** Study and all Development activities required specifically for such **[*]** Study, **[*]** Calendar Days after **[*]** provided by Dynavax setting forth **[*]** for such **[*]** Study in the preceding Calendar Quarter. **[*]** of such **[*]** against **[*]** of each milestone set forth in Sections **[*]**, up to a **[*]** of **[*]**. In any event, Dynavax shall be obligated to complete any **[*]** Study **[*]** pursuant to this Section 2.6.4.

2.6.5 *Proof of Concept Criteria*. Prior to the initiation of the first applicable **[*]** for a Program, **[*]** shall establish the provisional clinical trial design, including planned **[*]**, for the Proof of Concept Study, and shall **[*]**, collectively, as the Proof of Concept Criteria, prior to initiation of the PoC Study. All such Proof of Concept Criteria shall be established reasonably in accordance with the guidelines and examples attached hereto as Exhibit D.

2.6.6 *PoC Study Design*. The JSC shall be responsible for **[*]** for each Dynavax Program. Notwithstanding **[*]** with respect to the PoC Study Design, as set forth in Section 3.1.4(c), in no event shall Dynavax be obligated to **[*]** of **[*]** for any single Proof of Concept Study and all Development activities required specifically for such Proof of Concept Study. In the event that the **[*]** for any Proof of Concept Study conducted in accordance with the applicable PoC Study Design and Development Plan, and all Development activities required specifically for such Proof of Concept Study, **[*]**, then **[*]**, except to the extent due to **[*]** within **[*]** after **[*]** provided by Dynavax setting forth the **[*]** for such Proof of Concept Study in the preceding Calendar Quarter. **[*]** of such **[*]** against **[*]** of each milestone set forth in Sections 6.2.1 and 6.2.2, up to a **[*]** of **[*]**. In any event, Dynavax shall be obligated to complete any PoC Study funded by GSK pursuant to this Section 2.6.6.

2.7 Evaluation of Pre-Candidate Selection Criteria, Phase I Ready Criteria, [*] Criteria and Proof of Concept Criteria.

2.7.1 *Pre-Candidate Selection Criteria*. In the event that a Compound achieves **[*]** of the Pre-Candidate Selection Criteria after Dynavax has completed the activities required to make such an assessment, it being understood by the Parties that drug discovery is an iterative problem-solving process and that multiple Compounds may be expected to be progressed in order to identify a Compound that merits advancement into IND-enabling studies, Dynavax shall promptly notify GSK in writing of such event and shall provide to the JSC a completed data package containing the complete set of the analyses, results and raw data from the Dynavax Program for such Compound (the "**Pre-Candidate Selection Report**"). Unless otherwise agreed to by the Parties, the JSC will schedule an ad hoc meeting not more than **[*]** after receipt by GSK's JSC representatives of such complete Pre-Candidate Selection Report to review such Pre-Candidate Selection Report and to confirm whether or not such Compound meets **[*]** of the Pre-Candidate Selection Criteria. In the event that the JSC agrees that all or substantially all of the Pre-Candidate Selection Criteria have been met, **[*]**, and Dynavax shall use its Commercially Reasonable Efforts to continue to progress the Dynavax Program through to completion of the PoC Study or **[*]** Study, as applicable, subject to Section 2.7.2 below. If the JSC fails to agree that **[*]** of the Pre-Candidate Selection Criteria have been met, then the matter shall be resolved by **[*]** determines that all or substantially all of the Pre-Candidate Selection Criteria have been met, then the **[*]**, and Dynavax shall use its Commercially Reasonable Efforts to continue to progress the Dynavax Program through to completion of the PoC Study or **[*]** Study, as applicable under the relevant provisions of Articles 2 and 3. **[*]** of the Pre-Candidate Selection Criteria have been met, then Dynavax shall complete any additional studies as are **[*]** Pre-Candidate Selection Criteria and progress such Compound through completion of the PoC study or **[*]** Study, as applicable under the relevant provisions of Articles 2 and 3. If the achievement of such criteria is **[*]**, Dynavax shall instead progress a Backup Compound in place of the Compound that failed to meet the criteria, and Dynavax shall use its Commercially Reasonable Efforts to progress such Backup Compound through to completion of the PoC Study or **[*]** Study, as applicable under the relevant provisions of Articles 2 and 3.

2.7.2 *Phase I Ready Criteria*. In the event that a Compound achieves **[*]** of the Phase I Ready Criteria after Dynavax has completed the activities required to make such an assessment, it being understood by the Parties that drug discovery is an iterative problem-solving process, and that multiple Compounds may be expected to be progressed in order to identify a Compound that merits advancement into clinical Development, Dynavax shall promptly notify GSK in writing of such event and shall provide to the JSC a complete data package containing all analyses, results and raw data from the Dynavax Program for such Compound (the "**Phase I Ready Report**"). Unless otherwise agreed to by the Parties, the JSC will schedule an ad hoc meeting not more than **[*]** after receipt by GSK's JSC representatives of any such complete Phase I Ready Report to review such Phase I Ready Report and to confirm whether or not such Compound meets **[*]** of the Phase I Ready Criteria.

(a) If the JSC agrees that such Compound has achieved **[*]** of the Phase I Ready Criteria, then if such Compound is **[*]**, the Parties shall determine whether GSK shall **[*]** as to such Dynavax Program pursuant to **[*]**.

(b) If the JSC fails to agree that the Compound has satisfied **[*]** of the Phase I Ready Criteria, then the matter shall be resolved by **[*]** of the Phase I Ready Criteria have been met, then Dynavax shall complete any additional studies as are necessary **[*]** the Phase I Ready Criteria and progress such Compound through completion of the PoC study or **[*]** Study, as applicable under the relevant provisions of Articles 2 and 3. If the achievement of such criteria is not **[*]**, Dynavax shall instead progress a Backup Compound in place of the Compound that failed to meet the criteria, and Dynavax shall use its Commercially Reasonable Efforts to progress such Backup Compound through to completion of the PoC Study or **[*]** Study, as applicable under the relevant provisions of Articles 2 and 3.

(c) If either (i) the JSC agrees that such Compound has **[*]** of the Phase I Ready Criteria, and GSK either **[*]** in accordance with the applicable provisions of this Agreement, or (ii) **[*]** of the Phase I Ready Criteria, and GSK either **[*]** in accordance with the applicable provisions of this Agreement, then Dynavax shall progress such Compound into a Phase 1 Clinical Trial **[*]**. A Compound that either the JSC, **[*]** of the Phase I Ready Criteria shall be considered to be at the **"Phase I Ready"** stage.

2.7.3 ***[*]*** *Criteria*. Upon the completion of any **[*]** Study, Dynavax shall promptly notify GSK in writing of such event and shall provide to the JSC a complete data package containing all analyses, results and raw data from the completion of the **[*]** Study for such Phase I Ready Compound, and any related correspondence and information received from or sent to any Regulatory Authority relating to such Phase I Ready Compound (the "**[*] Study Report**"). GSK shall **[*]** upon the completion of the **[*]** Study pursuant to **[*]**. Unless otherwise agreed by the Parties, if requested by GSK, the JSC will schedule an ad hoc meeting not more than **[*]** after receipt of any such **[*]** Study Report to review such **[*]** Study Report

and confirm whether or not such Phase I Ready Compound satisfies the **[*]** Criteria. If the JSC (or the Executive Officers or GSK pursuant to Section 3.1.4(c)) decides that the Phase I Ready Compound did not satisfy the **[*]** Criteria, then, except as provided in Section 5.3, **[*]** with respect to such Dynavax Program and GSK **[*]** with respect to such Dynavax Program at **[*]**. In the event that the Compound fails to satisfy the **[*]** Criteria after completion of the **[*]** Study, but GSK **[*]** to such Dynavax Program, and GSK determines to **[*]** Study, in such case **[*]** for such GSK Development Program shall all be **[*]** from the **[*]** otherwise applicable, and the applicable **[*]**. If at any time after **[*]** the Compound that **[*]** Study **[*]**, as applicable, then GSK shall **[*]**.

2.7.4 *Proof of Concept Criteria*. Upon the completion of any Proof of Concept Study, Dynavax shall promptly notify GSK in writing of such event and shall provide to the JSC a complete data package containing all analyses, results and raw data from the completion of the Proof of Concept Study for such Phase I Ready Compound, and any related correspondence and information received from or sent to any Regulatory Authority relating to such Phase I Ready Compound (the "**PoC Study Report**"). GSK shall have the right to exercise its Option to such Dynavax Program upon the completion of the Proof of Concept Study pursuant to Section 4.1 (whether or not such criteria have been satisfied). Unless otherwise agreed by the Parties, if requested by GSK, the JSC will schedule an ad hoc meeting not more than **[*]** Calendar Days after receipt of any such PoC Study Report to review such PoC Study Report and confirm whether or not such Phase I Ready Compound satisfies the Proof of Concept Criteria. If the JSC **[*]** decides that the Phase I Ready Compound did not satisfy the Proof of Concept Criteria, then, except as provided in Section 5.3, Dynavax will **[*]** with respect to such Dynavax Program, and GSK may, **[*]**. In the event that the Compound fails to satisfy the Proof of Concept Criteria after completion of the Proof of Concept Study, **[*]** which completed the PoC Study, in such case the **[*]** and all other **[*]** for such GSK Development Program shall all be **[*]** from the **[*]** otherwise applicable, and the applicable **[*]**. If at any time after Option exercise the Compound that completed the PoC Study **[*]**, as applicable, then GSK shall **[*]**.

2.8 [*]. During the **[*]**, the JSC will review the progress of each Dynavax Program and **[*]**. The JSC may, **[*]** decide to **[*]** Dynavax Program(s) **[*]** Dynavax Program(s) that **[*]** Dynavax Programs, **[*]**. For clarity, if prior to the exercise by GSK of an Option with respect to a given Dynavax Program, the JSC is not in agreement, **[*]**. All such decisions shall be based on **[*]**. Notwithstanding the above, after GSK exercises an Option with respect to a Dynavax Program, GSK may, **[*]**, GSK shall be obligated to **[*]**. For the purposes of determining whether there is **[*]**, the TLR 7/9 Program shall **[*]** (for example, if a Compound in the **[*]** is being progressed, then the **[*]** may be rendered **[*]**, either prior to or after Option exercise by GSK).

2.9 Reports. Dynavax shall provide written progress reports on the status of each Dynavax Program, including without limitation summaries of data associated with Dynavax's Research and Development activities and a timetable for completion of the respective Dynavax Program. Dynavax shall provide such written report to JSC members at least **[*]** Business Days in advance of the applicable JSC meeting.

2.10 Material Transfer. To facilitate the conduct of the Programs, either Party may provide to the other Party certain biological materials or chemical compounds, such as cell-based assays or specific Compounds, owned by or licensed to the supplying Party for use by the other Party in furtherance of the Development Plans (such materials or compounds provided hereunder are referred to, collectively, as "**Materials**"). Except as otherwise provided under this Agreement, all such Materials delivered to the other Party shall remain the sole property of the supplying Party, shall be used only in furtherance of the Programs and solely under the control of the other Party (or its Affiliates), shall not be used or delivered to or for the benefit of any Third Party without the prior written consent of the supplying Party, and shall not be used in Research or testing involving human subjects, unless expressly agreed. The Materials supplied under this Section 2.9 are supplied "as is" and must be used with prudence and appropriate caution in any experimental work, since not all of their characteristics may be known. For the avoidance of doubt, this Section 2.10 shall not apply to any materials and/or Compounds supplied to GSK by Dynavax in accordance with Section 4.3 pursuant to the exercise by GSK of its Option for a Dynavax Program.

2.11 Regulatory Matters; Compliance.

2.11.1 *Compliance*. Dynavax shall conduct all pre-clinical activities and Clinical Trials under this Agreement in good scientific manner and in compliance in all material respects with applicable laws, rules and regulations and all other applicable requirements of cGMP, good laboratory practice and current good clinical practice.

2.11.2 *Data Integrity*.

(a) Dynavax acknowledges the importance to GSK of ensuring that the Dynavax Programs are undertaken in accordance with the following good data management practices:

(i) data are being generated using sound scientific techniques and processes;

(ii) data are being accurately and reasonably contemporaneously recorded in accordance with good scientific practices by Persons conducting Research hereunder;

(iii) data are being analyzed appropriately without bias in accordance with good scientific practices; and

(iv) data and results are being stored securely and can be easily retrieved.

(b) Dynavax agrees that it shall use Commercially Reasonable Efforts to carry out the Dynavax Programs so as to collect and record any data generated therefrom in a manner consistent with the above requirements as set forth in subsection (a) above.

2.11.3 *Ownership*. **[*]** all regulatory filings for Compounds **[*]**. Upon **[*]** with respect to a Dynavax Program, Dynavax shall **[*]** as soon as reasonably practicable of all regulatory filings for the resulting GSK Development Compounds (including Back-up Compounds), including all relevant INDs, and provide GSK with copies of such INDs and other regulatory filings and all pre-clinical and clinical data and results (including pharmacology, toxicology, formulation, and stability studies). Thereafter, **[*]** and maintain all regulatory filings and Regulatory Approvals for GSK Development Compounds.

2.11.4 *Adverse Event Reporting*. Beginning on the Effective Date and continuing until such time, if any, that GSK exercises its Option with respect to a Dynavax Program, Dynavax shall be responsible for reporting all adverse drug reaction experiences related to Compounds in such Dynavax Program in connection with the activities of Dynavax under this Agreement to the appropriate Regulatory Authorities in the countries in the Territory in which such Compounds are being Developed, in accordance with the appropriate laws and regulations of the relevant countries and Regulatory Authorities. Dynavax shall provide GSK notice of such event within five (5) days and provide copies of all reports to GSK as soon as possible, including using Commercially Reasonable Efforts to provide such copies. Through the JSC, GSK shall have the right to review from time to time Dynavax's pharmacovigilance policies and procedures. GSK and Dynavax agree to cooperate and use good faith efforts to ensure that Dynavax's adverse event database is organized in a format that is compatible with GSK's adverse event databases.

2.12 Dynavax Program Costs. Except as set forth in this Article 2, [*] shall [*] in connection with performing activities under a Dynavax Program.

2.13 Subcontracting. Subject to the terms of this Agreement, each Party shall have the right to engage Affiliates or Third Party subcontractors to perform certain of its obligations under this Agreement. Any Affiliate or subcontractor to be engaged by a Party to perform a Party's obligations set forth in the Agreement shall meet the qualifications typically required by such Party for the performance of work similar in scope and complexity to the subcontracted activity. Notwithstanding the preceding, any Party engaging an Affiliate or subcontractor hereunder shall remain principally responsible and obligated for such activities. In addition, each Party engaging a subcontractor with respect to its obligations under a Dynavax Program shall in all cases retain or obtain exclusive Control of any and all intellectual property created by or used with the relevant Party's permission by such subcontractor directly related to such subcontracted activity under the Dynavax Program. The Party engaging a subcontractor under a Dynavax Program shall be solely responsible for all costs associated with obtaining such exclusive Control and rights to such intellectual property. For example and not by limitation, Dynavax shall ensure that it retains or obtains exclusive Control of any intellectual property created by or used with the relevant Party's permission by any academic or any contract research, manufacturing or development organization appointed by Dynavax to fulfill any of its obligations under this Agreement. However, it is understood that, in some cases, it may not be commercially reasonable for such Party **[*]**. To the extent that such **[*]** from any such subcontractor under a Dynavax Program, prior to entering into such arrangement with such

subcontractor, such Party shall bring such matter to the JSC for the prior approval of the JSC to enter into such arrangement and for approval by the JSC of the licensing terms and conditions with respect to such arrangement.

ARTICLE 3

MANAGEMENT OF THE COLLABORATION

3.1 Joint Steering Committee. Promptly and in any event within **[*]** days after the Effective Date, the Parties shall establish a committee (the "**Joint Steering Committee**" or **"JSC"**) as more fully described in this Section 3.1. The JSC shall have review, oversight and decision-making responsibilities for all Research and Development activities performed under this Agreement, as more specifically provided herein. Each Party agrees to keep the JSC informed of its progress and activities under the Programs.

3.1.1 *Membership*. The JSC shall be comprised of three (3) representatives (or such other number of representatives as the Parties may agree) from each of GSK and Dynavax. Each Party shall provide the other with a list of its initial members of the JSC no later than thirty (30) days prior to the first scheduled meeting of the JSC, which shall be no later than ninety (90) days after the Effective Date. Each Party may replace any or all of its representatives on the JSC at any time upon written notice to the other Party in accordance with Section 13.7 of this Agreement. Each representative of a Party shall have relevant expertise (either individually or collectively) in pharmaceutical drug discovery and development. Any member of the JSC may designate a substitute to attend and perform the functions of that member at any meeting of the JSC. Each Party may, in its reasonable discretion, invite non-member representatives of such Party to attend meetings of the JSC as non-voting participants, subject to the confidentiality obligations of Article 9. The Parties shall designate a chairperson (each, a "**Chairperson**") to oversee the operation of the JSC and prepare minutes as set forth in Section 3.1.3, each such Chairperson to serve a twelve (12) month term. The right to name the Chairperson shall alternate between the Parties, with **[*]** designating the first such Chairperson.

3.1.2 *Meetings*. During the Research Term, the JSC shall meet in person or otherwise at least once each Calendar Quarter, and more or less frequently as the Parties mutually deem appropriate, on such dates and at such places and times as provided herein or as the Parties shall agree. Subject to Section 5.5, upon conclusion of the Research Term, the JSC shall meet, in person or otherwise, at least once every Calendar Year to provide Dynavax an update regarding GSK's efforts to Develop and commercialize Compounds and GSK Products in the GSK Development Programs, including without limitation, material changes in the clinical development plans for GSK Products, status of regulatory filings, anticipated indications, anticipated launch dates, manufacturing issues, and the like. Meetings of the JSC that are held in person shall alternate between the offices of the Parties, or such other place as the Parties may agree. The members of the JSC also may convene or be polled or consulted from time to time by

means of telecommunications, video conferences, electronic mail or correspondence, as deemed necessary or appropriate. Each Party will bear all expenses it incurs in regard to participating in all meetings of the JSC, including all travel and living expenses.

3.1.3 *Minutes*. The Alliance Manager from the Party other than the Party of the Chairman, shall be responsible for preparing and circulating minutes of each meeting of the JSC, setting forth, *inter alia*, an overview of the discussions at the meeting and a list of any actions, decisions or determinations approved by the JSC and a list of any issues to be resolved by the Executive Officers pursuant to Section 3.1.4. Such minutes shall be effective only after approved by both Parties. With the sole exception of specific items of the meeting minutes to which the members cannot agree and that are escalated to the Executive Officers as provided in Section 3.1.4 below, definitive minutes of all JSC meetings shall be finalized no later than thirty (30) days after the meeting to which the minutes pertain. If at any time during the preparation and finalization of the JSC minutes, the Parties do not agree on any issue with respect to the minutes, such issue shall be resolved by the escalation process as provided in Section 3.1.4. The decision resulting from the escalation process shall be recorded by the Alliance Manager in amended finalized minutes for such meeting.

3.1.4 *Decisions*. Except as otherwise provided herein, with respect to a given Program, all decisions of the JSC prior to Option exercise by GSK shall be made by **[*]**, with each Party having **[*]**. In the event that the JSC **[*]** on a matter regarding a Dynavax Program within **[*]** Calendar Days after it has met and attempted to reach such decision, then, except for matters expressly identified in this Agreement as not subject to escalation to the Executive Officers pursuant to this Section 3.1.4, either Party may, by written notice to the other, have such issue referred to **[*]** from time to time **[*]**, for resolution. **[*]**, which shall in no case be more than **[*]** after the matter was referred to **[*]**, the issue shall be finally resolved as follows:

(a) [*] shall have final decision-making authority with respect to any disputes concerning **[*]**.

(b) If the dispute concerns whether **[*]**, the disputed issue shall be **[*]**.

(c) GSK shall have final decision-making authority with respect to any disputes concerning **[*]**.

3.1.5 *Responsibilities*. The JSC shall perform the following functions, subject to the final decision-making authority of the respective Parties as set forth in Section 3.1.4(a), (b) and (c), some or all of which may be addressed directly at any given meeting of the JSC:

(a) review and comment on the Development Plan for each Dynavax Program and monitor progress of activities under such Development Plan;

(b) oversee and guide the progress of each Dynavax Program in accordance with the applicable Pre-Candidate Selection Criteria, Phase I Ready Criteria, **[*]** Criteria and Proof of Concept Criteria;

(c) [*];

(d) prepare, review, modify, update and approve each Proof of Concept Study Design and **[*]** Study Design;

(e) identify the Dynavax Programs to be conducted by Dynavax under this Agreement;

(f) assess the Proof of Concept Criteria and, if applicable, the **[*]** Criteria, for each Dynavax Program;

(g) [*] that a Compound has satisfied the Pre-Candidate Selection Criteria, Phase I Ready Criteria, Proof of Concept Criteria, or **[*]** Criteria;

(h) [*] all Dynavax Programs and decide whether to **[*]** a Dynavax Program;

(i) except as otherwise provided in Section 3.1.8 below, discuss and attempt to resolve any deadlock issues submitted to it by any Subcommittee (as defined in Section 3.1.7), in accordance with the procedures established in Section 3.1.4;

(j) serve as an information transfer vehicle, from time to time, to facilitate the discussion of Development and commercialization of GSK Products under GSK Development Programs;

(k) periodically review the Development and commercialization of any GSK Product and GSK Development Plan and **[*]**; and

(l) such other responsibilities as may be assigned to the JSC pursuant to this Agreement or as may be mutually agreed upon by the Parties from time to time.

For clarity, the JSC shall not have any authority beyond the specific matters set forth above in this Section 3.1.5, and in particular shall not have any power to amend or modify the terms or provisions of this Agreement. In addition, GSK (and not Dynavax or the JSC) shall have the sole right to make decisions with respect to (i) the exercise of an Option; or (ii) subject to Section 5.5 and GSK's diligence obligations in Section 5.1.3, the Research, Development, progression, manufacture, and commercialization of Compounds or Products in GSK Development Programs.

3.1.6 *Dynavax's Right to Withdraw*. Dynavax will have the right to withdraw from participation on and thereby terminate any of its rights and obligations to participate in the JSC at any time after the **[*]** anniversary of the Effective Date upon written notice to GSK.

Upon withdrawal by Dynavax from participation in the JSC, GSK will have the sole decision-making authority with respect to any matters that would otherwise have been subject to Sections 3.1.4(a) or 3.1.4(b) and GSK shall have the right in such event, in its sole discretion, to immediately terminate all of Dynavax's Co-Development and Co-Promotion rights, whether previously exercised or not, under this Agreement.

3.1.7 *Subcommittee(s).* From time to time, the JSC may establish subcommittees to oversee particular projects or activities, as it deems necessary or advisable (each, a "**Subcommittee**"). Each Subcommittee shall consist of such number of members as the JSC determines is appropriate from time to time. Such members shall be individuals with expertise and responsibilities in the areas of pre-clinical development, clinical development, patents, process sciences, manufacturing, regulatory affairs, product development and/or product commercialization, as applicable to the stage of development of the project or activity.

3.1.8 *Joint Patent Subcommittee*. Within two (2) months after the Effective Date, the JSC shall establish a Subcommittee (the **"Joint Patent Subcommittee"** or **"JPS"**) to be responsible for the coordination of the Parties' efforts in accordance with Article 8 of this Agreement, including the review and filing of patent applications and assessments of inventorship of inventions created during the Research Term under the Dynavax Programs. The JPS shall be comprised of an equal number of representatives from each of GSK and Dynavax and shall meet on such dates and at such places and times agreed to by the Parties. All decisions of the JPS on matters for which it has responsibility shall be made by consensus, with each Party having collectively one (1) vote in all decisions. In the event that the JPS is unable to reach a consensus decision within fifteen (15) Calendar Days after it has met and attempted to reach such decision, then either Party may, by written notice to the other, have such issue submitted to the chief patent counsel of GSK and of Dynavax (together, the **"Chief Patent Counsel"**), or such other person holding a similar position designated by GSK or Dynavax from time to time, for resolution. The Chief Patent Counsel shall meet promptly to discuss the matter submitted and to determine a resolution. Prior to exercise of an Option for a Dynavax Program, if the Chief Patent Counsel are unable to determine a resolution in a timely manner: (a) with respect to **[*]** related to such Program, then the decision of the chief patent counsel **[*]** shall be binding upon the Parties without further review, and (b) with respect to **[*]** related to such Program, then the decision of the chief patent counsel of **[*]** shall be binding upon the Parties without further review. Each Party will bear all expenses it incurs in regard to participating in all meetings of the JPS, including all travel and living expenses. After exercise of an Option hereunder for a Dynavax Program, if the Chief Patent Counsel are unable to determine a resolution in a timely manner with respect to any Patents related to such Program, **[*]**.

3.2 Alliance Managers. Promptly after the Effective Date, each Party shall appoint an individual (who may not be an existing member of the JSC) to act as alliance manager for such Party (each, an "**Alliance Manager**"). Each Alliance Manager shall thereafter be permitted to attend meetings of the JSC as a nonvoting observer, subject to the confidentiality provisions of Article 9. The Alliance Managers shall be the primary point of contact for the Parties regarding the activities contemplated by this Agreement and shall facilitate all such activities hereunder

including, but not limited to, the exchange of Information described in Section 2.9. The Alliance Managers shall also be responsible for assisting the JSC in performing its oversight responsibilities. The name and contact information for each Party's Alliance Manager, as well as any replacement(s) chosen by Dynavax or GSK, in their sole discretion, from time to time, shall be promptly provided to the other Party in accordance with Section 13.7 of this Agreement.

ARTICLE 4

GRANT OF RIGHTS

4.1 Options.

4.1.1 *Grant*. Dynavax hereby grants to GSK the exclusive option, exercisable on a Dynavax Program-by-Dynavax Program basis at GSK's sole discretion, to obtain the exclusive license set forth in Section 4.2.1 (each, an "**Option**"), subject to the terms and conditions described in Sections 4.1.2—4.1.6 below. GSK shall be limited to exercising one Option per Dynavax Program, and on exercise of an Option and payment of the applicable Option exercise fee, GSK shall have rights to such Dynavax Program consisting of all Compounds under a given Dynavax Program. For the purposes of this Section 4.1, the **[*]** and the **[*]** shall be considered distinct Dynavax Programs, each subject to a separate Option.

4.1.2 [*] *Period*. For the two (2) Dynavax Programs other than **[*]**, the Parties will determine whether GSK may exercise the Option **[*]** after a Phase I Ready Compound has completed the **[*]** Proof of Concept Study, as applicable, as follows. Within **[*]** after the JSC determines that a Compound has reached the Phase I Ready stage pursuant to Section 2.7.2(a), the Parties shall **[*]** or Dynavax shall **[*]**, as applicable. If the Parties do not agree within such **[*]** period, or if the Parties do agree that **[*]**, as applicable, then Dynavax shall continue to progress the Dynavax Program, and the Option for such Dynavax Program may be exercised only following completion of **[*]** the Proof of Concept Study, as applicable; *provided*, however, that if in GSK's reasonable judgment as specified in a reasonably detailed written notice to Dynavax delivered within **[*]** after attainment of the Phase I Ready stage, Dynavax does not **[*]**, as applicable, then GSK **[*]**. For clarity, GSK may exercise the Option with respect to the TLR 7/9 Program under any of the following circumstances, at the sole discretion of GSK, but in any event **[*]**: (i) after completion of the **[*]** or Proof of Concept Study, as determined pursuant to Section 2.6.3, or (ii) pursuant to Section 4.1.3(b) or 4.1.3(c).

4.1.3 *Exercise*.

(a) The **"Option Period Start"** with respect to a Dynavax Program will commence upon the receipt by GSK of written notice from Dynavax of the complete PoC Study Report, complete **[*]** Study Report, or **[*]**, as the case may be, as well as access to GSK to the Dynavax data room containing the complete set of material or relevant clinical and

preclinical information related to the applicable Dynavax Program. GSK shall decide whether or not to exercise the Option and may exercise the Option with respect to a Dynavax Program by written notice to Dynavax at any time within **[*]** after the Option Period Start, unless extended pursuant to Section 4.1.5 or otherwise extended by the mutual written agreement of the Parties. Upon GSK's exercise of an Option and receipt by Dynavax of the applicable Option exercise fee set forth in Section 6.2.1(a) or 6.2.2(a) pursuant to the procedure set forth in Section 6.7, the Dynavax Program will become a GSK Development Program. Subject to Section 5.3.2, any Option exercise shall be irrevocable. GSK shall have the right, at any time after exercising the Option with respect to a Dynavax Program and at its sole discretion, to **[*]** from the same Dynavax Program.

(b) In addition, in the event that either (i) a **[*]**, or (ii) a **[*]** occurs (as defined below), GSK shall have the right to exercise its Options to any and all Dynavax Programs, and to terminate Dynavax's **[*]** rights to participate in the JSC and related Subcommittees, at GSK's sole discretion, by providing written notice to Dynavax within **[*]** of (A) the event described in (i) above; or (B) the event described in (ii) above, provided that within **[*]** Business Days after Dynavax notifies GSK pursuant to Section 10.2.9, Dynavax shall provide to GSK a written plan for **[*]** and the Parties shall meet to discuss such plan, and if such plan is not reasonably acceptable to GSK (as reasonably detailed in written notice to Dynavax) then a **[*]** shall have occurred. Upon the exercise by GSK of its Option to a Dynavax Program pursuant to this Section 4.1.3(b), the Option exercise fee and the applicable milestone payments and royalty payments due under Article 6 shall all be **[*]** as follows on a Program-by-Program basis for each Program with respect to which GSK exercises its Option:

(1) if Option exercise occurs for a Dynavax Program with a lead Compound (other than the **[*]**) that has not yet satisfied the Pre-Candidate Selection Criteria, then the Option exercise fee and the milestone and royalty payments shall be **[*]**;

(2) if Option exercise occurs for a Dynavax Program with a lead Compound that has satisfied the Pre-Candidate Selection Criteria but is prior to the Phase I Ready stage, then the Option exercise fee and the milestone payments and the royalty payments either (i) shall be **[*]**, for a Program other than **[*]**, or (ii) shall be **[*]**.

(3) if Option exercise occurs for a Dynavax Program with a lead Compound at the Phase I Ready stage, but prior to initiation of a Phase 2 Clinical Trial, then the Option exercise fee and the milestone payments and royalty payments shall all be **[*]** from the payments that would have been payable under Article 6 had GSK exercised its Option after completion of the Proof of Concept Study;

(4) if Option exercise occurs for a Dynavax Program after the initiation of a Phase 2 Clinical Trial for such Program, then the Option exercise fee and the milestone payments and royalty payments shall be **[*]** that would have been payable under Article 6 had GSK exercised its Option after the Proof of Concept Study; and

(5) if Option exercise occurs for a Dynavax Program pursuant to Section 4.1.3(b)(ii) wherein Dynavax has **[*]** (i) within **[*]** of the Effective Date of this Agreement, then, **[*]** above of this Section 4.1.3(b), in the total amount of **[*]**, and, if such Option exercise occurs (ii) more than **[*]** after the Effective Date but prior to **[*]** after the Effective Date of this Agreement, then, **[*]** above of this Section 4.1.3(b), in the total amount of **[*]**.

The respective obligations of the Parties with respect to exclusivity under Article 7 shall remain unchanged.

(c) In the event that a **[*]**, then within **[*]** after the **[*]**, and quarterly thereafter, the Parties and the acquiror shall meet to discuss, in good faith and in as much detail and specifics as is practicable at the time, **[*]** under this Agreement. If at any time in the **[*]** following the **[*]**, GSK has a reasonable, good faith basis to believe, based on the plans, documents, actions or inactions of Dynavax **[*]** that Dynavax **[*]** has not or will not, with respect to any Program, employ diligent efforts or human and material resources that are at least equivalent to the diligent efforts and human and material resources that were employed by Dynavax for the Program prior to (and without any allowance for) any delay, disruption or de-prioritization of such Program as a result of or in contemplation of such **[*]**, then GSK shall provide written notice to Dynavax **[*]**, such notice to allege the specific basis for GSK's view that the diligent efforts or human and material resources being applied or to be applied to the Program in question are or are expected to be less than those that were applied to the Program by Dynavax **[*]**. Dynavax **[*]** shall notify GSK whether or not it plans to cure such deficiency, and if it so elects to cure, shall have a **[*]** to cure any such deficiencies in efforts or resources so alleged by GSK. In the event that Dynavax **[*]** notifies GSK that it does not intend to cure such deficiencies or GSK reasonably believes that such deficiency has not been corrected or cured within such **[*]**, GSK shall have the right to exercise its Options to any and all Dynavax Programs, and to terminate Dynavax's **[*]** rights to participate in the JSC and related Subcommittees, at GSK's sole discretion, by providing written notice to Dynavax within thirty (30) days after such **[*]** or such notice from Dynavax **[*]**. Upon the exercise by GSK of its Option to a Dynavax Program pursuant to this Section 4.1.3(c), the Option exercise fee and the applicable milestone payments and royalty payments due under Article 6 shall all be **[*]** as set forth in Section 4.1.3(b)(1)-(5) as applicable, on a Program-by-Program basis for each Program with respect to which GSK exercises its Option.

4.1.4 *Expiration or Termination of Option*. If GSK does not exercise the Option with respect to a particular Dynavax Program within the applicable **[*]** or GSK elects not to exercise the Option, then, subject to Section 4.1.5, the Option shall terminate with respect to such Dynavax Program, which shall become a Dynavax Development Program, and Dynavax will thereafter have all rights, itself or with or through an Affiliate or Third Party, (a) to Develop and commercialize all Compounds within the Dynavax Program, subject to any applicable royalty payments set forth in Section 6.5, and (b) to use any data, regulatory filings and know-how generated or used in the course of the Dynavax Program, to the extent such **[*]** that are included in the Dynavax Development Program.

4.1.5 *HSR and Equivalent Foreign Laws.* If GSK reasonably determines in good faith prior to the expiration of the applicable period for exercise of an Option for a particular Dynavax Program (the "**Option Deadline Period**") that the exercise of such Option is required to be filed with the Federal Trade Commission (the "**FTC**") under the Hart-Scott-Rodino Antitrust Improvements Act of 1976 (15 U.S.C. §18a) ("**HSR**") or with equivalent foreign governmental authorities under any similar foreign law, GSK shall provide written notice of exercise of the Option to Dynavax prior to the end of the Option Deadline Period, which notice shall include GSK's binding commitment to complete the exercise of the Option, subject only to HSR or other governmental clearance by the FTC or other governmental authority, and the Option Deadline Period automatically shall be extended for **[*]** (the "**Option Deadline Extension Period**"). If the exercise of the Option does not comply with the requirements of Section 4.1 and this Section 4.1.5, including, for example, because it includes other conditions to the completion of the exercise of the Option other than the grant of HSR or other governmental clearance, then the Parties shall negotiate in good faith to determine an appropriate way to proceed. If HSR or other governmental clearance is not granted within the Option Deadline Extension Period, or if GSK receives a "Second Request" from the FTC or similar request for additional information from a governmental authority in connection with such filing, the Option Deadline Extension Period shall be extended for an additional period of time (not to exceed an additional **[*]**) to permit GSK to obtain FTC or other governmental clearance or to respond to the Second Request or provide additional information to the governmental authority. If GSK elects not to respond to the Second Request or to withdraw its request for HSR or other governmental clearance or HSR, the Option shall terminate, and Dynavax shall have the same rights as are set forth in Section 4.1.4 in respect of the Compounds resulting from the applicable Dynavax Program. If HSR or other governmental clearance has not been granted by the end of the extended Option Deadline Extension Period, Dynavax and GSK shall promptly meet to discuss in good faith whether an additional extension of the Option Deadline Extension Period is reasonable under the circumstances, and to discuss and consider in good faith, where appropriate, the **[*]**, with the objective of placing each Party**[*]** if the Program in question had not been included in the Agreement from the beginning as of the Effective Date. Notwithstanding the foregoing, nothing in this paragraph or the Agreement shall require either Party to divest any assets or to take action (beyond cooperation with the other Party) to respond to any Second Request.

4.1.6 *Tolling of Payment Obligations*. If the exercise by GSK of any Option under Section 4.1 requires the making of filings under HSR, or under any similar premerger notification provision in the European Union or any other jurisdiction, then all rights and obligations related to the exercise of such Option (including payment of any Option exercise fee or other milestone) shall be tolled until the applicable waiting period has expired or been terminated or until approval or clearance from the reviewing authority has been received, and each Party agrees to cooperate at the request of the Party which decides in its sole discretion to respond to any such request for information to expedite review of such transaction. In the event that HSR clearance is not reasonably achievable within **[*]** days from notification, the Parties shall discuss in good faith potential alternatives, including, without limitation, termination of the relevant Program or the Agreement, as may be mutually agreed between the Parties in good faith, and, where appropriate, to discuss and consider in good faith the renegotiation of their financial and other obligations under the Agreement with respect to the affected Program.

4.2 License Grants.

4.2.1 *License to GSK*. Subject to the terms and conditions of this Agreement and upon GSK's exercise of the relevant Option in accordance with Section 4.1 and Dynavax's receipt of the applicable Option exercise fee, Dynavax and its Affiliates shall be hereby deemed to have granted and hereby grant to GSK the exclusive right and license (even as to Dynavax and its Affiliates, except for the limited purpose of conducting Research and Development activities with respect to Back-up Compounds or formulations as expressly contemplated under Section 5.2) in the Territory, with the right to grant sublicenses, under all of Dynavax's and its Affiliates' right, title and interest in and to the Exclusively Licensed IP to make, have made, use, sell, offer for sale and import Compounds under such Dynavax Program as and into GSK Products in the Field during the Term.

4.2.2 *No Grant of Rights to Third Parties*. Until such time as the Option Deadline Period, including any Option Deadline Extension Period (as may be extended), for an Option granted to GSK pursuant to Section 4.1 with respect to a given Dynavax Program has expired or terminated (including, for example, because **[*]** terminated a Dynavax Program), Dynavax and its Affiliates shall not grant to any Third Party rights to any Exclusively Licensed IP that are inconsistent with or that would interfere with the grant of the licenses that may result from the exercise of such Option by GSK hereunder. For the avoidance of doubt, the Parties understand and agree that for so long as an Option is in effect, such Option shall be exclusive as to the Compounds that are the subject of the relevant Dynavax Program, and Dynavax and its Affiliates shall have no right to offer or negotiate with any Third Party with respect to the grant to such Third Party of any right or license, or with respect to any settlement, consent judgment or other disposition of any action or proceeding under Article 8, or with respect to any other encumbrance of any kind, in or to any of such Compounds or any Exclusively Licensed IP that would interfere with the grant of the licenses resulting from the exercise of such Option to GSK hereunder. The grant of the Options by Dynavax hereunder is irrevocable except as provided under Article 12. GSK acknowledges that certain of the Exclusively Licensed IP to the extent that it pertains to compounds which are not Compounds or Products hereunder is subject to the terms and conditions of the **[*]** and that such grant of rights, so long as such grant is consistent with and does not interfere with the grant of exclusive licenses in the Field and in the Territory from the exercise of an affected Option hereunder, shall not be deemed a breach of this Agreement.

4.3 Technology Transfer after Option Exercise. As soon as reasonably practicable after GSK exercises its Option for a Dynavax Program pursuant to Section 4.1 **[*]**, Dynavax shall deliver to GSK, at no cost to GSK, all Information and material in its possession and Control relating to the Compounds in such GSK Development Program, including those documents and materials set out in Exhibit G, and any other such Information as may be in Dynavax's Control and in the possession of any subcontractors (including third party

manufacturers) appointed by Dynavax under Section 2.13, in each case in a format to be agreed between the Parties but which is in an electronically editable format suitable for eCTD submission. Dynavax shall provide such technology transfer services as may be reasonably necessary to [*] the Compound manufacturing processes at GSK's or GSK's Third Party manufacturer's site; provided that GSK shall be responsible for [*] to provide those services reasonably necessary to [*] of the Compound manufacturing processes by GSK, and [*] from Dynavax therefor. [*]. Dynavax shall use Commercially Reasonable Efforts with respect to those activities for which it is responsible to ensure orderly transition and uninterrupted Development of the GSK Development Program.

4.4 Third Party Licenses.

4.4.1 During the Term, **[*]** (a) required for the exploitation of Dynavax's proprietary platform technology or any other technology used by Dynavax in conducting a Dynavax Program or Dynavax Development Program, (b) obtained by Dynavax prior to the Effective Date, or (c) to the extent related to the composition of matter or method of use of a Compound as contemplated under a Dynavax Program.

4.4.2 With respect to any Third Party license necessary for the manufacture, formulation or commercialization of a GSK Product in a GSK Development Program (other than any license described in Section 4.4.1), after GSK exercises the Option with respect to such GSK Development Program, **[*]** obligation to pay any amounts for Third Party licenses as set forth above shall terminate immediately if GSK or Dynavax (in the case of an uncured material breach by GSK) **[*]**.

ARTICLE 5

POST-EXERCISE ACTIVITIES

5.1 GSK Development and Commercialization.

5.1.1 Following exercise of an Option with respect to a Dynavax Program, subject to Sections 5.2 and 5.5, GSK, either itself and/or by and through its Affiliates, Sublicensees or contractors, shall be responsible for all Research, Development, regulatory, manufacturing, marketing, advertising, promotional, launch and sales activities in connection with GSK Products containing Compounds from such Program. Except as set forth in Section **[*]**.

5.1.2 Subject to Section 5.5.1(c), GSK shall have sole decision-making authority with respect to the Research, Development, progression, regulatory activities, manufacturing and commercialization of any Compound within a GSK Development Program, without submitting such matter to the JSC or Senior Executive Officers. In the event that the **[*]** for resolution. **[*]** determine a resolution. **[*]** in a timely manner, which shall in no case be **[*]**.

5.1.3 *GSK Diligence.*

(a) Following GSK's exercise of an Option with respect to a Dynavax Program, GSK shall use its Commercially Reasonable Efforts to Develop and commercialize **[*]** in such GSK Development Program in **[*]**, subject to the provisions of Section 2.8. **[*]** provided, however, that the Parties acknowledge and agree that, for the purposes solely of this Section 5.1.3(a), **[*]**, it is appropriate for **[*]**. In the event that, as a result of any such **[*]** Country, such right of Dynavax shall be exercised in a manner **[*]** (collectively, the "**Coordination Conditions**"); provided that if the Coordination Conditions apply, if such Product is commercialized by Dynavax or any Affiliate or sublicensee thereof in such country **[*]**, and GSK **[*]**, then Dynavax or any Affiliate or licensee thereof shall, to the extent permitted under applicable law, **[*]**, as the case may be, or shall **[*]** under this Section 5.1.3 in **[*]**. For clarity, and without limiting any other provision of this Agreement, any dispute regarding the application or enforcement of this Section 5.1.3 shall be **[*]**.

(b) Notwithstanding the foregoing Section 5.1.3(a) and for the avoidance of doubt, Dynavax acknowledges and agrees that in the event it (or its Affiliates or sublicensee) commercializes a Product **[*]** then, subject to applicable law, Dynavax shall not, and shall ensure that its Affiliates or any sublicensee shall not, **[*]** unless mutually agreed in writing by the Parties, provided that **[*]**. With respect to **[*]**. If Dynavax (or its Affiliate or licensee) becomes aware that **[*]**, Dynavax shall, or shall cause its Affiliates and licensees to, to the extent permitted under applicable law, **[*]**.

5.2 Dynavax Post-Exercise Activities.

5.2.1 *Back-up Compounds*. If, upon exercise of the Option with respect to a Dynavax Program, there are not **[*]** Back-up Compounds in such Dynavax Program that **[*]**, then Dynavax shall continue, until **[*]** after GSK exercises such Option, to Develop **[*]** Back-up Compounds that **[*]** for such Dynavax Program, at Dynavax's sole cost and responsibility. Such Back-up Compounds shall be subject to GSK's Option and included within the applicable GSK Development Program. For clarity, efforts undertaken pursuant to this Section 5.2.1 following expiration of the Research Term shall not be deemed to extend the Research Term, but shall be subject to Dynavax's obligation to use Commercially Reasonable Efforts.

5.2.2 ***[*]*** *Development*. If, after completion of a Proof of Concept Study for a Phase I Ready Compound from a Dynavax Program or GSK Development Program, Dynavax has not **[*]** for such Compound for **[*]** in the applicable Development Plan, then Dynavax shall continue to develop such **[*]**, at its sole cost and expense, notwithstanding GSK's exercise of the Option for the Dynavax Program; *provided*, however, that an **[*]** of a Compound that is **[*]** shall be considered a **[*]**, provided that it meets GSK's then current requirements for **[*]**.

5.3 Dynavax Development Compounds.

5.3.1 *Option Expiration; Dynavax Program Termination*. In the event that the Option Deadline Period, including any Option Deadline Extension Period (as may be extended), for an Option with respect to a particular Dynavax Program that is not **[*]** expires without exercise, or in the event that the **[*]** terminates a Dynavax Program, then such Dynavax Program shall become a Dynavax Development Program, and Dynavax shall have the exclusive right, at its sole discretion, to Research, Develop and commercialize all Compounds within such Dynavax Program as Dynavax Products in the Territory in the Field, alone or with any Third Party or through any Sublicensee, Affiliate or subcontractor. GSK will have no further obligations to make any milestone, royalty or other payments to Dynavax of any kind under Article 6 with respect to such Compounds or to make any milestone, royalty or other payments of any kind to Dynavax, its Affiliate or any Third Party on account of any Third Party licenses for any such Compounds, except for any **[*]**. Dynavax shall have the right to use, in connection with such Development and commercialization, **[*]** without limitation if such materials are **[*]**, but for any Information that is **[*]**, Dynavax may only use the Information **[*]**. If Dynavax or its Affiliate or Sublicensee Develops and commercializes a Dynavax Product pursuant to such Dynavax Development Program, Dynavax shall pay to GSK the applicable royalty payments as set forth in Section 6.5 for such Dynavax Products.

5.3.2 *GSK Development Termination*. After exercising an Option with respect to a particular Dynavax Program, GSK may, at its sole discretion and without any penalty or liability (other than the transfer of any data, regulatory filings and other Information and grant of rights contemplated under this Section 5.3.2), terminate its Development or commercialization of all the Compounds or GSK Products within such Program upon written notice to Dynavax. In such event, provided that such Program is **[*]**: (a) all licenses in and to the Exclusively Licensed IP for such Compounds granted to GSK by Dynavax shall immediately terminate, (b) Dynavax shall have the right to continue Development and commercialization of such Compounds under a Dynavax Development Program, (c) the obligations of Dynavax and rights of GSK under **[*]** with respect to such Program will terminate, and (d) GSK (i) hereby grants, conditional upon the occurrence of such termination, an **[*]** to such Compounds and **[*]** as of the time of such termination, to further Develop and commercialize such Compounds as Dynavax Products in the Territory in the Field, (ii) shall transfer to Dynavax, **[*]** and as soon as reasonably practicable after such termination, (a) all material Information **[*]** to such Compounds **[*]**, and (b) all **[*]**, (iii) shall reasonably cooperate with Dynavax **[*]**. In the event of such termination, Dynavax shall pay to GSK the applicable royalty payments as set forth in Section 6.6 for Dynavax Products containing any such Compounds.

5.4 Safety Data Exchange. The Parties shall negotiate in good faith a safety data exchange agreement with respect to GSK Products within **[*]** days of GSK's exercise of an Option. The safety data exchange agreement shall facilitate management of safety for all GSK Products covered under such agreement in accordance with standards that are no less stringent than in the ICH guidelines, such that the Parties would be able to comply with all regulatory and legal requirements regarding the management of safety data, by providing for the exchange of relevant information in appropriate format within applicable timeframes.

5.5 Co-Development and Co-Promotion by Dynavax. GSK hereby grants Dynavax an option to co-develop one (1) GSK Product and a related right to co-promote in the U.S. the GSK Product that Dynavax has elected to co-develop, as set forth in this Section 5.5.

5.5.1 *Co-Development Option*.

(a) *Generally*. Within **[*]** days following GSK's exercise of an Option with respect to a Dynavax Program, GSK shall provide to Dynavax **[*]**, and shall have the option (the **"Co-Development Option"**), exercisable by written notice to GSK within **[*]** after receipt of the **[*]**, to co-Develop such GSK Product. If Dynavax elects to co-Develop a GSK Product, Dynavax shall be responsible for **[*]** of the Co-Development Costs incurred by GSK from and after GSK's exercise of the Option for the applicable Dynavax Program, and the royalty rate applicable to such GSK Product shall be adjusted as set forth in Section 6.4.2(d).

(b) *Co-Development Costs.* Upon exercise of the Co-Development Option, Dynavax shall pay to GSK a one-time **[*]** payment equal to **[*]** of the total Co-Development Costs incurred by GSK up to such date for such GSK Product (but not for other Compounds or GSK Products in such GSK Development Program) from and after its exercise of the Option. For clarity, any payments made by GSK to Dynavax under Article 6 of this Agreement prior to Dynavax's exercise of the Co-Development Option shall not be considered Co-Development Costs. In addition, following exercise of the Co-Development Option, Dynavax shall be responsible for **[*]** of the ongoing Co-Development Costs with respect to such GSK Product through and including approval of the NDA. The Parties shall make reconciling payments for such Co-Development Costs on a Calendar Quarter basis such that each Party bears its respective share (i.e., **[*]**) of the Co-Development Costs incurred during the applicable Calendar Quarter. In the event that the actual Co-Development Costs are reasonably expected to exceed, as determined by the summation of actual costs to date and official GSK forecasts over the course of the remaining development plan, **[*]** of the estimated costs for the Co-Development Costs as set forth in the GSK Development Plan and Budget, Dynavax shall have **[*]**.

(c) *Co-Development Governance*. After Dynavax exercises the Co-Development Option as to a particular GSK Product, the JSC or such Subcommittee designated by the JSC shall continue to oversee and make decisions with respect to the Development of the applicable GSK Product, and shall continue to meet on a Calendar Quarter basis or as mutually determined by the Parties. GSK shall continue to update the GSK Development Plan and Budget for such GSK Product, and shall submit such updated GSK Development Plan and Budget to the JSC for review and approval. In the event that the JSC cannot reach consensus on any decision with respect to the Development of such GSK Product, **[*]**. For clarity, GSK shall not **[*]**.

(d) ***[*]*** *of Dynavax*. In the event of a **[*]** in which **[*]**, GSK shall have the right, at its sole discretion, to **[*]**.

[*] = CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, IS FILED WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24B-2 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.

5.5.2 *Co-Promotion Option.*

(a) On or before the date which is **[*]** for a GSK Product for which Dynavax has exercised the Co-Development Option, GSK shall provide to Dynavax a written commercialization plan for such GSK Product (the **"Product Marketing Plan"**). Dynavax shall have the option, exercisable by written notice to GSK within **[*]** after receipt of the Product Marketing Plan, to co-promote such GSK Product to **[*]**. Promptly following Dynavax's exercise of such option, the Parties shall engage in good faith negotiations to prepare and execute a definitive co-promotion agreement describing the co-promotion activities of the Parties for such GSK Product in the United States (the **"Co-Promotion Agreement"**). The Co-Promotion Agreement will have **[*]** after Dynavax exercises such option. In addition, where appropriate, the Parties shall enter into a supply and quality agreement.

(b) The Co-Promotion Agreement shall incorporate the terms and conditions set forth in this Section 5.5.2(b). Dynavax shall have the right to provide between **[*]** and **[*]** of the **[*]**. All details contributed by Dynavax shall be conducted by Dynavax employees, and Dynavax may not use contract sales representatives to conduct such details. **[*]** GSK shall be responsible for receiving and filling orders, booking of sales, controlling invoicing, collection of payments, returns, charge-backs and rebates on sales of the GSK Product in the United States, and shall have sole control over pricing strategies and distribution of the GSK Product in the United States. GSK shall have responsibility for preparing and producing all promotional materials for the GSK Product at its sole expense, provided, however, that the **[*]**. GSK shall provide samples and promotional materials to Dynavax for distribution to physicians to whom it details the GSK Product. GSK shall develop and provide equivalent training programs and materials for the GSK Product to sales representatives of both Parties, which programs and materials shall be provided at cost to Dynavax for its sales representatives. Dynavax may terminate its co-promotion of the GSK Product at any time upon **[*]** written notice to GSK, upon which termination Dynavax and GSK shall reasonably cooperate to transition to GSK Dynavax's co-promotion activities so as to minimize disruption to sales activity.

(c) ***[*]*** *Dynavax.* In the event of a **[*]** in which **[*]**, GSK shall have the right, at its sole discretion, to **[*]**.

ARTICLE 6

MILESTONES AND ROYALTIES; PAYMENTS

6.1 Program Funding. In partial consideration for the Options granted to GSK hereunder, GSK shall pay to Dynavax a non-refundable, non-creditable payment of Ten Million Dollars ($10,000,000) **[*]** after receipt of an invoice from Dynavax on or after the Effective Date.

6.2 Development Milestones.

6.2.1 ***[*]***.

(a) Subject to the terms and conditions set forth in Section 6.2.1(b) and 6.2.3, GSK shall make the non-refundable, non-creditable milestone payments to Dynavax that are set forth below **[*]** after receipt of an invoice following occurrence of the corresponding milestone event with respect to Compounds and GSK Products resulting from the **[*]**.

Event	Payment
[*]	
[*]	**[*]**
[*]	**[*]**
[*]*	**[*]**
[*]	**[*]**
	(see paragraph b below)
[*]	**[*]**
	(see paragraph b below)
[*]	**[*]**
[*]	**[*]**
[*]	**[*]**
[*]	**[*]**
[*]	**[*]**
[*]	**[*]**
[*]	**[*]**
[*]	
[*]	**[*]**

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[*]	**[*]**
[*]	**[*]**
[*]	**[*]**
[*]	**[*]**
TOTAL	**[*]**

* for the purposes of this Section 6.2.1(a) milestone table, the **[*]** Study] would qualify for the milestone event for **[*]**.

(b) All of the milestones in Section 6.2.1(a), including the **[*]** payment or the **[*]** payment, are payable only once for the **[*]** and only once for the **[*]**. If, upon achievement of a milestone for the **[*]**, any previous milestone has not been paid for such Program, then each such previous milestone shall be payable along with the payment for the milestone then achieved (it being understood that the "**[*]**" payment is not payable for the **[*]** and that "**[*]**" payment is payable for either **[*]** and not both). If, when GSK exercises its Option for the **[*]**, it has not exercised its Option for the **[*]**, then the payment for the "**[*]**" shall be increased to **[*]** for the **[*]**, or, if the Option is exercised at **[*]**, the payment for the "**[*]**" shall be increased to **[*]** for the **[*]**. If Development of a lead Compound in either the **[*]** or the **[*]** is terminated and such Compound is replaced by a Back-up Compound or other Compound, then milestone payments will be paid for such Back-up Compound or other Compound only if the corresponding milestone payment was not already made for the lead Compound. For clarity, the milestones listed for the **[*]** may be achieved by **[*]** that achieves the milestones for the **[*]**, but not for any additional **[*]**. If the **[*]** Option is exercised, the difference between the **[*]** Payment and the **[*]** Payment will become payable as a further milestone upon **[*]** for such Compound, as determined by GSK, or upon the occurrence of **[*]**.

6.2.2 ***[*]***.

(a) Subject to the terms and conditions set forth in Sections 6.2.2(b) and 6.2.3, GSK shall make the non-refundable, non-creditable milestone payments to Dynavax that are set forth below within **[*]** after receipt of an invoice following the occurrence of the corresponding milestone event with respect to Compounds and GSK Products resulting from the Dynavax Programs **[*]**.

Event	Payment
[*]	[*]
[*]	[*]

Event	Payment if Option Exercised at [*]	Payment if Option Exercised after Proof of Concept Study (or if exercised after [*] Study)
[*]	[*]	[*]
[*]		
[*]	[*]	[*]
[*]*	[*]	[*]
[*]	[*]	[*]
[*]	[*]	[*]
[*]	[*]	[*]
[*]	[*]	[*]
[*]	[*]	[*]
[*]	[*]	[*]
[*]	[*]	[*]
[*]	[*]	[*]

[*] = CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, IS FILED WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24B-2 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.

[*]		
[*]	**[*]**	**[*]**
[*]	**[*]**	**[*]**
[*]	**[*]**	**[*]**
[*]	**[*]**	**[*]**
[*]	**[*]**	**[*]**
TOTAL	**[*]**	**[*]**

* for the purposes of this Section 6.2.2(a) milestone table, **[*]** Study] would qualify for the milestone event for **[*]**.

(b) The milestones in Sections 6.2.2(a) are payable only once for each Dynavax Program **[*]**, provided that in each row, either the amount for exercise of Option **[*]** or the amount for exercise of Option after Proof of Concept Study (or, if applicable, after **[*]** Study, as shown in parentheses above) will be payable for each Program depending upon which Option is exercised by GSK, but not for both in a given Program. If, upon achievement of a milestone for a Dynavax Program, any previous milestone has not been paid for such Program, then each such previous milestone (for the applicable Option exercise time only) shall be payable along with the payment for the milestone then achieved. For clarity, the milestone event "**[*]**" will be payable only if GSK does not exercise its Option at the **[*]**. For clarity, the milestones listed for the **[*]** may be achieved by either the same or a different Product that achieves the milestones for the **[*]**, but not for any **[*]**. If the **[*]** Option is exercised, the difference between the **[*]** Payment and the **[*]** Payment will become payable as a further milestone upon **[*]** for such Compound, as determined by GSK, or upon the occurrence of the **[*]**.

6.2.3 *Credit*. GSK may offset up to **[*]** in the aggregate of any amounts paid to Dynavax under Section 2.6.4 or 2.6.6 against the milestone payments in Sections 6.2.1 and 6.2.2, provided that such offset may reduce each milestone payment thereunder by no more than **[*]**, up to a cumulative total of **[*]**.

6.2.4 Milestone Event Definitions.

(a) The phrase "**[*]**" as used in this Article 6 and elsewhere in this Agreement means **[*]**.

(b) The phrase "**[*]**" as used in this Article 6 means **[*]**. In the event that GSK or its Affiliate or Sublicensee **[*]**. The phrase "**[*]**" as used in this Article 6 means **[*]**. In the event that GSK or its Affiliate or Sublicensee **[*]**.

(c) The phrase "**[*]**" as used in this Article 6 means **[*]**.

6.3 Commercialization Milestones. GSK shall pay to Dynavax, on a GSK Development Program-by-GSK Development Program basis, each of the one-time (per GSK Development Program), non-refundable, non-creditable milestone payments indicated below no later than **[*]** after receipt of an invoice when the aggregate Annual Net Sales of all GSK Products in a GSK Development Program in the Territory (for all indications and without regard to formulation) first reaches the corresponding dollar values.

Aggregate Annual Net Sales (Worldwide)	Payment
[*]	**[*]**
[*]	**[*]**

6.4 Royalties.

6.4.1 *Patent Royalty*. GSK shall pay to Dynavax incremental royalties on Annual Net Sales of GSK Products, on a country-by-country and GSK Product-by-GSK Product basis, in those countries of the Territory in which **[*]** of such GSK Product is covered by a Valid Claim of a Patent within the Exclusively Licensed IP as of the First Commercial Sale of such GSK Product, or the GSK Product **[*]** (the **"Patent Royalty"**) at royalty rates as set forth in the table below, except that **[*]** GSK exercised the Option with respect to the applicable Dynavax Program, the royalty rates shall be **[*]** from the rates that are otherwise applicable below. The penultimate sentence of Section 6.4.2(a) shall apply upon the issuance of a Valid Claim of a Patent within the Exclusively Licensed IP that covers **[*]** of a GSK Product, subject to the terms of this Section 6.4. The applicable royalty rates for a particular GSK Product shall depend on whether the GSK Product contains a Compound (a) **[*]**, (b) **[*]** and GSK exercised the Option **[*]**, or (c) from another Program and GSK exercised the Option after the **[*]**.

		Royalty Rate	
Annual Net Sales	**[*]**	**[*] – [*]**	**[*] – [*]**
First **[*]**	**[*]**	**[*]**	**[*]**
Portion above **[*]** and up to and including **[*]**	**[*]**	**[*]**	**[*]**
Portion above **[*]**	**[*]**	**[*]**	**[*]**

[*] = CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, IS FILED WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24B-2 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.

The royalty rates above are incremental rates that apply only for the respective increment of worldwide Annual Net Sales described in the Annual Net Sales column and, thus, once a total Annual Net Sales figure is achieved for the year, the royalties owed on any lower tier portion of Annual Net Sales are not adjusted up to the higher tier rate. The Patent Royalty as provided in this Section 6.4.1. shall be adjusted as provided in Section 6.4.2.

6.4.2 Royalty Adjustments.

(a) *Know-How Royalty.* If, on a country-by-country and GSK Product-by-GSK Product basis, there is no Valid Claim of a Patent in the Exclusively Licensed IP that covers **[*]** of the GSK Product at the time of First Commercial Sale (or such Valid Claim exists at the time of First Commercial Sale and subsequently expires) and no applicable data exclusivity exists under statute, regulation or other governmental action at the time of sale, but such **[*]** is covered by either (i) a pending claim of a patent application within the Exclusively Licensed IP or (ii) Information within the Exclusively Licensed IP that has been maintained as a trade secret as evidenced by Dynavax's, or for jointly owned Information, both Dynavax's and GSK's, written records up until the time of such Net Sales of such GSK Product, then GSK shall pay to Dynavax a know-how royalty on Net Sales of such GSK Product in such country at royalty rates equal to **[*]** of the rates set forth in the table in Section 6.4.1 above (the **"Know-How Royalty"**), subject to the remainder of this Section 6.4.2 and Section 6.4.3, and subject to a further reduction (in addition to the reductions set forth in the remainder of Section 6.4.2 and 6.4.3) of **[*]** from the Know-How Royalty rates that would otherwise be applicable if the only pending claim of a patent application within the Exclusively Licensed IP or the only Information within the Exclusively Licensed IP qualifying under this paragraph is **[*]** with respect to the applicable Dynavax Program. If such pending claim subsequently issues, then the rates set forth in the table in Section 6.4.1 and as adjusted under Section 6.4.1 above shall thereafter apply, and GSK shall pay to Dynavax an amount equal to the amounts previously paid with respect to GSK Products covered by such claim under this Section 6.4.2(a). In no event shall a Know-How Royalty be payable for Net Sales of a GSK Product in a country during any period in which a Patent Royalty is payable for such GSK Product in such country.

(b) *Royalty Reduction for Competition.* If at any such time that a Third Party product that has been approved for sale by the relevant Regulatory Authority in reliance on the MAA or NDA or their equivalent of a GSK Product (a "**Generic Product**") enters the market in a given country, and such Generic Product accounts for more than **[*]** of aggregate unit sales of GSK Products and Generic Product in the given country, as measured by IMS Health or its successor, the Patent Royalty or Know-How Royalty, as applicable as set forth in Section 6.4.1 or 6.4.2(a), respectively, shall be reduced by **[*]** in such country.

(c) *Third Party Licenses.* GSK shall be entitled to a credit against the royalty payments due to Dynavax on Net Sales of a GSK Product in a particular country of an amount equal to **[*]** of the **[*]** that are paid by GSK or its Affiliates or Sublicensees to a Third Party with respect to such GSK Product in such country for any license obtained after the exercise of the Option with respect to such GSK Product that is necessary for the commercialization of such GSK Product, as and to the extent set forth in Section 4.4.2, such credit not to exceed **[*]** of the royalty that would otherwise be due to Dynavax on Net Sales of such GSK Product, provided that GSK shall have the right to carry forward for application in future periods any uncredited amount.

(d) *Co-Development*. If Dynavax exercises its option to co-develop a GSK Product under Section 5.5, the royalty rate applicable to such GSK Product shall be increased by **[*]** above the applicable royalty rate set forth under Section 6.4.1, as adjusted pursuant to this Section 6.4.2.

6.4.3 Royalty Term. GSK's obligation to pay a Patent Royalty with respect to a GSK Product shall commence upon the First Commercial Sale of such GSK Product in a particular country in the Territory and will expire on a country-by-country and GSK Product-by-GSK Product basis upon the **[*]** of (a) the **[*]** of the GSK Product, or (b) **[*]** with respect to such GSK Product. GSK's obligation to pay a Know-How Royalty with respect to a GSK Product shall commence upon the First Commercial Sale of such GSK Product in a particular country in the Territory and will expire on a country-by-country and GSK Product-by-GSK Product basis **[*]** after First Commercial Sale in such country.

6.5 Royalty Payments by Dynavax – No Exercise of Option by GSK. With respect to any Dynavax Program that becomes a Dynavax Development Program upon GSK's failure to exercise or termination of its Option with respect thereto, or upon the JSC's or GSK's termination of such Dynavax Program, if Dynavax elects to Develop and/or commercialize Dynavax Products from such Program, Dynavax shall pay to GSK a royalty on Net Sales of such Dynavax Products at the following rates:

(a) [*] if **[*]** before such Dynavax Program became a Dynavax Development Program; and

(b) [*] if **[*]** before such Dynavax Program became a Dynavax Development Program.

Dynavax's obligation to pay royalties under this Section 6.5 with respect to a Dynavax Product shall commence upon the First Commercial Sale of such Dynavax Product in a particular country in the Territory and will expire on a country-by-country and Dynavax Product-by-Dynavax Product basis at the **[*]**.

6.6 Royalty Payments by Dynavax – Post-Option Termination by GSK. With respect to any GSK Development Program that becomes a Dynavax Development Program upon GSK's termination of its rights with respect thereto following Option exercise, if Dynavax elects to Develop and/or commercialize Dynavax Products from such Program, Dynavax shall pay to GSK a royalty on Net Sales of such Dynavax Products at the following rates:

(a) [*] if GSK terminated such GSK Development Program **[*]** from such Program anywhere in the Territory; and

(b) [*] if GSK terminated such GSK Development Program **[*]** from such Program anywhere in the Territory.

Dynavax's obligation to pay royalties under this Section 6.6 with respect to a Dynavax Product shall commence upon the First Commercial Sale of such Dynavax Product in a particular country in the Territory and will expire on a country-by-country and Dynavax Product-by-Dynavax Product basis upon the **[*]** Dynavax Product, or (ii) **[*]** after the **[*]** in such country.

6.7 Reports and Payment of Milestones. GSK shall make all milestone payments within **[*]** after receipt by GSK of an invoice from Dynavax with respect to the achievement of such milestone event after GSK has notified Dynavax of achievement of the milestone event in accordance with the terms of this Section 6.7. Upon exercise of an Option by GSK, GSK shall pay the applicable Option exercise fee within **[*]** of receipt of an invoice from Dynavax after notice from GSK of Option exercise pursuant to Section 4.1.3. Dynavax shall notify GSK in writing promptly, but in no event later than **[*]**, after each achievement of the "**[*]**" and, if GSK has not exercised the Option at the **[*]**, "**[*]**" milestones set out in Section 6.2 (it being understood that if Dynavax is conducting a **[*]** Study, the **[*]** Study shall qualify as the milestone event for **[*]**"). GSK shall notify Dynavax in writing promptly, but in no event later than **[*]**, after the achievement of (a) the earlier of (i) the **[*]** or (ii) the **[*]** or **[*]**, as applicable, for a Program for which GSK exercised the Option after a **[*]** Study, (b) all other milestones in Section 6.2 and (c) each milestone event set forth in Section 6.3. Subject to Section 4.1.5, GSK shall pay all milestone payments due (other than for Option exercise) within **[*]** after receipt of an invoice for such payment from Dynavax following the achievement of the corresponding milestone event.

6.8 Reports; Royalty Payments. Until the expiration of a Party's royalty obligations under this Article 6, such Party agrees to make written reports to the other Party within **[*]** days after the end of each Calendar Quarter covering all sales of Products in the Territory by such Party and its Affiliates and Sublicensees for which invoices were sent during such Calendar Quarter, each such written report in reasonable detail as available to such Party stating for the period in question: (a) the total Net Sales for each Product and (b) a calculation of the royalty payment due on such Net Sales pursuant to Article 6. The information contained in each report under this Section 6.8 shall be considered Confidential Information of the Party providing the report. Concurrent with the delivery of each such report, the Party delivering such report shall make the royalty payment due the other Party under Article 6 for the Calendar Quarter covered by such report. In the case of transfers or sales of any Product between the royalty-paying Party and an Affiliate or Sublicensee of such Party, a royalty shall be payable only with respect to the sale of such Product to an independent Third Party and not an Affiliate or Sublicensee of the seller.

6.9 Methods of Payments. All payments due from one Party (the "**Payor**") to the other Party (the "**Payee**") under this Agreement shall be paid in Dollars by wire transfer to a bank in the United States designated in writing by the Payee.

6.10 Accounting. Payor agrees to keep full, clear and accurate records for a maximum period of **[*]** after the relevant payment is owed pursuant to this Agreement, setting forth the sales and other disposition of Product sold or otherwise disposed of in sufficient detail to enable royalties and compensation payable to the Payee hereunder to be determined. Payor further agrees, upon not less than **[*]** Calendar Days prior written notice, to permit the books and records relating to such **[*]** to be examined by an independent accounting firm selected by Payee and reasonably acceptable to Payor for the purpose of verifying reports provided by Payor under Section 6.8. Such audit shall not be performed more frequently than **[*]** and shall be conducted under appropriate confidentiality provisions, for the sole purpose of verifying the accuracy and completeness of all financial, accounting and numerical information and calculations provided under this Agreement. Such examination is to be made at the expense of Payee, except in the event that the results of the audit reveal an underpayment of royalties, milestones, or other payments to Payee under this Agreement of **[*]** or more per annum over the period being audited, in which case reasonable audit fees for such examination shall be paid by Payor. When calculating Net Sales, the amount of such sales in foreign currencies shall be converted into Dollars using the standard methodologies employed by Payor for consolidation purposes. Payor shall provide reasonable documentation of the calculation and reconciliation of the conversion figures on a country-by-country basis as part of its report of Net Sales for the period covered under the report.

6.11 Taxes.

6.11.1 Subject to Section 6.11.2, any tax paid or required to be withheld by GSK for the benefit of Dynavax on account of any royalties or other payments payable to Dynavax under this Agreement shall be deducted from the amount of royalties or other payments otherwise due. GSK shall secure and send to Dynavax proof of any such taxes withheld and paid by GSK for the benefit of Dynavax, and shall, at Dynavax's request, provide reasonable assistance to Dynavax in recovering such taxes. Pending receipt of formal certification from the UK Inland Revenue, GSK may pay royalty income and any other payments under this Agreement to Dynavax by deducting tax at a rate specified in the double tax treaty between the UK and US. Dynavax shall provide the appropriate documentation necessary for GSK not to withhold amounts under the applicable terms of the double tax agreement between the UK and US. Dynavax agrees to indemnify and hold harmless GSK against any loss, damage, expense or liability arising in any way from a breach of the foregoing or any breach of Section 10.2.7 with respect to any claim by a UK tax authority or other similar body alleging that GSK was not entitled to deduct withholding tax on such payments at source at the treaty rate.

6.11.2 If GSK or any GSK Affiliate is or becomes liable to withhold any taxes from payments made to Dynavax under Section 6.11.1 as a result of any permitted assignment by GSK pursuant to Section 13.4, **[*]**. Dynavax shall provide GSK with such reasonable evidence as GSK may reasonably request to determine whether the taxes are creditable against taxes payable by Dynavax.

6.11.3 If Dynavax is required to withhold any taxes from payments made to GSK under Section 6.11.1, as a result of an assignment pursuant to Section 13.4, **[*]**. GSK shall provide Dynavax with such reasonable evidence as Dynavax may reasonably request to determine whether the taxes are creditable against taxes payable by GSK.

6.12 Late Payments. Any undisputed amount owed by Payor to Payee under this Agreement that is not paid within the applicable time period set forth herein shall accrue interest at the rate of **[*]** above the then-applicable prime commercial lending rate of Citibank, N.A., San Francisco, California, or, if lower, the highest rate permitted under applicable law.

ARTICLE 7

EXCLUSIVITY

7.1 Dynavax Exclusivity. Except pursuant to this Agreement, on a Program-by Program basis during the **[*]** thereafter, Dynavax and/or its Affiliates shall not, either alone or with or for any Third Party, Research, Develop or commercialize any compound in the Field that is **[*]** as a Compound any TLRs or combinations thereof that are the subject of **[*]**. For clarity, nothing in this Section 7.1 shall limit Dynavax's rights to Develop or commercialize on its own or with or for a Third Party Compounds and Dynavax Products within a Dynavax Development Program, if such Program results from termination or expiration of the Option Deadline Period, including any Option Deadline Extension Period (as may be extended), for an Option without exercise by GSK, the JSC's or GSK's decision to terminate a Dynavax Program, or the termination of a GSK Development Program.

7.2 GSK Exclusivity. Except pursuant to this Agreement, on a Program-by-Program basis during the **[*]** thereafter, GSK and/or its Affiliates shall not, either alone or with or for any Third Party, Research, Develop or commercialize any **[*]** as a Compound, any TLRs or combinations thereof that are the subject of any **[*]**.

7.3 Clarification. For clarity, if **[*]** is the subject of a Dynavax Program, then the restrictions in Sections 7.1 and 7.2 shall not apply to a Party's Research, Development, or commercialization, whether alone or together with or for the benefit of a Third Party, of a **[*]** that is the subject of such Dynavax Program, provided that **[*]**. Notwithstanding the above, GSK shall have the right to in-license rights from a Third Party, or to conduct research, development or commercialization with respect to any **[*]**, provided that the **[*]** is not itself

the subject of a **[*]** to develop **[*]**. Upon GSK's in-license or commencement of research, development or commercialization of such a **[*]**, the restrictions set forth in Section 7.1 shall not apply to **[*]**. In the event that the limitation on a TLR does not apply as set forth in the preceding sentence, Dynavax and/or its Affiliates shall nevertheless **[*]** any Research, Development or commercialization activities, either on its own or together with or for the benefit of any Third Party, (i) with respect to a **[*]**) during the **[*]**, or (ii) with respect to a **[*]** during the **[*]**, if such TLR is not then the subject of a Dynavax Program. If GSK **[*]**, Dynavax shall **[*]**. If Dynavax has not, as may be permitted above in this Section 7.3, previously entered into an agreement with a Third Party regarding a TLR released from the limitations of Section 7.1 as set forth above, GSK may request pursuant to Sections 2.5 and 3.1.4(c) at any time during the respective **[*]** periods that Dynavax initiate and conduct such activities exclusively with GSK as a Dynavax Program under this Agreement.

7.4 Dynavax Exclusivity Exceptions. Notwithstanding the foregoing in Section 7.1, Dynavax will have the right to perform the following activities:

7.4.1 Continue to research, develop, manufacture and commercialize compounds which do not qualify under the definition of Compounds hereunder in accordance with **[*]**. For the avoidance of doubt, nothing herein will impair or interfere with Dynavax's obligations under **[*]**

7.4.2 Continue to research, develop, manufacture and commercialize compounds which do not qualify under the definition of Compounds hereunder in accordance with **[*]**.

ARTICLE 8

OWNERSHIP OF INTELLECTUAL PROPERTY RIGHTS

8.1 Ownership.

8.1.1 *Dynavax Compound IP and GSK Development IP.* Dynavax shall retain all of its rights, title and interest in and to the Dynavax Compound IP, and GSK shall retain all of its rights, title and interest in and to the GSK Development IP, except to the extent that any rights or licenses are expressly granted by one Party to the other Party under this Agreement.

8.1.2 *Intellectual Property Arising During Research & Development Activities.* GSK shall be the sole owner of any Patents and Information discovered, developed, invented or created solely by or on behalf of GSK personnel under this Agreement, and GSK shall retain all of its rights, title and interest thereto, except to the extent that any rights or licenses are expressly granted thereunder by GSK to Dynavax under this Agreement. Dynavax shall be the sole owner of any Patents or Information discovered, developed, invented or created solely by or on behalf

of Dynavax personnel under this Agreement, and Dynavax shall retain all of its rights, title and interest thereto, except to the extent that any rights or licenses are expressly granted thereunder to GSK under this Agreement. Any Patents or Information that are discovered, developed, invented or created jointly by or on behalf of GSK and Dynavax under this Agreement shall be owned jointly by GSK and Dynavax, and all rights, title and interest thereto shall be jointly owned by the Parties, subject to any exclusive rights or licenses that are expressly granted to a Party under this Agreement. Except as expressly provided in this Agreement, neither Party shall have **[*]**, by reason of joint ownership thereof, and each Party hereby waives any right it may have under the laws of any jurisdiction to require any such consent or accounting.

8.2 Prosecution and Maintenance of Patents.

8.2.1 *Dynavax Compound Patents*. As between the Parties, **[*]** shall be responsible for the Prosecution and Maintenance of the Dynavax Compound Patents. Notwithstanding the foregoing, **[*]** will use Commercially Reasonable Efforts to obtain a reasonable scope of patent protection for Compounds that satisfy the Pre-Candidate Selection Criteria covered by claims of Dynavax Compound Patents, using counsel of its own choice but reasonably acceptable to **[*]** informed as to material developments with respect to the Prosecution and Maintenance of such Dynavax Compound Patents, including without limitation by providing copies of all substantive office actions or any other substantive documents that **[*]** receives from any patent office, including without limitation notice of all interferences, reissues, re-examinations, oppositions or requests for patent term extensions, and by providing **[*]** the timely opportunity to have input into all substantive aspects of such Prosecution and Maintenance. **[*]** in good faith, with respect to the Prosecution and Maintenance of any Dynavax Compound Patents. Any dispute regarding the Prosecution and Maintenance of any Dynavax Compound Patents shall be referred **[*]** for resolution.

8.2.2 *GSK Development Patents*. As between the Parties, GSK shall control the Prosecution and Maintenance of any Patents in the GSK Development IP ("**GSK Development Patents**"). Notwithstanding the foregoing, GSK shall use Commercially Reasonable Efforts to consult with Dynavax in connection with the Prosecution and Maintenance of the GSK Development Patents; provided, however, that GSK shall not be required to disclose any confidential information that is not specific to the Programs. Input shall be provided and consideration undertaken and concluded by the Parties in a timely manner so as not to jeopardize the pendency of the application under review or otherwise negatively affect or limit the rights of any Party hereto. Should the Parties fail to agree on any matter in this Section 8.2.2, GSK shall have the final say on such matter.

8.2.3 *Collaboration Patents*.

(a) [*] shall be responsible for the Prosecution and Maintenance of the Collaboration Patents solely **[*]**. Notwithstanding the foregoing, **[*]** will use Commercially Reasonable Efforts to obtain a reasonable scope of patent protection for Compounds that satisfy the Pre-Candidate Selection Criteria covered by claims of such

Collaboration Patents, using counsel of its own choice but reasonably acceptable to **[*]** informed as to material developments with respect to the Prosecution and Maintenance of such Patents, including without limitation by providing copies of all substantive office actions or any other substantive documents that **[*]** receives from any patent office, including without limitation notice of all interferences, reissues, re-examinations, oppositions or requests for patent term extensions, and by providing **[*]** the timely opportunity to have input into all substantive aspects of such Prosecution and Maintenance. **[*]**, with respect to the Prosecution and Maintenance of any such Patents. Any dispute regarding the Prosecution and Maintenance of any Collaboration Patents **[*]**.

(b) GSK shall be responsible for the Prosecution and Maintenance of the Collaboration Patents solely owned by GSK. Notwithstanding the foregoing, GSK shall use Commercially Reasonable Efforts to consult with Dynavax in connection with the Prosecution and Maintenance of such Collaboration Patents. Any dispute regarding the Prosecution and Maintenance of any Collaboration Patents owned solely by GSK shall be **[*]**.

(c) GSK shall be responsible for the Prosecution and Maintenance of the Collaboration Patents jointly owned by GSK and Dynavax. GSK shall keep Dynavax informed as to material developments with respect to the Prosecution and Maintenance of such Patents, including without limitation by providing copies of all substantive office actions or any other substantive documents that GSK receives from any patent office, including without limitation notice of all interferences, reissues, re-examinations, oppositions or requests for patent term extensions, and by providing Dynavax the timely opportunity to have input into all substantive aspects of such Prosecution and Maintenance. GSK shall consult with Dynavax and shall take into account any comments from Dynavax in good faith, with respect to the Prosecution and Maintenance of any such Patents. Any dispute regarding the Prosecution and Maintenance of such Collaboration Patents shall be **[*]**.

8.2.4 *Filing Decision or Prosecution Lapse*. If, during the Term, the Party responsible Prosecuting and Maintaining a Patent in the Dynavax Compound Patents or Collaboration Patents in any country decides not to file such Patent or intends to allow such Patent to lapse or become abandoned without having first filed a substitute, the prosecuting or maintaining Party shall, whenever practicable, notify the other Party of such decision or intention at least **[*]** Calendar Days prior to the date upon which the subject matter of such Patent shall become unpatentable or such Patent shall lapse or become abandoned, and such other Party shall thereupon have the right, but not the obligation, to assume responsibility for the Prosecution and Maintenance thereof at its own expense with counsel of its own choice.

8.2.5 *Prosecution and Maintenance Following GSK's Exercise of an Option*. Notwithstanding the foregoing, following GSK's exercise of an Option, GSK will be solely responsible for the Prosecution and Maintenance of all Patents in the Dynavax Compound IP and Collaboration Patents that contain claims covering GSK Development Compounds and GSK Products. Notwithstanding the foregoing in this Section 8.2, following GSK's termination of a GSK Development Program, Dynavax will be solely responsible for the Prosecution and Maintenance of the Dynavax Compound Patents and the Collaboration Patents owned solely by Dynavax or jointly by Dynavax and GSK.

8.3 Patent Costs.

8.3.1 *Collaboration Patents*. **[*]** shall be responsible for all Patent Costs associated with the Prosecution and Maintenance of Collaboration Patents owned solely by Dynavax. **[*]** shall be responsible for all Patent Costs associated with the Prosecution and Maintenance of Collaboration Patents owned solely by GSK or owned jointly by GSK and Dynavax.

8.3.2 *Dynavax Compound IP and GSK Development IP*. Dynavax shall be responsible for all Patent Costs incurred by Dynavax prior to and after the Effective Date with respect to any Dynavax Compound IP. GSK shall be responsible for all Patent Costs incurred by GSK prior to and after the Effective Date with respect to GSK Development IP.

8.3.3 *Patent Costs Following GSK's Exercise of an Option.* Notwithstanding the foregoing, following GSK's exercise of an Option, **[*]** will be responsible for all Patent Costs going forward that are associated with the Prosecution and Maintenance of all Patents in the Dynavax Compound IP and Collaboration Patents that contain claims covering GSK Development Compounds and GSK Products.

8.4 Defense of Claims Brought by Third Parties.

8.4.1 *Compounds.* If a Third Party asserts that a Patent or other right owned by it is infringed by the manufacture, use, sale or importation of any Compound in a Dynavax Program as to which GSK has not exercised its Option, or any Compound within a Dynavax Development Program, Dynavax shall have the primary right but not the obligation to defend against any such assertions at its cost and expense. In the event Dynavax elects to defend against any such Third Party claims, Dynavax shall have the sole right to direct the defense of any such Third Party claims and to elect to settle such claims, but only with the prior written consent of GSK for a proposed settlement, not to be unreasonably withheld. In the event that Dynavax elects not to defend against such Third Party claims within **[*]** Calendar Days of learning of same, GSK shall have the right, but not the duty, to defend against such action and thereafter shall have the right to direct the defense of any such Third Party claim(s), including the right to settle such claims, but only with the prior written consent of Dynavax for a proposed settlement, not to be unreasonably withheld. In any event, the Parties shall reasonably assist one another and cooperate in any such litigation at the other's request without expense to the requesting Party. Each Party may at its own expense and with its own counsel join any defense brought by the other Party.

8.4.2 *GSK Development Compounds*. If a Third Party asserts that a Patent or other right owned by it is infringed by the manufacture, use, sale or importation of any GSK Development Compound or GSK Product, GSK shall have the primary right but not the obligation to defend against any such assertions at its cost and expense. In the event GSK elects

to defend against any such Third Party claims, GSK shall have the sole right to direct the defense of such Third Party claims and to elect to settle such claims. In the event that GSK elects not to defend against such Third Party claims within **[*]** Calendar Days of learning of same, Dynavax shall have the right, but not the duty, to defend against such an action and thereafter shall have the sole right to direct the defense of any such Third Party claim(s), including the right to settle such claims. In any event, the Parties shall reasonably assist one another and cooperate in any such litigation at the other's request without expense to the requesting Party. Each Party may at its own expense and with its own counsel join any defense brought by the other Party.

8.5 Enforcement of Dynavax or GSK Intellectual Property Rights.

8.5.1 *Duty to Notify of Infringement*. If any Party learns of an infringement, unauthorized use, misappropriation or threatened infringement or other such activity by a Third Party with respect to any Collaboration IP, Dynavax Compound IP, or GSK Development IP ("**Competitive Infringement**"), such Party shall promptly notify the other Party and shall provide such other Party with available evidence of such Competitive Infringement.

8.5.2 *Prior to Exercise of Option.*

(a) Prior to GSK's exercise of an Option, with respect to any Collaboration IP solely owned by Dynavax or any Dynavax Compound IP that is the subject of such Competitive Infringement, Dynavax shall have the first right to bring and control any such action. Unless subject to an agreement between Dynavax and a Third Party in existence as of the Effective Date that would preclude Dynavax from granting such right to GSK, if Dynavax fails to bring any such action or proceeding within a period of **[*]** Calendar Days after first being notified of such Competitive Infringement, then GSK shall have the right, but not the obligation, to bring and control any such action by counsel of its own choice, and Dynavax shall have the right to be represented in any such action by counsel of its own choice at its own expense.

(b) Prior to GSK's exercise of an Option, except as provided in Section 8.5.2(a), the Party responsible for Prosecuting and Maintaining a Collaboration Patent shall have the primary right, but not the obligation, to institute, prosecute, and control any action or proceeding with respect thereto by counsel of its own choice, and the other Party shall have the right, at its own expense, to be represented in that action by counsel of its own choice. If the Party having the primary right fails to bring any such action or proceeding within a period of **[*]** Calendar Days after first being notified of such Competitive Infringement, then the other Party shall have the right, but not the obligation, to bring and control any such action by counsel of its own choice, and the Party not bringing the action shall have the right to be represented in any such action by counsel of its own choice at its own expense.

8.5.3 *Following Exercise of Option.* Following GSK's exercise of an Option, and before GSK's termination of Development and commercialization, with respect to the Program containing Compounds that are the subject of any Competitive Infringement, GSK shall have the primary right, but not the obligation, to institute, prosecute, and control any action or proceeding with respect thereto by counsel of its own choice, and Dynavax shall have the right,

at its own expense, to be represented in that action by counsel of its own choice. If GSK fails to bring an action or proceeding within a period of **[*]** Calendar Days after first being notified of such Competitive Infringement, Dynavax shall have the right to bring and control any such action by counsel of its own choice, and GSK shall have the right to be represented in any such action by counsel of its own choice at its own expense.

8.5.4 *After GSK's Termination of a Program.* After GSK's termination of Development and commercialization with respect to a Program containing Compounds that are the subject of any Competitive Infringement of a Collaboration Patent, Dynavax shall have the sole right, but not the obligation, to institute, prosecute, and control any action or proceeding with respect thereto by counsel of its own choice.

8.5.5 *Settlement*. Any settlement, consent judgment or other disposition of any action or proceeding under this Article 8 shall not (a) include the grant of any license, covenant or other rights to any Third Party that would limit or interfere with or reduce the scope of the subject matter included under the exclusive licenses to be granted or granted to GSK pursuant to the exercise of any of its Options to Programs under Section 4.2.1, or (b) limit or interfere with or reduce the scope of the subject matter claimed in any patent owned (solely or jointly) by the other Party.

8.5.6 *Share of Recoveries.* If one Party brings any such action or proceeding in accordance with this Section 8.5, the second Party agrees to be joined as a party plaintiff where necessary and to give the first Party reasonable assistance and authority to file and prosecute the suit. The costs and expenses of the Party bringing suit under this Section 8.5 shall be borne by such Party, and any damages or other monetary awards recovered shall be shared as follows: (i) the amount of such recovery actually received by the Party controlling such action shall first be applied to the out-of-pocket costs of such action; and then (ii) any remaining proceeds shall be allocated between the Parties such that the Party bringing suit under this Section 8.5 retains **[*]** and other Party retains **[*]** of such amount. Any such damages or other monetary awards as recovery shall be **[*]** of Net Sales for the purpose of determining royalties due under Article 6 hereunder. A settlement or consent judgment or other voluntary final disposition of a suit under this Section 8.5 may be entered into without the consent of the Party not bringing the suit; *provided that* such settlement, consent judgment or other disposition does not admit the invalidity or unenforceability of the relevant Patent in the Dynavax Compound Patents, GSK Development Patents, or Collaboration IP, and *provided further*, that any rights granted under the relevant Patent to continue the infringing activity in such settlement, consent judgment or other disposition shall be limited to those rights that the granting Party otherwise has the right to grant, and *provided further*, that any settlement, consent judgment or other disposition shall not include the grant of any license, covenant or other rights to any Third Party that would limit or interfere with or reduce the scope of the subject matter included under the exclusive licenses to be granted to GSK pursuant to the exercise of any of its Options to Programs under Section 4.2.1.

8.5.7 *35 USC 271(e)(2) Infringement.* Notwithstanding anything to the contrary in this Section 8.5, for infringement under 35 USC 271(e)(2) where GSK has exercised its

Option and where GSK is the holder of the applicable NDA, and for so long as GSK maintains or retains its exclusive license under such Option, GSK shall have the sole right to initiate legal action to enforce all Collaboration IP, GSK Development IP and Dynavax Compound IP licensed to it against infringement or misappropriation by Third Parties or defend any declaratory judgment action relating thereto at its sole expense.

8.5.8 *Regulatory Data Protection.* To the extent required by law or permitted by law, each Party will use Commercially Reasonable Efforts to promptly, accurately and completely list, with the applicable Regulatory Authorities during the Term, all applicable Patents for any Product that such Party intends to, or has begun to, commercialize and that have become the subject of a marketing application submitted to FDA, such listings to include all so called "Orange Book" listings required under the Hatch-Waxman Act and all so called "Patent Register" listings as required in Canada. Prior to such listings, the Parties will meet to evaluate and identify all applicable Patents. Notwithstanding the preceding sentence, the Party holding the NDA for the applicable Product will retain final decision-making authority as to the listing of all applicable Patents for such Product, regardless of which Party owns such Patent.

8.6 Other Agreement(s). GSK's rights under this Article 8 with respect to any Dynavax Compound Patents or Collaboration Patents shall be subject to the rights that one or more Third Parties may have, or the obligations that Dynavax may have, in each case to file, prosecute, maintain, and/or enforce such Patents under the agreement(s) listed in Schedule 8.6, but only to the extent that any of such rights or obligations with respect to any Third Party under any of the Agreements listed in Schedule 8.6 pertain solely to compounds that do not qualify under the definition of Compounds hereunder.

ARTICLE 9

CONFIDENTIALITY

9.1 Confidentiality; Exceptions. Except to the extent expressly authorized by this Agreement or otherwise agreed in writing, the Parties agree that the receiving Party (the "**Receiving Party**") shall keep confidential and shall not publish or otherwise disclose or use for any purpose other than as provided for in this Agreement any Information or other confidential and proprietary information and materials, patentable or otherwise, in any form (written, oral, photographic, electronic, magnetic, or otherwise) which is disclosed to it by the other Party (the "**Disclosing Party**") or otherwise received or accessed by a Receiving Party in the course of performing its obligations or exercising its rights under this Agreement, including but not limited to trade secrets, know-how, inventions or discoveries, proprietary information, formulae, processes, techniques and information relating to a Party's past, present and future marketing, financial, and Research and Development activities of any product or potential product or useful technology of the Disclosing Party and the pricing thereof (collectively, "**Confidential Information**"), except to the extent that it can be established by the Receiving Party that such Confidential Information:

9.1.1 was in the lawful knowledge and possession of the Receiving Party prior to the time it was disclosed to, or learned by, the Receiving Party, or was otherwise developed independently by the Receiving Party, as evidenced by written records kept in the ordinary course of business, or other documentary proof of actual use by the Receiving Party;

9.1.2 was generally available to the public or otherwise part of the public domain at the time of its disclosure to the Receiving Party;

9.1.3 became generally available to the public or otherwise part of the public domain after its disclosure and other than through any act or omission of the Receiving Party in breach of this Agreement; or

9.1.4 was disclosed to the Receiving Party, other than under an obligation of confidentiality, by a Third Party who had no obligation to the Disclosing Party not to disclose such information to others.

9.2 Authorized Disclosure. Except as expressly provided otherwise in this Agreement, a Receiving Party may use and disclose Confidential Information of the Disclosing Party as follows: (i) under appropriate confidentiality provisions similar to those in this Agreement, in connection with the performance of its obligations or exercise of rights granted or reserved in this Agreement (including, without limitation, the rights to commercialize Products and to grant licenses and sublicenses hereunder); or (ii) to the extent such disclosure is reasonably necessary in filing or prosecuting patent, copyright and trademark applications, prosecuting or defending litigation, complying with applicable governmental regulations, obtaining regulatory approval, conducting pre-clinical activities or clinical trials, marketing Products, or otherwise required by law; *provided*, *however*, that if a Receiving Party is required by law or regulation to make any such disclosure of a Disclosing Party's Confidential Information it will, except where impracticable for necessary disclosures, for example in the event of medical emergency, give reasonable advance notice to the Disclosing Party of such disclosure requirement and, except to the extent inappropriate in the case of patent applications, will use its reasonable efforts to secure confidential treatment of such Confidential Information required to be disclosed; or (iii) in communication with investors, consultants, advisors or others on a need to know basis, in each case under appropriate confidentiality provisions substantially equivalent to those of this Agreement; or (iv) to the extent mutually agreed to in writing by the Parties; provided, however, that, in each of the above situations, the Receiving Party shall remain responsible for any failure by any Person who receives the Confidential Information pursuant to this Section 9.2 to treat such Confidential Information as required under this Article 9.

9.3 Press Release; Disclosure of Agreement. On or promptly after the Effective Date, the Parties shall jointly issue a public announcement of the execution of this Agreement in the form attached hereto as Exhibit F. Neither Party shall be free to issue any press release or other public disclosure regarding the Agreement or the Parties' activities hereunder, or any

results or data arising hereunder, except (a) with the other Party's prior written consent, or (b) for any disclosure that is reasonably necessary to comply with applicable national securities exchange listing requirements or laws, rules or regulations, with the other Party's consent not to be unreasonably withheld or delayed beyond a time reasonably in advance of the required disclosure deadline necessary to comply with applicable national securities exchange listing requirements or laws, rules or regulations. The Parties agree to consult with each other reasonably and in good faith with respect to the text and timing of any such press releases prior to the issuance thereof, and a Party may not unreasonably withhold consent to such releases. Except to the extent required by law or as otherwise permitted in accordance with this Section 9.3, neither Party shall make any public announcements concerning this Agreement or the subject matter hereof without the prior written consent of the other, which shall not be unreasonably withheld. Each Party agrees to provide to the other Party a copy of any public announcement regarding this Agreement or the subject matter thereof as soon as reasonably practicable under the circumstances prior to its scheduled release. Except under extraordinary circumstances, when the following notice may not be possible but in which event the press release will still be provided to the other Party for comment before release, each Party shall provide the other with an advance copy of any such announcements at least **[*]** prior to its scheduled release. Each Party shall have the right to expeditiously review and recommend changes to any such announcement and, except as otherwise required by laws, rules or regulations, the Party whose announcement has been reviewed shall remove any Confidential Information of the reviewing Party that the reviewing Party reasonably deems to be inappropriate for disclosure. The principles to be observed by Dynavax and GSK in any such permitted public disclosures with respect to this Agreement shall be: accuracy and completeness, the requirements of confidentiality under this Article 9, and the normal business practice in the pharmaceutical and biotechnology industries for disclosures by companies comparable to Dynavax and GSK. Notwithstanding the foregoing, to the extent information regarding this Agreement has already been publicly disclosed in the same context, either Party may subsequently disclose the same information to the public without the consent of the other Party. Each Party shall be permitted to disclose the terms of this Agreement, in each case under appropriate confidentiality provisions substantially equivalent to those of this Agreement, to any actual or potential acquirers, merger partners, and professional advisors. Each Party shall give the other Party a reasonable opportunity to review all filings with the United States Securities and Exchange Commission describing the terms of this Agreement prior to submission of such filings, and shall give due consideration to any reasonable comments by the non-filing Party relating to such filing, including without limitation the provisions of this Agreement for which confidential treatment should be sought.

9.4 Termination of Prior Agreement. This Agreement supersedes the Confidentiality Agreement between Dynavax and GSK dated **[*]** (including any and all amendments thereto). All information exchanged between the Parties under that agreement shall be deemed Confidential Information hereunder and shall be subject to the terms of this Article 9.

9.5 Remedies. Each Party shall be entitled to seek, in addition to any other right or remedy it may have, at law or in equity, a temporary injunction, without the posting of any bond or other security, enjoining or restraining the other Party from any violation or threatened violation of this Article 9.

[*] = CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, IS FILED WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24B-2 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.

9.6 Publications. Neither Party or its Affiliates shall publish or publicly disclose the results of any of the Research and/or Development activities conducted by either Party under this Agreement without the prior written consent of the other Party, except as expressly permitted in this Section 9.6 or otherwise in this Agreement. The Parties recognize that it may be useful or required to publish or publicly disclose the results of Research and Development work on Programs, and each Party (and its Affiliates and Sublicensees) shall be free to publish or publicly disclose such results, subject to the prior review by the other Party for patentability and protection of its Confidential Information as described in this Section 9.6. For Dynavax, the publication right conveyed by the preceding sentence shall apply solely to Compounds prior to the exercise of an Option by GSK to the relevant Dynavax Program, if approved by GSK, such approval not to be unreasonably withheld or delayed. The Party that desires to publish results hereunder shall provide to the other Party a copy of such proposed abstract, manuscript, or presentation no less than **[*]** prior to its intended submission for publication. The reviewing Party shall respond in writing promptly and in no event later than **[*]** after receipt of the proposed material, with one or more of the following: (i) comments on the proposed material, which the publishing Party must consider in good faith, (ii) a specific statement of concern, based upon the need to seek patent protection or to block publication if the reviewing Party determines that the proposed disclosure is intellectual property that should be maintained as a trade secret to protect a Compound or any Research and/or Development activities conducted under this Agreement, or (iii) an identification of the reviewing Party's Confidential Information that is contained in the material reviewed. In the event of concern over patent protection or whether maintaining a trade secret would be a priority, the publishing Party agrees not to submit such publication or to make such presentation that contains such information until the reviewing Party is given a reasonable period of time (**[*]**) to seek patent protection for any material in such publication or presentation which it believes is patentable or to resolve any other issues or to abandon such proposed publication if the reviewing Party reasonably determines in good faith that maintaining such information as a trade secret is a commercially-reasonable priority. Any Confidential Information of such other Party shall be removed. Furthermore, with respect to any proposed abstracts, manuscripts or summaries of presentations by investigators or other Third Parties, such materials shall be subject to review under this Section 9.6 to the extent that GSK or Dynavax (as the case may be) has the right to do so. For clarity, (a) prior to the exercise of the relevant Option to a given Program by GSK, any proposed publication by Dynavax relating to a Dynavax Program or any Compounds shall be subject to review by GSK in accordance with the terms of this Section 9.6, but after the expiration of the relevant Option without exercise by GSK or after the termination of a Program which then reverts to Dynavax, Dynavax shall then be free to publish or publicly disclose any results that relate to any Compounds or Dynavax Products in such Dynavax Program or Dynavax Development Program without any review by GSK under this Section 9.6, unless such proposed disclosure or publication contains any GSK Development IP, in which case GSK shall have the right to review and approve such disclosure as stated under this Section 9.6 above, and (b) after the exercise by GSK of its Option to a Program, except as required by law or securities regulations, Dynavax shall not have the right to make any

publication relating to such Dynavax Program or any Compounds or GSK Development Compounds or GSK Products without the prior written consent of GSK, and GSK shall have the right to make any such publication relating to such Dynavax Program or any Compounds or GSK Development Compounds or GSK Products without any review by Dynavax under this Section 9.6.

9.7 Clinical Trial Register. Each of GSK and Dynavax shall have the right to publish summaries of results from any human clinical trials conducted by such Party under this Agreement on its clinical trials registry, without requiring the consent of the other Party, subject to the last sentence of this Section 9.7; provided, however, that GSK shall have no right, without the consent of Dynavax, to so publish data generated by Dynavax prior to GSK's exercise of its Option with respect to the relevant Compounds under the relevant Dynavax Program, and, after the exercise of its Option to such Dynavax Program, GSK shall have the right to so publish any previously existing and/or any subsequently arising data that is or may be generated by either Dynavax or GSK or by their respective Affiliates or Sublicensees with respect to the relevant Compound(s) without obtaining the consent of Dynavax, except with respect to any Compounds which are being pursued under a Dynavax Development Program after termination by GSK of such Compounds as GSK Development Compounds or after GSK declines to exercise its Option with respect to such Dynavax Program. In addition, after the exercise of its Option by GSK to a particular Dynavax Program, Dynavax shall not have the right to publish any of such data, without the prior consent of GSK, pertaining to the relevant Compounds or the Dynavax Program, except with respect to any Compounds which are being pursued under a Dynavax Development Program after termination by GSK of such Compounds as GSK Development Compounds. The Parties shall discuss and reasonably cooperate in order to facilitate the process to be employed in order to ensure the publication of any such summaries of human clinical trials data and results as required on the clinical trial registry of each respective Party, and shall provide the other Party via submission to the Joint Patent Subcommittee established under Section 3.1.8, at least **[*]** Calendar Days prior notice to review the clinical trials results to be published for the purposes of preparing any necessary Patent filings.

ARTICLE 10

REPRESENTATIONS AND WARRANTIES

10.1 Representations and Warranties of Both Parties. Each Party hereby represents and warrants to the other Party, as of the Effective Date, that:

10.1.1 such Party is duly organized, validly existing and in good standing under the laws of the jurisdiction of its incorporation and has full corporate power and authority to enter into this Agreement and to carry out the provisions hereof;

10.1.2 such Party has taken all necessary action on its part to authorize the execution and delivery of this Agreement and the performance of its obligations hereunder;

10.1.3 this Agreement has been duly executed and delivered on behalf of such Party, and constitutes a legal, valid, binding obligation, enforceable against it in accordance with the terms hereof;

10.1.4 the execution, delivery and performance of this Agreement by such Party does not conflict with any agreement or any provision thereof, or any instrument or understanding, oral or written, to which it is a party or by which it is bound, nor violate any law or regulation of any court, governmental body or administrative or other agency having jurisdiction over such Party;

10.1.5 no government authorization, consent, approval, license, exemption of or filing or registration with any court or governmental department, commission, board, bureau, agency or instrumentality, domestic or foreign, under any applicable laws, rules or regulations currently in effect, is or will be necessary for, or in connection with, the transaction contemplated by this Agreement or any other agreement or instrument executed in connection herewith, or for the performance by it of its obligations under this Agreement and such other agreements except as may be required to obtain HSR clearance; and

10.1.6 it has not employed (and, to the best of its knowledge without further duty of inquiry, has not used a contractor or consultant that has employed) any individual or entity debarred by the FDA (or subject to a similar sanction of EMEA), or, to the best of its knowledge without further duty of inquiry, any individual who or entity that is the subject of an FDA debarment investigation or proceeding (or similar proceeding of EMEA), in the conduct of any pre-clinical activities or clinical studies of Compounds.

10.2 Representations, Warranties and Covenants of Dynavax. Dynavax hereby represents, warrants, and covenants to GSK, as of the Effective Date, and covenants to GSK during the Term (or the applicable portion thereof) as applicable for Sections 10.2.3 and 10.2.6-10.2.9, that:

10.2.1 To its knowledge, Dynavax is the owner of, or has Control via a license to, the Dynavax Compound IP;

10.2.2 To its knowledge, Dynavax has the right to grant all rights and licenses it purports to grant to GSK with respect to the Dynavax Compound IP under this Agreement;

10.2.3 Except as set forth on Schedule 10.2 only with respect to compounds that do not qualify as Compounds as defined under this Agreement, Dynavax has not granted as of the Effective Date, and during the Term Dynavax shall not grant, any right or license, encumbrance, lien or other interest of any kind (other than general liens arising in the ordinary course of business which are not specific to any of the Dynavax Compound IP or to any Collaboration IP) to any Third Party relating to any of the Dynavax Compound IP or any of Dynavax's right, title or interest in any of the Collaboration IP that would conflict or interfere with or limit the scope of any of the rights or licenses granted or to be granted to GSK hereunder pursuant to the exercise of any Option to any Program;

10.2.4 Dynavax has not granted any liens or security interests on the Dynavax Compound IP or Collaboration IP under the Symphony Agreement or the AstraZeneca Agreement or any other collaboration or license agreement;

10.2.5 Dynavax has not withheld from GSK any material data or any material correspondence, including without limitation any correspondence to or from any Regulatory Authority, in existence as of the Effective Date with respect to the Dynavax Programs or Compounds that it is aware would have a material adverse effect upon GSK's scientific, commercial, safety and regulatory assessment of the liabilities of the collaboration between the Parties as contemplated under this Agreement;

10.2.6 To its knowledge, Dynavax has disclosed or provided access to as of the Effective Date, and thereafter until the exercise or expiration of the Option with respect to a Dynavax Program shall disclose to GSK and exchange, all data and information and all correspondence to or from any Regulatory Authority then available, regardless of whether such data, correspondence and information would have a positive or negative impact on the potential commercial, scientific or strategic value or attractiveness of the Compounds, that is in Dynavax's reasonable business judgment material to a reasonable assessment by GSK of the scientific, commercial, safety, and regulatory liabilities of the Compounds to be considered by GSK in deciding whether or not to exercise its Option with respect to such Dynavax Program;

10.2.7 Dynavax is resident for tax purposes in the US and is entitled to relief from United Kingdom income tax under the terms of the double tax agreement between the UK and US and, during the Term, Dynavax shall notify GSK immediately in writing in the event that Dynavax ceases to be entitled to such relief and in such event, the withholding rights of GSK pursuant to Section 6.11.1 shall apply.

10.2.8 During the Term until the exercise or expiration of an Option with respect to a Dynavax Program, Dynavax will not knowingly use any compound in such Dynavax Program that, to its knowledge, is encumbered by any Third Party lien (other than general liens created in the ordinary course of business which are not specific to any of the Dynavax Compound IP or to any Collaboration IP) or restriction or any Third Party right or obligation that would conflict or interfere with any of the rights or licenses granted or to be granted to GSK hereunder pursuant to the exercise of such Option or by operation of the provisions of Article 12;

10.2.9 During the Term, Dynavax shall notify GSK in writing within ten (10) Calendar Days in the event that it has **[*]**, based upon then-current or reasonable **[*]**; and

10.2.10 During the Term, Dynavax shall use its reasonable business judgment to **[*]**, to the extent necessary for GSK to make, have made, use, sell, offer for sale or import GSK Products.

10.3 Mutual Covenants. Each Party hereby covenants to the other Party that:

10.3.1 All employees of such Party or its Affiliates working under this Agreement will be under the obligation to assign all right, title and interest in and to their inventions and discoveries, whether or not patentable, to such Party as the sole owner thereof;

10.3.2 Such Party will not employ (or, to the best of its knowledge without further duty of inquiry, will not use any contractor or consultant that employs) any individual or entity debarred by the FDA (or subject to a similar sanction of EMEA) or, to the best of its knowledge without further duty of inquiry, any individual who or entity that is the subject of an FDA debarment investigation or proceeding (or similar proceeding of EMEA), in the conduct of its activities under any Program;

10.3.3 Such Party shall (a) perform its activities pursuant to this Agreement in compliance with good laboratory and clinical practices and cGMP, in each case as applicable under the laws and regulations of the country and the state and local government wherein such activities are conducted; (b) with respect to the care, handling and use in Research and Development activities hereunder of any non-human animals by or on behalf of such Party, at all times comply (and shall ensure compliance by any of its subcontractors) with all applicable federal, state and local laws, regulations and ordinances, and also with the most current best practices for comparable-sized pharmaceutical or biotechnology companies for the proper care, handling and use of animals in pharmaceutical Research and Development activities, and at all times with the "3R Principles" (reducing the number of animals used, replacing animals with non-animal methods whenever possible and refining the Research techniques used), subject to the other Party's reasonable right of inspection; (c) promptly and in good faith undertake reasonable corrective steps and measures to remedy the situation to the extent that any significant deficiencies are identified as a result of such inspection; and (d) with respect to any biological samples obtained from humans, obtain the appropriate informed consents in advance for the use of all such human biological samples, and use such samples at all times within the scope of the relevant informed consents;

10.3.4 Neither Party shall, during the Term, grant any right or license or encumbrance or lien of any kind (other than general liens created in the ordinary course of business which are not specific to any of the Dynavax Compound IP, the GSK Development IP, or to any Collaboration IP) to any Third Party relating to any of the intellectual property rights it owns or Controls which would conflict or interfere with any of the rights or licenses granted or to be granted to the other Party hereunder pursuant to the provisions of Article 4 or by operation of the provisions of Article 12; and

10.3.5 Each Party will notify the other Party in writing promptly in the event that it has actual knowledge of the material breach of any covenant under Section 10.2 or this Section 10.3 or the material breach of any representation or warranty provided by either Party under Section 10.1 or by Dynavax under Section 10.2.

10.4 Disclaimer. Except as otherwise expressly set forth in this Agreement, NEITHER PARTY MAKES ANY REPRESENTATION OR EXTENDS ANY WARRANTY

OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY THAT ANY PATENTS ARE VALID OR ENFORCEABLE OR THAT THEIR EXERCISE DOES NOT INFRINGE ANY PATENT RIGHTS OF THIRD PARTIES, AND EXPRESSLY DISCLAIMS ALL WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Without limiting the generality of the foregoing, each Party disclaims any warranties with regards to: (a) the success of any study or test commenced under this Agreement, (b) the safety or usefulness for any purpose of the technology or materials, including any Compounds, it provides or discovers under this Agreement; and/or (c) the validity, enforceability, or non-infringement of any intellectual property rights or technology it provides or licenses to the other Party under this Agreement.

ARTICLE 11

INDEMNIFICATION; INSURANCE

11.1 Indemnification by GSK. GSK shall indemnify, defend and hold harmless Dynavax and its Affiliates, and its or their respective directors, officers, employees and agents, from and against any and all liabilities, damages, losses, costs and expenses, including, but not limited to, the reasonable fees of attorneys and other professional Third Parties (collectively, "**Losses**"), arising out of or resulting from any and all Third Party suits, claims, actions, proceedings or demands ("**Claims**") based upon:

11.1.1 the negligence, recklessness or wrongful intentional acts or omissions of GSK and/or its Affiliates and its or their respective directors, officers, employees and agents, in connection with GSK's performance of its obligations or exercise of its rights under this Agreement;

11.1.2 any breach of any representation or warranty or express covenant made by GSK under Article 10 or any other provision under this Agreement;

11.1.3 the Development that is actually conducted by and/or on behalf of GSK (excluding any Development carried out by and/or on behalf of Dynavax hereunder), the handling and storage by and/or on behalf of GSK of any chemical agents or other compounds for the purpose of conducting Development by or on behalf of GSK, and the manufacture, marketing, commercialization and sale by GSK, its Affiliate or Sublicensee of any Compound or GSK Product; or

11.1.4 the alleged infringement or misappropriation of the intellectual property rights of any Third party or a claim or defense of unenforceability due to inequitable conduct brought before the United States Patent and Trademark Office or a United States District Court and any resulting antitrust claims arising therefrom, in each case, to the extent based upon or attributable to the Patents for which and to the extent GSK is responsible for the Prosecution and Maintenance under Article 8;

except, in each case above, to the extent such Claim arose out of or resulted from or is attributable to the negligence, recklessness or wrongful intentional acts or omissions of Dynavax and/or its Affiliates, or their respective directors, officers, employees or agents.

11.2 Indemnification by Dynavax. Dynavax shall indemnify, defend and hold harmless GSK and its Affiliates, and its or their respective directors, officers, employees and agents, from and against any and all Losses, arising out of or resulting from any and all Third Party Claims based upon:

11.2.1 the negligence, recklessness or wrongful intentional acts or omissions of Dynavax and/or its Affiliates and/or its or their respective directors, officers, employees and agents, in connection with Dynavax's performance of its obligations or exercise of its rights under this Agreement;

11.2.2 any breach of any representation or warranty or express covenant made by Dynavax under Article 10 or any other provision under this Agreement;

11.2.3 the Research and/or Development actually conducted by or on behalf of Dynavax (excluding any Research and Development carried out by or on behalf of GSK or its Affiliate, Sublicensee or subcontractor, provided however that the Research and Development which is to be carried out by or on behalf of Dynavax hereunder shall not be considered or interpreted to be Research and Development carried out by or on behalf of GSK), the handling and storage by and/or on behalf of Dynavax of any chemical agents or other compounds for the purpose of conducting Research and/or Development by or on behalf of Dynavax, and the manufacture, marketing, commercialization and sale by Dynavax, its Affiliate or Sublicensee of any Compound or Dynavax Product; or

11.2.4 the alleged infringement or misappropriation of the intellectual property rights of any Third Party or a claim or defense of unenforceability due to inequitable conduct brought before the United States Patent and Trademark Office or a United States District Court and any resulting antitrust claims arising therefrom, in each case, to the extent based upon or attributable to the Patents in the Exclusively Licensed IP for which and to the extent Dynavax is responsible for the Prosecution and Maintenance under Article 8;

except, in each case above, to the extent such Claim arose out of or resulted from or is attributable to the negligence, recklessness or wrongful intentional acts or omissions of GSK and/or its Affiliate, or their respective directors, officers, employees and agents.

11.3 Procedure. In the event that any person (an "**Indemnitee**") entitled to indemnification under Section 11.1 or Section 11.2 is seeking such indemnification, such Indemnitee shall (i) inform, in writing, the indemnifying Party of the claim as soon as reasonably practicable after such Indemnitee receives notice of such claim, (ii) permit the indemnifying Party to assume direction and control of the defense of the claim (including the sole right to settle it at the sole discretion of the indemnifying Party, taking into consideration in good faith any reasonable concerns or objections raised by the Indemnitee; *provided that* such settlement

does not impose any obligation on, or otherwise adversely affect, the Indemnitee or other Party), (iii) cooperate as reasonably requested (at the expense of the indemnifying Party) in the defense of the claim, and (iv) undertake all reasonable steps to mitigate any loss, damage or expense with respect to the claim(s).

11.4 Insurance.

11.4.1 *Dynavax's Insurance Obligations*. Dynavax shall maintain, at its cost, with effect from **[*]** (including, without limitation, all Products and any product based thereon) **[*]** hereunder and during the Term thereafter, adequate insurance against liability and other risks associated with its activities contemplated by this Agreement, including but not limited to its Clinical Trials and its indemnification obligations herein, in such amounts and on such terms as are customary for prudent practices in the biotechnology industry for the activities to be conducted by it under this Agreement; provided, however, that in no event shall such insurance coverage be less than **[*]** per claim and annual aggregate prior to the date of first administration of any Compound or Product to humans by GSK or any Dynavax Product to humans by Dynavax hereunder, and further provided that such coverage is increased to at least **[*]** at least **[*]** before Dynavax or its Affiliate or Sublicensee initiates the First Commercial Sale of any Dynavax Product hereunder. Dynavax shall furnish to GSK evidence of such insurance upon request.

11.4.2 *GSK's Insurance Obligations*. GSK hereby represents and warrants to Dynavax that it is self-insured against liability and other risks associated with its activities and obligations under this Agreement in such amounts and on such terms as are customary for prudent practices for large pharmaceutical companies in the pharmaceutical industry for the activities to be conducted by it under this Agreement. GSK shall furnish to Dynavax evidence of such self-insurance upon request.

11.5 LIMITATION OF LIABILITY. EXCEPT FOR A BREACH OF ARTICLE 9 OR FOR CLAIMS OF A THIRD PARTY THAT ARE SUBJECT TO INDEMNIFICATION UNDER THIS ARTICLE 11 OR AS OTHERWISE EXPRESSLY STATED IN THIS AGREEMENT, NEITHER DYNAVAX NOR GSK, NOR ANY OF THEIR AFFILIATES OR SUBLICENSEES, WILL BE LIABLE TO THE OTHER PARTY TO THIS AGREEMENT, ITS AFFILIATES OR ANY OF THEIR SUBLICENSEES FOR ANY INDIRECT, INCIDENTAL, CONSEQUENTIAL, SPECIAL, RELIANCE OR PUNITIVE DAMAGES OR LOST OR IMPUTED PROFITS OR ROYALTIES, LOST DATA OR COST OF PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES, WHETHER LIABILITY IS ASSERTED IN CONTRACT, TORT (INCLUDING NEGLIGENCE AND STRICT PRODUCT LIABILITY), INDEMNITY OR CONTRIBUTION, AND IRRESPECTIVE OF WHETHER THAT PARTY OR ANY REPRESENTATIVE OF THAT PARTY HAS BEEN ADVISED OF, OR OTHERWISE MIGHT HAVE ANTICIPATED THE POSSIBILITY OF, ANY SUCH LOSS OR DAMAGE.

ARTICLE 12

TERM AND TERMINATION

12.1 Term; Expiration. This Agreement shall become effective as of the Effective Date and, unless earlier terminated pursuant to the other provisions of this Article 12, shall expire as follows:

12.1.1 On a Product-by-Product and country-by-country basis, on the date of the expiration of all payment obligations under this Agreement with respect to such Product in such country;

12.1.2 In its entirety upon the expiration of all payment obligations under this Agreement with respect to the last Product in all countries in the Territory; and

12.1.3 On a Program-by-Program basis when no Compound or Product is being Researched, Developed or commercialized by either Party hereunder with Commercially Reasonable Efforts pursuant to a given Dynavax Program or GSK Development Program or Dynavax Development Program, **[*]**.

The period from the Effective Date until the date of expiration of this Agreement in its entirety, or as the case may be, until the date of the expiration of this Agreement in part with respect to a given Product or Program, may be referred to herein as the "**Term.**"

12.2 Termination for Cause.

12.2.1 *Termination for Material Breach*. Either Party (the "**Non-breaching Party**") may, without prejudice to any other remedies available to it at law or in equity, terminate this Agreement, either on a Program-by-Program basis or in its entirety, as may be appropriate to protect the interest of the Non-breaching Party arising from such alleged breach, in the event the other Party (the "**Breaching Party**") shall have materially breached or defaulted in the performance of any of its material obligations hereunder either with respect to a particular Program or the Agreement as a whole, and such default shall have continued for **[*]** after written notice thereof was provided to the Breaching Party by the Non-breaching Party, such notice describing with particularity and in detail the alleged material breach. Subject to Section 12.2.2, any such termination of the Agreement under this Section 12.2 shall become effective at the end of such **[*]** period, unless the Breaching Party has cured any such breach or default prior to the expiration of such **[*]** period, or if such breach is not susceptible to cure within such **[*]** period even with the use of Commercially Reasonable Efforts, the Non-Breaching Party's right to termination shall be suspended only if and for so long as the Breaching Party has provided to the Non-Breaching Party a written plan that is reasonably calculated to effect a cure, such plan is acceptable to the Non-Breaching Party (or to the arbitrators, in the event of arbitration pursuant to Section 13.1), and the Breaching Party commits to and does carry out such plan. The right of either Party to terminate this Agreement, or a portion of this Agreement, as provided in this Section 12.2 shall not be affected in any way by such Party's waiver or failure to take action with respect to any previous default.

12.2.2 *Disagreement.* If the Parties reasonably and in good faith disagree as to whether there has been a material breach, the Party that seeks to dispute that there has been a material breach may contest the allegation in accordance with Section 13.1. The cure period for any allegation made in good faith as to a material breach under this Agreement will run from the date that written notice was first provided to the Breaching Party by the Non-breaching Party, but shall be suspended pursuant to Section 13.2.

12.3 GSK Unilateral Termination Rights. GSK shall have the right, at its sole discretion and without any penalty or liability, exercisable at any time during the Term, to terminate this Agreement either in its entirety or on a Program-by-Program basis, for any reason or for no reason at all, upon (a) **[*]** prior written notice to Dynavax if such notice is given **[*]**, or (b) **[*]** prior written notice to Dynavax if such notice is given **[*]**, in each case subject to the obligations set forth in Section 12.5.2.

12.4 Termination for Insolvency.

12.4.1 Either Party may terminate this Agreement if, at any time, the other Party shall file in any court or agency pursuant to any statute or regulation of any state or country, a petition in bankruptcy or insolvency or for reorganization or for an arrangement or for the appointment of a receiver or trustee of the Party or of substantially all of its assets, or if the other Party proposes a written agreement of composition or extension of substantially all of its debts, or if the other Party shall be served with an involuntary petition against it, filed in any insolvency proceeding, and such petition shall not be dismissed **[*]** Calendar Days after the filing thereof, or if the other Party shall propose or be a party to any dissolution or liquidation, or if the other Party shall make an assignment of substantially all of its assets for the benefit of creditors.

12.4.2 All rights and licenses granted under or pursuant to any section of this Agreement are and shall otherwise be deemed to be for purposes of Section 365(n) of Title 11, United States Code (the "*Bankruptcy Code*") licenses of rights to "intellectual property" as defined in Section 101(56) of the Bankruptcy Code. The Parties shall retain and may fully exercise all of their respective rights and elections under the Bankruptcy Code. Upon the bankruptcy of any Party, the non-bankrupt Party shall further be entitled to a complete duplicate of, or complete access to, any such intellectual property, and such, if not already in its possession, shall be promptly delivered to the non-bankrupt Party, unless the bankrupt Party elects to continue, and continues, to perform all of its obligations under this Agreement.

12.5 Effect of Termination or Expiration.

12.5.1 Upon Expiration. Following the expiration of the Term pursuant to Section 12.1, the following terms shall apply:

(a) Subject to the terms and conditions of this Agreement, following expiration of the Term with respect to a GSK Product in a country pursuant to Section 12.1.1, GSK shall have an exclusive, fully-paid and royalty-free right and license, with the right to grant sublicenses, under the Exclusively Licensed IP, to continue to make, have made, use, sell, offer to sell and import such GSK Product in the Field in such country, for so long as it continues to do so.

(b) Subject to the terms and conditions of this Agreement, following expiration of the Term with respect to a Dynavax Product in a country pursuant to Section 12.1.1, Dynavax shall have an exclusive, fully-paid and royalty-free right and license, with the right to grant sublicenses, under the GSK Development IP and GSK's interest in the Collaboration IP, solely to continue to make, have made, use, sell, offer to sell and import such Dynavax Product in the Field in such country, for so long as it continues to do so.

(c) Subject to the terms and conditions of this Agreement, following expiration of the Term with respect to this Agreement in its entirety pursuant to Section 12.1.2, GSK shall have an exclusive, fully-paid and royalty-free right and license, with the right to grant sublicenses, under the Exclusively Licensed IP, to continue to make, have made, use, sell, offer to sell and import GSK Products in the Field in the Territory, for so long as it continues to do so.

(d) Subject to the terms and conditions of this Agreement, following expiration of the Term with respect to this Agreement in its entirety pursuant to Section 12.1.2, Dynavax shall have an exclusive, fully-paid and royalty-free right and license, with the right to grant sublicenses, under the GSK Development IP and GSK's interest in the Collaboration IP, solely to continue to make, have made, use, sell, offer to sell and import Dynavax Products in the Field in the Territory, for so long as it continues to do so.

12.5.2 *Upon Unilateral Termination by GSK.* In the event of a unilateral termination of this Agreement in its entirety or any Program by GSK pursuant to Section 12.3, the following terms shall apply:

(a) Notwithstanding anything contained herein to the contrary, all licenses granted to GSK with respect to Compounds and GSK Products in the terminated Program (or, in the case of termination of the entire Agreement, all Compounds and GSK Products) shall terminate, each such GSK Product shall be deemed to be a Dynavax Product, and the terms and conditions of Sections 5.3, 6.5 and 6.6 shall apply with respect to such Dynavax Products;

(b) as of the date of notice of such termination, GSK shall not be required to use Commercially Reasonable Efforts to progress any GSK Products in the terminated Program(s) under this Agreement, and as of the effective date of such termination, GSK will cease any and all Development and commercialization activities with respect to Compounds included in a terminated Program (or in the case of termination of the entire Agreement, all Programs); provided, however, that nothing in this Section 12.5.2 is intended to limit GSK's obligations under Section 12.5.5;

(c) All unexercised Options with respect to the terminated Program(s) as of the date that Dynavax receives such notice from GSK shall be cancelled and of no force and effect;

(d) With respect to any Compound in a terminated Program (or in the case of termination of the entire Agreement, all Programs), GSK shall grant, and hereby grants, to Dynavax an exclusive right and license, with the right to grant sublicenses, under GSK's (including its Affiliate's and Sublicensee's) interest in any Collaboration IP and GSK Development IP **[*]**, solely to Develop, make, have made, use, sell, offer to sell and import such Compound as a Dynavax Product in the Field in the Territory, for so long as it continues to do so, subject to the royalty obligations set forth in Sections 6.5 and 6.6; and

(e) In the event of termination of the Agreement in its entirety or on a Program-by-Program basis pursuant to Section 12.3, all of Dynavax's and GSK's respective **[*]** with respect to TLRs in the terminated Program(s) shall immediately terminate and no longer be of any force or effect.

12.5.3 Upon Termination by GSK for Cause or Dynavax's Insolvency. In the event of a termination of this Agreement in its entirety or any Program by GSK pursuant to Section 12.2.1 for a material breach by Dynavax, or the entire Agreement pursuant to Section 12.4:

(a) All Options with respect to the terminated Programs (or in the case of termination of the entire Agreement, all Options) that are unexercised as of the effective date of termination shall be cancelled and of no force and effect;

(b) For each terminated Program for which GSK has not exercised the Option, **[*]**. GSK will **[*]**, and (ii) all **[*]** shall not apply. Notwithstanding the above, in no event shall **[*]**.

(c) In the case of termination by GSK of a Program for an uncured material breach or insolvency of Dynavax that occurred after the exercise by GSK of its Option with respect to such Program or a termination by GSK of the entire Agreement, in each case pursuant to Section 12.2.1 or Section 12.4, GSK shall retain any license granted in Section 4.2.1 with respect to the Compounds in each terminated Program for which GSK has already exercised its Option, provided that GSK continues to comply with all **[*]** with respect to such GSK Products, except that **[*]**.

(d) In the event of termination of the Agreement in its entirety or on a Program-by-Program basis by GSK pursuant to Section 12.2.1, all of GSK's exclusivity obligations under Article 7 with respect to the TLRs in the terminated Program(s) shall **[*]**, but the exclusivity obligations of Dynavax under Article 7 shall continue in full force and effect as follows: (i) **[*]** Dynavax's obligations shall continue in accordance with the terms of Article 7, and (ii) **[*]** Dynavax's obligations under Article 7 shall **[*]**, and (iii) **[*]** Dynavax's obligations under Article 7 shall **[*]**.

(e) GSK shall no longer have any obligations with respect to diligence or to use Commercially Reasonable Efforts with respect to (i) any Compounds or GSK Products resulting from any Dynavax Program or GSK Development Program that was terminated by GSK pursuant to Section 12.2.1, or (ii) all Compounds and GSK Products if the entire Agreement was terminated pursuant to Section 12.2.1.

(f) Notwithstanding the foregoing, to the extent that termination by GSK of this Agreement for insolvency of Dynavax does not, as a result of the outcome of bankruptcy or insolvency proceedings, result in GSK having the right to exercise its rights pursuant to the foregoing Section 12.5.3(b) or (c), then GSK shall also have the remedy set forth in Section **[*]** shall have occurred.

12.5.4 *Upon Termination by Dynavax for Cause or GSK's Insolvency*. In the event that Dynavax terminates a Program or this Agreement pursuant to Section 12.2.1 or the entire Agreement pursuant to Section 12.4:

(a) All Options with respect to the terminated Programs (or in the case of termination of the entire Agreement, all Options) that are unexercised as of the effective date of termination shall be cancelled and of no force and effect. For clarity, GSK shall not be permitted to exercise any Option after receiving notice of Dynavax's termination under Section 12.2.1 without Dynavax's prior written consent, unless and until Dynavax agrees, or it is determined pursuant to the process set forth under Section 13.1 or Section 13.2, that GSK has cured the applicable breach in a timely manner or GSK has not been in material breach or GSK has been in breach but the matter has been resolved in favor of allowing GSK to exercise its Option;

(b) With respect to any Compound in a terminated Program (or in the case of termination of the entire Agreement, any Program), at Dynavax's option, GSK will grant, and hereby grants, to Dynavax an exclusive right and license, with the right to grant sublicenses, under GSK's (including its Affiliate's and Sublicensee's) interest in any Collaboration IP and any GSK Development IP **[*]**, solely to Develop, make, have made, use, sell, offer to sell and import such Compounds as Dynavax Products in the Field in the Territory, for so long as it continues to do so, subject to the royalty obligations as set forth in Sections 6.5 and 6.6; and

(c) In the event of termination by Dynavax of the Agreement in its entirety or on a Program-by-Program basis, the respective **[*]** of Dynavax and GSK under Article **[*]** shall continue in full force and effect for **[*]**.

12.5.5 *Obligations of GSK with Respect to Compounds in Dynavax Products.* Upon termination of a Program or this Agreement by Dynavax pursuant to Section **[*]** or the termination of the entire Agreement by Dynavax pursuant to Section **[*]**, or termination of a Program or this Agreement by GSK pursuant to Section **[*]**:

(a) GSK shall complete any ongoing trials of GSK Products with regard to **[*]**; provided, however, that if Dynavax terminates this Agreement pursuant to

Section **[*]**, Dynavax may instead elect to have GSK (i) transition oversight of such ongoing trials to Dynavax as soon as reasonably practicable and (ii) **[*]** associated with Dynavax completing such trials with regard to **[*]**. Notwithstanding the foregoing, GSK may prematurely suspend or terminate any such trial if (A) a priori protocol defined stopping rules are met for safety or efficacy or (B) unacceptable safety signals are observed by GSK or the Data and Safety Monitoring Board with respect to the Product or related Compound that present an unacceptable risk to patients participating in such trials;

(b) GSK shall promptly return to Dynavax, **[*]**, all Information and materials transferred by Dynavax to GSK with respect to each such Compound and shall transfer stocks of Product **[*]** to Dynavax;

(c) GSK shall transfer to Dynavax, at Dynavax's request, any and all data and Information pertaining directly and solely to the applicable Compounds that are necessary for the continued Development and commercialization of such Compounds in its possession and other related materials, including without limitation copies of all clinical study data and results, and all other Information and the like developed by or for the benefit of GSK relating to such Compounds and other documents to the extent directly and solely relating to such Compounds that are necessary in the continued Development and commercialization of such Compounds as Dynavax Products (including without limitation material documents and agreements relating to the sourcing, manufacture, promotion, distribution, sale or use of a Product) throughout the Territory; and

(d) GSK shall wherever practical assign (and where not practical shall permit use of the same) to Dynavax any and all regulatory filings relating to such Compounds, including, without limitation, any NDAs.

12.6 Accrued Rights; Surviving Provisions of the Agreement.

12.6.1 Termination, relinquishment or expiration of this Agreement for any reason shall be without prejudice to any rights that shall have accrued to the benefit of any Party prior to such termination, relinquishment or expiration including the payment obligations under Article 6 hereof and any and all damages or remedies arising from any breach hereunder. Such termination, relinquishment or expiration shall not relieve any Party from obligations which are expressly indicated to survive termination of this Agreement.

12.6.2 The provisions of Articles 9, 11 and 13 and Sections 2.10, 4.2 (in accordance with Section 12.5, as applicable), 5.3 (in accordance with Section 12.5, as applicable), 6.10, 8.1, 10.4, 12.5 and 12.6 as well as any applicable definitions in Article 1, shall survive the termination or expiration of this Agreement for any reason, in accordance with their respective terms and conditions, and for the duration stated, and where no duration is stated, shall survive indefinitely. Article 9 shall survive for a period of **[*]**.

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ARTICLE 13

MISCELLANEOUS

13.1 Dispute Resolution. Unless otherwise expressly provided in Section 3.1.4 as not being subject to further review under Section 13.1, in the event of a dispute arising under this Agreement between the Parties, either Party shall have the right to refer such dispute to the respective Executive Officers, and such Executive Officers shall attempt in good faith to resolve such dispute. If the Parties are unable to resolve a given dispute pursuant to this Section 13.1 within **[*]** days of referring such dispute to the Executive Officers, either Party may have the given dispute settled by binding arbitration pursuant to Section 13.2.

13.2 Arbitration Request. If a Party intends to begin an arbitration to resolve a dispute arising under this Agreement, such Party shall provide written notice (the "**Arbitration Request**") to the other Party of such intention and the issues for resolution. From the date of the Arbitration Request and until such time as the dispute has become finally settled, the running of the time periods as to which Party must cure a breach of this Agreement becomes suspended as to any breach that is the subject matter of the dispute.

13.2.1 *Additional Issues*. Within **[*]** Business Days after the receipt of the Arbitration Request, the other Party may, by written notice, add additional issues for resolution.

13.2.2 *No Arbitration of Patent Issues*. Any dispute, controversy or claim relating to the scope, validity, enforceability or infringement of any Patents covering the manufacture, use, importation, offer for sale or sale of Products shall be submitted to a court of competent jurisdiction in the country in which such patent rights were granted or arose.

13.2.3 *Arbitration Procedure*. Any arbitration pursuant to this Article 13 will be held in the continental United States at a location to be agreed by the Parties and under the rules of the American Arbitration Association ("**AAA**"). The arbitration will be governed by the United States Arbitration Act, 9 U.S.C. §§ 1-16, to the exclusion of any inconsistent state laws. The Parties shall mutually agree the rules to govern discovery and the rules of evidence for the arbitration. In the event the parties fail to agree promptly to such rules, The United States Federal Rules of Civil Procedure will govern discovery and the rules of evidence for the arbitration. The arbitration will be conducted by three (3) arbitrators who are knowledgeable in the subject matter at issue in the dispute. The Parties will attempt to select three (3) arbitrators that are each acceptable to both Parties. In the event the Parties fail to agree promptly on three mutually-acceptable arbitrators, one (1) arbitrator will be selected by Dynavax, one (1) arbitrator will be selected by GSK, and the third arbitrator will be selected by mutual agreement of the two (2) arbitrators selected by the Parties. The arbitrators may proceed to an award, notwithstanding the failure of either Party to participate in the proceedings. The arbitrators shall, within fifteen (15) days after the conclusion of the arbitration hearing, issue a written award and statement of decision describing the essential findings and conclusions on which the award is based, including the calculation of any damages awarded. The arbitrators shall be limited in the scope of their

authority to resolving only the specific matter which the Parties have referred to arbitration for resolution and shall not have authority to render any decision or award on any other issues. The arbitrators shall be authorized to award compensatory damages, but shall not be authorized to award punitive, special, consequential, or any other similar form of damages, or to reform, modify or materially change this Agreement. The arbitrators also shall be authorized to grant any temporary, preliminary or permanent equitable remedy or relief the arbitrators deem just and equitable and within the scope of this Agreement, including, without limitation, an injunction or order for specific performance. The award of the arbitrators shall be the sole and exclusive remedy of the Parties, except for those remedies that are set forth in this Agreement or which apply to a Party by operation of the applicable provisions of this Agreement, and the Parties hereby expressly agree to waive the right to appeal from the decisions of the arbitrators, and there shall be no appeal to any court or other authority (government or private) from the decision of the arbitrators. Judgment on the award rendered by the arbitrators may be enforced in any court having competent jurisdiction thereof, subject only to revocation on grounds of fraud or clear bias on the part of the arbitrators. Notwithstanding anything contained in this Section 13.2 to the contrary, each Party shall have the right to institute judicial proceedings against the other Party or anyone acting by, through or under such other Party, in order to seek to enforce the instituting Party's rights hereunder through specific performance, injunction or similar equitable relief.

13.2.4 *Costs*. Each Party shall bear its own attorneys' fees, costs, and disbursements arising out of the arbitration, and shall pay an equal share of the fees and costs of the arbitrators; provided, however, that the arbitrators shall be authorized to determine whether a Party is the prevailing Party, and if so, to award to that prevailing Party reimbursement for its reasonable attorneys' fees, costs and disbursements (including, for example, expert witness fees and expenses, photocopy charges and travel expenses).

13.2.5 *Preliminary Injunctions*. Notwithstanding anything in this Agreement to the contrary, a Party may seek a temporary restraining order or a preliminary injunction from any court of competent jurisdiction in order to prevent immediate and irreparable injury, loss, or damage on a provisions basis, pending the decision of the arbitrators on the ultimate merits of any dispute.

13.2.6 *Confidentiality*. All proceedings and decisions of the arbitrators shall be deemed Confidential Information of each of the Parties, and shall be subject to Article 9.

13.3 Governing Law. This Agreement and any dispute arising from the performance or breach hereof shall be governed by and construed and enforced in accordance with the laws of the State of Delaware without reference to conflicts of laws principles.

13.4 Assignment. Either Party may assign this Agreement to any Affiliate of such Party without the consent of the other Party; provided, that such Party provides the other Party with written notice of such assignment and remains fully liable for the performance of such Party's obligations hereunder by such Affiliate. Further, each Party may assign this Agreement

without the consent of the other Party to its successor in interest by way of merger, acquisition, or sale of all or substantially all of its assets to which this Agreement relates; provided, that such Party provides the other Party with written notice of such assignment; provided further, that if such assignment involves a transaction in which Dynavax: (a) merges or consolidates with any other entity (other than a wholly-owned subsidiary of Dynavax); or (b) effects any other transaction or series of transactions, such that the stockholders of Dynavax immediately prior thereto, in the aggregate, no longer own, directly or indirectly, beneficially or legally, at least fifty percent (50%) of the outstanding voting securities or capital stock of the surviving entity following the closing of such merger, consolidation, other transaction or series of transactions (a "**Change of Control Event**"), then Dynavax will notify GSK prior to the closing of such Change of Control Event, and **[*]**. The terms and conditions of this Agreement shall be binding upon and shall inure to the benefit of the successors, heirs, administrators and permitted assigns of the Parties. Any purported assignment in violation of this Section 13.4 shall be null and void.

13.5 Performance Warranty. Each Party hereby acknowledges and agrees that it shall be responsible for the full and timely performance as and when due under, and observance of all the covenants, terms, conditions and agreements set forth in this, Agreement by its Affiliate(s) and Sublicensees.

13.6 Force Majeure. No Party shall be held liable or responsible to the other Party nor be deemed to be in default under, or in breach of any provision of, this Agreement for failure or delay in fulfilling or performing any obligation (other than a payment obligation) of this Agreement when such failure or delay is due to *force majeure*, and without the fault or negligence of the Party so failing or delaying. For purposes of this Agreement, *force majeure* is defined as causes beyond the control of the Party, including, without limitation, acts of God; acts, regulations, or laws of any government; war; civil commotion; destruction of production facilities or materials by fire, flood, earthquake, explosion or storm; labor disturbances; epidemic; and failure of public utilities or common carriers. In such event Dynavax or GSK, as the case may be, shall immediately notify the other Party of such inability and of the period for which such inability is expected to continue. The Party giving such notice shall thereupon be excused from such of its obligations under this Agreement as it is thereby disabled from performing for so long as it is so disabled for up to a maximum of ninety (90) days, after which time Dynavax and GSK shall promptly meet to discuss in good faith how to best proceed in a manner that maintains and abides by the Agreement. To the extent possible, each Party shall use reasonable efforts to minimize the duration of any *force majeure*.

13.7 Notices. Any notice or request required or permitted to be given under or in connection with this Agreement shall be deemed to have been sufficiently given if in writing and personally delivered or sent by certified mail (return receipt requested), facsimile transmission (receipt verified), or overnight express courier service (signature required), prepaid, to the Party for which such notice is intended, at the address set forth for such Party below:

If to Dynavax, addressed to:
Dynavax Technologies Corporation
2929 Seventh Street, Suite 100
Berkeley, CA 94710
Attention: Chief Executive Officer
Telephone: (510) 665-4601
Facsimile: (510) 848-1376

with a copy to:
Cooley Godward Kronish LLP
Five Palo Alto Square
3000 El Camino Real
Palo Alto, CA 94306
Attention: Glen Y. Sato, Esq.
Telephone: (650) 843-5502
Facsimile: (650) 849-7400

If to GSK, addressed to:
Attention: Business Development
GlaxoSmithKline
Greenford Road
Greenford
Middlesex
UB6 0HE, United Kingdom
[*]

with a copy to:
Attention: Vice President and Associate General Counsel,
R&D Legal Operations
GlaxoSmithKline
2301 Renaissance Boulevard
Mail Code RN0220
King of Prussia, PA 19406
[*]

or to such other address for such Party as it shall have specified by like notice to the other Parties, provided that notices of a change of address shall be effective only upon receipt thereof. If delivered personally or by facsimile transmission, the date of delivery shall be deemed to be the date on which such notice or request was given. If sent by overnight express courier service, the date of delivery shall be deemed to be the next business day after such notice or request was deposited with such service. If sent by certified mail, the date of delivery shall be deemed to be the third (3rd) Business Day after such notice or request was deposited with the U.S. Postal Service.

13.8 Export Clause. Each Party acknowledges that the laws and regulations of the United States restrict the export and re-export of commodities and technical data of United States origin. Each Party agrees that it will not export or re-export restricted commodities or the technical data of the other party in any form without the appropriate United States and foreign government licenses.

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13.9 Waiver. Neither Party may waive or release any of its rights or interests in this Agreement except in writing. The failure of either Party to assert a right hereunder or to insist upon compliance with any term or condition of this Agreement shall not constitute a waiver of that right or excuse a similar subsequent failure to perform any such term or condition. No waiver by either Party of any condition or term in any one or more instances shall be construed as a continuing waiver of such condition or term or of another condition or term.

13.10 Severability. If any provision hereof should be held invalid, illegal or unenforceable in any jurisdiction, the Parties shall negotiate in good faith a valid, legal and enforceable substitute provision that most nearly reflects the original intent of the Parties and all other provisions hereof shall remain in full force and effect in such jurisdiction and shall be liberally construed in order to carry out the intentions of the Parties hereto as nearly as may be possible. Such invalidity, illegality or unenforceability shall not affect the validity, legality or enforceability of such provision in any other jurisdiction.

13.11 Entire Agreement. This Agreement, together with the Schedules and Exhibits hereto, set forth all the covenants, promises, agreements, warranties, representations, conditions and understandings between the Parties hereto and supersede and terminate all prior agreements and understanding between the Parties. There are no covenants, promises, agreements, warranties, representations, conditions or understandings, either oral or written, between the Parties other than as set forth herein and therein. No subsequent alteration, amendment, change or addition to this Agreement shall be binding upon the Parties hereto unless reduced to writing and signed by the respective authorized officers of the Parties.

13.12 Independent Contractors. Nothing herein shall be construed to create any relationship of employer and employee, agent and principal, partnership or joint venture between the Parties. Each Party is an independent contractor. Neither Party shall assume, either directly or indirectly, any liability of or for the other Party. Neither Party shall have the authority to bind or obligate the other Party and neither Party shall represent that it has such authority.

13.13 Headings; Interpretation. Headings used herein are for convenience only and shall not in any way affect the construction of or be taken into consideration in interpreting this Agreement. Further, in this Agreement: (a) the word “including” shall be deemed to be followed by the phrase “without limitation” or like expression; (b) the singular shall include the plural and vice versa; and (c) masculine, feminine and neuter pronouns and expressions shall be interchangeable.

13.14 Books and Records. Any books and records to be maintained under this Agreement by a Party or its Affiliates or Sublicensees shall be maintained in accordance with U.S. generally accepted accounting principles in the case of Dynavax, and shall be maintained in accordance with International Financial Reporting Standards (IFRS) in the case of GSK, consistently applied, except that the same need not be audited.

13.15 Further Actions. Each Party shall execute, acknowledge and deliver such further instruments, and do all such other acts, as may be necessary or appropriate in order to carry out the expressly stated purposes and the clear intent of this Agreement.

13.16 Parties in Interest. All of the terms and provisions of this Agreement shall be binding upon, and shall inure to the benefit of and be enforceable by the Parties hereto and their respective successors, heirs, administrators and permitted assigns.

13.17 Construction of Agreement. The terms and provisions of this Agreement represent the results of negotiations between the Parties and their representatives, each of which has been represented by counsel of its own choosing, and neither of which has acted under duress or compulsion, whether legal, economic or otherwise. Accordingly, the terms and provisions of this Agreement shall be interpreted and construed in accordance with their usual and customary meanings, and each of the Parties hereto hereby waives the application in connection with the interpretation and construction of this Agreement of any rule of law to the effect that ambiguous or conflicting terms or provisions contained in this Agreement shall be interpreted or construed against the Party whose attorney prepared the executed draft or any earlier draft of this Agreement.

13.18 Supremacy. In the event of any express conflict or inconsistency between this Agreement and a Development Plan or any Schedule or Exhibit hereto, the terms of this Agreement shall control. The Parties understand and agree that the Schedules and Exhibits hereto are not intended to be the final and complete embodiment of any terms or provisions of this Agreement, and are to be updated from time to time during the Term, as appropriate and in accordance with the provisions of this Agreement.

13.19 Counterparts. This Agreement may be signed in counterparts, each and every one of which shall be deemed an original, notwithstanding variations in format or file designation which may result from the electronic transmission, storage and printing of copies of this Agreement from separate computers or printers. Facsimile signatures and signatures transmitted via PDF shall be treated as original signatures.

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[*] = CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, IS FILED WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24B-2 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.

IN WITNESS WHEREOF, and intending to be legally bound hereby, the Parties have caused this Agreement to be executed by their duly authorized representatives as of the Effective Date.

Dynavax Technologies Corporation

By:	/s/ Dino Dina
Name:	Dino Dina, M.D.
Title:	President and CEO

Glaxo Group Limited

By:	/s/ Paul Williamson
Name:	Paul Williamson
Title:	For and on behalf of Edinburgh Pharmaceutical Industries Limited Corporate Director

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EXHIBIT A

[*]

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EXHIBIT B

- **[*]**

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EXHIBIT C

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EXHIBIT D

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EXHIBIT E

[*] Criteria

Dose Ranging – Safety and **[*]**.

It is expected that the **[*]** would be i) in healthy volunteers undergoing immunological challenge relevant to the mechanism or ii) in patients with gain in function/activation of the relevant pathway, where a short term intervention is anticipated to be able to demonstrate efficacy on the mechanism.

Maximum anticipated duration of treatment – 2-4 weeks,

Maximum anticipated subjects – placebo, and 3 dose group

4 x 10-15 subjects = 40-60 subjects.

Depending on the mechanism and disease **[*]** could be within FTIH study (including FTIH being in patients) or could follow a separate FTIH study

Evidence for Proof of Mechanistic Effect

Quantitative measurements of multiple immunological parameters will be taken from treated subjects for example, cytokine/chemokine profiles, leukocyte CD antigens and genome-wide gene expression profiling, impact on signaling pathways and if appropriate on tissue pathology. Assays will be performed to determine extent of target binding. Criteria for positive **[*]** would be based on evidence of pharmacology, PK/PD relationship and resulting relevant mechanistic efficacy, with supportive trends in clinical markers if the study is within a patient population.

The desired goal is to achieve an early proof of pharmacological and mechanistic activity to develop PD markers, PK/PD modeling, and safety information, that will allow informed decision-making on progression of the asset and selection of smaller numbers of dose groups for the larger Phase IIb PoC trial, thus enabling that study to be up to 25% smaller]

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EXHIBIT F

Press Release

GlaxoSmithKline and Dynavax Announce Worldwide Strategic Alliance

— Developing First-in-Class Endosomal TLR Inhibitors for

Autoimmune and Inflammatory Diseases —

London, United Kingdom, Philadelphia, PA, and Berkeley, CA – December 16, 2008 – GlaxoSmithKline (LSE and NYSE: GSK) and Dynavax Technologies Corporation (NASDAQ: DVAX) today announced a worldwide strategic alliance to discover, develop and commercialize novel inhibitors of endosomal Toll-like Receptors (TLRs) for the treatment of immuno-inflammatory diseases. TLRs are key receptors of the innate immune system that can induce strong inflammatory responses.

Under the terms of the alliance, Dynavax will receive an initial payment of $10 million for which GSK will receive an exclusive option over four programs targeting autoimmune and inflammatory diseases such as lupus, psoriasis, and rheumatoid arthritis.

“Our alliance with GSK provides an opportunity to create an entirely new product franchise for Dynavax,” commented Dino Dina, M.D., President and Chief Executive Officer of Dynavax. “Our TLR inhibitors have the potential to create significant value for our newest collaborator GSK as well as for our stockholders. Alliances with major pharmaceutical companies have enabled Dynavax to establish a diverse pipeline of innovative products, while contributing valuable cash for our programs.”

Dynavax is to conduct research and early clinical development in up to four programs and is eligible to receive future potential development and commercialization milestones totaling approximately $200 million per program. GSK can exercise its exclusive option to license each program upon achievement of proof-of-concept or earlier upon certain circumstances. After exercising its option, GSK will carry out further development and commercialization of these products. Dynavax will receive tiered, up to double-digit royalties on sales and has retained an option to co-develop and co-promote one specified product.

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Dynavax has pioneered a new approach to treating autoimmune and inflammatory diseases with its first-in-class oligonucleotide-based endosomal TLR inhibitors, called immunoregulatory sequences (IRS). Dynavax's lead inhibitor drug candidate, DV1079, is a bifunctional inhibitor of TLR7 and TLR9, and is expected to enter clinical development in the fourth quarter of 2009.

"We are committed to using our expertise, in collaboration with Dynavax, to research and develop new therapeutics that can improve the lives of patients with conditions like systemic lupus erythematosus, psoriasis and rheumatoid arthritis," commented Jose Carlos Gutierrez-Ramos, Ph.D., Senior Vice President and Head of the Immuno-Inflammation Centre of Excellence for Drug Discovery at GSK. "Dynavax is a recognized pioneer in the scientific community for its innovation of endosomal TLR inhibitors which prevent immune signaling in autoimmune and inflammatory diseases."

Dynavax Conference Call

Dynavax will webcast a conference call today at 9:00 a.m. ET (6:00 a.m. PT) to discuss this alliance. The live and archived webcast can be accessed by visiting the investor relations section of the Company's Web site at http://investors.dynavax.com/events.cfm.

About TLR Inhibitors

Dynavax's endosomal TLR inhibitors are a novel class of oligonucleotides, called immunoregulatory sequences (IRS), that specifically inhibit the TLR-induced inflammatory response associated with autoimmune and inflammatory diseases. Preclinical data from animal model studies show Dynavax's TLR inhibitors block IFN-alpha and also reduce symptoms in multiple autoimmune diseases models, such as lupus, inflammatory skin disorders, and rheumatoid arthritis.

About Dynavax

Dynavax Technologies Corporation, a clinical-stage biopharmaceutical company, discovers and develops a diversified, well-funded pipeline of novel Toll-like Receptor (TLR) product candidates. Based on Dynavax's proprietary technology platform, these products specifically modify the innate immune response to infectious, respiratory, autoimmune, and inflammatory diseases. Dynavax's product programs are supported by global partnerships with leading pharmaceutical companies such as Merck & Co., Inc., GlaxoSmithKline, and AstraZeneca AB, as well as funding from Symphony Dynamo, Inc. and the National Institutes of Health. For more information visit www.dynavax.com.

Dynavax Forward-Looking Statement

This press release contains "forward-looking statements," including statements related to the potential value of payments that may be received under our collaboration with GSK, the anticipated development of our inhibitors of endosomal TLRs, the future responsibilities of the parties under the collaboration agreement and Dynavax's ability to

perform under the terms of the collaboration agreement. Actual results may differ materially from those set forth in this press release due to the risks and uncertainties inherent in our business, including difficulties or delays in discovery or development, initiation and completion of preclinical or clinical studies, the results of those studies and the impact of those results on the initiation and completion of subsequent studies and issues arising in the regulatory process; achieving our GSK collaborative agreement objectives; our ability to obtain additional financing to support our operations; and other risks detailed in the "Risk Factors" section of our Quarterly Report on Form 10-Q. We undertake no obligation to revise or update information herein to reflect events or circumstances in the future, even if new information becomes available.

About GlaxoSmithKline

GlaxoSmithKline - one of the world's leading research-based pharmaceutical and healthcare companies – is committed to improving the quality of human life by enabling people to do more, feel better and live longer. For company information, visit GlaxoSmithKline at www.gsk.com.

GlaxoSmithKline Forward-Looking Statement

Under the safe harbor provisions of the U.S. Private Securities Litigation Reform Act of 1995, GSK cautions investors that any forward-looking statements or projections made by GSK, including those made in this announcement, are subject to risks and uncertainties that may cause actual results to differ materially from those projected. Factors that may affect GSK' s operations are described under 'Risk Factors' in the 'Business Review' in the company's Annual Report on Form 20-F for 2007.

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EXHIBIT G

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SCHEDULE 7.2

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SCHEDULE 8.6

Agreements Granting Third Parties Rights to Prosecute and Maintain Dynavax Compound Patents

Research Collaboration and License Agreement, dated as of September 1, 2006, by and between AstraZeneca AB and Dynavax, as amended from time to time.

Novated and Restated Technology License Agreement, dated as of April 18, 2006, by and among Dynavax, Symphony Dynamo, Inc. and Symphony Holdings LLC, as amended from time to time

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SCHEDULE 10.2

Rights Granted to Third Parties Under Dynavax Compound IP

Research Collaboration and License Agreement, dated as of September 1, 2006, by and between AstraZeneca AB and Dynavax, as amended from time to time.

Novated and Restated Technology License Agreement, dated as of April 18, 2006, by and among Dynavax, Symphony Dynamo, Inc. and Symphony Holdings LLC, as amended from time to time

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List of Subsidiaries

Rhein Biotech GmbH

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the following Registration Statements:

(1) Registration Statements (Form S-3 Nos. 333-137608, 333-145836 and 333-149117) of Dynavax Technologies Corporation and in the related Prospectuses,

(2) Registration Statements (Form S-3/A Nos. 333-139664, 333-134688 and 333-147455) of Dynavax Technologies Corporation and in the related Prospectuses, and

(3) Registration Statements (Form S-8 Nos. 333-113220, 333-136345, 333-145094 and 333-152819) pertaining to the 1997 Equity Incentive Plan, the 2004 Stock Incentive Plan and the 2004 Employee Stock Purchase Plan of Dynavax Technologies Corporation; of our reports dated March 4, 2009, with respect to the consolidated financial statements of Dynavax Technologies Corporation and the effectiveness of internal control over financial reporting of Dynavax Technologies Corporation, included in this Annual Report (Form 10-K) for the year ended December 31, 2008.

/s/ Ernst & Young LLP

San Francisco, California
March 4, 2009

Rule 13a-14(a) Certification of Chief Executive Officer

CERTIFICATIONS

I, Dino Dina, M.D., certify that:

1. I have reviewed this annual report on Form 10-K of Dynavax Technologies Corporation (the "registrant");
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
   a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;
   b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this annual report based on such evaluation; and
   d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably like to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):
   a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
   b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

By: /S/ DINO DINA, M.D.

Dino Dina, M.D.
President and Chief Executive Officer
(Principal Executive Officer)

Date: March 6, 2009

Rule 13a-14(a) Certification of Chief Financial Officer

CERTIFICATIONS

I, Deborah A. Smeltzer, certify that:

1. I have reviewed this annual report on Form 10-K of Dynavax Technologies Corporation (the "registrant");
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
   a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;
   b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this annual report based on such evaluation; and
   d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably like to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):
   a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
   b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

By: /S/ DEBORAH A. SMELTZER

Deborah A. Smeltzer
Vice President, Operations and Chief Financial Officer
(Principal Financial Officer)

Date: March 6, 2009

Certification Pursuant to Section 1350 of Chapter 63
of Title 18 of the United States Code

I, Dino Dina, M.D., hereby certify, pursuant to 18 U.S.C § 1350, as adopted pursuant to Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") and to § 906 of the Sarbanes-Oxley Act of 2002, in my capacity as an officer of Dynavax Technologies Corporation (the "Company"), that, to the best of my knowledge:

(i) The Annual Report of the Company on Form 10-K for the period ended December 31, 2008 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), fully complies with the requirements of section 13(a) or 15(d) of the Securities and Exchange Act of 1934; and

(ii) The information contained in the Report fairly represents, in all material respects, the financial condition and results of operations of the Company.

By: /S/ DINO DINA, M.D.

Dino Dina, M.D.
President and Chief Executive Officer
(Principal Executive Officer)

Date: March 6, 2009

This certification accompanies the Form 10-K to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of Dynavax Technologies Corporation under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of the Form 10-K), irrespective of any general incorporation language contained in such filing.

Certification Pursuant to Section 1350 of Chapter 63
of Title 18 of the United States Code

I, Deborah A. Smeltzer, hereby certify, pursuant to 18 U.S.C § 1350, as adopted pursuant to Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") and to § 906 of the Sarbanes-Oxley Act of 2002, in my capacity as an officer of Dynavax Technologies Corporation (the "Company"), that, to the best of my knowledge:

(iii) The Annual Report of the Company on Form 10-K for the period ended December 31, 2008 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), fully complies with the requirements of section 13(a) or 15(d) of the Securities and Exchange Act of 1934; and

(iv) The information contained in the Report fairly represents, in all material respects, the financial condition and results of operations of the Company.

By: /S/ DEBORAH A. SMELTZER

Deborah A. Smeltzer
Vice President, Operations and Chief Financial Officer
(Principal Financial Officer)

Date: March 6, 2009

This certification accompanies the Form 10-K to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of Dynavax Technologies Corporation under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of the Form 10-K), irrespective of any general incorporation language contained in such filing.