COLLABORATION AND LICENSE AGREEMENT

between

REGULUS THERAPEUTICS INC.

And

ASTRAZENECA AB

THIS COLLABORATION AND LICENSE AGREEMENT (the ***"Agreement"***) is made and entered into this August 14, 2012 (the ***"Effective Date"***), by and between **ASTRAZENECA AB**, a company organized under the laws of Sweden (***"AstraZeneca"***) having a place of business at SE-431 83 Mölndal, Sweden, and **REGULUS THERAPEUTICS INC.**, a Delaware Corporation (***"Regulus"***) having a place of business at 3545 John Hopkins Court, San Diego, California 92121-1121, U.S.A. AstraZeneca and Regulus each may be referred to herein individually as a ***"Party,"*** or collectively as the ***"Parties."***

WHEREAS, Regulus possesses certain patent rights, know-how and technology with respect to therapeutic microRNA Antagonists;

WHEREAS, Regulus and AstraZeneca each desire to collaborate to conduct a Research Program to identify a Lead Compound for each Collaboration Target for AstraZeneca to advance into human clinical trials and ultimately commercialize as Products; and

WHEREAS, AstraZeneca will have exclusive rights to Collaboration Targets, Lead Compounds and Products arising from the Research Program and will be solely responsible for the clinical development and commercialization of Products worldwide, in each case on the terms set forth in this Agreement.

NOW, THEREFORE, in consideration of the foregoing and the mutual covenants herein contained, the Parties do hereby agree as follows.

ARTICLE 1

DEFINITIONS

The terms used in this Agreement with initial letters capitalized, whether used in the singular or the plural, will have the meaning set forth in **APPENDIX 1**, or if not listed in **APPENDIX 1**, the meaning designated in places throughout the Agreement.

ARTICLE 2

GRANT OF RIGHTS; EXCLUSIVITY

Section 2.1 License Grants to AstraZeneca; Retention of Rights. Subject to the terms and conditions of this Agreement, and effective upon designation of each Lead Compound, Regulus hereby grants to AstraZeneca a worldwide, royalty-bearing, exclusive (including with regard to Regulus and its Affiliates, save for the retained rights set forth below in this Article 2) license, with the right to grant sublicenses as set forth in Section 2.2 below, under the Regulus Technology and Regulus' interest in the Joint Patents, to Exploit such Lead Compounds and Products containing such Lead Compounds in the Product Field. For clarity, Regulus shall and hereby does retain all rights under the Regulus Technology and Regulus'

interest in the Joint Patents to the extent necessary to exercise its rights and perform its obligations in connection with the Research Program.

Section 2.2 Sublicenses. The licenses granted to AstraZeneca under Section 2.1 are sublicensable only in connection with a sublicense of rights to a Lead Compound or Product to any Affiliate of AstraZeneca or to any Third Party, in each case solely to Exploit Lead Compound or Product in the Product Field in accordance with the terms of this Agreement; provided, however, that AstraZeneca shall not have the right to sublicense any rights under this Agreement to any Regulus Competitor except with the prior written consent of Regulus, not to be unreasonably withheld. Any sublicense shall be in writing and, with the exception of the financial terms, on substantially the same terms as this Agreement (including with regard to the obligation to comply with the Existing Regulus Agreements), except that the sublicensee shall not have the right to further sublicense. Where AstraZeneca grants a sublicense to a Person that is not an Affiliate of AstraZeneca and such Person is not a Distributor, such Person shall be a "***Sublicensee***" for the purposes of this Agreement. In the event AstraZeneca grants a sublicense to an Affiliate of AstraZeneca, the terms of this Agreement shall be applicable to such Affiliate to the same extent as a Sublicensee, except that AstraZeneca shall not be obligated to provide notice to Regulus of the grant of a sublicense to an Affiliate of AstraZeneca, nor shall AstraZeneca be obligated to provide to Regulus a copy of a sublicense to such Affiliate in each case pursuant to the last sentence of this Section 2.2. AstraZeneca shall be responsible for the acts or omissions of its Sublicensees and Affiliates in exercising rights under the sublicenses which would constitute a breach hereunder. AstraZeneca shall provide written notice to Regulus within 30 Business Days after execution of any sublicense with a Third Party (or such reasonable shorter period as is required under an agreement to which Regulus is a party, provided that Regulus provides notice to AstraZeneca of such shorter time period) and, within 30 Business Days after receipt of a request from Regulus (or such reasonable shorter period as is required under an agreement to which Regulus is a party, provided that Regulus provides notice to AstraZeneca of such shorter time period), AstraZeneca shall provide Regulus with a full and complete copy of any sublicense requested (provided that AstraZeneca may redact any confidential information contained therein that is not necessary to disclose to ensure compliance with this Agreement).

Section 2.3 Distributorships and Promotion. For the avoidance of doubt, AstraZeneca shall have the right, in its sole discretion, to grant to its Affiliates, and AstraZeneca and its Affiliates shall have the right, in their sole discretion except as limited in this Section 2.3, to grant to any other Persons, the right to distribute, market, promote, co-promote and/or sell the Products only (with or without packaging rights); provided, that (a) such grant does not include the grant of a sublicense under any Regulus Technology or the grant of any right to Exploit Lead Compounds or Products other than to distribute, market and sell Products, and (b) the appointed Person purchases its requirements of Products from AstraZeneca or its Affiliates but does not otherwise make any royalty or other payment to AstraZeneca with respect to Regulus Technology, Joint Patents or its intellectual property rights. Where such a Person is appointed by AstraZeneca or its Affiliate as set forth in the foregoing sentence, and such Person is not an Affiliate of AstraZeneca, that Person shall be a "***Distributor***" for purposes of this Agreement. AstraZeneca shall not appoint a Regulus Competitor as a Distributor except with the prior written consent of Regulus, not to be unreasonably withheld.

Section 2.4 Exclusivity. Each Party agrees that, during the Term, it will not work independently of this Agreement, either alone or in collaboration with any Affiliate or Third Party (including the grant of any license to any Third Party), to perform any discovery, research, development and/or commercialization activities with respect to oligonucleotide therapies directly effecting any Collaboration Targets.

Section 2.5 License Conditions; Limitations. Except for the rights and licenses expressly granted in this Agreement, Regulus retains all rights under the Regulus Technology and Regulus' interest in the Joint Patents, and AstraZeneca retains all rights under the AstraZeneca Technology and AstraZeneca's interest in the Joint Patents, and no rights shall be deemed granted by one Party to the other Party by implication, estoppel or otherwise. AstraZeneca agrees not to practice any Regulus Technology or Regulus' interest in the Joint Patents except to Exploit Lead Compounds and Products in the Product Field during the Term in accordance with the terms of this Agreement. AstraZeneca acknowledges that it has received a copy of each Existing Regulus Agreement, the […***…] Agreement and the […***…] Agreements (provided that Regulus may redact any confidential information contained in the […***…] Agreement, […***…] Agreements and Existing Regulus Agreements that is not necessary to disclose to ensure compliance with this Agreement), and agrees that certain of the rights granted by Regulus to AstraZeneca under this Agreement are subject to, and AstraZeneca agrees to be bound by, the applicable terms and conditions and further limitations (including any limitations on assignment) of, the Existing Regulus Agreements, the […***…] Agreement and the […***…] Agreements. Without limiting the foregoing, the Parties acknowledge and agree that the Research Program will include research or development relating to microRNA Mimics if (a) the JSC amends the R&D Plan to include such research or development activities, and (b) the Parties agree in writing to the inclusion of such rights and to additional funding, if applicable, for development of any additional technology not in Regulus' Control and that may be required in connection with the revised R&D Plan; provided, that any grant of rights with respect to microRNA Mimics pursuant to this sentence and all related research and development activities shall be subject to any applicable terms and conditions and limitations (including any limitations on assignment) contained the Existing Regulus Agreements, the […***…] Agreement and the […***…] Agreements.

Section 2.6 Research License. Subject to the terms and conditions of this Agreement, Regulus hereby grants to AstraZeneca and its Affiliates a non-exclusive license, with no right to sublicense except to contractors as permitted under Article 3, under the Regulus Technology that is used in the Research Program, solely to conduct research activities for which AstraZeneca is responsible under the R&D Plan. Subject to the terms and conditions of this Agreement, AstraZeneca hereby grants to Regulus a non-exclusive license, with no right to sublicense except to subcontractors as permitted under Article 3, under the AstraZeneca Technology that is used in the Research Program, solely to conduct research activities for which Regulus is responsible under the R&D Plan. For clarity, the scope of the licenses granted under this Section 2.6 shall not result in AstraZeneca Background Intellectual Property being included in the licenses granted under Article 10.

ARTICLE 3

COLLABORATION

Section 3.1 Objective. The Parties will collaborate in carrying out a program to discover and preclinically develop Lead Compounds in accordance with this Article 3 (the ***"Research Program"***).

Section 3.2 R&D Plan. The Research Program will be carried out in accordance with a written research and development plan that sets forth all research and development activities of the Parties with respect to each Collaboration Target through the Development Transition Date with respect to such Collaboration Target and, prior to designation of the Oncology Target in accordance with Section 3.3, all research activities with respect to Target Pool microRNAs for the purpose of identifying the Oncology Target (the ***"R&D Plan"***). The initial R&D Plan that has been agreed to by the Parties as of the Effective Date has been separately set forth in a letter between the Parties of even date herewith. The purpose of the R&D Plan is to detail the responsibilities and activities of Regulus and AstraZeneca with respect to carrying out the Research Program. The R&D Plan will include a description of the specific activities to be performed by the Parties in support of the Research Program and projected timelines for completion of such activities, and will also include the Candidate Selection ID Criteria for each Collaboration Target. The R&D Plan may be updated and amended by the JSC in accordance with the Research Program Management Charter from time to time, including an annual review.

Section 3.3 Management of the Research Program. The Parties will establish and maintain a joint steering committee to oversee the conduct of the Research Program and, following completion of the Research Program, to serve as an information-sharing forum with respect to development, registration, Manufacture and commercialization of Lead Compounds and Products by or on behalf of AstraZeneca, its Affiliates and Sublicensees pursuant to this Agreement (the ***"JSC"***). The JSC will be established, operated and governed in accordance with the policies and procedures set forth in **APPENDIX 2** attached hereto (the ***"Research Program Management Charter"***). The Research Program Management Charter may only be amended by mutual written agreement of the Parties. As needed, the JSC will establish subcommittees and working groups that will report to the JSC to further the objectives of the Research Program and, following completion of the Research Program, to further the objectives of the information-sharing objectives of the JSC.

Section 3.4 Collaboration Targets.

3.4.1 Lead Targets. As of the Effective Date, the Parties have designated miR-33 and miR-[…***…] as Collaboration Targets (the ***"Lead Targets"***).

3.4.2 Designation of Oncology Target. AstraZeneca may designate one additional microRNA as a Collaboration Target (in addition to the Lead Targets) at any time

(a) Target Pool. As of the Effective Date, Regulus and AstraZeneca have identified in the R&D Plan three microRNAs as potential Oncology Targets (the "***Target Pool***" and each such microRNA properly included in the Target Pool, a ***"Target Pool microRNA"***). Regulus represents that as of the Effective Date they are not aware of any Target Encumbrances other than the Regulus Existing Agreements for the Target Pool as of the Effective Date. During the first 12 months of the Research Term (or such longer time period during the Research Term as may be set forth in the R&D Plan), the JSC may substitute a different microRNA for an existing Target Pool microRNA; provided, that such substitute microRNA (i) is not the subject of an exclusive license or option for an exclusive license

granted by Regulus to a Third Party or any other obligations of Regulus or its Affiliates that would prohibit Regulus from collaborating with AstraZeneca under this Agreement or from granting a license under Section 2.1 with respect to such microRNA, (ii) is not a Regulus Independent Program, and (iii) is primarily associated with the Oncology Field and (iv) Regulus will provide information on any Target Encumbrances applicable to such substitute microRNA, subject to Regulus' confidentiality obligations in its Third Party Agreements. If the JSC substitutes a new microRNA for a prior Target Pool microRNA, then such new microRNA shall be a Target Pool microRNA, and such prior Target Pool microRNA shall not be a Target Pool microRNA. For clarity, in no event shall there be more than three microRNAs in the Target Pool at any time. For the avoidance of doubt any substitutions described in Section 3.4.2(a) are independent of the rights of substitution and substitution target as described in Section 3.4.3. As of the Effective Date, the Parties agree that the Target Pool consists of the […***…], as described in the R&D Plan as of the Effective Date.

(b) Proposed Oncology Target. During the Research Term, AstraZeneca shall have the right to provide Regulus with a written notice of the Target Pool microRNA it wishes to designate as the Oncology Target (each such note, a ***"Request Notice"*** and each such microRNA, a ***"Proposed Oncology Target"***).

(c) Selection of Oncology Target. So long as the Proposed Target is a Target Pool microRNA at the time of receipt by Regulus of the Request Notice, such Proposed Oncology Target will become the Oncology Target on the date occurring 30 Business Days after the date of receipt by Regulus of the Request Notice; *provided, however*, that, if Regulus receives the Request Notice after the first anniversary of the Effective Date or the date of completion of the work under the R&D Plan for the validation phase to select the Oncology Target as set out at the Effective Date, whichever is later (or such later date as may be agreed by the Parties in writing following discussion by the JSC), Regulus shall have the right to reject such Proposed Oncology Target if, at the time of receipt of such Request Notice, such Proposed Oncology Target is (i) the subject of an exclusive license or option for an exclusive license granted by Regulus to a Third Party or any other obligations of Regulus or its Affiliates that would prohibit Regulus from collaborating with AstraZeneca under this Agreement or from granting a license under Section 2.1 with respect to such microRNA, or (ii) a Regulus Independent Program; and provided further, that if the Oncology Target is subject to a grant of any licenses or other rights to any Third Party or is subject to any other encumbrances or potential encumbrances under any agreement to which Regulus or its Affiliate is a party including, without limitation, any payment obligations (collectively, ***"Target Encumbrances"***), then Regulus shall, prior to the expiry of the aforesaid 30 Business Day period, specify to AstraZeneca in writing all such Target Encumbrances. Before such Proposed Target can become the Oncology Target, (1) AstraZeneca must agree in writing to assume all Target Encumbrances for such Proposed Oncology Target other than payment obligations, and (2) with respect to Target Encumbrances that are payment obligations (***"Payment Target Encumbrances"***), (I) if such Payment Target Encumbrances are in an Existing Regulus Agreement, Regulus shall be solely responsible for such Payment Target Encumbrances, and such Payment Target Encumbrances shall be deemed part of Regulus' payment obligations under Existing Regulus Agreements under this Agreement, and (II) if such Payment Target Encumbrances are not in an Existing Regulus Agreement, then before the Proposed Oncology Target can become an Oncology Target, the Parties must agree in writing on an equitable division of such Payment Target Encumbrances. If Regulus fails to notify AstraZeneca of any Payment Target Encumbrances with respect to a Proposed Oncology Target, such unnotified Payment Target Encumbrances will remain the responsibility of Regulus.

3.4.3 Right of Substitution.

(a) Generally. If, at any time during the Research Term, research and development activities under the R&D Plan with respect to a Collaboration Target are discontinued, whether the JSC formally determines to discontinue such activities or Effective Discontinuation occurs, whether due to either scientific or technical failure or a change of strategic direction or re-priorization of projects by AstraZeneca relevant to such activities or for any other reason (the ***"Discontinued Target"***), the JSC shall have the right, during the Research Term, subject to the limits set forth below to propose that such Discontinued Target be substituted by a new microRNA in accordance with the procedures set out below; provided, that such new microRNA (i) is not the subject of an exclusive license or option for an exclusive license granted by Regulus to a Third Party or any other obligations of Regulus or its Affiliates that would prohibit Regulus from collaborating with AstraZeneca under this Agreement or from granting a license under Section 2.1 with respect to such microRNA at the time; (ii) is not a Regulus Independent Program, and (iii) unless agreed in writing by the Parties, is primarily associated with one of the Target Fields.

(b) Proposal of Substitute Targets. If the JSC's proposal is not rejected by Regulus in writing within 30 Business Days of receipt, the proposed substitute microRNA shall become a Collaboration Target upon agreement by the Parties regarding the payments due under this Agreement in connection with Lead Compounds and Products with respect to such microRNA in accordance with subsection (c) below (such new substitute microRNA, a ***"Substitute Target"***); *provided, however*, that if the Substitute Target is subject to any Target Encumbrances, then Regulus shall, prior to the expiry of the aforesaid 30 Business Day period, specify to AstraZeneca in writing all such Target Encumbrances. Before such proposed Substitute Target can become a Substitute Target, (1) AstraZeneca must agree in writing to assume all Target Encumbrances for such proposed Substitute Target other than Payment Target Encumbrances, and (2) with respect to Payment Target Encumbrances, (I) if such Payment Target Encumbrances are in an Existing Regulus Agreement, Regulus shall be solely responsible for such Payment Target Encumbrances, and such Payment Target Encumbrances shall be deemed part of Regulus' payment obligations under Existing Regulus Agreements under this Agreement, and (II) if such Payment Target Encumbrances are not in an Existing Regulus Agreement, then before the proposed Substitute Target can become a Substitute Target, the Parties must agree in writing on an equitable division of such Payment Target Encumbrances. If Regulus fails to notify AstraZeneca of any Payment Target Encumbrances with respect to a proposed Substitute Target, such unnotified Payment Target Encumbrances will remain the responsibility of Regulus. For clarity, any Discontinued Target will no longer be considered a Collaboration Target, and Regulus' obligations under this Agreement with respect to such Discontinued Target (including but not limited to Section 2.4) will terminate, and AstraZeneca shall grant the limited licenses set forth in Article 10 with respect to such Discontinued Target.

(c) Payments for Substitute Targets. All payments due under Section 6.2 and 6.3 with respect to a Lead Compound (and associated Product) targeting or mimicking a particular Discontinued Target shall remain the same for any Lead Compound targeting or mimicking a Substitute Target substituted for such Discontinued Target, except that, if the proposed Substitute Target is primarily associated with a field other than the Target Field of the Discontinued Target, then (i) if such Substitute Target is primarily associated with the Atherosclerosis Field, the payments with respect to miR-33 Compounds and miR-33 Products set forth in Sections 6.2.1 and 6.3.1 shall apply with respect to Lead Compounds and

Products targeting or mimicking such Substitute Target, (ii) if such Substitute Target is primarily associated with the […***…] Field and/or the […***…] Field, the payments with respect to miR-[…***…] Compounds and miR-[…***…] Products set forth in Sections 6.2.2 and 6.3.2 shall apply with respect to Lead Compounds and Products targeting or mimicking such Substitute Target, (iii) if such Substitute Target is primarily associated with the Oncology Field, the payments with respect to Oncology Compounds and Oncology Products set forth in Sections 6.2.3 and 6.3.3 shall apply with respect to Lead Compounds and Products targeting or mimicking such Substitute Target, and (iv) if such Substitute Target is primarily associated with any field other than the fields described in the foregoing subsections (a), (b) and (c), the Parties shall negotiate in good-faith financial terms to apply to such Substitute Target; provided, that in no event shall such financial terms be lower than those set out in Sections 6.2 and 6.3 with respect to Oncology Compounds and Oncology Products or higher than those set out in Sections 6.2 and 6.3 with respect to miR-33 Compounds and miR-33 Products. For clarity, the Parties must agree in writing regarding designation of the applicable financial terms with respect to a proposed Substitute Target in order for it to be designated as a Substitute Target under this Agreement.

(d) Number of Substitute Targets. Notwithstanding anything to the contrary contained in this Agreement, in no event shall the JSC (or AstraZeneca) have the right to designate more than a total of three Substitute Targets under this Section 3.4.3 unless otherwise agreed in writing by the Parties, which agreement may include additional payments to be made by AstraZeneca to Regulus to fund such research and development activities relating to such additional Substitute Target, and may include an extension of the Research Term to allow further time for such addition activities if agreed in writing by the Parties. For clarity, the JSC shall have the right to apply such three rights of substitution to whichever Collaboration Target it wishes. For example, subject to the terms of this Section 3.4.3, the JSC shall have the right to substitute a single Collaboration Target three times, or shall have the right to substitute each Collaboration Target one time (for a total of three substitutes). In no event shall the JSC have the right to designate more than three Substitute Target.

3.4.4 R&D Plan. Whenever a microRNA becomes a Collaboration Target (whether through designation of the Oncology Target pursuant to Section 3.4.2 or through designation of a Substitute Target pursuant to Section 3.4.3), the JSC will promptly update the R&D Plan to reflect the new Collaboration Target and, if applicable, to remove the Discontinued Target. For clarity, in no event shall there be more than three Collaboration Targets at any given time (the Lead Targets and the Oncology Target or, if any of the foregoing become a Discontinued Target, any Substitute Target therefor).

Section 3.5 Performance of the Research Program.

3.5.1 Generally. During the Research Term, each Party will use Commercially Reasonable Efforts to perform any activities and responsibilities allocated to it under the R&D Plan including, in the case of Regulus, filing the first IND in a Major Market (or, if the JSC agrees otherwise, such other country in which the JSC agrees to file such first IND) in relation to each Lead Compound in the Product Field. Each Party will maintain laboratories, offices, administrative support and all other facilities at its own expense and risk necessary to carry out its responsibilities under the R&D Plan. Each Party agrees to make its employees reasonably available at their respective places of employment to consult with the other Party on issues arising during the performance of the Research Program. AstraZeneca and Regulus will cooperate with each other in carrying out the Research Program.

3.5.2 Exploratory IND. At any time during the Research Term, the Parties may agree to file an exploratory IND and conduct an exploratory IND study in the Product Field of any microRNA Compound being researched or developed in respect of a Collaboration Target under the Research Program (***"Exploratory IND Activities"***), subject to the terms of this Section 3.5.2. If the JSC wishes to engage in Exploratory IND Activities with respect to a microRNA Compound, the JSC shall provide notice thereof to the Parties, and the Parties shall negotiate in good faith regarding the conduct, budget and funding of such activities and the allocation of performance of such activities between the Parties; provided, that the Parties hereby agree that, in any event, AstraZeneca would be responsible for reasonable out-of-pocket costs and expenses incurred by Regulus in connection with such activities. For clarity, the foregoing obligations regarding agreement by the Parties and funding described in this Section 3.5.2 shall apply separately for each Collaboration Target with respect to which the Parties agree to pursue Exploratory IND Activities. Absent agreement by the Parties pursuant to this Section 3.5.2, in no event shall either Party be obligated or have the right to pursue Exploratory IND Activities with respect to a microRNA Compound pursuant to this Agreement. In the event the Parties agree to engage in Exploratory IND Activities pursuant to this Section 3.5.2, the JSC shall amend the R&D Plan to include the description, protocol and budget with respect to such Exploratory IND Activities agreed by the Parties, and such activities would be deemed included in the Research Program.

3.5.3 Program Management Teams. During the Research Term, each Party shall appoint an individual to act as the Project Leader for such Party (the ***"Project Leaders"***) with respect to the research and development activities for each Collaboration Target (each, a ***"Research Project"***). As soon as reasonably practicable after designation of a Collaboration Target (or, with respect to the Lead Targets, as soon as reasonably practicable after the Effective Date), each Party shall designate its Project Leader for such Research Project. The Project Leaders shall be responsible for the day-to-day management of the applicable Research Project, including communication of all information concerning the Research Project between the Parties, and shall be charged with creating and maintaining a collaborative work environment between the Parties with respect to such Research Project. Each Project Leader shall always be invited and permitted to attend meetings of the JSC as non-voting participants. If a Project Leader is not available, the relevant Party shall designate an appropriate individual to act as a substitute. Either Party may replace its Project Leader with another suitable individual on written notice to the other Party.

3.5.4 Compliance with Law. The Research Program will be conducted by each Party in good scientific manner, and in compliance with all applicable GCP, GLP and GMP, and applicable legal requirements, as well the AstraZeneca bioethics policy attached at **Appendix 6**, to attempt to achieve efficiently and expeditiously the objectives of the Research Program. Each Party will comply with all Applicable Laws, in the performance of all activities conducted pursuant to this Article 3.

3.5.5 Subcontractors. Each Party shall have the right to perform any of its obligations under this Article 3 through one or more subcontractors or consultants; provided, that such subcontracts and/or consultants must be approved in advance by the JSC.

Section 3.6 Lead Compound Designation.

3.6.1 At any time during the Research Term, Regulus may, subject to any procedures set forth in the R&D Plan, present to the JSC any microRNA Compound that it in good-faith believes meets the Candidate Selection ID Criteria for a Collaboration Target,

together with a package containing data generated in the Research Program which supports such belief (such microRNA Compound, including its back-ups, the ***"Proposed Candidate"*** and such data package, the ***"Candidate Selection ID Package"***).

3.6.2 With respect to each Collaboration Target, at any time during the Research Term, the JSC may select for pre-clinical and clinical development any microRNA Compound that targets or mimics, as applicable, such Collaboration Target and meets the Candidate Selection ID Criteria for such Collaboration Target, together with, if applicable, any microRNA Compounds that target or mimic such Collaboration Target and meet the Candidate Selection ID Criteria as back-ups (collectively, a ***"Lead Compound"***). For clarity, "Lead Compound" shall include any salt, hydrate, solvate, stereo-isomer, ester, chelate, acid, base, epimer, enantiomer, crystalline form, metabolite or prodrug or any other non-covalent derivative or crystalline form of the foregoing. The Parties agree to work in good-faith to draft the R&D Plan, including the Candidate Selection ID Criteria and timelines for research and development activities, so as to ensure designation of Lead Compounds as soon as practicable. If the JSC does not designate any Lead Compound during the Research Term, the Research Project with respect to such Collaboration Target shall be deemed complete.

3.6.3 In the event that, during the Research Term, Regulus delivers a Candidate Selection ID Package in accordance with Section 3.6.1, and the JSC determines that the Proposed Candidate does not meet the applicable Candidate Selection ID Criteria, the JSC shall agree upon a remedial plan of any further work it in good-faith believes is necessary in order for the Proposed Candidate to meet the applicable Candidate Selection ID Criteria. In the event that Regulus successfully completes the JSC-determined remedial plan, IMRB will have the right to designate a Lead Compound or IMRB will agree a remedial plan for further work it in good faith believes is necessary in order for the proposed candidate to meet the applicable Candidate Selection ID Criteria. In the event that (a) Regulus successfully completes the remedial plan agreed by the IMRB but IMRB, as applicable, determines that such Proposed Candidate does not meet the applicable Candidate Selection ID Criteria or otherwise determines not to designate such Proposed Candidate as a Lead Compound, or (b) the Research Term otherwise ends without designation of a Lead Compound by the JSC and IMRB with respect to such Collaboration Target (subject to any extension of the Research Term agreed by the Parties pursuant to Section 3.7 below), then in each case the applicable Collaboration Target shall be deemed a Discontinued Target, unless Regulus otherwise notifies AstraZeneca in writing (such discontinuation, ***"Effective Discontinuation"***).

Section 3.7 Research Term. The Research Program will be carried out during the period beginning on the Effective Date and ending on the fourth anniversary of the Effective Date (the ***"Research Term"***). Such period of time may be extended only by mutual written agreement of the Parties that may include agreement by AstraZeneca to pay additional funding to Regulus in connection with such extension. Upon the expiration of the Research Term, (a) Regulus will not be obligated to continue to perform work under the Research Program; and (b) AstraZeneca may not designate any additional (or substituted) Collaboration Targets under Section 3.4.

Section 3.8 Research Program Records. Each Party and its contractors will maintain complete and accurate records of all work conducted in the performance of the Research Program and all results, data, inventions and developments made in the performance of the Research Program. Such records will be in sufficient detail and in good scientific manner appropriate for patent and regulatory purposes. Upon reasonable prior written notice, each

Party will provide the other Party the right to inspect such records, and will provide copies of all requested records, to the extent reasonably required for the performance of such Party's rights and obligations under this Agreement. In each case, each Party will maintain such records and the information it receives from the other Party in confidence in accordance with Article 7 hereof and will not use such records or information except to the extent otherwise permitted by this Agreement.

Section 3.9 Disclosure of Results of Research Program. The results of all work performed by the Parties as part of the Research Program will be promptly disclosed to the other Party in a reasonable manner as such results are obtained. Regulus and AstraZeneca will provide reports and analyses at each JSC meeting, and more frequently on reasonable request by the JSC, detailing the current status of the Research Program. The results, reports, analyses and other information regarding the Research Program disclosed by one Party to the other Party pursuant hereto may be used only in accordance with the rights granted and other terms and conditions under this Agreement. Any reports required, excluding reports needed for submission to a Regulatory Agency, under this Section 3.9 may take the form of and be recorded in minutes of the JSC that will contain copies of any slides relating to the results and presented to the JSC. Reports needed to support regulatory submissions and updates to a Regulatory Agency will be provided in a timely manner and in a format as agreed upon by the JSC.

Section 3.10 Materials Transfer. In order to facilitate the Research Program, either Party may provide to the other Party certain materials for use by the other Party in furtherance of the Research Program. All such materials will be used by the receiving Party in accordance with the terms and conditions of this Agreement solely for purposes of performing its rights and obligations under this Agreement, and the receiving Party will not transfer such materials to any Third Party unless expressly contemplated by this Agreement or upon the written consent of the supplying Party. Except as expressly set forth herein, THE MATERIALS ARE PROVIDED "AS IS" AND WITHOUT ANY REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR ANY PARTICULAR PURPOSE OR ANY WARRANTY THAT THE USE OF THE MATERIALS WILL NOT INFRINGE OR VIOLATE ANY PATENT OR OTHER PROPRIETARY RIGHTS OF ANY THIRD PARTY.

ARTICLE 4

MANUFACTURING

Section 4.1 Supply of microRNA Compounds for Research Program. With respect to a Lead Compound for a Collaboration Target, Regulus agrees to Manufacture and supply, at its own cost, all microRNA Compounds for use in support of the Research Project with respect to such Collaboration Target. In addition, Regulus shall be accountable for securing appropriate amounts of API and quality control activities to be able to conduct the agreed GLP toxicity package and Phase 1 studies; provided, that the Parties agree that AstraZeneca shall be responsible for all reasonable costs and expenses incurred by Regulus in connection with the Manufacture of such microRNA Compounds for use in the Phase 1 studies. AstraZeneca shall reimburse all such reasonable costs and expenses within 45 Business Days following the date of an invoice of Regulus for such amounts.

Section 4.2 Clinical and Commercial Manufacturing and Supply of Lead Compound and Product.

4.2.1 Product Manufacturing Responsibility. Except as otherwise provided in Section 4.1, the Parties acknowledge and agree that AstraZeneca will be solely responsible for the Manufacturing of Lead Compounds and Products for all clinical trials and commercial supply, including management of the overall manufacturing strategy and tactics, formulation, internal or contract manufacturer selection for API and finished Product, associated audits, stability testing, pricing, relationship with contract manufacturer(s) and any work proposals or contract negotiations or contracts themselves.

4.2.2 Supply of Finished Drug Product. Except as otherwise specified in the R&D Plan, the Parties acknowledge and agree that AstraZeneca will be solely responsible for the Manufacturing, stability testing and supply of finished drug Product.

Section 4.3 Manufacturing Technology.

4.3.1 Transfer of Manufacturing Technology and Assistance. Promptly after a Lead Compound is designated with respect to a Collaboration Target, the JSC will meet to discuss implementation of the transfer of Manufacturing Technology with respect to such Lead Compound, and the Parties will negotiate and execute a "Technology Transfer Master Plan API" that will set forth the steps, planning and obligations of the Parties regarding the transfer of the Manufacturing Technology for such Lead Compound, including Regulus' obligations to disclose (and provide copies, as applicable) to either AstraZeneca or a Third Party manufacturer designated by AstraZeneca all Manufacturing Technology that is required for the manufacture (including the development of the manufacturing process) of such Lead Compound and Products containing or comprising such Lead Compound and is reasonably necessary or useful to enable AstraZeneca or such Third Party manufacturer (as appropriate) to Manufacture such Products. The Parties acknowledge and agree that all reasonable costs and expenses incurred by the Parties in performing activities under this Section 4.3.1 shall be borne solely by AstraZeneca. Without limiting the foregoing, upon request by AstraZeneca, Regulus will at all times use diligent efforts to provide AstraZeneca with any additional information or on-site support as may be reasonably required by AstraZeneca and its Affiliates in connection with the transfer of the Manufacturing Technology. AstraZeneca shall reimburse Regulus for any on-site support rendered at the FTE Rate, provided further Regulus shall in no event be obliged to provide more than […***…] FTE-days in total unless the Parties otherwise agree in writing. For purposes of this Agreement ***"Manufacturing Technology"*** shall mean, with respect to a particular Lead Compound, the Know-How Controlled by Regulus that is reasonably available and in Regulus' possession, and is reasonably necessary or useful for the Manufacture (including formulation, processing, filling and packaging) of such Lead Compound and Products containing such Lead Compound. AstraZeneca and its Third Party manufacturer may only use the Manufacturing Technology in support of Manufacturing the Lead Compound and Products containing or comprising such Lead Compound in accordance with the licenses under Section 2.1 of this Agreement and will not use the Manufacturing Technology in connection with any other compound or product. AstraZeneca will be responsible and liable to Regulus for any practice of the Manufacturing Technology by AstraZeneca's Third Party manufacturer that breaches this Section 4.3.

4.3.2 Protection of Manufacturing Technology. In addition to the provisions of Article 7, the exceptions to which contained in sections 7.1.3,7.1.4 and 7.2 of that Article shall apply to this section 4.3.2, AstraZeneca recognizes that maintaining the confidentiality and trade secret nature of the Manufacturing Technology requires an even

higher level of vigilance than other Confidential Information, and agrees to (a) maintain in confidence Manufacturing Technology with the same degree of care that AstraZeneca uses to protect its own like information, (b) strictly limit access to and use of Manufacturing Technology to employees, representatives, consultants and contractors of AstraZeneca and its designated Third Party contract manufacturers with a need to know such information, and (c) use Manufacturing Technology and trade secrets only for producing Lead Compounds and Products in accordance with the license granted in Section 2.1 and for no other purpose. AstraZeneca shall ensure that any person having access to the Manufacturing Technology will be made aware of its highly confidential nature and will agree to be bound by confidentiality terms no less stringent than those in this Agreement. The obligations under this Section 4.3.2 shall survive and continue in effect following any expiration or termination of this Agreement.

ARTICLE 5

DEVELOPMENT & COMMERCIALIZATION

Section 5.1 Development, Commercialization and Regulatory Responsibilities. Prior to First IND Approval. During the Research Term, prior to the First IND Approval with respect to a Collaboration Target, Regulus' research and development responsibilities with respect to such Collaboration Target shall be as set forth in the R&D Plan, unless the Parties agree that AstraZeneca should undertake any particular elements of the R&D Plan. Regulus is responsible for such research and development activities in the R&D Plan (including its funding) up to the Development Transition Date for each Collaboration Target, except as may otherwise be agreed by the Parties as described in this Section. The Parties agree that, during the Research Term following designation of a Lead Compound with respect to a Collaboration Target, Regulus shall be responsible for filing the initial IND (unless the JSC agrees to replace Regulus with AstraZeneca as the IND submitting Party) for such Lead Compound in a Major Market as selected by the JSC or, if the JSC agrees otherwise, such other country in which the JSC agrees to file such first IND (the ***"Initial Major Market IND Submission"***) unless JSC agrees otherwise. The Parties agree that the IND documentation will as far as possible be compatible to AstraZeneca IND documentation standards to aid the transfer of the IND to AstraZeneca. Thereafter during the Research Term, Regulus shall have sole responsibility for all Regulatory Documentation and follow-up with Regulatory Authorities in such Major Market in connection therewith, and for using Commercially Reasonable Efforts to obtain the first IND Approval in such Major Market (the ***"Initial Major Market IND Approval"***). The Initial Major Market IND Approval filed by Regulus with respect to the relevant Lead Compound with respect to a Collaboration Target shall be in Regulus' name. All Initial IND Major Market Approval INDs to be filed by Regulus in accordance with this Section 5.1 shall be discussed and approved by the JSC in accordance with **APPENDIX 2.** For clarity, notwithstanding anything to the contrary herein, Regulus will only be responsible for using Commercially Reasonable Efforts to conduct those activities and responsibilities allocated to it in the R&D Plan including, if applicable, filing the first IND for a Lead Compound in a Major Market following designation of a Lead Compound. In the event that a Lead Compound is designated during the Research Term but Regulus does not obtain Initial Major Market IND Approval of such Lead Compound, the Parties agree to discuss in good faith regarding an extension of the Research Term to permit additional time for Regulus to obtain such Initial Major Market IND Approval; provided, that the Parties agree that such agreement may include additional payments to be made by AstraZeneca to Regulus to support such activities. Regulus will make reasonable efforts to aid the smooth transfer of the IND to AstraZeneca.

Section 5.2 Development, Commercialization and Regulatory Responsibilities after the Initial Major Market IND Approval. Following the earlier to occur of (a) Initial Major Market IND Approval with respect to a Collaboration Target and (b) the end of the Research Term (the ***"Development Transition Date"*** for such Collaboration Target), AstraZeneca will have sole responsibility, including without limitation sole responsibility for all funding, resourcing and decision-making, for all development and commercialization of such Lead Compound and all Products containing or comprising such Lead Compound in the Product Field. AstraZeneca shall and hereby does assume all regulatory responsibilities in connection with Lead Compounds and Products in the Product Field after the Development Transition Date for such Collaboration Target, including all subsequent IND submissions in countries outside the country of the Initial Major Market IND Approval. To the extent that, at the time of the Development Transition Date with respect to a Collaboration Target, any INDs for such Lead Compound in the Product Field are in Regulus' name, Regulus shall promptly transfer ownership of and responsibility for such IND to AstraZeneca, at AstraZeneca's expense. AstraZeneca will comply with all Applicable Laws in connection with the Exploitation of Lead Compounds and Products. For clarity, following the Development Transition Date with respect to a Collaboration Target, AstraZeneca shall own all INDs, NDAs, MAAs and other regulatory filings and Approvals for such Lead Compound and Products, subject to Regulus' reversion rights under Article 10.

Section 5.3 Diligence. During the Research Term, Regulus (by itself or through its Affiliates, (sub)contractors or agents, as applicable) will use Commercially Reasonable Efforts following designation by the JSC of a Lead Compound with respect to a Collaboration Target to achieve Initial Major Market IND Approval for such Lead Compound in the U.S. or other Major Market selected by the JSC. Following the Development Transition Date with respect to each Lead Compound, AstraZeneca will use Commercially Reasonable Efforts to develop, register and commercialize at least one Lead Compound or Product for each Collaboration Target in the Product Field in each of (a) the U.S., (b) any two of the UK, Spain, Germany and France and (c) Japan, in each case in accordance with the terms of this Agreement.

Section 5.4 Reports by AstraZeneca. After the Development Transition Date for any Lead Compound or Product, AstraZeneca will provide an annual report to Regulus summarizing AstraZeneca's main activities over the past year with respect to the identified Lead Compound or Product and an appropriate number of representatives from each Party will meet at least once every year to review development activities. The reports provided by AstraZeneca under this Section 5.4 will contain sufficient information to allow Regulus to reasonably determine whether AstraZeneca is in compliance with its obligations to use Commercially Reasonable Efforts under Section 5.3.

Section 5.5 Product Development Plans; Integrated Product Plans. For each Product that AstraZeneca is clinically developing under this Agreement, AstraZeneca will prepare a development plan outlining key aspects of the clinical development of such Product through Approval. Each development plan will contain information customarily contained in AstraZeneca's development plans for its similar products at similar stages of development (each a ***"Product Development Plan"***). In addition, prior to the launch of a Product, AstraZeneca will prepare a global integrated Product plan outlining the key aspects of market launch and commercialization (the ***"Integrated Product Plan"*** or ***"IPP"***). AstraZeneca will prepare each IPP at the same time and containing information and target markets as customarily contained in AstraZeneca's commercialization plans for its similar products at similar stages of development. Each Product Development Plan and IPP will be updated annually by

AstraZeneca. AstraZeneca will provide to Regulus a copy of the final draft of the Product Development Plans and IPPs (original and updates) for each of the U.S., the E.U. and Japan, if available. Such copies of Product Development Plans and IPPs provided to Regulus may be redacted to the extent necessary to preserve the confidentiality of AstraZeneca confidential information related to products that are not Products. AstraZeneca and Regulus will meet on a semiannual basis to discuss the draft of each Product Development Plan and IPP and AstraZeneca will consider, in its sole discretion, any proposals and comments made by Regulus for incorporation in the final Product Development Plan or IPP (as the case may be).

Section 5.6 Class Generic Claims. To the extent AstraZeneca intends to make any claims in a Product label that are class generic to microRNA Compounds, AstraZeneca will provide such claims to Regulus in advance and will take into account any proposals and comments made by Regulus.

Section 5.7 Pharmacovigilance; Safety Database. Promptly but in any circumstances within ninety (90) days following the first Initial Major Market IND Submission, the Parties shall negotiate and execute a detailed Safety Data Exchange Agreement ("***SDEA"***) setting forth the Parties responsibilities with respect to reporting of adverse events and maintaining a global safety database with respect to Lead Compounds and Products, which SDEA shall in any event be in place prior to AstraZeneca starting any clinical development. Notwithstanding the foregoing, the Parties agree to the following principles:

5.7.1 Global Safety Database. AstraZeneca will establish the global safety database for the Lead Compounds/Products that will be used for regulatory reporting and responses to safety queries from Regulatory Authorities. For that purpose, Regulus will promptly transfer all safety information regarding the Lead Compounds or Products, including, if applicable, adverse events, and drug exposure during pregnancy data that it has regarding the Lead Compounds or Products to AstraZeneca for entry into the global safety database upon request from AstraZeneca. The timelines, format and content of such transfer shall be agreed in the SDEA.

5.7.2 Studies/Regulatory Documents. AstraZeneca will provide Regulus with all results from each of the nonclinical (e.g., toxicology, pharmacokinetics, and safety pharmacology studies) and the clinical studies of each Lead Compound and Product that are material to the development of such Lead Compound and Products as soon as practicable (or such other timeframe as agreed by the JSC prior to the end of the Research Term), following the date such information is available to AstraZeneca (except with respect to safety information, including information relating to adverse events, which AstraZeneca shall disclose immediately pursuant to the terms of the SDEA) and provided that such disclosure is permitted by the terms of any contractual agreement governing such studies, except that in no event shall AstraZeneca be permitted to withhold any safety information (including information relating to adverse events) or information relevant to the safety or efficacy of Regulus' or its Affiliates' or licensees' products. In all agreements entered into after the Effective Date, AstraZeneca and its Affiliates and Sublicensees shall use best efforts to ensure that it is able to provide to Regulus and its Affiliates and licensees access to all results of nonclinical and clinical studies of Lead Compound and Products.

5.7.3 Confidentiality. All such information disclosed by AstraZeneca to Regulus will be AstraZeneca Confidential Information; *provided, however*, that Regulus may disclose any such AstraZeneca Confidential Information to Regulatory Authorities or to Regulus' other partners pursuant to Article 7 below, and/or any Third Party, in each case as

useful or reasonably necessary in connection with Regulus' or its Affiliates or such other Third Party's development or commercialization of microRNA Compounds.

ARTICLE 6

FINANCIAL PROVISIONS

Section 6.1 Upfront Payment by AstraZeneca. AstraZeneca shall make a one-time, non-refundable, non-creditable payment to Regulus of $3,000,000 within 45 Business Days after the Effective Date. Without limiting the foregoing, Regulus intends to use such payment to fund its performance of research and development activities under the Research Program.

Section 6.2 Milestone Payments by AstraZeneca. AstraZeneca will give Regulus written notice within 10 Business Days of the first achievement of each Milestone Event set forth below, whether achieved by AstraZeneca, its Affiliate or a Sublicensee. After receiving such written notice, Regulus shall submit an invoice to AstraZeneca for the amount of such milestone payment, and AstraZeneca will pay Regulus the applicable milestone payment within 45 Business Days after receipt of an invoice (which conforms to the applicable requirements of Appendix 5 as described below) from Regulus following achievement of the applicable Milestone Event.

6.2.1 Milestone Payments for miR-33 Product:

Milestone Event	**Milestone Payment**
[…***…]	$[…***…]
[…***…]	$[…***…]
[…***…]	$[…***…]
[…***…]	$[…***…]
[…***…]	$[…***…]
[…***…]	$[…***…]
[…***…]	$[…***…]
[…***…]	$[…***…]
[…***…]	$[…***…]

In the event the IMRB designates a […***…] on or prior to […***…], regardless of which Collaboration Target it targets or mimics (a ***"Bonus Event"***), then the following additional payments shall apply:

(a) The milestone payment payable for Initiation of first Phase 2b Trial of a miR-33 Product set out above shall be increased from $[…***…] to $[…***…]; and

(b) In addition to the Milestone Events and payments set out above, the following additional Milestone Event and payment shall be due with respect to a miR-33 Product:

Milestone Event	**Milestone Payment**
[...***...]	$[…***…]

6.2.2 Milestone Payments for miR-[…***…] Product:

Milestone Event	Milestone Payment
[…***…]	$[…***…]
[…***…]	$[…***…]
[…***…]	$[…***…]
[…***…]	$[…***…]
[…***…]	$[…***…]
[…***…]	$[…***…]
[…***…]	$[…***…]
[…***…]	$[…***…]
[…***…]	$[…***…]
[…***…]	$[…***…]

In the event of a Bonus Event, the milestone payment payable for […***…] of a miR-[…***…] Product set out above shall be increased from $[…***…] to $[…***…].

6.2.3 Milestone Payments for Oncology Product:

Milestone Event	Milestone Payment
[…***…]	$[…***…]
[…***…]	$[…***…]
[…***…]	$[…***…]
[…***…]	$[…***…]
[…***…]	$[…***…]
[…***…]	$[…***…]
[…***…]	$[…***…]
[…***…]	$[…***…]
[…***…]	$[…***…]
[…***…]	$[…***…]

In the event of a Bonus Event, the milestone payment payable for […***…] of an Oncology Product set out above shall be increased from $[…***…] to $[…***…].

6.2.4 Bonus Event Payments. AstraZeneca will give Regulus written notice within 10 Business Days of the occurrence of a Bonus Event. After receiving such written notice, Regulus shall submit an invoice to AstraZeneca for the amount owed to Regulus in connection with the Bonus Event as described in this Section 6.2, and AstraZeneca will pay Regulus the amount within 45 Business Days after receipt of an invoice (which conforms to the applicable requirements of Appendix 5 as described below) from Regulus following achievement of the Bonus Event. In the event any of the additional amounts payable in the event of a Bonus Event correspond to a Milestone Event that has been achieved prior to the occurrence of the Bonus Event, then such additional amounts shall be payable upon achievement of the Bonus Event. For example, if […***…] for a miR-33 Product has occurred prior to […***…], then the $[…***…] payable in connection with such Milestone Event shall be due 45 Business Days following issuance of an invoice therefor by Regulus following achievement of the Bonus Event.

6.2.5 One payment only per Compound; Dropped Products. For clarity, references to Products set out in Section 6.2 shall be deemed to include references to miR-33 Compound, miR-[…***…] Compound and Oncology Compound, as applicable. Irrespective of the number of Products that have achieved the milestone events in this Section 6.2 above, AstraZeneca will make each of the above milestone payments only once and any milestones paid in relation to a Product will be counted as paid up even if the Product later is reprofiled and developed for use in a different disease area. If a Product is abandoned during development after one or more of the milestone payments with respect to a Collaboration Target has been made (a **"Dropped Product"**) and another Product is developed as a replacement for such Dropped Product (including any back-ups for the Dropped Product), then only those milestone payments that were not previously made with respect to such Dropped Product shall be payable with respect to the replacement Product.

6.2.6 Substituted Targets. In the event AstraZeneca substitutes a new microRNA for a Discontinued Target as set out in Section 3.4.3 above, any milestone payments already payable at the time of the substitution in relation to that Discontinued Target should be paid in accordance with the milestone levels already in place for the Product that targeted or mimicked, as applicable, the Discontinued Target. For all further milestones and royalties for a Substituted Target substituted for such Discontinued Target, the payments for such Substitute Target shall be determined as set out in Section 3.4.3(c) above and such milestones and royalties shall be payable in accordance with which Target Field the Substitute Target is primarily associated with in accordance with Section 3.4.3(c), and all milestone payments set forth above for a Collaboration Target that apply to such Substitute Target in accordance with Section 3.4.3(c) shall be payable for such Substituted Target, regardless of whether any such milestone payment has previously been paid for a Product targeting or mimicking the applicable Discontinued Target (as opposed to payments for a Product replacing a Dropped Product, as described in Section 6.2.5 above).

6.2.7 Clinical Milestone Events. If, for any reason, a Product reaches a particular milestone event specified above relating to a clinical trial for which a milestone payment is payable hereunder but without having achieved one or more preceding milestone events above relating to a clinical trial (including Lead Compound Identification), then upon the achievement of such milestone event, both the milestone payment applicable to such milestone event and the milestone payment(s) applicable to such preceding unachieved milestone event(s) shall be due and payable within 45 Business Days after the issuance of the invoice by Regulus therefor pursuant to Section 6.2 following achievement of such milestone event.

6.2.8 Sales Milestone Events. For clarity, if aggregate annual Net Sales of Products in a Calendar Year satisfies more than one milestone event set forth above, then payment shall be made for each such milestone event that is satisfied. For example, if, in the first Calendar Year that annual Net Sales of all miR-33 Products exceeds $[…***…], actual aggregate annual Net Sales of miR-33 Products in such Calendar Year is $[…***…], then AstraZeneca shall pay to Regulus the two relevant milestone payments set forth above for a total of $[…***…].

Section 6.3 Royalty Payments by AstraZeneca. AstraZeneca will pay to Regulus royalties on Net Sales of Products at the applicable rate(s) set forth below. The royalty rate payable with respect to Products will depend on whether the Product is a miR-33 Product,

a miR-[…***…] Product or an Oncology Product, and will be based on the level of annual worldwide Net Sales of such Products in a given Calendar Year by AstraZeneca, its Affiliates and Sublicensees, with the royalty rate tiered based upon the level of such worldwide Net Sales in such Calendar Year period of such Products as set forth in the tables below.

6.3.1 Royalty Payments for miR-33 Product:

Aggregate Annual Net Sales	**Royalty Rate**
For that portion of aggregate annual Net Sales of miR-33 Products that is less than or equal to $[...***...]	[…***…]%
For that portion of aggregate annual Net Sales of miR-33 Products that is greater than $[...***...] but less than or equal to $[...***...]	[…***…]%
For that portion of aggregate annual Net Sales of miR-33 Products that is greater than $[...***...] but less than or equal to $[...***...]	[…***…]%
For that portion of aggregate annual Net Sales of miR-33 Products that is greater than $[...***...]	[…***…]%

6.3.2 Royalty Payments for miR-[…***…] Product:

Aggregate Annual Net Sales	**Royalty Rate**
For that portion of aggregate annual Net Sales of miR-[...***...] Products that is less than or equal to $[...***...]	[…***…]%
For that portion of aggregate annual Net Sales of miR-[...***...] Products that is greater than $[...***...] but less than or equal to $[...***...]	[…***…]%
For that portion of aggregate annual Net Sales of miR-[...***...] Products that is greater than $[...***...] but less than or equal to $[...***...]	[…***…]%
For that portion of aggregate annual Net Sales of miR-[...***...] Products that is greater than $[...***...]	[…***…]%

6.3.3 Royalty Payments for Oncology Product:

Aggregate Annual Net Sales	**Royalty Rate**
For that portion of aggregate annual Net Sales of Oncology Products that is less than or equal to $[...***...]	[…***…]%
For that portion of aggregate annual Net Sales of Oncology Products in the Territory that is greater than $[...***...] but less than or equal to $[...***...]	[…***…]%

For that portion of aggregate annual Net Sales of Oncology Products that is greater than $[...***...]	[…***…]%

Section 6.4 Third Party Payment Obligations.

6.4.1 Existing Regulus Agreements. AstraZeneca acknowledges that certain of the Regulus Technology is in-licensed, or was otherwise acquired by Regulus, from Third Parties under the Existing Regulus Agreements, and that Regulus is obligated to pay royalties, milestones and other payments to the Licensor(s) under such Existing Regulus Agreements as a result of the development or commercialization of Products by AstraZeneca or any of its Affiliates or sublicensees to the extent that such Products are covered by the applicable Patents or Know-How licensed to Regulus under such Existing Regulus Agreement. All such royalties, milestones and other payments under such Existing Regulus Agreements shall be paid by Regulus and AstraZeneca shall under no circumstances whatsoever be liable for any such royalties, milestones or other payments.

6.4.2 Existing AstraZeneca Agreements. The Parties acknowledge and agree that, if and to the extent that there are any Existing AstraZeneca Agreements, AstraZeneca shall be responsible for paying all milestones, royalties and other payments that become due to the Licensor(s) under such Existing AstraZeneca Agreements, and none of such payments will be creditable against any payment due to Regulus hereunder.

6.4.3 Future Third Party Agreements.

(a) Third Party Blocking Patent Rights. In the event that, on a Product-by-Product and country-by-country basis, AstraZeneca is required to make payments to a Third Party in order to obtain further additional rights under Blocking Patent Rights owned or controlled by such Third Party in order to fully Exploit the Product under this Agreement, AstraZeneca shall have the right to negotiate and acquire such rights through a licence or otherwise and to deduct from the royalty payments due to Regulus under Section 6.3 of this Agreement […***…] percent ([…***…]%) of the amounts paid (including milestone payments, royalties or other licence fees) by AstraZeneca to such Third Party; provided, however, that in no event shall the reduced royalties paid to Regulus under this section 6.4.3(a) at any time be less than the payment due by Regulus to its Licensors under Existing Regulus Agreements. Any amount that AstraZeneca is entitled to deduct that is reduced by the limitations on the deduction set forth in the preceding sentence shall be carried forward and AstraZeneca may deduct such amount from subsequent amounts due to Regulus (subject to the limitations on the deduction set forth in the preceding sentence) until the full amount that AstraZeneca was entitled to deduct is deducted. Regulus agrees to fully cooperate with AstraZeneca to acquire such rights. As used herein, "***Blocking Patent Rights***" shall mean Patents of Third Parties without a license to which the Exploitation of the applicable Product in the relevant country would infringe such issued Third Party Patent, but excluding Patents of Third Parties that (i) have been described in a patent application in any territory worldwide published prior to the Effective Date, (ii) […***…] and (iii) without a license to which the Exploitation of the applicable Product in the relevant country would infringe such issued Third Party Patent.

(b) Existing Blocking Patent Rights. In the event that rights under Existing Blocking Patent Rights are required to fully Exploit the Product under this

Agreement then, notwithstanding Section 6.4.3(a), Regulus and AstraZeneca shall discuss in good faith regarding which Party shall obtain such rights from such Third Party. Unless the Parties agree in writing that AstraZeneca shall be responsible for obtaining such rights, the Parties hereby agree that Regulus shall be use commercially reasonable efforts to obtain such rights and shall keep AstraZeneca updated and consult in good faith with AstraZeneca regarding its efforts to obtain such rights and, in the case that Regulus so obtains such rights, Regulus shall be solely responsible for all payments owed to such Third Party in consideration of such rights. In the event the Parties agree in writing that AstraZeneca shall be responsible for obtaining such rights under an Existing Blocking Patent Right and agree in writing regarding an estimate of reasonable payments to be paid to such Third Party in consideration of such rights, then following such agreement by the Parties, AstraZeneca shall have the right to use commercially reasonable efforts to obtain such rights under the Existing Blocking Patent Right from such Third Party. If AstraZeneca so obtains such rights under such Existing Blocking Patent Right, Regulus agrees to reimburse AstraZeneca for amounts paid by AstraZeneca to such Third Party in consideration of such rights to the Existing Blocking Patent Right; provided, that in no event shall Regulus be obligated to reimburse greater than the reasonable payments agreed in advance by the Parties to be paid for such rights. As used herein, "***Existing Blocking Patent Rights***" shall mean Patents of Third Parties that (i) have been described in a patent application in any territory worldwide published prior to the Effective Date, (ii) […***…] and (iii) without a license to which the Exploitation of the applicable Product in the relevant country would infringe such issued Third Party Patent. The Intellectual Property Subcomittee shall discuss and reach consensus regarding whether any Patent is an Existing Blocking Patent Right; provided, that if the Intellectual Property Subcommittee is unable to unanimously agree, such matter shall be resolved by discussion by the Senior Representatives. If the Senior Representatives are unable to reach agreement within a reasonable period of time, then the Senior Representatives shall refer such matter to a mutually agreed independent Third Party intellectual property expert with relevant experience in the field (***"IP Expert"***). Following appointment of the IP Expert, each Party shall provide relevant evidence supporting such Party's position regarding whether such Patent is an Existing Blocking Patent Right, and the IP Expert shall thereafter review such evidence and make a determination as to whether such Patent is an Existing Blocking Patent Right, and such determination shall be final and binding on both Parties. In the event the IP Expert determines that such Patent is an Existing Blocking Patent, Regulus shall use commercially reasonable efforts to obtain such rights to the Existing Blocking Patent Right as described above. The Parties shall equally split the cost of any IP Expert appointed to determine the existing of an Existing Blocking Patent Right under this Section 6.4.3(b). If the IP Expert determines that such Patent is not an Existing Blocking Patent Right, AstraZeneca shall have the right to enter into an agreement to obtain such rights nonetheless, however AstraZeneca shall be solely responsible for all reasonable costs therefor, and shall not have the right to deduct or credit such costs under Section 6.4.3(a). Any agreement entered into by Regulus with respect to an Existing Blocking Patent Right shall automatically be deemed an Existing Regulus Agreement for purposes of this Agreement.

Section 6.5 Compulsory License. In the event that, during the Royalty Term for a particular Product in a particular country, (a) a court or governmental agency of competent jurisdiction requires AstraZeneca or its Affiliate to grant a license under Regulus Technology to a Third Party who is not an Affiliate, Sublicensee or Distributor and is not otherwise authorized by AstraZeneca to sell or Manufacture or otherwise Exploit a Lead Compound or Product, to Manufacture and /or sell and/or distribute such Product in the Product Field in such

country (a ***"Compulsory License"***); (b) following the grant of such Compulsory License, the Third Party to whom such Compulsory License was granted sells such Product in such country; and (c) in any full Calendar Year following the first commercial sale by such Third Party of a Product in such country, the Net Sales of such Product in that country are less than […***…] percent ([…***…]%) of the Net Sales of such Product in such country in the immediately preceding Calendar Year, then, for the purposes of calculating royalties due for such Product under Section 6.3 for the remainder of the Royalty Term, […***…] percent ([…***…]%) of the Net Sales in such country shall be disregarded; provided, however, that in no event shall the reduced royalties paid to Regulus under this Section 6.5 at any time be less than the payment due by Regulus to its Licensors under Existing Regulus Agreements. Any amount that AstraZeneca is entitled to deduct that is reduced by the limitations on the deduction set forth in the preceding sentence shall be carried forward and AstraZeneca may deduct such amount from subsequent amounts due to Regulus (subject to the limitations on the deduction set forth in the preceding sentence) until the full amount that AstraZeneca was entitled to deduct is deducted.

Section 6.6 Existing Regulus Agreements; Credits. Notwithstanding any other provision of this Agreement to the contrary (including, without limitation, Sections 6.4, 6.5 and 6.7), in no event shall the royalties payable by AstraZeneca to Regulus with respect to sales of a particular Product in a particular country for any Calendar Quarter be reduced below the aggregate royalties payable by Regulus to Licensor(s) under the Existing Regulus Agreements for sales of such Product in such country in such Calendar Quarter. For clarity, and notwithstanding any other provision of this Agreement, in no event shall the credits to which AstraZeneca may be entitled under Section 6.4 or Section 6.5 result in Regulus being obligated to make any payment to AstraZeneca.

Section 6.7 Royalty Term. Royalties payable under Section 6.3 will be payable on a Product-by-Product and country-by-country basis from the First Commercial Sale of a Product in a country until the expiration of the last to expire Valid Claim which would be infringed by the Manufacture, use or sale of such Product in such country by an unauthorized party. Such period during which royalties are payable with respect to a Product in a country is referred to herein as the ***"Royalty Term"*** for such Product in such country. Notwithstanding expiration of the Royalty Term with respect to a particular Product in a country, AstraZeneca will continue to pay to Regulus all royalties payable by Regulus to Licensor(s) under the Existing Regulus Agreements with respect to sales of such Product in such country. Following expiration (but not early termination) of each Royalty Term and following expiration of AstraZeneca's payment obligations in the immediately preceding sentence, on a Product-by-Product and country-by-country basis, AstraZeneca's license under Section 2.1 with respect to such Product in such country shall become fully paid-up, perpetual, non-exclusive and irrevocable to Exploit such Lead Compounds and Products. For clarity, AstraZeneca's license with respect to such Product in other countries shall remain as stated in Section 2.1 until expiration of the Royalty Term in the applicable country, and all payment obligations with respect to such Product in such countries (including royalties and Milestone Payments based upon sales of such Product in such countries) in which the Royalty Term has not expired shall continue.

Section 6.8 Royalty Report and Payment. During the Royalty Term (and, if applicable, the term during which payments are owed for Regulus Existing Agreements under Section 6.7) following the First Commercial Sale of any Product, within 40 Business Days after

the end of each Calendar Quarter, AstraZeneca will provide Regulus with a royalty report for such Calendar Quarter showing on a Product-by-Product basis:

(a) the Net Sales of Products sold by AstraZeneca, its Sublicensees and their respective Affiliates during such Calendar Quarter reporting period and, if applicable, the exchange rate used to convert such Net Sales to Dollars;

(b) the royalties which will have accrued hereunder with respect to such Net Sales;

(c) any other information related to the calculation of Net Sales of Products reasonably requested by Regulus that (i) is reasonably necessary for Regulus to comply with an Existing Regulus Agreement; and (ii) contained in a report and format that is regularly generated by AstraZeneca's accounting department in its normal course of business; and

(d) the quantity of Product not subject to royalties distributed by AstraZeneca, its Affiliates or sublicensees, including Product distributed as part of an expanded access program to include compassionate use, named patients or other similar use or as bona fide samples, in the case of this subsection (d) to the extent such information is tracked by AstraZeneca.

In the event that a court or governmental agency of competent jurisdiction requires AstraZeneca or its Affiliate to grant a Compulsory License, AstraZeneca will thereafter provide Regulus with the above information for such Product on a country-by-country (in addition to Product-by-Product) basis for such Calendar Quarter and for all other periods used by AstraZeneca to make a determination as to whether Net Sales have fallen to below […***…] percent ([…***…]%) of the Net Sales of such Product in the immediately preceding Calendar Year.

Together with such report, AstraZeneca shall submit payment of all royalties owed under this Agreement for such Calendar Quarter. AstraZeneca will keep, and will require its Sublicensees and their respective Affiliates to keep, complete, true and accurate books of account and records for the purpose of determining the payments to be made under this Agreement. All information disclosed by AstraZeneca to Regulus under this Section 6.6 will be AstraZeneca Confidential Information.

Section 6.9 Diagnostic or Veterinary Products. The Parties acknowledge and agree that AstraZeneca shall not have any right or license to Exploit, and the milestones and royalties in Sections 6.2 and 6.3 shall not apply to Exploitation of, Lead Compounds and/or Products for any use outside the Product Field (which, for clarity, does not include any diagnostic or veterinary uses), except as set out in the following sentence with respect to the right under Regulus Technology for Diagnostic Uses. If AstraZeneca continues to develop or sell a Lead Compound or Product for a disease, state or condition in the Product Field (and milestones and royalties in Section 6.2 and 6.3 shall apply to such Exploitation), during such time AstraZeneca has the right to use such Lead Compound or Product as a biomarker for screening patients who have been diagnosed with such disease, state or condition for eligibility to be treated for such disease, state or condition for which the Lead Compound or a Product is Exploited in the Product Field, or for monitoring patients who are or have been treated for such disease, state or condition with a Lead Compound in the Product Field (***"Diagnostic Uses"***) without the payment of any milestones and royalties for such Diagnostic Uses except that, where such Diagnostic Uses by AstraZeneca shall result in Regulus having to make payments

under any licenses or other agreements to which Regulus or its Affiliate is a party and that were entered into prior to the Effective Date including, without limitation, the Existing Regulus Agreements, then AstraZeneca shall pay to Regulus each Calendar Quarter the aggregate payments owed by Regulus to Licensor(s) under any licenses or other agreements to which Regulus or its Affiliate is a party for such Diagnostic Uses. If Regulus enters into such a license or agreement under which Regulus may owe a payment to a Licensor for such Diagnostic Use after the Effective Date, AstraZeneca shall only be liable to pay any contribution to such payments that Regulus may be obliged make to Licensor if such agreements was entered into with AstraZeneca's consent. In addition, AstraZeneca acknowledges that such Diagnostic Uses shall be limited by and otherwise subject to the terms and conditions of any applicable agreements to which Regulus or its Affiliate is a party including, without limitation, the Existing Regulus Agreements. For clarity this Section 6.9 shall in no event limit Sections 6.2 and 6.3 and the milestones and royalties applicable to Exploitation of Lead Compounds and/or Products in the Product Field.

If AstraZeneca discontinues development or selling of a Lead Compound, AstraZeneca also forfeits its rights to the Lead Compound and Product for Diagnostic Uses and all rights for Diagnostic Uses revert to Regulus.

In the event that AstraZeneca wishes to Exploit a Lead Compound or Product (i) for any diagnostic use other than Diagnostic Uses, including diagnostic uses unconnected to screening patients who have been diagnosed with a disease, state or condition for eligibility to be treated for such disease, state or condition with a Product or for monitoring patients who are or have been treated with a Product, (ii) for any Diagnostic Uses after discontinuation of Exploitation of the Lead Compound or Product in the Product Field, or (iii) for a veterinary use, the Parties shall negotiate in good faith milestones and royalties for the Exploitation of such Lead Compound(s) and/or Product(s) for such purposes that reflects the commercial potential of such Lead Compound(s) and/or Product(s) and reasonable commercial terms in the industry for diagnostic or veterinary products, as applicable, and AstraZeneca shall not have the right to Exploit such Lead Compound(s) and/or Products for such purposes unless and until the Parties agree to such payments.

Section 6.10 Combination Products. With respect to Combination Products, the Net Sales used for the calculation of the royalties under Section 6.3 shall be determined as follows:

[…***….]

In the event that such standard sales price cannot be determined for both the Product and the readyforsale form of a product containing the same amount of the other therapeutically active ingredient(s) included in the Combination Product, Net Sales for the purposes of determining royalty payments will be calculated as above, but the standard sales price in the above equation will be replaced by a good faith estimate agreed by the Parties of the fair market value of the compound(s) for which no such price exists.

Section 6.11 Manner of Payment. Except as otherwise provided in this Agreement, Regulus shall invoice AstraZeneca for all milestone, royalty and other payments hereunder and AstraZeneca shall pay all such milestone, royalty and other payments that are due within 45 Business Days after the receipt of the applicable invoice. Regulus agrees that invoices issued to AstraZeneca under this Agreement shall include the information described

in **APPENDIX 5** (to the extent applicable). All payments to be made by AstraZeneca to Regulus hereunder will be made by transfer in immediately available funds in the requisite amount to such bank account Regulus may from time to time designate by notice to AstraZeneca. Except as expressly set forth in this Agreement, all payments described hereunder are nonrefundable and noncreditable (but may be considered creditable if both Parties expressly agree in writing that a specific payment or series of payments may be credited in a particular manner).

Section 6.12 Currency. All payments required under this Article 6 shall be made in U.S. Dollars. For the purpose of computing the Net Sales of Products sold in a currency other than U.S. Dollars, such currency shall be converted from local currency to U.S. Dollars by AstraZeneca in accordance with the rates of exchange for the relevant month for converting such other currency into U.S. Dollars used by AstraZeneca's internal accounting systems, which are independently audited on an annual basis.

Section 6.13 Audits, including Audits of Royalty Reports.

6.13.1 Audits of Royalty Reports. Upon the written request of Regulus and not more than once in each Calendar Year except for cause, AstraZeneca will permit an independent certified public accounting firm of nationally recognized standing selected by Regulus and reasonably acceptable to AstraZeneca, at Regulus' expense to have access during normal business hours to such records of AstraZeneca and/or its Affiliates as may be reasonably necessary to verify the accuracy of the royalty reports hereunder for any Calendar Year ending not more than 72 months prior to the date of such request. These audit rights (but not any obligation to pay unpaid royalties for such periods) with respect to any Calendar Year will terminate 6 years after the end of such Calendar Year. Regulus will provide AstraZeneca with a copy of the accounting firm's written report within 30 days of completion of such report.

6.13.2 If such accounting firm concludes that an overpayment or underpayment was made, then the owing Party will pay the amount due within 45 days of the date Regulus delivers to AstraZeneca such accounting firm's written report so correctly concluding. Regulus will bear the full cost of such audit unless such audit correctly discloses that the additional payment payable by AstraZeneca for the audited period is more than 5% of the amount of the royalties paid for that audited period, in which case AstraZeneca will pay the fees and expenses charged by the accounting firm.

6.13.3 AstraZeneca shall include in each sublicense granted by it to any Sublicensee a provision requiring the Sublicensee to maintain records of sales made pursuant to such license and to grant access to such records by AstraZeneca's independent accountant to the same extent and under substantially similar obligations as required of AstraZeneca under this Agreement. AstraZeneca will advise Regulus in advance of each audit of any Sublicensee with respect to Product sales. AstraZeneca will provide Regulus with a summary of the results received from the audit and, if Regulus so requests, a copy of the audit report with respect to Product sales. AstraZeneca will pay the reasonable fees and expenses charged by the accounting firm, except that Regulus will pay for all additional services requested exclusively by Regulus from AstraZeneca's independent accountant unless the audit discloses that the additional payments payable to Regulus for the audited period differ by more than 5% from the amount of the royalties otherwise paid.

6.13.4 All financial information subject to review under this Section or under any license agreement with a Sublicensee will be AstraZeneca Confidential Information and will be treated in accordance with the confidentiality provisions of this Agreement. As a

condition precedent to Regulus' audit rights under this Section, Regulus' accounting firm will enter into a confidentiality agreement with AstraZeneca obligating it to treat all such financial information in confidence pursuant to such confidentiality agreement. Regulus may provide Third Parties to which Regulus owes royalties on Products information in such audit report that are relevant and required to comply with such Third Party's audit rights under the applicable license agreement between Regulus and such Third Party, *provided* that such Third Party is obligated to keep such information confidential.

Section 6.14 Taxes.

6.14.1 The royalties, milestones and other amounts payable by AstraZeneca to Regulus pursuant to this Agreement ("Payments") shall not be reduced on account of any Taxes (a) unless required by Applicable Law and (b) except as set forth in this Section 6.14. Each Party alone shall be responsible for paying any and all Taxes (other than withholding taxes required by Applicable Law to be paid by AstraZeneca) levied on account of, or measured in whole or in part by reference to, the income of such Party.

6.14.2 Subject to the provisions of Section 6.14, AstraZeneca shall deduct or withhold from the Payments any Taxes that it is required by Applicable Law to deduct or withhold. Notwithstanding the foregoing, if Regulus is entitled under any applicable treaty to a reduction of rate of, or the elimination of, applicable withholding tax, it may deliver to AstraZeneca or the appropriate governmental authority (with the assistance of AstraZeneca to the extent that this is reasonably required and is expressly requested in writing) the prescribed forms necessary to reduce the applicable rate of withholding or to relieve AstraZeneca of its obligation to withhold Tax, and AstraZeneca shall apply the reduced rate of withholding, or dispense with withholding, as the case may be, provided that AstraZeneca has received evidence, in a form reasonably satisfactory to AstraZeneca, of Regulus' delivery of all applicable forms (and, if necessary, its receipt of appropriate governmental authorization) at least fifteen (15) days prior to the time that the Payments are due. For clarity, the Parties agree that under Applicable Law no Tax will be deducted from the amount payable to Regulus pursuant to Section 6.1 AstraZeneca shall promptly upon becoming aware that it must make a Tax deduction (or that there is any change in the rate or the basis of a Tax deduction) notify Regulus accordingly. If, in accordance with the foregoing, AstraZeneca withholds any amount, it shall pay to Regulus the balance when due, make timely payment to the proper Tax Authority of the withheld amount, and send to Regulus proof of such payment within sixty (60) days following that payment.

6.14.3 All Payments are exclusive of Indirect Taxes. If any Indirect Taxes are chargeable in respect of any Payments, the paying Party shall pay such Indirect Taxes at the applicable rate in respect of such Payments following receipt, where applicable, of an Indirect Taxes invoice in the appropriate form issued by the receiving Party in respect of those payments. The Parties shall issue invoices for all amounts payable under this Agreement consistent with Indirect Tax requirements and irrespective of whether the sums may be netted for settlement purposes. If such amounts of Indirect Taxes are refunded by the applicable Governmental Authority or other fiscal authority subsequent to payment, the Party receiving such refund will transfer such amount to the paying Party within forty-five (45) days of receipt.

6.14.4 For the avoidance of doubt, the Parties acknowledge and agree that none of the upfront payments, milestone payments or royalties payable under this Agreement are intended as payments for import duties or similar import charges relating to Products. The Parties shall cooperate to ensure that the Party responsible for shipping values clinical Product

in accordance with Applicable Laws and maximizes the full benefits of available duty free or savings programs such as Free Trade Agreements or other Special Programs and minimises where permissible any such duties and any related import taxes that are not reclaimable from the relevant authorities. The receiving Party shall be responsible for any import clearance, including payment of any import duties and similar charges, in connection with any Products transferred to such Party under this Agreement.

6.14.5 Regulus and AstraZeneca shall reasonably work together with respect to any audits, disputes or requests for information with respect to Taxes in connection with or as a result of this Agreement. This commitment shall include the provision of all relevant information, documents and reasonable support and it shall survive the termination of this Agreement.

Section 6.15 Sublicenses. In the event AstraZeneca grants licenses or sublicenses to a Sublicensee to sell Products which are subject to royalties under Section 6.3, such licenses or sublicenses will include an obligation for the Sublicensee to account for and report its sales of Products on the same basis as if such sales were Net Sales by AstraZeneca.

Section 6.16 Interest. If AstraZeneca fails to make any payment due to Regulus under this Agreement, then interest will accrue on a daily basis at the greater of an annual rate equal to […***…]% (or such lower interest rate to the extent necessary to comply with Applicable Law).

ARTICLE 7

CONFIDENTIALITY; PRESS RELEASES & PUBLICATIONS

Section 7.1 Confidentiality; Exceptions. Except to the extent expressly authorized by this Agreement or otherwise agreed in writing, the Parties agree that, during the Term and for 5 years thereafter, the receiving Party (the ***"Receiving Party"***) and its Affiliates will keep confidential and will not publish or otherwise disclose or use for any purpose other than as provided for in this Agreement any Know-How 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 its Affiliates 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 the past, present and future marketing, financial, and research and development activities of any product or potential product or technology of the Disclosing Party or its Affiliates and the pricing thereof (collectively, ***"Confidential Information"***). For clarity, all Regulus Technology shall be Confidential Information of Regulus, and all AstraZeneca Technology shall be Confidential Information of AstraZeneca. Each Party will use at least the same standard of care as it uses to protect proprietary or confidential information of its own (but in no event less than reasonable care) to ensure that its employees, agents, consultants and other representatives do not disclose or make any unauthorized use of the Confidential Information. Notwithstanding the foregoing, the foregoing obligations of confidentiality and non-use shall not apply to the extent that it can be established by the Receiving Party that such information:

7.1.1 was in the lawful knowledge and possession of the Receiving Party or its Affiliates prior to the time it was disclosed to, or learned by, the Receiving Party or its Affiliates in connection with this Agreement, or was otherwise developed independently by the

Receiving Party or its Affiliates, as evidenced by written records kept in the ordinary course of business, or other documentary proof of actual use by the Receiving Party or its Affiliates;

7.1.2 was generally available to the public or otherwise part of the public domain at the time of its disclosure to the Receiving Party or its Affiliates;

7.1.3 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 or its Affiliates in breach of this Agreement; or

7.1.4 was disclosed to the Receiving Party or its Affiliates, other than under an obligation of confidentiality, by a Third Party who had no obligation to the Disclosing Party or its Affiliates not to disclose such information to others.

Section 7.2 Authorized Disclosure. Except as expressly provided otherwise in this Agreement, a Receiving Party or its Affiliates may use and disclose to Third Parties Confidential Information of the Disclosing Party as follows: (i) with respect to any such disclosure of Confidential Information, under confidentiality provisions no less restrictive than those in this Agreement, and solely in connection with the performance of its obligations or exercise of its rights granted or reserved in this Agreement (including, without limitation, the rights to develop and commercialize Lead Compounds, Products, and/or Discontinued Products, and to grant licenses and sublicenses hereunder); (ii) to the extent such disclosure is reasonably necessary in filing or prosecuting patent, copyright and trademark applications (subject to Section 8.6 below), complying with applicable governmental regulations, obtaining Approvals, conducting clinical trials, marketing Products, or as otherwise required by applicable law, regulation, rule or legal process (including the rules of the SEC and any stock exchange); *provided, however*, that if a Receiving Party or any of its Affiliates 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, but without limitation, in the event of a medical emergency, give reasonable advance notice to the Disclosing Party of such disclosure requirement and will use its reasonable efforts to secure confidential treatment of such Confidential Information required to be disclosed; (iii) in communication with actual or potential lenders, arm's-length financial investors, merger partners, acquirers, consultants, or professional advisors on a need-to-know basis, in each case under confidentiality provisions no less restrictive than those of this Agreement; (iv) in the case of Regulus, to the extent such disclosure is required to comply with existing expressly stated contractual obligations owed to Regulus' or its Affiliates' licensees or collaboration partners, or to its licensors with respect to any intellectual property or other rights licensed or sublicensed to the other Party under this Agreement; (v) to prosecute or defend litigation as permitted by this Agreement; or (vi) to the extent mutually agreed to in writing by the Parties.

Section 7.3 Press Releases; Disclosure of Agreement.

7.3.1 Press Releases. The Parties agree that the public announcement of the execution of this Agreement will be made by individual press releases issued by each Party and will not be made in a joint press release. Furthermore, each such initial press release will be substantially in the form of the press releases separately exchanged and agreed by the Parties (the ***"Initial Press Releases"***). Except for the Initial Press Releases, or to the extent required to comply with applicable law, regulation, rule or legal process or as otherwise permitted in accordance with this Section 7.3, neither Party nor such Party's Affiliates will make any public announcements, press releases or other public disclosures concerning this Agreement or the

terms or the subject matter hereof without the prior written consent of the other, which will not be unreasonably withheld. Notwithstanding the foregoing, (a) except for scientific presentations and publications (which will be governed by Section 7.5 below) each Party or its Affiliates may, without the other Party's approval, make disclosures pertaining solely to Products (as to AstraZeneca) or Discontinued Products (as to Regulus), provided, however, that AstraZeneca will immediately notify (and provide as much advance notice as possible to) Regulus of any event materially related to Products (including in such notice any disclosure of clinical data or results, material regulatory filings or Approval) so that the Parties may analyze the need for or desirability of publicly disclosing or reporting such event. any press release or other similar public communication by AstraZeneca related to efficacy or safety data and/or results of a Product will be submitted to Regulus for review at least five (5) Business Days (to the extent permitted by law) in advance of such proposed public disclosure, Regulus will have the right to expeditiously review and recommend changes to such communication and AstraZeneca will in good faith consider any changes that are timely recommended by Regulus and (b) to the extent information regarding this Agreement, a Lead Compound or Product has already been publicly disclosed, either Party (or its Affiliates) may subsequently disclose the same information to the public without the consent of the other Party.

7.3.2 Confidentiality of this Agreement. Except as otherwise provided in this Article 7, each Party agrees not to disclose to any Third Party the existence of this Agreement or the terms of this Agreement without the prior written consent of the other Party hereto, except that each Party may disclose the terms of this Agreement that are not otherwise made public as contemplated by this Section 7.3.2 as permitted under Section 7.2. Each Party will give the other Party a reasonable opportunity (to the extent consistent with law) to review all material filings with the SEC describing the terms of this Agreement prior to submission of such filings, and will 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.

Section 7.4 Remedies. Notwithstanding Section 12.3, each Party will 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 7.

Section 7.5 Publications. At any point during the Term, subject to this Section 7.5, each Party will have the right to publish summaries of results from any pre-clinical studies and/or human clinical trials generated by AstraZeneca and/or Regulus with respect to the Target Pool microRNA, Collaboration Targets (including the Oncology Target), Lead Compounds or Products in strict accordance with this Section 7.5 and any publication plan agreed by the Parties and attached to the R & D Plan. The Parties acknowledge that scientific lead time is a key element of the value of the Research Program and Products under this Agreement and further agree to use commercially reasonable efforts to control public scientific disclosures of the results of the research and development activities under this Agreement (including but not limited to any such summaries of human clinical trials data and results as required on the clinical trial registry) to prevent any potential adverse effect of any premature public disclosure of such results. The JSC will be responsible for coordinating publications with respect to such Target Pool microRNA, Collaboration Targets (including the Oncology Target), Lead Compounds and Products pursuant to this Section 7.5. Each Party will first submit to the JSC a draft of all such publications, whether they are to be presented orally or in

written form, at least 45 Business days prior to submission for publication including, without limitation, to facilitate the publication of any summaries of human clinical trials data and results as required on the clinical trial registry of each respective Party. Each Party will review such proposed publication in order to avoid the unauthorized disclosure of a Party's Confidential Information, the inclusion of any information that may be deemed prejudicial to the effective Exploitation of the Target Pool microRNA, Collaboration Targets (including the Oncology Target), Lead Compounds or Products and to preserve the patentability of inventions arising from the Research Program. If, as soon as reasonably possible, but no longer than 45 Business Days following submission to JSC a Party informs the other Party that its proposed publication contains Confidential Information of the other Party, then such Party will delete such Confidential Information from its proposed publication. In addition, if at any time during such 45-Business Day period, the non-publishing Party informs the other Party that its proposed publication discloses inventions made by either Party in the course of the Research Program under this Agreement that have not yet been protected through the filing of a patent application, contains information that it considers prejudicial to the effective Exploitation of the Target Pool microRNA, Collaboration Targets (including the Oncology Target), Lead Compounds or Products or the public disclosure of such proposed publication could be expected to have a material adverse effect on any Patents or Know-How solely owned or Controlled by such other Party, then such Party will either (a) delay such proposed publication, for up to 60 Business Days from the date the other Party informed such Party of its objection to the proposed publication, to permit the timely preparation and first filing of patent application(s) on the information involved or (b) remove the identified disclosures or information deemed prejudicial to the effective Exploitation of the Target Pool microRNA, Collaboration Targets (including the Oncology Target), Lead Compounds or Products prior to publication or decline to publish the proposed publication.

Section 7.6 Acknowledgment. Unless otherwise agreed upon in writing by the Parties, each Party will acknowledge in any press release, public presentation or publication regarding a Target Pool microRNA, Collaboration Target (including the Oncology Target), Lead Compound and/or Product, the other Party's role in discovering and developing the Collaboration Target, Lead Compound or Product, as applicable, and that such Collaboration Targets, Compounds or Products are under license from Regulus (including, if requested by Regulus, Regulus' stock ticker) and otherwise acknowledge the contributions from the other Party.

ARTICLE 8

PATENTS

Section 8.1 Ownership of Inventions and Patents. The provisions of this Article 8 as they relate to Regulus Patents that are licensed to Regulus under any Existing Regulus Agreement or under any Future Third Party Agreement are subject in all respects to the terms of such Existing Regulus Agreement. In the event of any inconsistency between Regulus' obligations under any Existing Regulus Agreement and the rights conferred on AstraZeneca by this Article 8 with respect to Patents that are subject to such Existing Regulus Agreement, the Existing Regulus Agreement shall control, and the provisions of this Article 8 shall, to the extent inconsistent with the Existing Regulus Agreement, be of no force or effect.

Section 8.2 Ownership of Inventions. Title to Know-How, including inventions, discoveries, improvements, information and other technology, whether or not patentable, conceived, made or reduced to practice in the performance of each Party's

obligations or exercise of each Party's rights under this Agreement, including such Know-How, including improvements, that is conceived, reduced to practice or otherwise developed by Regulus and AstraZeneca, either solely or jointly, as the case may be, while fulfilling the obligations under the Research Program that relate to the Lead Compounds and/or the Product (collectively, the ***"Program Inventions"***) and any Patents claiming such Program Inventions (***"Program Patents"***), are retained by the Party that is the employer of the inventor(s) (or, in the case of consultants and (sub)contractors, the Party for which the consultant or (sub)contractor is providing its services). Each Party will ensure that every employee, consultant, and (sub)contractor employed or contracted by that Party in the performance of the Research Program has a written obligation to assign all (or, to the extent assignment is not permitted by applicable law, waive all rights in) Know-How and Patents conceived, made or reduced to practice by each such employee, consultant, and (sub)contractor to such Party. The Parties agree that the United States federal patent law on inventorship will determine the inventorship of any Program Invention and the names of the inventors on any Program Patent filings, whether sole or joint inventions, which arise in connection with activities conducted pursuant to this Agreement. AstraZeneca will own Program Inventions invented solely by employees, consultants and/or (sub)contractors of AstraZeneca (the ***"AstraZeneca Program Inventions"***) and any Patents claiming such Program Inventions (the ***"AstraZeneca Program Patents"***). Regulus will own Program Inventions invented solely by employees, consultants and/or (sub)contractors of Regulus (the ***"Regulus Program Inventions"***) and any Patents claiming such Program Inventions (the ***"Regulus Program Patents"***). Regulus and AstraZeneca will own jointly such Program Inventions invented by employees, consultants and/or (sub)contractors of Regulus and AstraZeneca (the ***"Joint Inventions"***) and any Patents claiming such Program Inventions (the ***"Joint Patents"***). Regulus will promptly disclose to AstraZeneca any such Regulus Program Invention or Joint Invention, and AstraZeneca will promptly disclose to Regulus any AstraZeneca Program Invention or Joint Invention, arising from or made in the performance of the Research Program and any patent or patent application claiming such Program Invention

Section 8.3 Filing, Prosecution and Maintenance of Patents. For purposes of this Section 8.3, the terms "prosecute," "prosecuting" and "prosecution," when used in reference to any Patent, shall be deemed to include, without limitation, the control of any interferences, reissue proceedings, oppositions and reexaminations with respect to such Patent.

8.3.1 Regulus Product Specific Patents and Joint Product Specific Patents.

(a) Prior to Development Transition Date. On a Collaboration Target-by-Collaboration Target basis, prior to the Development Transition Date for a Lead Compound that targets or mimics, as applicable, such Collaboration Target, Regulus will have the first right, subject to consultation and discussion at the Intellectual Property Sub-committee, but not the obligation, to prepare, file, prosecute and maintain Regulus Product Specific Patents and Joint Product Specific Patents, at Regulus' sole expense and by counsel of its own choice.

(b) After Development Transition Date. On a Collaboration Target-by-Collaboration Target basis, after the Development Transition Date for a Lead Compound that targets or mimics, as applicable, such Collaboration Target, AstraZeneca will have the first right, subject to consultation and discussion at the Intellectual Property Sub-committee, but not the obligation, to prepare, file, prosecute and maintain Regulus Product Specific Patents and Joint Product Specific Patents, at AstraZeneca's sole expense and by counsel of its own choice.

(c) Disclosure; Cooperation. The Party responsible for preparing, filing, prosecuting and maintaining any Regulus Product Specific Patent or Joint Product Specific Patent under Section 8.3.1(a) or Section 8.3.1(b) above (the ***"Lead Party"***), or its outside counsel, will provide the Intellectual Property Sub-committee with: (i) copies of relevant filing documents, prosecution documents (e.g., office actions, office action responses and other relevant correspondence) and maintenance documents; for such Regulus Product Specific Patent or Joint Product Specific Patent, as applicable, and (ii) any further information reasonably requested by the other Party from time to time regarding such Regulus Product Specific Patent or Joint Product Specific Patent, as applicable; *provided, however,* that if such Regulus Product Specific Patent is licensed to Regulus by a Third Party, Regulus will not be obligated to make disclosure of information regarding such Regulus Product Specific Patent to the extent that such disclosure would constitute a breach of Regulus' confidentiality obligations to the Third Party licensor. Each Lead Party will consider in good faith, and give effect to, all reasonable requests or recommendations of the other Party regarding the preparation, filing, prosecution and maintenance of, Regulus Product Specific Patents or Joint Product Specific Patents.

8.3.2 Election Not to File, Prosecute, or Maintain Regulus Product Specific Patents or Joint Product Specific Patents. In the event that the Lead Party decides not to pursue or continue the filing, prosecution or maintenance of any Regulus Product Specific Patent or Joint Product Specific Patent in any country, the Lead Party, or its outside counsel, will provide the other Party with written notice of such decision at least 60 days in advance of any relevant filing, prosecution or maintenance deadline, and the other Party will provide the Lead Party with prompt notice as to whether the other Party desires to assume responsibility and costs for such filing, prosecution or maintenance of such Regulus Product Specific Patent or Joint Product Specific Patent. The Lead Party will not knowingly permit any such Regulus Product Specific Patent or Joint Product Specific Patent to be abandoned or elect not to file a new patent application claiming priority to a patent application within the Regulus Product Specific Patents or Joint Product Specific Patents either before such patent application's issuance or within the time period required for the filing of an international (i.e., Patent Cooperation Treaty), regional (including European Patent Office) or national application, without the other Party's written consent or without the other Party otherwise first being given an opportunity to assume full responsibility (at the other Party's expense) for the continued prosecution and maintenance of such Regulus Product Specific Patents or Joint Product Specific Patents, or the filing of such new patent application. In the event that the other Party assumes responsibility for the preparation, filing, prosecution or maintenance of any patent or patent application as set forth above, the other Party will not be liable to the Lead Party in any way with respect to its handling of, or the results obtained from, the filing, prosecution, issuance, extension or maintenance of such application or any resulting patent or any failure by it to so file, prosecute, extend or maintain. For clarity, the other Party shall not assume full responsibility for the preparation, filing prosecution or maintenance of an entire patent family solely as a result of responsibility for a particular Patent within that patent family transitions to such Party under this Agreement, unless agreed upon, subject to an Intellectual Property Subcommittee review on a case-by-case basis.

8.3.3 Regulus Core Technology Patents. Regulus (or its Third Party licensors of Regulus Core Technology Patents, as applicable) will have the sole right, but not the obligation, to prepare, file, prosecute and maintain Regulus Core Technology Patents, at Regulus' sole expense and by counsel of its own choice. At AstraZeneca's reasonable request from time to time, Regulus, or its outside counsel, will promptly provide AstraZeneca with an

update of the filing, prosecution and maintenance status for each of such Regulus Core Technology Patents, including without limitation an update of the list of Regulus Core Technology Patents separately provided by Regulus. With respect to a Lead Compound for a Collaboration Target, Regulus shall, if requested by AstraZeneca, provide to AstraZeneca information Controlled by Regulus and reasonably requested by AstraZeneca regarding any Regulus Program Patent that is a Regulus Core Technology Patent that claims anything required to Exploit a Lead Compound or Product in the Product Field, as applicable, and is developed under the Research Program; *provided, however,* that if such Regulus Core Technology Patent is licensed to Regulus by a Third Party, Regulus will not be obligated to make disclosure of information regarding such Regulus Core Technology Patent to the extent that such disclosure would constitute a breach of Regulus' confidentiality obligations to the Third Party licensor.

8.3.4 Other Joint Patents. Regulus will have the first right, subject to consultation and discussion at the Intellectual Property Sub-committee, but not the obligation, to prepare, file, prosecute and maintain Other Joint Patents, at Regulus' sole expense and by counsel of its own choice. Regulus, or its outside counsel, will provide AstraZeneca with: (a) a reasonably detailed monthly update of the filing, prosecution and maintenance status for such Other Joint Patent and (b) any further information reasonably requested by AstraZeneca from time to time regarding such Other Joint Patent. Regulus will consider in good faith, and give effect to, all reasonable requests or recommendations of AstraZeneca regarding the preparation, filing, prosecution and maintenance of Other Joint Patents. In the event that Regulus decides not to pursue or continue the filing, prosecution or maintenance of any Other Joint Patent in any country, Regulus, or its outside counsel, will provide AstraZeneca with written notice of such decision at least 60 days in advance of any relevant filing, prosecution or maintenance deadline, and AstraZeneca will provide Regulus with prompt notice as to whether AstraZeneca desires to assume responsibility and costs for such filing, prosecution or maintenance of such Other Joint Patent. Regulus will not knowingly permit any Other Joint Patent to be abandoned or elect not to file a new patent application claiming priority to a patent application within the Other Joint Patents either before such patent application's issuance or within the time period required for the filing of an international (i.e., Patent Cooperation Treaty), regional (including European Patent Office) or national application, without AstraZeneca's written consent or without AstraZeneca otherwise first being given an opportunity to assume full responsibility (at AstraZeneca's expense) for the continued prosecution and maintenance of such Other Joint Patents, or the filing of such new patent application. In the event that AstraZeneca assumes responsibility for the preparation, filing, prosecution or maintenance of any patent or patent application as set forth above, AstraZeneca will not be liable to Regulus in any way with respect to its handling of, or the results obtained from, the filing, prosecution, issuance, extension or maintenance of such application or any resulting patent or any failure by it to so file, prosecute, extend or maintain. For clarity, the other Party shall not assume full responsibility for the preparation, filing prosecution or maintenance of an entire patent family solely as a result of responsibility for a particular Patent within that patent family transitions to such Party under this Agreement, unless agreed upon, subject to an Intellectual Property Subcommittee review on a case-by-case basis.

8.3.5 AstraZeneca Program Patents. AstraZeneca will have the first right, subject to consultation and discussion at the Intellectual Property Sub-committee, but not the obligation, to prepare, file, prosecute and maintain AstraZeneca Program Patents, at AstraZeneca's sole expense and by counsel of its own choice. AstraZeneca, or its outside counsel, will provide Regulus with: (a) copies of relevant patent filing documents, prosecution

documents (e.g., office actions, office action responses and other relevant correspondence) and maintenance-related documents; and (b) any further information reasonably requested by the other Party from time to time regarding such AstraZeneca Program Patent. AstraZeneca will consider in good faith, and give effect to, all reasonable requests or recommendations of Regulus regarding the preparation, filing, prosecution and maintenance of AstraZeneca Program Patents. In the event that AstraZeneca decides not to pursue or continue the filing, prosecution or maintenance of any AstraZeneca Program Patent in any country, AstraZeneca, or its outside counsel, will provide Regulus with written notice of such decision at least 60 days in advance of any relevant filing, prosecution or maintenance deadline, and Regulus will provide AstraZeneca with prompt notice as to whether Regulus desires to assume responsibility and costs for such filing, prosecution or maintenance of such AstraZeneca Program Patent. AstraZeneca will not knowingly permit any AstraZeneca Program Patent to be abandoned or elect not to file a new patent application claiming priority to a patent application within the AstraZeneca Program Patents either before such patent application's issuance or within the time period required for the filing of an international (i.e., Patent Cooperation Treaty), regional (including European Patent Office) or national application, without Regulus' written consent or without Regulus otherwise first being given an opportunity to assume full responsibility (at Regulus' expense) for the continued prosecution and maintenance of such AstraZeneca Program Patents, or the filing of such new patent application. In the event that Regulus assumes responsibility for the preparation, filing, prosecution or maintenance of any patent or patent application as set forth above, Regulus will not be liable to AstraZeneca in any way with respect to its handling of, or the results obtained from, the filing, prosecution, issuance, extension or maintenance of such application or any resulting patent or any failure by it to so file, prosecute, extend or maintain. For clarity, the other Party shall not assume full responsibility for the preparation, filing prosecution or maintenance of an entire patent family solely as a result of responsibility for a particular Patent within that patent family transitions to such Party under this Agreement, unless agreed upon, subject to an Intellectual Property Subcommittee review on a case-by-case basis.

8.3.6 Cooperation. Each Party agrees to cooperate fully in the preparation, filing, prosecution and maintenance of Patents pursuant to this Section 8.3. Such cooperation includes, but is not limited to promptly and in all circumstances within 90 days of the Effective Date setting up an Intellectual Property Subcommittee which shall operate in accordance with **APPENDIX 2** (a) executing all papers and instruments, or requiring its employees or contractors, to execute such papers and instruments, so as to enable the other Party to exercise its rights and perform its obligations under this Section 8.3; and (b) promptly informing the other Party of any matters coming to such Party's attention that may affect the preparation, filing, prosecution or maintenance of any such patent applications.

Section 8.4 Patent Term Extension. Regulus and AstraZeneca will each cooperate with one another and will use Commercially Reasonable Efforts in obtaining patent term restorations and/or extensions (including without limitation, any pediatric exclusivity extensions as may be available) or supplemental protection certificates or their equivalents in any country with respect to patent rights covering those Products licensed by AstraZeneca hereunder. If elections with respect to obtaining such patent term extensions or supplemental protection are to be made, AstraZeneca will have the right to make such election, *provided* that (a) such election will be made in accordance with applicable Law so as to maximize the period of marketing exclusivity for the Product, and (b) AstraZeneca may not elect to extend a Regulus Core Technology Patent or Other Joint Patent under this Section 8.4 without Regulus' prior written consent.

Section 8.5 Enforcement of Patents

8.5.1 Notice of Infringement or Challenges. In the event that Regulus or AstraZeneca becomes aware of a suspected infringement of any Regulus Product Specific Patent, Joint Patent or AstraZeneca Program Patent, or any such Regulus Product Specific Patent, Joint Patent or AstraZeneca Program Patent is challenged in any action or proceeding (other than any interferences, reissue proceedings, oppositions or reexaminations, which are addressed above), such Party will notify the other Party promptly, and following such notification, the Parties will confer and determine an appropriate course of action in response to such suspected infringement or action or proceeding.

8.5.2 Regulus Product Specific Patents, Joint Product Specific Patents and AstraZeneca Program Patents.

(a) Enforcement by AstraZeneca. AstraZeneca will have the first right, but not the obligation, to defend any such action or proceeding or bring an infringement action with respect to suspected infringement of any Regulus Product Specific Patent, Joint Product Specific Patent or AstraZeneca Program Patent at its own expense, in its own name and entirely under its own direction and control, or settle any such action, proceeding or dispute by license (to the extent such sublicense is permitted under this Agreement). Regulus will reasonably assist AstraZeneca in any action or proceeding being defended or prosecuted if so requested, and will lend its name to such actions or proceedings if reasonably requested by AstraZeneca or required by Applicable Law. AstraZeneca will reimburse Regulus for the documented out-of-pocket costs Regulus reasonably incurs in providing such assistance. In the event Regulus is a required party to the proceeding or action, Regulus will have the right to be represented by its own counsel, and AstraZeneca will reimburse Regulus for the documented external costs Regulus reasonably incurs that are reasonably related to the proceeding or action, including attorneys fees, *provided* that AstraZeneca will retain overall responsibility for the prosecution of such action or proceeding in such event. In the event that Regulus is not a necessary party to the proceeding or action, Regulus will have the right to participate and be represented in any such suit by its own counsel at its own expense, *provided* that AstraZeneca will retain overall responsibility for the prosecution of such action or proceedings in such event. AstraZeneca may not enter any settlement of any such action or proceeding which restricts the scope, or adversely affects the enforceability, of a Regulus Product Specific Patent, Joint Product Specific Patent or a AstraZeneca Program Patent, or which could be reasonably expected to have a material adverse financial impact on Regulus, without Regulus' prior written consent, which consent will not be unreasonably withheld, conditioned or delayed.

(b) Enforcement by Regulus. If AstraZeneca decides to not bring any action for infringement described in Section 8.5.2(a) within: (i) 90 days following the notice of alleged infringement, or (ii) 15 days before the time limit, if any, set forth in the appropriate laws and regulations for the filing of such action, whichever comes first, then AstraZeneca shall provide written notice thereof to Regulus and discuss the reason for such decision with Regulus, and unless, with respect to an infringement action with respect to an AstraZeneca Program Patent only, during such discussion, AstraZeneca reasonably demonstrates why enforcing such AstraZeneca Program Patent to abate such infringement is likely to have a material adverse affect on the potential sales of or market for a Lead Compound or Product, within or outside the relevant country or territory (which limits shall not apply with respect to a Joint Product Specific Patent or a Regulus Product Specific Patent), Regulus may

defend or bring such action at its own expense, in its own name and entirely under its own direction and control, or settle any such action, proceeding or dispute by license (to the extent such sublicense is permitted under this Agreement). AstraZeneca will reasonably assist Regulus in any action or proceeding being defended or prosecuted if so requested, and will lend its name to such actions or proceedings if reasonably requested by Regulus or required by Applicable Law. Regulus will reimburse AstraZeneca for the documented out-of-pocket costs AstraZeneca reasonably incurs in providing such assistance. In the event AstraZeneca is a required party to the proceeding or action, AstraZeneca will have the right to be represented by its own counsel, and Regulus will reimburse AstraZeneca for the documented external costs AstraZeneca reasonably incurs that are reasonably related to the proceeding or action, including attorneys fees, provided that Regulus will retain overall responsibility for the prosecution of such action or proceeding in such event. In the event that AstraZeneca is not a necessary party to the proceeding or action, AstraZeneca will have the right to participate and be represented in any such suit by its own counsel at its own expense, provided that Regulus will retain overall responsibility for the prosecution of such action or proceedings in such event. Regulus may not enter any settlement of any such action or proceeding which restricts the scope, or adversely affects the enforceability, of a Regulus Product Specific Patent, Joint Product Specific Patent or a AstraZeneca Program Patent, or which could be reasonably expected to have a material adverse financial impact on AstraZeneca, without AstraZeneca's prior written consent, which consent will not be unreasonably withheld, conditioned or delayed.

8.5.3 Other Joint Patents.

(a) Enforcement by Regulus. Regulus will have the first right, but not the obligation, to defend any such action or proceeding or bring an infringement action with respect to suspected infringement of Other Joint Patents at its own expense, in its own name and entirely under its own direction and control, or settle any such action, proceeding or dispute by license (to the extent such sublicense is permitted under this Agreement). AstraZeneca will reasonably assist Regulus in any action or proceeding being defended or prosecuted if so requested, and will lend its name to such actions or proceedings if reasonably requested by Regulus or required by Applicable Law. Regulus will reimburse AstraZeneca for the documented out-of-pocket costs AstraZeneca reasonably incurs in providing such assistance. In the event AstraZeneca is a required party to the proceeding or action, AstraZeneca will have the right to be represented by its own counsel, and Regulus will reimburse AstraZeneca for the documented external costs AstraZeneca reasonably incurs that are reasonably related to the proceeding or action, including attorneys fees, *provided* that Regulus will retain overall responsibility for the prosecution of such action or proceeding in such event. In the event that AstraZeneca is not a necessary party to the proceeding or action, AstraZeneca will have the right to participate and be represented in any such suit by its own counsel at its own expense, *provided* that Regulus will retain overall responsibility for the prosecution of such action or proceedings in such event. Regulus may not enter any settlement of any such action or proceeding which restricts the scope, or adversely affects the enforceability, of an Other Joint Patent or which could be reasonably expected to have a material adverse financial impact on AstraZeneca, without AstraZeneca's prior written consent, which consent will not be unreasonably withheld, conditioned or delayed.

(b) Enforcement by AstraZeneca. If Regulus decides to not bring any action for infringement described in Section 8.5.3(a) within (i) 90 days following the notice of alleged infringement, or (ii) 15 days before the time limit, if any, set forth in the appropriate laws and regulations for the filing of such action, whichever comes first, then Regulus shall

provide written notice thereof to AstraZeneca, and AstraZeneca may defend or bring such action at its own expense, in its own name and entirely under its own direction and control, or settle any such action, proceeding or dispute by license (to the extent such sublicense is permitted under this Agreement). Regulus will reasonably assist AstraZeneca in any action or proceeding being defended or prosecuted if so requested, and will lend its name to such actions or proceedings if reasonably requested by Regulus or required by Applicable Law. AstraZeneca will reimburse Regulus for the documented out-of-pocket costs Regulus reasonably incurs in providing such assistance. In the event Regulus is a required party to the proceeding or action, Regulus will have the right to be represented by its own counsel, and AstraZeneca will reimburse Regulus for the documented external costs Regulus reasonably incurs that are reasonably related to the proceeding or action, including attorneys fees, *provided* that AstraZeneca will retain overall responsibility for the prosecution of such action or proceeding in such event. In the event that Regulus is not a necessary party to the proceeding or action, Regulus will have the right to participate and be represented in any such suit by its own counsel at its own expense, *provided* that AstraZeneca will retain overall responsibility for the prosecution of such action or proceedings in such event. AstraZeneca may not enter any settlement of any such action or proceeding which restricts the scope, or adversely affects the enforceability, of an Other Joint Patent, or which could be reasonably expected to have a material adverse financial impact on Regulus, without Regulus' prior written consent, which consent will not be unreasonably withheld, conditioned or delayed.

8.5.4 Withdrawal. If either Party brings an action or proceeding under Section 8.5.2 or Section 8.5.3 and subsequently ceases to pursue or withdraws from such action or proceeding, it will promptly notify the other Party and the other Party may substitute itself for the withdrawing Party and pursue such action or proceeding in accordance with the terms of this Section 8.5.1 or Section 8.5.2.

8.5.5 Damages. In the event that either Party exercises the rights conferred above in this Section 8.5.2 or Section 8.5.3 and recovers any damages or other sums in such action, suit or proceeding or in settlement thereof, such damages or other sums recovered will first be applied to all out-of-pocket costs and expenses incurred by the Party which initiated such action, suit or proceeding, including, without limitation, attorneys fees, and second to any out-of-pocket costs and expenses incurred by the other Party and not previously reimbursed by the Party which initiated such action, suit or proceeding according to this Section 8.5.1 or Section 8.5.2. Any remaining amounts will: (a) if recovered by AstraZeneca, be divided as follows: (i) as to ordinary damages based on lost sales or profit, AstraZeneca will retain such funds and such funds will be treated as Net Sales and royalties will be payable by AstraZeneca to Regulus with respect to such Net Sales in accordance with Section 6.2 of this Agreement; and (ii) as to special or punitive damages, AstraZeneca will receive […***…]% of the amount of such special or punitive damages and Regulus will receive […***…]% of the amount of such special or punitive damages; or (b) if recovered by Regulus, belong solely to Regulus.

8.5.6 Regulus Core Technology Patents. Regulus will have the sole right to enforce Regulus Core Technology Patents and to defend Regulus Core Technology Patents against challenge in any action or proceeding. For clarity, should a Regulus Product Specific Patent or Joint Patent also require by Applicable Law concurrent enforcement of a Regulus Core Technology Patent, then Regulus will reasonably assist AstraZeneca in any action or proceeding being defended or prosecuted if so requested, and will lend its name to such actions or proceedings if reasonably requested by Regulus or required by Applicable Law, and

AstraZeneca shall be responsible for reasonable costs and expenses, as evidenced in writing, incurred by Regulus in connection with Regulus' performance of its obligations under this sentence.

8.5.7 Cooperation. The Party not enforcing a particular Patent under any of the preceding provisions of this Section 8.5 will provide reasonable assistance to the other Party (at such other Party's expense), including providing access to relevant documents and other evidence, making its employees available at reasonable business hours, and joining the action to the extent necessary to allow the enforcing Party to initiate or maintain the action.

Section 8.6 Determination of Certain Patent Matters. The Parties, acting in good faith and on the advice of their respective internal or external patent counsel, will agree in good faith on: (i) the inventorship of Program Inventions under Section 8.2, consistent with U.S. patent laws; (ii) whether any particular Regulus Patent is a Regulus Core Technology Patent, or a Regulus Product Specific Patent, taking into full consideration the definitions of such terms set forth in **APPENDIX 1** and the Regulus Patents; and (iii) whether there exists a Regulus Product Specific Patent that is suspected to be infringed by a suspected infringement under Section 8.5.1. If the Parties cannot agree upon any such matter within 30 days of good faith discussions, the Parties will refer such matter to independent patent counsel, not engaged by either Party or any of its Affiliates for any matter in the previous three (3) years and reasonably acceptable to both Parties. The determination of the independent patent counsel with respect to such matter will be binding on the Parties. The costs and expenses of the independent patent counsel will be shared equally between the Parties.

Section 8.7 Data Exclusivity and Orange Book Listings. With respect to data exclusivity periods (such as those periods listed in the FDA's Orange Book (including without limitation any available pediatric extensions) or periods under national implementations of Article 11.1(a)(iii) of Directive 2001/EC/83, or similar periods as may be applicable to a biologic, and all international equivalents), AstraZeneca will use Commercially Reasonable Efforts consistent with its obligations under applicable law (including any applicable consent order) to seek, maintain and enforce all such data exclusivity periods available for the Lead Compounds and Products exclusively licensed by AstraZeneca hereunder. With respect to filings in the FDA Orange Book or other similar filings or listings as may be applicable (and foreign equivalents) for issued patents for a Lead Compound or Product, upon reasonable request by AstraZeneca, Regulus will provide reasonable cooperation to AstraZeneca in filing and maintaining any such listing and filings. All listing and filing decisions will be at the sole discretion of AstraZeneca except for Regulus Core Technology Patents; *provided, however* that AstraZeneca may list Regulus Core Technology Patents and Other Joint Patents in the FDA Orange Book with Regulus' prior written consent, such consent not to be unreasonably withheld or delayed. In no event will Regulus withhold or delay such consent where the listing of such Regulus Core Technology Patent or Other Joint Patent is required under applicable law.

Section 8.8 Further Actions. Each Party will, upon the reasonable request of the other Party, provide such assistance and execute such documents as are reasonably necessary for such Party to exercise its rights and/or perform its obligations pursuant to this Article 8; *provided however*, that neither Party will be required to take any action pursuant to Article 8 that such Party reasonably determines in its sole judgment and discretion conflicts with or violates any applicable court or government order or decree.

Section 8.9 Infringement Claims; Oppositions. AstraZeneca and Regulus will promptly inform the other in writing of any written notice to it of alleged infringement or

misappropriation, based on the research, development, making, using, importing, exporting or selling of a Lead Compound or Product, of a Third Party's intellectual property rights of which it will become aware. The Parties will confer on the handling of such matter using the Intellectual Property Subcommittee as the initial body to discuss the claim or opposition. Regulus will not acknowledge to a Third Party the validity of any such allegation or admit liability without the prior written consent of AstraZeneca, and AstraZeneca will not acknowledge to a Third Party the validity of any such allegation or admit liability without the prior written consent of Regulus. AstraZeneca and Regulus will each keep the other advised of all material developments in the conduct of any proceedings in defending any claim of such alleged infringement or misappropriation and will cooperate with the other in the conduct of such defense. In no event may either Party settle any such infringement or misappropriation claim in a manner that would limit the rights of the other Party or impose any obligation on the other Party, without such other Party's prior written consent, such consent not to be unreasonably withheld or delayed. AstraZeneca and Regulus will promptly inform the other in writing of any written notice to it of actual or threatened opposition related to the Regulus Product Specific Patents. The Parties will confer on the handling of such matter and such matters will be handled in accordance with Section 8.2 above.

Section 8.10 CREATE Act. Notwithstanding anything to the contrary in this Article 8, neither Party will have the right to make an election under the Cooperative Research and Technology Enhancement Act of 2004, 35 U.S.C. § 103(c)(2)-(c)(3) (the ***"CREATE Act"***) when exercising its rights under this Article 8 without the prior written consent of the other Party, which will not be unreasonably withheld, conditioned or delayed. With respect to any such permitted election, the Parties will use reasonable efforts to cooperate and coordinate their activities with respect to any submissions, filings or other activities in support thereof. The Parties acknowledge and agree that this Agreement is a "joint research agreement" as defined in the CREATE Act.

Section 8.11 Amendments to Third Party Agreements. Regulus will not amend or agree to amend any Existing Regulus Agreement under which Regulus has sublicensed rights to AstraZeneca under Section 2.1, in any manner that would increase AstraZeneca's payment obligations or reduce the scope of AstraZeneca's license under Section 2.1, without the prior written consent of AstraZeneca.

ARTICLE 9

TERM AND TERMINATION

Section 9.1 Term. The term of this Agreement (the ***"Term"***) commences upon the Effective Date and, unless earlier terminated in accordance with the provisions of this Article 9, will continue until the expiration of all payment obligations of AstraZeneca under this Agreement. Upon the expiration, but not an earlier termination, of this Agreement with respect to a particular country in relation to a particular Product, AstraZeneca will have a fully paid-up, non-exclusive license, which includes the right to sublicense, under the Regulus Technology and Regulus' interest in the Joint Patents to Exploit such Product within the Product Field in such country. For clarity, AstraZeneca shall retain ownership of all Approvals on expiration of this Agreement.

Section 9.2 Termination.

9.2.1 By Either Party.

(a) Material Breach. Each Party shall have the right to terminate this Agreement in its entirety upon written notice to the other Party if such other Party is in breach of a material provisions of this Agreement and has not cured such breach within 40 Business Days (30 Business Days with respect to any payment breach) after written notice from the terminating Party requesting cure of the breach. Any such termination shall become effective at the end of such 40 Business Day (30 Business Day with respect to any payment breach)-period unless the breaching Party has cured any such breach or default prior to the end of such period.

(b) Insolvency. Each Party shall have the right to terminate this Agreement in its entirety upon written notice to the other Party upon the insolvency, bankruptcy, dissolution or winding up of such other Party, or the making or seeking to make or arrange an assignment for the benefit of creditors of such other Party, or the initiation of proceedings in voluntary or involuntary bankruptcy, or the appointment of a receiver or trustee of such other Party's property that is not discharged within 60 Business Days.

(c) No Lead Compound. Each Party shall have the right to terminate this Agreement in its entirety immediately upon written notice to the other Party provided within 20 Business Days after the end of the Research Term if no Lead Compound is designated by the IMRB during the Research Term.

9.2.2 Additional AstraZeneca Rights of Termination.

(a) Change of Control Event At Any Time During the Research Term. During the Research Term, AstraZeneca shall have the right to terminate this Agreement in its entirety or on a Collaboration Target-by-Collaboration Target basis, immediately upon written notice to Regulus provided at any time within 20 Business Days following notification by Regulus to AstraZeneca of the closing of a Change of Control Event, if such closing occurs during the Research Term. If at AstraZeneca discretion, Astra Zeneca decides not to terminate this Agreement in relation to any Collaboration Target pursuant to this Section 9.2.2(a) following the closing of a Change of Control Event during the Research Term, then Regulus' obligations under Article 3 to perform the Research Project on the Collaboration Target will remain and Regulus (or its successor) will use reasonable endeavours to perform the Research Project on such Collaboration Target in accordance with Article 3 whilst maintaining confidentiality of AstraZeneca's Confidential Information from any entity acquiring Regulus as a result of the Change of Control Event. As soon as reasonably possible after the public announcement of such a Change of Control Event, Regulus (or its successor) and AstraZeneca will meet to discuss in good faith how Regulus (or its successor) will continue to perform its obligation under this Agreement with respect to any Collaboration Targets for which this Agreement is not terminated under this Section 9.2.2(a).

(b) Without Cause.

(i) AstraZeneca shall have the right to terminate this Agreement in its entirety or, during the Research Term, on a Collaboration Target-by-Collaboration Target basis, in each case upon 60 Business Days' prior written notice to Regulus. For purposes of clarification, milestone and royalty payments will be due on milestones achieved and Products sold during the period between notice of termination and the effective date of termination.

(ii) AstraZeneca shall have the right to terminate this Agreement in its entirety or, during the Term, on a Collaboration Target-by-Collaboration

Target basis, in each case upon 12 months' prior written notice to Regulus. For purposes of clarification, milestone and royalty payments will be due on milestones achieved and Products sold during the period between notice of termination and the effective date of termination.

9.2.3 Additional Regulus Rights of Termination for Patent Challenge. Regulus shall have the right to terminate this Agreement immediately upon written notice to AstraZeneca if AstraZeneca, its Affiliate or sublicensee, individually or in association with or support (financial or otherwise), (i) commences or otherwise voluntarily determines to participate in (other than as may be necessary or reasonably required to respond to a court request or order or administrative law request or order) any action or proceeding, challenging or denying the validity of any claim within an issued patent or patent application within the Regulus Patents or (ii) directs, supports or actively assists any other Person (other than as may be necessary or reasonably required to respond to a court request or order or administrative law request or order) in bringing or prosecuting any action or proceeding challenging or denying the validity of any claim within an issued patent or patent application within the Regulus Patents. The foregoing right of termination by Regulus shall be subject to AstraZeneca having a 30 Business Day period following notice thereof from Regulus to rescind any wrongfully brought actions by its Affiliates or Sublicensees described in this Section 9.2.3.

9.2.4 Termination for Delayed Equity Investment. This Agreement shall automatically terminate without any further notice by the Parties on the earlier of (a) the day after the closing of a Triggering IPO, if a Triggering IPO occurs and Regulus has not received payment of $25,000,000 on or prior to the date of the closing of the Triggering IPO for purchase of shares of Common Stock of Regulus in the Triggering IPO in accordance with Section 1.1 of the Stock Purchase Agreement, (b) the day after the Alternative Funding Execution Date, if the Parties have not executed a written agreement for the Alternative Funding on or before the Alternative Funding Execution Date, or (c) the day after the Alternative Funding Closing Deadline Date, if Regulus has not received payment of $25,000,000 in cash or in consideration of shares of Common Stock or Preferred Stock of Regulus pursuant to Section 1.4 of the Stock Purchase Agreement on or before the Alternative Funding Closing Deadline Date. All capitalized terms used in this Section 9.2.4 but not defined in this Agreement shall have the meanings provided in the Stock Purchase Agreement.

Section 9.3 Consequences of Termination.

9.3.1 Licenses. Upon termination of this Agreement (in its entirety or on a Collaboration Target-by-Collaboration Target basis) by either Party pursuant to this Article 9, the licenses and sublicenses granted by Regulus to AstraZeneca hereunder (including any sublicenses granted by AstraZeneca) will terminate.

9.3.2 Return of Information and Materials. Upon termination of this Agreement in its entirety by either Party pursuant to this Article 9, the Parties will return (or destroy, as directed by the other Party) all data, files, records and other materials containing or comprising the other Party's Confidential Information. Notwithstanding the foregoing, the Parties will be permitted to retain one copy of such data, files, records, and other materials for archival purposes, and with respect to Regulus, to practice its rights under Section 10.1.

Section 9.4 Accrued Rights; Surviving Obligations.

9.4.1 Accrued Rights. Termination or expiration of this Agreement for any reason will be without prejudice to any rights or financial compensation that will have accrued to the benefit of a Party prior to such termination or expiration. For clarity and without limiting

the foregoing, Regulus shall be entitled to retain in full the $3,000,000 up-front payment and any other payments made to Regulus by AstraZeneca on or prior to the date of such termination or expiration. Such termination or expiration will not relieve a Party from obligations that are expressly indicated to survive the termination or expiration of this Agreement.

9.4.2 Survival. Articles 1, 7, 10, 11 and 14; and Section 3.10 (only with regard to the warranty waiver therein), 4.3.2, 6.10 and 6.11 (but only to the extent payments are owed under this Agreement for activities prior to termination or expiration), 6.13 (for the time period therein), 9.3, 9.4, 9.5 and 12.3 of this Agreement will survive expiration or termination of this Agreement for any reason.

Section 9.5 Rights in Bankruptcy. All rights and licenses granted under or pursuant to this Agreement by Regulus or AstraZeneca are, and will otherwise be deemed to be, for purposes of Section 365(n) of the U.S. Bankruptcy Code (i.e., Title 11 of the U.S. Code) or analogous provisions of Applicable Law outside the United States, licenses of rights to "intellectual property" as defined under Section 101 of the U.S. Bankruptcy Code or analogous provisions of Applicable Law outside the United States. The Parties agree that each Party, as licensee of such rights under this Agreement, will retain and may fully exercise all of its rights and elections under the U.S. Bankruptcy Code or any other provisions of Applicable Law outside the United States that provide similar protection for 'intellectual property.' The Parties further agree that, in the event of the commencement of a bankruptcy proceeding by or against a Party under the U.S. Bankruptcy Code or analogous provisions of Applicable Law outside the United States, the Party that is not subject to such proceeding will be entitled to a complete duplicate of (or complete access to, as appropriate) such intellectual property and all embodiments of such intellectual property, which, if not already in the non subject Party's possession, will be promptly delivered to it upon the non subject Party's written request therefor. Any agreements supplemental hereto will be deemed to be "agreements supplementary to" this Agreement for purposes of Section 365(n) of the U.S. Bankruptcy Code.

ARTICLE 10

REGULUS REVERSION RIGHTS

Section 10.1 Regulus Reversion Rights. Effective automatically upon (a) any termination of this Agreement (in full or on a Collaboration Target-by-Collaboration Target basis) by either Party (or automatically) under Section 9.2, or (b) any discontinuation or substitution of a Collaboration Target under Article 3 (including any Discontinued Target), AstraZeneca shall, and hereby does, (i) grant to Regulus an exclusive (even as to AstraZeneca and its Affiliates) license and sublicense, with the right to sublicense through multiple tiers of sublicenses (provided that, in the case of any acquired AstraZeneca Program Intellectual Property licensed to AstraZeneca under an agreement with a Third Party, such agreement by which AstraZeneca has acquired said AstraZeneca Program Intellectual Property permits such multiple tiers of sublicense), under the AstraZeneca Program Intellectual Property and AstraZeneca's interest in the Joint Patents solely to Exploit any Lead Compounds and Products that are the subject of such discontinuation, substitution or termination, including any Lead Compounds targeting or mimicking, as applicable, any Discontinued Target or terminated Collaboration Target (each a ***"Discontinued Product"***), (ii) transfer to Regulus, for Regulus' use with respect to the development, manufacture and commercialization of the Discontinued Product*s,* copies of any AstraZeneca Know-How that relates to such Discontinued Products (provided, that AstraZeneca may redact from such copies any confidential information regarding other products of AstraZeneca, if applicable, that do not relate to Discontinued

Products), (iii) transfer and assign to Regulus all Regulatory Documentation with respect to such Discontinued Products (including but not limited to identifying for Regulus, and authorizing Regulus to reference, any Drug Master File with a Regulatory Authority related to such Discontinued Product), and (iv) work in good faith to coordinate with Regulus with regard to all ongoing development, regulatory and commercial activities with respect to such Discontinued Product(s), and to promptly and efficiently transfer all such activities to Regulus or Regulus' designee.

Section 10.2 Financial obligations for Regulus Reversion Rights. In consideration of the licensed rights granted by AstraZeneca to Regulus under Section 10.2 above in relation to a Discontinued Product following Initiation of a Phase 1 Trial of the relevant Discontinued Product, the Parties shall negotiate in good faith regarding a reasonable payments to be paid by Regulus to AstraZeneca for Discontinued Products covered by the licensed AstraZeneca Program Intellectual Property.

ARTICLE 11

INDEMNIFICATION AND INSURANCE

Section 11.1 Indemnification of Regulus. AstraZeneca agrees to defend Regulus, its Affiliates and their respective directors, officers, stockholders, employees and agents, and their respective successors, heirs and assigns (collectively, the ***"Regulus Indemnitees"***), and will indemnify and hold harmless the Regulus Indemnitees, from and against any liabilities, losses, costs, damages, fees or expenses payable to a Third Party, and reasonable attorneys' fees and other legal expenses with respect thereto (collectively, ***"Losses"***) arising out of any claim, action, lawsuit or other proceeding by a Third Party (collectively, ***"Third Party Claims"***) brought against any Regulus Indemnitee and resulting from or occurring as a result of: (a) the Exploitation of any Lead Compound or Product by AstraZeneca or its Affiliates, Sublicensees or contractors, (b) any breach by AstraZeneca of any of its representations, warranties or covenants pursuant to this Agreement or (c) the negligence or willful misconduct of AstraZeneca or any AstraZeneca Affiliate or Sublicensee in connection with this Agreement; *except* in any such case to the extent such Losses result from: (i) the negligence or willful misconduct of any Regulus Indemnitee, (ii) any breach by Regulus of any of its representations, warranties, covenants or obligations pursuant to this Agreement, or (iii) any breach of Applicable Law by any Regulus Indemnitee. In addition, and without limiting the foregoing, to the extent of the sublicense granted to AstraZeneca under this Agreement with respect to the Regulus Technology in-licensed by Regulus under the […***…] Agreement, AstraZeneca agrees to be directly bound by, and to indemnify and obtain and maintain insurance in accordance with, the provisions set forth in […***…] Agreement as though AstraZeneca is CORPORATION as set forth therein. […***…] attached as **APPENDIX 4** to this Agreement and incorporated herein by reference.

Section 11.2 Indemnification of AstraZeneca. Regulus agrees to defend AstraZeneca, its Affiliates and their respective directors, officers, stockholders, employees and agents, and their respective successors, heirs and assigns (collectively, the ***"AstraZeneca Indemnitees"***), and will indemnify and hold harmless the AstraZeneca Indemnitees, from and against any Losses and Third Party Claims brought against any AstraZeneca Indemnitee and resulting from or occurring as a result of: (a) any activities conducted by a Regulus employee, consultant or (sub)contractor in the performance of the Research Program; (b) any breach by Regulus of any of its representations, warranties or covenants pursuant to this Agreement or

(c) the negligence or willful misconduct of any Regulus Indemnitee or any (sub)contractor of Regulus in connection with this Agreement; *except* in any such case to the extent such Losses result from: (i) the negligence or willful misconduct of any AstraZeneca Indemnitee, (ii) any breach by AstraZeneca of any of its representations, warranties, covenants or obligations pursuant to this Agreement, or (iii) any breach of Applicable Law by any AstraZeneca Indemnitee.

Section 11.3 Notice of Claim. All indemnification claims provided for in Sections 11.1 and 11.2 will be made solely by such Party to this Agreement (the ***"Indemnified Party"***). The Indemnified Party will give the indemnifying Party prompt written notice (an ***"Indemnification Claim Notice"***) of any Losses or the discovery of any fact upon which the Indemnified Party intends to base a request for indemnification under Section 11.1 or 11.2, but in no event will the indemnifying Party be liable for any Losses to the extent such Losses result from any delay in providing such notice. Each Indemnification Claim Notice must contain a description of the claim and the nature and amount of such Loss (to the extent that the nature and amount of such Loss is known at such time). The Indemnified Party will furnish promptly to the indemnifying Party copies of all papers and official documents received in respect of any Losses and Third Party Claims.

Section 11.4 Defense, Settlement, Cooperation and Expenses.

11.4.1 Control of Defense. At its option, the indemnifying Party may assume the defense of any Third Party Claim by giving written notice to the Indemnified Party within 30 days after the indemnifying Party's receipt of an Indemnification Claim Notice. The assumption of the defense of a Third Party Claim by the indemnifying Party will not be construed as an acknowledgment that the indemnifying Party is liable to indemnify the Indemnified Party in respect of the Third Party Claim, nor will it constitute a waiver by the indemnifying Party of any defenses it may assert against the Indemnified Party's claim for indemnification. Upon assuming the defense of a Third Party Claim, the indemnifying Party may appoint as lead counsel in the defense of the Third Party Claim any legal counsel selected by the indemnifying Party. In the event the indemnifying Party assumes the defense of a Third Party Claim, the Indemnified Party will as soon as is reasonably possible deliver to the indemnifying Party all original notices and documents (including court papers) received by the Indemnified Party in connection with the Third Party Claim. Should the indemnifying Party assume the defense of a Third Party Claim, except as provided in Section 11.4.1, the Indemnified Party will be responsible for the legal costs or expenses subsequently incurred by such Indemnified Party in connection with the analysis, defense or settlement of the Third Party Claim.

11.4.2 Right to Participate in Defense. Without limiting Section 11.4.1, any Indemnified Party will be entitled to participate in, but not control, the defense of such Third Party Claim and to employ counsel of its choice for such purpose; *provided, however*, that such employment will be at the Indemnified Party's own cost and expense unless (a) the employment thereof has been specifically authorized by the indemnifying Party in writing, (b) the indemnifying Party has failed to assume the defense and employ counsel in accordance with Section 11.4.1 (in which case the Indemnified Party will control the defense) or (c) the interests of the Indemnified Party and the indemnifying Party with respect to such Third Party Claim are sufficiently adverse to prohibit the representation by the same counsel of both Parties under Applicable Law, ethical rules or equitable principles in which case the indemnifying Party will be responsible for any such costs and expenses of counsel for the Indemnified Party.

11.4.3 Settlement. With respect to any Third Party Claims relating solely to the payment of money damages in connection with a Third Party Claim and that will not admit liability or violation of Law on the part of the Indemnified Party or result in the Indemnified Party's becoming subject to injunctive or other relief or otherwise adversely affecting the business of the Indemnified Party in any manner (such as granting a license or admitting the invalidity of a Patent Controlled by an Indemnified Party), and as to which the indemnifying Party will have acknowledged in writing the obligation to indemnify the Indemnified Party hereunder, the indemnifying Party will have the sole right to consent to the entry of any judgment, enter into any settlement or otherwise dispose of such Loss, on such terms as the indemnifying Party, in its sole discretion, will deem appropriate. With respect to all other Losses in connection with Third Party Claims, where the indemnifying Party has assumed the defense of the Third Party Claim in accordance with Section 11.4.1, the indemnifying Party will have authority to consent to the entry of any judgment, enter into any settlement or otherwise dispose of such Loss provided it obtains the prior written consent of the Indemnified Party (which consent will not be unreasonably withheld). The indemnifying Party will not be liable for any settlement or other disposition of a Loss by an Indemnified Party that is reached without the written consent of the indemnifying Party. Regardless of whether the indemnifying Party chooses to defend or prosecute any Third Party Claim, no Indemnified Party will admit any liability with respect to or settle, compromise or discharge, any Third Party Claim without the prior written consent of the indemnifying Party, such consent not to be unreasonably withheld.

11.4.4 Cooperation. Regardless of whether the indemnifying Party chooses to defend or prosecute any Third Party Claim, the Indemnified Party will, and will cause each other Indemnified Party to, cooperate in the defense or prosecution thereof and will furnish such records, information and testimony, provide such witnesses and attend such conferences, discovery proceedings, hearings, trials and appeals as may be reasonably requested in connection therewith. Such cooperation will include access during normal business hours afforded to indemnifying Party to, and reasonable retention by the Indemnified Party of, records and information that are reasonably relevant to such Third Party Claim, and making Indemnified Parties and other employees and agents available on a mutually convenient basis to provide additional information and explanation of any material provided hereunder, and the indemnifying Party will reimburse the Indemnified Party for all its reasonable out-of-pocket costs and expenses in connection therewith.

11.4.5 Costs and Expenses. Except as provided above in this Section 11.4, the costs and expenses, including attorneys' fees and expenses, incurred by the Indemnified Party in connection with any claim will be reimbursed on a Calendar Quarter basis by the indemnifying Party, without prejudice to the indemnifying Party's right to contest the Indemnified Party's right to indemnification and subject to refund in the event the indemnifying Party is ultimately held not to be obligated to indemnify the Indemnified Party.

Section 11.5 Insurance.

11.5.1 Regulus' Insurance Obligations. Regulus shall maintain, at its cost, reasonable insurance against liability and other risks associated with its activities contemplated by this Agreement, including but not limited to its indemnification obligations herein, in such amounts and on such terms as are customary for prudent practices for biotech companies of similar size and with similar resources in the pharmaceutical industry for the activities to be conducted by it under this Agreement taking into account the scope of development of products.

Regulus shall furnish to AstraZeneca evidence of any insurance required under this Section 11.5, upon request.

11.5.2 AstraZeneca's Insurance Obligations. AstraZeneca hereby represents and warrants to Regulus that it shall maintain, at its cost, reasonable insurance against liability and other risks associated with its activities contemplated by this Agreement (including product liability), including but not limited to its indemnification obligations herein, in such amounts and on such terms as are customary for prudent practices for large companies in the pharmaceutical industry for the activities to be conducted by AstraZeneca under this Agreement. AstraZeneca shall maintain such self insurance throughout the Term and for five years thereafter, and shall furnish to Regulus evidence of such insurance, upon request.

ARTICLE 12

REPRESENTATIONS AND WARRANTIES

Section 12.1 Representations, Warranties and Covenants. Each Party hereby represents and warrants as of the Effective Date, and covenants, to the other Party that:

12.1.1 it has the power and authority and the legal right to enter into this Agreement and perform its obligations hereunder, and that it has taken all necessary action on its part required to authorize the execution and delivery of this Agreement and the performance of its obligations hereunder;

12.1.2 this Agreement has been duly executed and delivered on behalf of such Party and constitutes a legal, valid and binding obligation of such Party and is enforceable against it in accordance with its terms subject to the effects of bankruptcy, insolvency or other laws of general application affecting the enforcement of creditor rights and judicial principles affecting the availability of specific performance and general principles of equity, whether enforceability is considered a proceeding at law or equity;

12.1.3 all necessary consents, approvals and authorizations of all Regulatory Authorities and other parties required to be obtained by such Party in connection with the execution and delivery of this Agreement and the performance of its obligations hereunder have been obtained;

12.1.4 the execution and delivery of this Agreement and the performance of such Party's obligations hereunder (a) do not conflict with or violate any requirement of Applicable Law or any provision of the certificate of incorporation, bylaws or any similar instrument of such Party, as applicable, in any material way, and (b) do not conflict with, violate, or breach or constitute a default or require any consent not already obtained under, any contractual obligation or court or administrative order by which such Party is bound;

12.1.5 All employees, consultants, or (sub)contractors of such Party or Affiliates performing development activities hereunder on behalf of such Party are, and such Party hereby covenants to the other Party that they will be, obligated to assign all right, title and interest in and to any inventions developed by them, whether or not patentable, to such Party or Affiliate, respectively, as the sole owner thereof;

12.1.6 Such Party will, and such Party hereby covenants to the other Party that it will, perform its activities pursuant to this Agreement in compliance with good laboratory and clinical practices and cGMP and Applicable Law, in each case as applicable under the laws and regulations of the country and the state and local government wherein such activities are

conducted, and with respect to the care, handling and use in development activities hereunder of any non-human animals by or on behalf of such Party, will at all times comply (and will ensure compliance by any of its subcontractors) with all applicable national, federal, state and local laws, regulations and ordinances in performing its obligations under this Agreement; and

12.1.7 Such Party is not debarred under the United States Federal Food, Drug and Cosmetic Act or comparable Applicable Laws and it does not, and will not during the Term, employ or use the services of any person or entity who is debarred, in connection with the development, manufacture or commercialization of the Lead Compounds or Products. In the event that either Party becomes aware of the debarment or threatened debarment of any person or entity providing services to such Party, including the Party itself and its Affiliates or Sublicensees, which directly or indirectly relate to activities under this Agreement, the other Party shall be immediately notified in writing.

Section 12.2 Regulus Representations, Warranties, and Covenants. Regulus hereby represents and warrants to AstraZeneca as of the Effective Date that:

12.2.1 Regulus is the owner of, or otherwise has the right to grant all rights and licenses it purports to grant to AstraZeneca with respect to the Regulus Patents and Regulus Technology under this Agreement for Lead Compounds identified by Regulus on or before the Effective Date that target the Lead Targets;

12.2.2 To Regulus' Knowledge, all Regulus Patents that are owned by Regulus (***"Regulus Owned Patents"***) have been filed and maintained properly and correctly in all material respects;

12.2.3 Regulus has not previously entered into any agreement, whether written or oral, with respect to, or otherwise assigned, transferred, licensed, conveyed or otherwise encumbered its right, title or interest in or to, the Regulus Technology (including by granting any covenant not to sue with respect thereto) in such a way as to make the representation set forth in Section 12.2.1 not true, and it will not enter into any such agreements or grant any such right, title or interest to any Person that is inconsistent with the rights and licenses granted to AstraZeneca under this Agreement;

12.2.4 To Regulus' Knowledge, each of the Regulus Owned Patents properly identifies each and every inventor of the claims thereof as determined in accordance with the laws of the jurisdiction in which such Patent is issued or such application is pending;

12.2.5 Regulus has not received any written claim alleging that any of the Regulus Owned Patents are invalid or unenforceable, including any Regulus Owned Patents required in order for Regulus to conduct its obligation under the R&D Plan with respect to the Lead Targets and Lead Compounds identified by Regulus on or before the Effective Date that target the Lead Targets;

12.2.6 Regulus has not received any written claim alleging that any of Regulus' activities relating to the Lead Targets and Lead Compounds identified by Regulus on or before the Effective Date that target Lead Targets infringe any intellectual property rights of a Third Party;

12.2.7 To Regulus' Knowledge, (i) the licenses granted to Regulus under the Existing Regulus Agreements are in full force and effect, (ii) Regulus has not received any written notice, and is not aware, of any breach by any party to the Existing Regulus Agreements,

and (iii) Regulus' performance of its obligations under this Agreement (including the R&D Plan as of the Effective Date with respect to Lead Targets) will not constitute a breach of Regulus' obligations under the Existing Regulus Agreements and the licenses granted to Regulus thereunder;

12.2.8 To Regulus' Knowledge, Regulus does not require any additional licenses or other intellectual property rights in order for Regulus to conduct its obligation under the R&D Plan as of the Effective Date with respect to the Lead Targets and Lead Compounds identified by Regulus on or before the Effective Date; and

12.2.9 To Regulus' Knowledge, in respect of the pending United States patent applications included in the Regulus Owned Patents, Regulus has submitted all material prior art of which it is aware in accordance with the requirements of the United States Patent and Trademark Office.

Section 12.3 DISCLAIMER OF WARRANTY. EXCEPT FOR THE EXPRESS WARRANTIES SET FORTH IN THIS ARTICLE 12, ASTRAZENECA AND REGULUS MAKE NO REPRESENTATIONS AND GRANT NO WARRANTIES, EXPRESS OR IMPLIED, EITHER IN FACT OR BY OPERATION OF LAW, BY STATUTE OR OTHERWISE, AND ASTRAZENECA AND REGULUS EACH SPECIFICALLY DISCLAIM ANY WARRANTIES, WHETHER WRITTEN OR ORAL, OR EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF QUALITY, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE OR ANY WARRANTY AS TO THE VALIDITY OF ANY PATENTS OR THE NON-INFRINGEMENT OF ANY INTELLECTUAL PROPERTY RIGHTS OF THIRD PARTIES.

ARTICLE 13

ANTI BRIBERY AND ANTI CORRUPTION

Section 13.1 Each Party (the "First Party") agrees, on behalf of itself, its officers, directors and employees and on behalf of its Affiliates, agents, representatives, consultants and subcontractors hired in connection with the subject matter of this Agreement (together with the First Party, "FP Persons") that in relation to the performance of the First Party's obligations hereunder:

13.1.1 FP Persons shall not directly or indirectly pay, offer or promise to pay, or authorize the payment of any money, or give, offer or promise to give, or authorize the giving of anything else of value, to:

(a) any Government Official in order to influence official action in a corrupt, improper, or illegal manner;

(b) any Person (whether or not a Government Official) (i) to influence such Person to act in breach of a duty of good faith, impartiality or trust ("acting improperly"), (ii) to reward such Person for acting improperly, or (iii) where such Person would be acting improperly by receiving the money or other thing of value;

(c) any other Person while knowing that all or any portion of the money or other thing of value will be corruptly or improperly paid, offered, promised or given

to, or will otherwise benefit, a Government Official in order to influence official action for or against either Party in connection with the matters that are the subject of this Agreement; or

(d) any Person to reward that Person for acting improperly or to induce that Person to act improperly.

13.1.2 FP Persons shall not, directly or indirectly, solicit, receive or agree to accept any payment of money or anything else of value in violation of the Anti-Corruption Laws.

Section 13.2 The First Party, on behalf of itself and the other FP Persons, represents and warrants to the other Party that for the term of this Agreement and three (3) years thereafter that the First Party shall and shall procure that the other FP Persons keep and maintain accurate books and reasonably detailed records in connection with the performance of its obligations under this Agreement including all records required to establish compliance with Sections 13.1 above.

Section 13.3 The First Party shall promptly provide the other Party with written notice of the following events:

13.3.1 Upon becoming aware of any breach or violation by any FP Person of any representation, warranty or undertaking set forth in Sections 13.1.

13.3.2 Upon receiving a formal notification that it is the target of a formal investigation by a Regulatory Authority for a Material Anti-Corruption Law Violation or upon receipt of information from any other FP Person connected with this Agreement that any of them is the target of a formal investigation by a Regulatory Authority for a Material Anti-Corruption Law Violation.

Section 13.4 For the term of this Agreement and three (3) years thereafter, the First Party shall for the purpose of auditing and monitoring the performance of its compliance with the Agreement and particularly this Section 13 permit the other Party, its Affiliates, any auditors of any of them and any Regulatory Authority to have reasonable access to any premises of the First Party or any FP Person used in connection with this Agreement, together with a right to access personnel and records that relate to this Agreement (an "**Audit**").

Section 13.5 The First Party shall be responsible for any breach of any representation, warranty or undertaking in this Section 13 or of the Anti-Corruption Laws by any FP Person.

Section 13.6 Either Party may disclose the terms of this Agreement or any action taken under this Section 13 to prevent a potential violation or continuing violation of applicable Anti-Corruption Laws, including the identity of the other Party and the payment terms, to any governmental authority if and to the extent that such disclosing Party reasonably determines, upon advice of counsel, that such disclosure is necessary.

ARTICLE 14

MISCELLANEOUS

Section 14.1 Assignment. Except as expressly set forth in this Agreement, without the prior written consent of the other Party hereto, neither Party will sell, transfer, assign, delegate, pledge or otherwise dispose of, whether voluntarily, involuntarily, by

operation of law or otherwise, this Agreement or any of its rights or duties hereunder; *provided, however,* that:

(a) either Party may assign this Agreement and its rights and obligations hereunder without the other Party's consent in connection with the transfer or sale of all or substantially all of the business of such Party to which this Agreement relates to a Third Party (in the case of a transfer or sale of only substantially all of the business, provided that the transferred or sold portion of the business includes all the business related to this Agreement), whether by merger, sale of stock, sale of assets or otherwise, provided that in the event of such a sale or transfer (whether this Agreement is actually assigned or is assumed by the acquiring party by operation of law (*e.g.*, in the context of a reverse triangular merger)), intellectual property rights of the acquiring party in such sale or transfer (if other than one of the Parties to this Agreement) shall not be included in the technology licensed hereunder or otherwise subject to this Agreement;

(b) either Party may, without the other Party's consent, assign this Agreement and its rights and obligations hereunder to an Affiliate of such Party, provided that such Affiliate agrees to be bound by the terms and conditions of this Agreement and that no such assignment to an Affiliate will relieve the assigning Party of its obligations hereunder; and

(c) Regulus may assign or transfer its rights under Article 6 (but no liabilities) to a Third Party in connection with a royalty or other payment factoring transaction.

The rights and obligations of the Parties under this Agreement shall be binding upon and inure to the benefit of the successors and permitted assigns of the Parties, and the name of a Party appearing herein will be deemed to include the name of such Party's successors and permitted assigns to the extent necessary to carry out the intent of this section. Each Party agrees to provide written notice to the other Party of any assignment pursuant to Section 14.1 above within 30 Business Days following such assignment. Any purported assignment or transfer in violation of this Section 14.1 will be void *ab initio* and of no force or effect.

Section 14.2 Severability. If any provision of this Agreement is held to be illegal, invalid or unenforceable by a court of competent jurisdiction, such adjudication will not affect or impair, in whole or in part, the validity, enforceability, or legality of any remaining portions of this Agreement. All remaining portions will remain in full force and effect as if the original Agreement had been executed without the invalidated, unenforceable or illegal part.

Section 14.3 Governing Law; Jurisdiction. This Agreement will be governed by and construed and enforced in accordance with the laws of England and Wales, without reference to any rules of conflicts of laws. For clarification, any dispute relating to the scope, validity, enforceability or infringement of any Patents will be governed by and construed and enforced in accordance with the patent laws of the applicable jurisdiction.

Section 14.4 Equitable relief. Each Party acknowledges and agrees that the restrictions set forth in Section 2.4 of this Agreement are reasonable and necessary to protect the legitimate interests of the other Party and that the other Party would not have entered into this Agreement in the absence of such restrictions, and that any breach or threatened breach of any of these provisions will probably result in irreparable injury to the other Party for which there will be no adequate remedy at law. In the event of a breach or threatened breach of any such provision, each Party shall be authorised and entitled to obtain from any court of competent jurisdiction equitable relief, whether preliminary or permanent, specific

performance and an equitable accounting of all earnings, profits and other benefits arising from such breach, which rights shall be cumulative and in addition to any other rights or remedies to which such Party may be entitled in law or equity. Each Party agrees to waive any requirement that the other Party (a) post a bond or other security as a condition for obtaining any such relief, and (b) show irreparable harm, balancing of harms, consideration of the public interest or inadequacy of monetary damages as a remedy. Nothing in this Section 14.4 is intended, or should be construed, to limit a Party's rights to equitable relief or any other remedy for a breach of any other provision of this Agreement.

Section 14.5 Dispute Resolution.

14.5.1 Resolution by Senior Representatives. The Parties will seek to settle amicably any and all disputes, controversies or claims arising out of or in connection with this Agreement. For clarity, any decision within the JSC's decision-making authority will be finally decided by the JSC. Any dispute between the Parties which is outside the JSC's decision-making authority will be promptly presented to the Head of R &D of AstraZeneca and the Chief Executive Officer of Regulus (the ***"Senior Representatives"***), or their respective designees, for resolution. Such Senior Representatives, or their respective designees, will meet in-person or by teleconference as soon as reasonably possible thereafter, and use their good faith efforts to mutually agree upon the resolution of the dispute, controversy or claim. Any dispute within the JSC's decision-making authority will not be subject to arbitration.

14.5.2 Request for Arbitration. If after negotiating in good faith pursuant to Section 14.5.1, after good faith discussions undertaken within reasonable promptness, to reach an amicable agreement within 90 days, then either Party may upon written notice to the other submit to binding arbitration pursuant to Section 14.5.3 below. No statements made by either Party during such discussions will be used by the other Party or admissible in arbitration or any other subsequent proceeding for resolving the dispute.

14.5.3 Arbitration.

(a) Any dispute, claim or controversy arising from or related in any way to this Agreement or the interpretation, application, breach, termination or validity thereof, including any claim of inducement of this Agreement by fraud or otherwise, not resolved under the provisions of Section 14.5.1 will be resolved by final and binding arbitration conducted in accordance with the terms of this Section 14.5.3. The arbitration will be held in New York, New York, USA according to Rules of Arbitration of the International Chamber of Commerce (***"ICC"***). The arbitration will be conducted by a panel of three arbitrators with significant experience in the pharmaceutical industry, unless otherwise agreed by the Parties, appointed in accordance with applicable ICC rules. Any arbitration herewith will be conducted in the English language to the maximum extent possible. The arbitrators will render a written decision no later than six months following the selection of the arbitrators, including a basis for any damages awarded and a statement of how the damages were calculated. Any award will be promptly paid in U.S. dollars free of any tax, deduction or offset. Each Party agrees to abide by the award rendered in any arbitration conducted pursuant to this Section 14.5.3. With respect to money damages, nothing contained herein will be construed to permit the arbitrator or any court or any other forum to award punitive or exemplary damages, except in the case of breach of Article 7. By entering into this agreement to arbitrate, the Parties expressly waive any claim for punitive or exemplary damages, except in the case of breach of Article 7. Each Party will pay its legal fees and costs related to the arbitration (including witness and expert fees).

Judgment on the award so rendered will be final and may be entered in any court having jurisdiction thereof.

(b) EACH PARTY HERETO WAIVES ITS RIGHT TO TRIAL OF ANY ISSUE BY JURY. EACH PARTY HERETO WAIVES ANY CLAIM FOR ATTORNEYS' FEES AND COSTS AND PREJUDGMENT INTEREST FROM THE OTHER.

(c) EXCEPT FOR LOSSES COVERED BY THE INDEMNITIES PROVIDED UNDER ARTICLE 11, AND ANY BREACH OF THE CONFIDENTIALITY RESTRICTIONS UNDER ARTICLE 7, EACH PARTY HERETO WAIVES (1) ANY CLAIM TO PUNITIVE, EXEMPLARY OR MULTIPLIED DAMAGES FROM THE OTHER; AND (2) ANY CLAIM OF CONSEQUENTIAL, INDIRECT OR INCIDENTAL DAMAGES FROM THE OTHER.

14.5.4 Disputes Regarding Material Breach. If the Parties are in dispute as to whether one Party is in material breach of this Agreement, then the arbitrator will first determine if material breach has in fact occurred, and if so, will grant the defaulting Party the cure period provided pursuant to Section 9.2. If the material breach is not cured within the time period provided pursuant to Section 9.2, the arbitration will continue and the arbitrator will, as part of the same arbitration, award actual direct damages to the non-defaulting Party.

14.5.5 Court Actions. Nothing contained in this Agreement shall deny either Party the right to seek injunctive or other equitable relief from a court of competent jurisdiction in the context of a *bona fide* emergency or prospective irreparable harm, and such an action may be filed and maintained notwithstanding any ongoing dispute resolution discussions or arbitration proceeding. In addition, either Party may bring an action in any court of competent jurisdiction to resolve disputes pertaining to the validity, construction, scope, enforceability, infringement or other violations of patents or other proprietary or intellectual property rights, and no such claim shall be subject to arbitration pursuant to Section 14.5.3.

Section 14.6 Notices. Except as otherwise provided for in this Agreement, all notices or other communications that are required or permitted hereunder will be in the English Language and in writing and delivered personally with acknowledgement of receipt, sent by facsimile (and promptly confirmed by personal delivery, registered or certified mail or overnight courier as provided herein), sent by internationally-recognized overnight courier or sent by registered or certified mail, postage prepaid, return receipt requested, addressed as follows:

If to AstraZeneca, to:

AstraZeneca AB
SE-431 83 Mölndal
Sweden
Attention: Legal Dept
Facsimile: +46 31 7763871

With a copy to:

AstraZeneca UK Limited
Strategic Planning and business Development
Alderley House,

Alderley Park,
Macclesfield,
Cheshire SK10 4TF
Facsimile: +44 1625 518805

If to Regulus, to:

Regulus Therapeutics Inc.
3545 John Hopkins Court, Suite 210
San Diego, California 92121-1121
U.S.A.
Attention: Executive Vice President, Finance
Facsimile: +1 (858) 202-6363

With a copy to:

Regulus Therapeutics Inc.
3545 John Hopkins Court, Suite 210
San Diego, California 92121-1121
U.S.A.
Attention: General Counsel
Facsimile: +1 (858) 202-6363

With a copy to:

Attention: Thomas Coll
Cooley LLP
4401 Eastgate Mall
San Diego, CA 92121
USA
Facsimile: +1 (858) 550-6420

or to such other address as the Party to whom notice is to be given may have furnished to the other Party in writing in accordance herewith. Any such communication will be deemed to have been given (i) when delivered, if personally delivered or sent by facsimile on a Business Day, (ii) on the Business Day after dispatch, if sent by nationally-recognized overnight courier, and (iii) on the third Business Day following the date of mailing, if sent by mail. It is understood and agreed that this Section 14.6 is not intended to govern the day-to-day business communications necessary between the Parties in performing their duties, in due course, under the terms of this Agreement.

Section 14.7 Entire Agreement; Modifications. This Agreement (including the attached Appendices and the R&D Plan) sets forth and constitutes the entire agreement and understanding between the Parties with respect to the subject matter hereof, and all prior agreements, understanding, promises and representations, whether written or oral, with respect thereto are superseded hereby except, for clarity, the Stock Purchase Agreement and the letter between the Parties of even date herewith. Each Party confirms that it is not relying on any representations or warranties of the other Party except as specifically set forth herein. No amendment, modification, release or discharge will be binding upon the Parties unless in writing and duly executed by authorized representatives of both Parties.

Section 14.8 Headings. The headings of Articles and Sections of this Agreement are for ease of reference only and will not affect the meaning or interpretation of this Agreement in any way.

Section 14.9 Relationship of the Parties. It is expressly agreed that the Parties will be independent contractors of one another and that the relationship between the Parties will not constitute a partnership, joint venture or agency.

Section 14.10 Waiver. Any term or condition of this Agreement may be waived at any time by the Party that is entitled to the benefit thereof, but no such waiver will be effective unless set forth in a written instrument duly executed by or on behalf of the Party waiving such term or condition. Any such waiver will not be deemed a waiver of any other right or breach hereunder.

Section 14.11 Counterparts. This Agreement may be executed in two or more counterparts, each of which will be deemed an original, but all of which together will constitute one and the same instrument.

Section 14.12 No Benefit to Third Parties. The representations, warranties, covenants and agreements set forth in this Agreement are for the sole benefit of the Parties hereto and their successors and permitted assigns, and they will not be construed as conferring any rights on any other parties, except that […***…] shall be deemed a Third Party beneficiary for the purpose of enforcing its rights as explicitly set forth in Section 11.1 hereof.

Section 14.13 Further Assurances. Each Party will duly execute and deliver, or cause to be duly executed and delivered, such further instruments and do and cause to be done such further acts and things, including the filing of such assignments, agreements, documents and instruments, as may be necessary to carry out the provisions and purposes of this Agreement.

Section 14.14 Force Majeure. Neither Party will be charged with any liability for delay in performance of an obligation under this Agreement (other than failure to make payment when due) to the extent such delay is due to a cause beyond the reasonable control of the affected Party, such as war, riots, labor disturbances, fire, explosion, earthquake, and compliance in good faith with any Applicable Law, regulation or order. The Party affected will give prompt written notice to the other Party of such force majeure circumstances as soon as reasonably practical and shall promptly undertake all reasonable efforts necessary to cure such force majeure circumstances. Such excuse from liability shall be effective only to the extent and duration of the event(s) causing the failure or delay in performance and provided that the Party has not caused such event(s) to occur.

Section 14.15 Interpretation.

14.15.1 Each of the Parties acknowledges and agrees that this Agreement has been diligently reviewed by and negotiated by and between them, that in such negotiations each of them has been represented by competent counsel and that the final agreement contained herein, including the language whereby it has been expressed, represents the joint efforts of the Parties hereto and their counsel. Accordingly, in the event an ambiguity or a question of intent or interpretation arises, this Agreement will be construed as if drafted jointly by the Parties and no presumption or burden of proof will arise favoring or disfavoring any Party by virtue of the authorship of any provisions of this Agreement. This Agreement has been prepared in the English language and the English language shall control its interpretation. In addition, all

notices required or permitted to be given under this Agreement, and all written, electronic, oral or other communications between the Parties regarding this Agreement, shall be in the English language.

14.15.2 The definitions of the terms herein will apply equally to the singular and plural forms of the terms defined. Whenever the context may require, any pronoun will include the corresponding masculine, feminine and neuter forms. The words "include", "includes" and "including" will be deemed to be followed by the phrase "without limitation". The word "will" will be construed to have the same meaning and effect as the word "shall". The word "any" will mean "any and all" unless otherwise clearly indicated by context.

14.15.3 Unless the context requires otherwise, (a) any definition of or reference to any agreement, instrument or other document herein will be construed as referring to such agreement, instrument or other document as from time to time amended, supplemented or otherwise modified (subject to any restrictions on such amendments, supplements or modifications set forth herein or therein), (b) any reference to any Applicable Laws herein will be construed as referring to such Applicable Laws as from time to time enacted, repealed or amended, (c) any reference herein to any person will be construed to include the person's successors and assigns, (d) the words "herein", "hereof" and "hereunder", and words of similar import, will be construed to refer to this Agreement in its entirety and not to any particular provision hereof, and (e) all references herein to Articles, Sections or Appendices, unless otherwise specifically provided, will be construed to refer to Articles, Sections and Appendices of this Agreement.

14.15.4 References to sections of the Code of Federal Regulations and to the United States Code will mean the cited sections, as these may be amended from time to time.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed by their duly authorized representatives as of the date first above written.

REGULUS THERAPEUTICS INC.

By: /s/ Kleanthis G. Xanthopoulos

Name: Kleanthis G. Xanthopoulos, Ph.D.

Title: President & CEO

ASTRAZENECA AB

By: /s/ Gunnar Olsson

Name: Gunnar Olsson

Title: VP & Head CVGI & iMed

List of Appendices

APPENDIX 1

DEFINITIONS

"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 another Person. A Person will be deemed to "control" another Person if it (a) owns, directly or indirectly, beneficially or legally, at least 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. Notwithstanding the above, neither of the Founding Companies of Regulus will be deemed an Affiliate of Regulus for the purposes of this Agreement under any circumstances.

"Agreement" means this Collaboration and License Agreement, together with all Appendices attached hereto, and the R&D Plan, as the same may be amended or supplemented from time to time in accordance with the terms of this Agreement.

"Anti-Corruption Laws" means the U.S. Foreign Corrupt Practices Act, as amended, the UK Bribery Act 2010, as amended, and any other applicable anti-corruption laws and laws for the prevention of fraud, racketeering, money laundering or terrorism.

"API" means, with respect to a Product, the bulk active pharmaceutical ingredient for a Lead Compound manufactured in accordance with GMP for such Product.

"Applicable Law" or **"Law"** means all applicable laws, statutes, rules, regulations and other pronouncements having the effect of law of any federal, national, multinational, state, provincial, county, city or other political subdivision, agency or other body, domestic or foreign, including but not limited to any applicable rules, regulations, guidelines, or other requirements of the Regulatory Authorities that may be in effect from time to time, but excluding patent laws.

"Approval" means, with respect to any Product in any regulatory jurisdiction, approval from the applicable Regulatory Authority sufficient for the manufacture, distribution, use and sale of the Product in such jurisdiction in accordance with Applicable Laws. In jurisdictions where the applicable Regulatory Authority sets the pricing authorizations necessary for a Product, Approval will not be deemed to have occurred if the final approval to market and sell

the Product is being withheld because AstraZeneca (or its Affiliates or Sublicensee) and the Regulatory Authority have not yet determined pricing; *provided, however*, that the First Commercial Sale in such jurisdiction will be considered Approval in such jurisdiction.

"AstraZeneca Background Intellectual Property" means any Know-How and Patents that: (i) were Controlled by AstraZeneca prior to the Effective Date; and/or (ii) were created or acquired on or after the Effective Date except in connection with performance of obligations under the Research Program and/or in connection with the Exploitation of Lead Compounds or Products under this Agreement, which Patents and Know-How is necessary or useful to Exploit Lead Compound and Products in the Product Field.

"AstraZeneca Confidential Information" means any Confidential Information for which AstraZeneca is the Disclosing Party.

"AstraZeneca Indemnitees" has the meaning set forth in Section 11.2.

"AstraZeneca Know-How" means any Know-How Controlled by AstraZeneca or its Affiliates on the Effective Date and/or at any time thereafter during the Term that is necessary or useful to Exploit Lead Compound and Products in the Product Field. AstraZeneca Know-How shall include, without limitation, AstraZeneca Program Inventions.

"AstraZeneca Program Intellectual Property" means (i) AstraZeneca Program Inventions; (ii) AstraZeneca Program Patents; and (iii) Patents and Know-How created or acquired on or after the Effective Date by or on behalf of AstraZeneca or its Affiliates or Sublicensees in connection with performance of obligations under the Research Program and/or in connection with the Exploitation of Lead Compounds and Products under this Agreement.

"AstraZeneca Program Inventions" has the meaning set forth in Section 8.2.

"AstraZeneca Program Patents" has the meaning set forth in Section 8.2.

"AstraZeneca Technology" shall mean AstraZeneca Know-How and AstraZeneca Program Intellectual Property and AstraZeneca Background Intellectual Property.

"Atherosclerosis Field" means the treatment of conditions characterised by lipid infiltration and thickening of the arterial wall, inflammation of the arterial wall and the presence of atherosclerotic plaque formation leading to a reduction of blood flow in the heart.

"Audit" has the meaning set forth in Section 13.4.

"Business Day" means a day on which banking institutions in New York, New York, United States and Stockholm, Sweden, are both open for business.

"Calendar Quarter" means the respective periods of three consecutive calendar months ending on March 31, June 30, September 30 and December 31.

"Calendar Year" means the period of twelve consecutive calendar months ending on December 31.

"Candidate Selection ID Criteria" shall mean the criteria for selection of a microRNA Compound that targets or, if applicable, mimics, a Collaboration Target as a candidate for clinical development and commercialization by AstraZeneca pursuant to this Agreement, which criteria may include, if agreed by the JSC, a section relating to intellectual property

associated with the microRNA Compound and the Collaboration Target. The Candidate Selection ID Criteria for each Collaboration Target shall be determined by the JSC and set forth in the R&D Plan.

"Candidate Selection ID Package" has the meaning provided in Section 3.6.1.

"Change of Control Event" shall mean any (a) direct or indirect acquisition of all or substantially all of the assets of Regulus, (b) direct or indirect acquisition by a Person, or group of Persons acting in concert, of fifty percent (50%) or more of the voting equity interests of Regulus, (c) tender offer or exchange offer that if consummated would result in any Person, or group of Persons acting in concert, beneficially owning fifty percent (50%) or more of the voting equity interests of Regulus, or (d) merger, consolidation, other business combination or similar transaction involving Regulus, pursuant to which any Person would own all or substantially all of the consolidated assets, net revenues or net income of Regulus, taken as a whole, or which results in the holders of the voting equity interests of Regulus immediately prior to such merger, consolidation, business combination or similar transaction ceasing to hold fifty percent (50%) or more of the combined voting power of the surviving, purchasing or continuing entity immediately after such merger, consolidation, business combination or similar transaction, in all cases where such transaction is to be entered into with any Person other than AstraZeneca.

"Collaboration Target" means each microRNA designated by the Parties or the JSC in accordance with Section 3.4 for research and development under the R&D Plan. For clarity, the Collaboration Targets shall consist of each Lead Target and any Oncology Target or any Substitute Target designated in accordance with Section 3.4. For clarity, in no event shall there be more than three Collaboration Targets at any given time.

"Combination Product" means a Product that includes at least one additional active ingredient (whether coformulated or copackaged) which is not a Lead Compound.

"Commercially Reasonable Efforts" shall mean that level of efforts and resources, at the relevant point in time, commonly used in the pharmaceutical industry for a product of similar commercial potential at a similar stage in its lifecycle, taking into consideration relative safety and efficacy, product profile, the competitiveness of the marketplace, market potential, the relative profitability of the product (including pricing and reimbursement status) and other relevant factors, including technical, legal, scientific and/or medical factors.

"Confidential Information" has the meaning set forth in Section 7.1.

"Control" means, with respect to any Know-How, Patent or other intellectual property right, possession by a Party (including its Affiliates) of the right (whether by ownership, license or otherwise) to grant to the other Party ownership, a license, sublicense and/or other right to practice under such Know How, Patent or other intellectual property right as provided for herein without violating the terms of any agreement or other arrangement with any Third Party. Notwithstanding anything to the contrary under this Agreement, with respect to any Third Party acquirer that later becomes an Affiliate of Regulus after the Effective Date, no intellectual property of such Third Party acquirer will be included in the licenses granted hereunder by virtue of such Third Party acquirer becoming an Affiliate of Regulus.

"Development Transition Date" has the meaning set forth in Section 5.2.

"[…*…] Field"** means the treatment of conditions characterized by […***…].

"Diagnostic Uses" has the meaning set forth in Section 6.9.

"Disclosing Party" has the meaning set forth in Section 7.1.

"Discontinued Product" has the meaning set forth in Section 10.1.

"Discontinued Target" has the meaning set forth in Section 3.4.3(a).

"Distributor" has the meaning set forth in Section 2.3.

"Dollars" or **"$"** means the lawful currency of the United States.

"Dropped Product" has the meaning set forth in Section 6.2.5.

"Effective Date" has the meaning set forth in the opening paragraph of this Agreement.

"Effective Discontinuation" has the meaning provided in Section 3.6.3.

"EMA" means the European Regulatory Authority known as the European Medicines Agency and any successor agency thereto.

"EU" means the European Union, as its membership may be altered from time to time, and any successor thereto, and which, as of the Effective Date, consists of Austria, Belgium, Bulgaria, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, The Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and the United Kingdom, and that certain portion of Cyprus included in such organization.

"Exchange Act" means the Securities and Exchange Act of 1934, as amended.

"Existing AstraZeneca Agreement" means any agreement to which AstraZeneca is a party as of the Effective Date under which AstraZeneca has in-licensed or acquired rights to Patents or Know-How from a Third Party.

"Existing Blocking Patent Right" has the meaning provided in Section 6.4.3(b).

"Existing Regulus Agreement" means any of the agreements listed on **APPENDIX 3**.

"**Exploit**" means to develop, have developed, register, Manufacture, have Manufactured, formulate, use, have used, offer for sale, sell, have sold, import, hold/keep (whether for disposal or otherwise), export, transport, distribute, promote, market and/or otherwise dispose of or offer to dispose of a product or process.

"Exploratory IND Activities" has the meaning provided in Section 3.5.2.

"FDA" means the United States Food and Drug Administration and any successor agency thereto.

"First Commercial Sale" means the first sale of a Product by AstraZeneca, its Affiliates or a Sublicensee or Distributor to a Third Party in a particular country after Approval of such Product has been obtained in such country.

"Founding Company" means individually, either Isis Pharmaceuticals, Inc. or Alnylam Pharmaceuticals, Inc.; and collectively, both Isis Pharmaceuticals, Inc. and Alnylam Pharmaceuticals, Inc.

"Founding Company License Agreement" means the Amended and Restated License and Collaboration Agreement among Regulus and the Founding Companies dated January 1, 2009, as amended as of the Effective Date.

"FTE" means full-time equivalent per year based on […***…] ([…***…]) hours worked per 12-month period.

"FTE Rate" means a rate of […***…] ($[…***…]) per annum per FTE to be pro-rated on a daily basis if necessary. For the avoidance of doubt, such rate shall […***…].

"Future Third Party Agreement" means any agreement to which Regulus is a party as of or after the Effective Date under which Regulus has in-licensed or acquired rights to Patents or Know-How from a Third Party.

"Good Clinical Practice" or **"GCP"** will mean the then current standards for clinical trials for pharmaceuticals, as set forth in the United States Code of Federal Regulations, ICH guidelines and applicable regulations, laws or rules as promulgated thereunder, as amended from time to time, and such standards of good clinical practice as are required by the European Union and other organizations and governmental agencies in countries in which a Product is intended to be sold to the extent such standards are not less stringent than United States GCP.

"Good Laboratory Practice" or **"GLP"** will mean the then current standards for laboratory activities for pharmaceuticals, as set forth in the FDA's GLP regulations and/or ICH guidelines and applicable regulations.

"Good Manufacturing Practice(s)" or **"GMP"** will mean the regulatory requirements for current good manufacturing practices promulgated in the United States Code of Federal Regulations including those rules promulgated by the United States Food and Drug Administration under the U.S. Food, Drug and Cosmetic Act, 21 C.F.R. § 210 et seq., and ICH Guidelines and applicable regulations, as the same may be amended from time to time.

"Government Official" means any Person employed by or acting on behalf of a government, government-controlled entity or public international organization; any political party, party official or candidate; any Person who holds or performs the duties of a public-sector appointment, office or position created by custom or convention; and any Person who holds himself out to be the authorized intermediary of any of the foregoing.

"[…*…] Agreement"** means the […***…] Agreement dated […***…], between […***…] and […***…], as amended.

"IMRB" means AstraZeneca's IMED Research Board or an equivalent AstraZeneca Senior Management team of AstraZeneca's choosing.

"IND" means an Investigational New Drug Application (as defined in the Food, Drug and Cosmetic Act, as amended) filed with the FDA or its foreign counterparts.

"IND Approval" means the acceptance (or deemed acceptance) by the applicable Regulatory Authority of the filing of an IND for a Lead Compound or Product in the Product Field. For purposes of clarity, acceptance (or deemed acceptance) of the filing of the foreign equivalent of an IND by the applicable Regulatory Authority in such country will be an IND Approval.

"Indemnified Party" has the meaning set forth in Section 11.3.

"Indemnification Claim Notice" has the meaning set forth in Section 11.3.

"Indirect Taxes" means VAT, sales taxes, consumption taxes and other similar taxes required by law to be disclosed on the invoice.

"Initial Major Market IND Submission" has the meaning set forth in Section 5.1.

"Initial Major Market IND Approval" has the meaning set forth in Section 5.1.

"Initiation" means, with respect to a clinical trial or study, the first dosing of the first human subject in such trial or study.

"Integrated Product Plan" or **"IPP"** has the meaning set forth in Section 5.3.

"IP Expert" has the meaning provided in Section 6.4.3(b).

"Joint Inventions" has the meaning set forth in Section 8.2

"Joint Patents" has the meaning set forth in Section 8.2.

"Joint Product Specific Patents" means all Joint Patents claiming: (a) the composition of matter of a Lead Compound or Product; (b) methods of using a Lead Compound or Product; or (c) the manufacture of a Lead Compound, but excluding in each case: (1) Patents that include claims that are directed to subject matter and have a scope that is applicable to microRNA Compounds in general and do not exemplify or claim Lead Compounds or Products and (2) Patents that do not exemplify or claim Lead Compounds or Products and that include claims directed to the identification or isolation of microRNAs that are not Collaboration Targets, or to the production, composition, or use of microRNA Compounds that are not Lead Compounds or Products (which Patents Controlled by Regulus or its Affiliates described in (1) and (2) will, for clarity, be considered to be Regulus Core Technology Patents).

"JSC" has the meaning set forth in Section 3.3.

"Know-How" means inventions, discoveries, data, information (including scientific, technical or regulatory information), trade secrets, knowledge, processes, means, methods, practices, formulae, instructions, skills, procedures, experiences, ideas, techniques, materials, technology, results, analyses, designs, drawings, computer programs, apparatuses, specifications, technical assistance, laboratory, pre-clinical and clinical data (including laboratory notes and notebooks), and other material or know-how, in written, electronic or any other form now known or hereafter developed, whether or not confidential, proprietary or patentable, including without limitation: high-throughput screening, gene expression, genomics, proteomics and other drug discovery and development technology; biology, chemistry, pharmacology, toxicology, drug stability, Manufacturing and formulation, test procedures, synthesis, purification and isolation techniques, quality control data and information, methodologies and techniques; clinical and non-clinical safety and efficacy studies, including study designs and protocols, marketing studies, absorption, distribution, metabolism and excretion studies; assays and biological methodology.

"Knowledge" means a Party's and its Affiliates' good faith, actual understanding of the facts and information as of the Effective Date; **provided that,** with respect to information regarding the status of Patents or other intellectual property rights, "Knowledge" means such Party's or its Affiliate's good faith, actual understanding of the facts and information as of the Effective Date after performing a diligent investigation with respect to such facts and information as is customary in the conduct of its business with respect to such Patents or other

intellectual property rights (and not, for clarity, a diligent investigation solely in connection with this Agreement).

"Lead Compound" has the meaning set forth in Section 3.6.

"Lead Compound Identification" shall mean, with respect to a Collaboration Target, the date upon which the IMRB approves a JSC recommendation that a microRNA Antagonist meets the Candidate Selection ID Criteria for such Collaboration Target.

"Lead Party" has the meaning set forth in Section 8.3.1(c).

"Lead Target" has the meaning set forth in Section 3.4.1.

"Licensor" means, with respect to a particular Third Party Agreement, any Third Party that is a party to such Third Party Agreement.

"Losses" has the meaning set forth in Section 11.1.

"Major Market" shall mean any of the U.S., U.K., Spain, Germany, France or Japan.

"Manufacturing Technology" has the meaning set forth in Section 4.3.

"[…***…**]"** means […***…] ([…***…]).

"[…***…**]"** means the […***…] Agreement among […***…], […***…] and […***…], dated […***…].

"Manufacture" or "**Manufacturing**" means, with respect to a product or compound, the synthesis, manufacturing, processing, formulating, packaging, labelling, holding and quality control testing of such product or compound.

"**Material Anti-Corruption Law Violation**" means a violation of an Anti-Corruption Law relating to the subject matter of this Agreement which would if it were publicly known reasonably have a material adverse effect on either Party or on the reputation of a Party because of its relationship with the other Party.

"microRNA" means a structurally defined functional RNA molecule usually between 21 and 25 nucleotides in length, which is derived from genetically-encoded non-coding RNA which is predicted to be processed into a hairpin RNA structure that is a substrate for the double-stranded RNA-specific ribonuclease Drosha and subsequently is predicted to serve as a substrate for the enzyme Dicer, a member of the RNase III enzyme family; including, without limitation, those microRNAs exemplified in miRBase (http://microrna.sanger.ac.uk/). To the extent that […***…] for purposes of this Agreement; *provided, however*, that nothing contained herein will require any Party hereto to […***…].

"microRNA Antagonist" means a single-stranded oligonucleotide (or a single stranded analog thereof) that is designed to interfere with or inhibit a particular microRNA. For purposes of clarity, the definition of "microRNA Antagonist" excludes oligonucleotides that function predominantly through the RNAi mechanism of action or the RNase H mechanism of action.

"microRNA Compound" means a microRNA Antagonist and, if the JSC amends the R&D Plan to include research and/or development activities with respect to microRNA Mimics and the Parties agree pursuant to Section 2.5, such microRNA Mimic(s) that are included in the R&D Plan.

"microRNA Mimic" means a double-stranded or single-stranded oligonucleotide or analog thereof with a substantially similar base composition as a particular microRNA and which is designed to mimic the activity of such microRNA.

"miR-[…***…**]"** means a microRNA having (a) (i) miRBase ID: […***…]; (ii) the miRBase Accession Number […***…], and (iii) the sequence […***…]; (b) (i) miRBase ID: hsa-miR-[…***…]; (ii) the miRBase Accession Number […***…], and (iii) the sequence […***…].

"miR-[…***…**] Compound"** means a Lead Compound targeting or mimicking, as applicable, miR-[…***…].

"miR-[…***…**] Product"** means any pharmaceutical product containing a miR-[…***…] Compound (alone or with other active ingredients), in all forms, presentations, formulations and dosage forms.

"miR-33" means a microRNA having (a) (i) miRBase ID: hsa-miR-[…***…]; (ii) the miRBase Accession Number […***…], and (iii) the sequence […***…]; or (b) (i) miRBase ID: hsa-miR-[…***…]; (ii) the miRBase Accession Number […***…], and (iii) the sequence […***…].

"miR-33 Compound" means a Lead Compound targeting or mimicking, as applicable, miR-33.

"miR-33 Product" means any pharmaceutical product containing a miR-33 Compound (alone or with other active ingredients), in all forms, presentations, formulations and dosage forms.

"NDA" means a New Drug Application filed with the FDA after completion of clinical trials to obtain marketing approval for the applicable Product in the United States.

"Net Sales" means the gross invoiced amount on sales of the Products by or on behalf of AstraZeneca and its Affiliates and Sublicensees to Third Parties (which shall include Distributors) after deduction of the following amounts, to the extent taken:

a) normal and customary trade, quantity or prompt settlement discounts (including chargebacks and allowances) actually allowed;

b) amounts repaid or credited by reason of rejection, returns or recalls of goods, rebates or bona fide price reductions determined by AstraZeneca or its Affiliates in good faith;

c) rebates and similar payments made with respect to sales paid for by any governmental or regulatory authority such as, by way of illustration and not in limitation of the Parties' rights hereunder, Federal or state Medicaid, Medicare or similar state program in the United States or equivalent governmental program in any other country;

d) any invoiced amounts which are not collected by AstraZeneca or its Affiliates, including bad debts,

e) excise taxes, Indirect Taxes, customs duties, customs levies and import fees imposed on the sale, importation, use or distribution of the Products;

f) any other similar and customary deductions that are consistent with generally accepted accounting principles, or in the case of non-United States sales, other applicable accounting standards; and

g) as an allowance for transportation costs, distribution expenses, special packaging and related insurance charges, […***…] percent ([…***…]%) of the amount arrived at after application of the provisions of items (a) to (f) above.

Net Sales shall be calculated using AstraZeneca's internal audited systems used to report such sales as adjusted for any of items (a) to (g) above not taken into account in such systems. Deductions pursuant to subsection (d) above shall be taken in the Calendar Quarter in which such sales are no longer recorded as a receivable.

"[…***…**]"** means […***…].

"[…***…**] Agreement"** means that certain […***…] Agreement, dated […***…], by and between Regulus and […***…].

"[…***…**] Field"** means the treatment of the medical condition […***…].

"Oncology Compound" means a Lead Compound targeting or mimicking, as applicable, the Oncology Target.

"Oncology Field" shall mean the treatment and/or prophylaxis of cancer in humans.

"Oncology Product" means any pharmaceutical product containing an Oncology Compound (alone or in combination with other active ingredients), in all forms, presentations, formulations and dosage forms.

"Oncology Target" shall have the meaning set forth in Section 3.4.2.

"Other Joint Patents" shall mean all Joint Patents other than Joint Product Specific Patents.

"Party(ies)" has the meaning set forth in the opening paragraph of this Agreement.

"Patents" means (a) patents and patent applications in any country or jurisdiction, (b) all priority applications, divisionals, continuations, and continuations-in-part of any of the foregoing, and (c) all patents issuing on any of the foregoing patent applications, together with all registrations, reissues, renewals, re-examinations, confirmations, supplementary protection certificates, and extensions of any of (a), (b) or (c).

"Payment Target Encumbrances" has the meaning provided in Section 3.4.2(c).

"Person" means any individual, firm, corporation, partnership, limited liability company, trust, business trust, joint venture company, governmental authority, association or other entity.

"Phase 1 Trial" means the initial clinical testing of a Product in humans (first-in-humans study) with the intention of gaining a preliminary assessment of the safety of such Product.

"Phase 2b Trial" means a human clinical trial of a Product, the principal purpose of which is a determination of efficacy and safety, in the target population, at the intended clinical

dose or doses or range of doses, on a sufficient number of subjects and for a sufficient period of time to confirm the optimal manner of use of the Product (dose and dose regimen) prior to initiation of the pivotal Phase 3 Trials, and which itself provides sufficient evidence of safety and efficacy to be included as a Phase 3 Trial in filings with Regulatory Authorities.

"Phase 3 Trial" means a human clinical trial of a Product on a sufficient number of subjects that is designed to establish that a pharmaceutical product is safe and efficacious for its intended use, and to determine warnings, precautions and adverse reactions that are associated with such pharmaceutical product in the dosage range to be prescribed, which trial is intended to support Approval of a Product, as described in 21 C.F.R. 312.21(c) for the United States, or a similar clinical study prescribed by the Regulatory Authorities in a foreign country.

"Product" means any pharmaceutical product containing a Lead Compound (alone or with other active ingredients), in all forms, presentations, formulations and dosage forms.

"Product Development Plan" has the meaning set forth in Section 5.3.

"Product Field" means the treatment and/or prophylaxis of any disease or disorder in humans including, without limitation, the Target Fields.

"Program Invention" has the meaning provided in Section 8.2.

"Program Patent" has the meaning provided in Section 8.2.

"Project Leaders" has the meaning provided in Section 3.5.3.

"Proposed Candidate" has the meaning provided in Section 3.6.1.

"Proposed Oncology Target" has the meaning set forth in Section 3.4.2.

"R&D Plan" has the meaning set forth in Section 3.2.

"Receiving Party" has the meaning set forth in Section 7.1.

"Regulatory Authority" means any governmental authority, including without limitation FDA, EMA or Koseisho (i.e., the Japanese Ministry of Health, Labour and Welfare, or any successor agency thereto), that has responsibility for granting any licenses or approvals or granting pricing and/or reimbursement approvals necessary for the marketing and sale of a Product in any country.

"Regulatory Documentation" means all applications, registrations, licenses, authorizations and approvals (including all Approvals), all correspondence submitted to or received from Regulatory Authorities (including minutes and official contact reports relating to any communications with any Regulatory Authority), all supporting documents and all clinical studies and tests, including the manufacturing batch records, relating to the Product, and all data contained in any of the foregoing, including all regulatory drug lists, advertising and promotion documents, adverse event files and complaint files.

"Regulus Competitor" shall mean (a) any of […***…]; and/or (b) any company whose primary business function is the discovery or development of microRNA Antagonists.

"Regulus Confidential Information" means any Confidential Information for which Regulus is the Disclosing Party.

"Regulus Core Technology Patents" means Patents Controlled by Regulus or its Affiliates on the Effective Date and/or at any time thereafter during the Term, in each case that are useful or necessary to Exploit Lead Compound and Products in the Product Field, but excluding the Regulus Product Specific Patents. A list of the Regulus Core Technology Patents as of the Effective Date has been separately provided in a letter between the Parties of even date herewith. For clarification, any Regulus Program Patent satisfying the definition above will be considered a Regulus Core Technology Patent. Regulus Core Technology Patents shall include any and all Patents listed in the Existing Regulus Agreements Controlled by Regulus that are useful or necessary to Exploit Lead Compound and Products in the Product Field, but excluding any such Patents that are Regulus Product Specific Patent.

"Regulus Know-How" means all Know-How Controlled by Regulus or its Affiliates as of the Effective Date and/or at any time thereafter during the Term that is necessary or useful to Exploit Lead Compounds and Products in the Product Field.

"Regulus Independent Program" means a microRNA (a) that has been disclosed by Regulus as being the subject of research (beyond discovery) and/or development by Regulus or its Affiliate or has been identified to the board of directors of Regulus in a presentation or otherwise as the subject of research (beyond discovery) and/or development by Regulus or its Affiliates, and (b) for which a line item has been added in Regulus' internal budget.

"Regulus Patents" means the Regulus Core Technology Patents and the Regulus Product Specific Patents.

"Regulus Product Specific Patents" means all Patents (including all claims and the entire scope of claims therein) Controlled by Regulus or its Affiliates on the Effective Date and/or at any time thereafter during the Term, in each case claiming: (a) the composition of matter of a Lead Compound or Product; (b) methods of using a Lead Compound or Product; or (c) the manufacture of a Lead Compound, but excluding in each case: (1) Patents that include claims that are directed to subject matter and have a scope that is applicable to microRNA Compounds in general and do not exemplify or claim Lead Compounds or Products and (2) Patents that do not exemplify or claim Lead Compounds or Products and that include claims directed to the identification or isolation of microRNAs that are not Collaboration Targets, or to the production, composition, or use of microRNA Compounds that are not Lead Compounds or Products (which Patents Controlled by Regulus or its Affiliates described in (1) and (2) will, for clarity, be considered to be Regulus Core Technology Patents). For clarity, any Regulus Program Patent satisfying the definition above, will be considered a Regulus Product Specific Patent. The Parties agree that there are no Regulus Product Specific Patents as of the Effective Date.

"Regulus Program Patent" has the meaning set forth in Section 8.2.

"Regulus Technology" means, collectively, the Regulus Know-How and the Regulus Patents.

"Request Notice" has the meaning set forth in Section 3.4.2(b).

"Research Program" has the meaning set forth in Section 3.1.

"Research Program Management Charter" has the meaning set forth in Section 3.3.

"Research Project" has the meaning set forth in Section 3.5.3.

"Research Term" has the meaning set forth in Section 3.7.

"Royalty Term" has the meaning set forth in Section 6.4.

"[…*…] Agreements"** shall mean (a) that certain […***…] Agreement, dated […***…] by and between Regulus and […***…], and (b) that certain […***…], dated […***…], by and between Regulus and […***…].

"SDEA" has the meaning set forth in Section 5.7.

"Securities Act" means the Securities Act of 1933, as amended.

"Senior Representatives" has the meaning set forth in Section 14.5.1.

"Stock Purchase Agreement" means that certain Common Stock Purchase Agreement of even date herewith by and between the Parties, as may be amended in accordance with its terms.

"Sublicensee" has the meaning set forth in Section 2.2.

"Substitute Target" has the meaning set forth in Section 3.4.3(b).

"Target Encumbrances" has the meaning set forth in Section 3.4.2.

"Target Field" shall mean (a) for miR-33, the Atherosclerosis Field; (b) for miR-[…***…], the […***…] Field and/or the […***…] Field; and (c) for the Oncology Target, the Oncology Field.

"Target Pool" has the meaning set forth in Section 3.4.2(a).

"Target Pool microRNA" has the meaning set forth in Section 3.4.2(a).

"Tax Authority" or **"Tax Authorities"** means any government, state or municipality, or any local, state, federal or other fiscal, revenue, customs, or excise authority, body or official anywhere in the world, authorized to levy Tax.

"Tax Invoice" means an invoice including such particulars as are required by any law imposing Tax and such other information as required to claim any credit allowed under a law imposing Tax.

"Tax and Taxation" means any form of tax or taxation, levy, duty, charge, social security charge, contribution, or withholding of whatever nature (including any related fine, penalty, surcharge or interest) imposed by, or payable to, a Tax Authority.

"Term" has the meaning set forth in Section 9.1.

"Third Party" means any Person other than Regulus or AstraZeneca or their respective Affiliates.

"Third Party Agreement" means an Existing Regulus Agreement, Existing AstraZeneca Agreement or Future Third Party Agreement, as applicable.

"Third Party Claims" has the meaning set forth in Section 11.1.

"[…*…] Patents"** means all Patents licensed under the […***…].

"Valid Claim" means composition of matter claims, medical use claims or method of treatment claims that claim the Product or the medical use thereof or methods of treatment using the Product, excluding process or formulation claims, (a) of any issued, unexpired patent within the Regulus Patents, AstraZeneca Program Patents or Joint Patents that has not been revoked or held unenforceable or invalid by a decision of a court or governmental agency of competent jurisdiction from which no appeal can be taken, or with respect to which an appeal is not taken within the time allowed for appeal, and that has not been disclaimed or admitted to be invalid or unenforceable through reissue, disclaimer or otherwise, or (b) of any patent application within the Regulus Patents, AstraZeneca Program Patents or Joint Patents that has not been cancelled, withdrawn or abandoned, or been pending for more than […***…] years.

APPENDIX 2

RESEARCH PROGRAM MANAGEMENT CHARTER

PROJECT MANAGEMENT

In accordance with Section 3.5.3 during the Research Term, each Party shall appoint a Project Leader with respect to the research and development activities for each Collaboration Target. The Project Leaders shall be responsible for the day-to-day management of the applicable Research Project, including communication of all information concerning the Research Project between the Parties, and shall be charged with creating and maintaining a collaborative work environment between the Parties with respect to such Research Project, such tasks to include but not be limited to

1. Forming a joint project team (JPT), led jointly by the Project Leaders, to discuss and deal with the science and day to day work to execute the R&D Plan for each Collaboration Target. The JPT will have members from Regulus and AstraZeneca and is composed based on science skills deemed needed. These include but are not limited to bioscience, safety and DMPK.
2. Ensure timely delivery of the IPDP (Integrated Product Development Plan) and slide deck to IMRB for […***…].
3. Ensuring the […***…] has sufficient lead time to review a project (data from pre-nomination safety studies needed) before […***…]
4. Submission of the IND package to Safety Assessment Review Board and ensure sufficient time for review
5. Ensure discussion with […***…] including timely delivery of information needed to facilitate discussion before Submission of IND package.

Each Project Leader shall always be invited and permitted to attend meetings of the JSC as non-voting participants.

JOINT STEERING COMMITTEE

Purpose

In accordance with Section 3.3 of the Agreement, the JSC is established by Regulus and AstraZeneca to oversee the Research Program under the Agreement and, following completion of the Research Program, to continue to serve as a forum for the Parties to share information regarding Exploitation of Lead Compounds and Products pursuant to this Agreement.

Responsibilities

1. The JSC will, using the R&D Plan initially agreed to on the Effective Date as a basis, continue to develop and refine the R&D Plan, as needed, and will conduct a comprehensive review of the R&D Plan on at least an annual basis.

2. The JSC will be responsible for the overall planning and execution of the Research Program. The JSC will

(i) amend, approve and provide oversight of the R&D Plan,

(ii) evaluate the data generated by the Parties in the course of carrying out the R&D Plan,

(iii) discuss and resolve any overarching issues or significant changes in the R&D Plan,

(iv) set Research Project prioritization within the R&D Plan,

(v) make Research Project progression decisions and resource allocation decisions in accordance with the R&D Plan,

(vi) make revisions to the R&D Plan as necessary,

(vii) set the Target Pool,

(viii) determine the Candidate Selection ID Criteria for each Collaboration Target,

(ix) determine whether a microRNA Compound meets the Candidate Selection ID Criteria for a Collaboration Target and recommend for approval by AstraZeneca's IMRB (which, for clarity, has final say on designation of a Lead Compound ([…***…]),

(x) discuss recommendations made by Intellectual Property Sub-committee,

(xi) determine whether to discontinue research or development activities with respect to a Collaboration Target (other than an Effective Discontinuation, which may occur without formal determination by the JSC),

(xii) determine whether a Substitute Target shall replace any Discontinued Target,

(xiv) discuss and recommend for approval IND filings for Lead Compounds*,

(xiii) consistent with Article 7 of the Agreement, review and approve all public communications, publications and disclosures, including but not limited to data presented at external meetings and journals on the results of the Research Program, and

(xiv) monitor that all activities are compliant with AstraZeneca's Bioethics policy and other compliance standards of importance to AstraZeneca or Regulus. This includes the approval of use of contract research organisations (CRO) to perform its obligations under this Agreement.

Except for amendments to the R&D Plan (as adopted in accordance with this charter and the Agreement), in no event will the JSC have the power or authority to amend any provision of the Agreement.

3. The JSC will have the power to delegate its authority and duties to sub-committees as it deems appropriate.

Composition

4. The JSC will initially have six members, and will at all times have an equal number of members designated by each Party. Each Party may replace its appointed JSC representatives at any time upon written notice to the other Party. The size and composition of the JSC provided herein may not be changed without the written consent of both Regulus and AstraZeneca.

5. Each JSC member will have the requisite background, experience and training to carry out the duties and obligations of the JSC.

6. a) During the Research Term each Party will designate one of its representatives as co-chairperson of the JSC. Each of the co-chairpersons will be responsible, on an alternating basis with the AstraZeneca co-chairperson having responsibility with respect to the initial meeting, for scheduling meetings, preparing and circulating an agenda in advance of each meeting, and preparing the minutes of each meeting.

b) After the end of the Research Term, an AstraZeneca member of the JSC will chair the JSC meetings.

Operations; Meetings

7. a) During the Research Term the JSC will initially meet once per Calendar Quarter, unless and until the JSC determines that such meetings should occur less or more frequently (in either case, each a "Scheduled Meeting"). Scheduled Meetings may be held in person or by audio or video teleconference when appropriate, but at a minimum, once each year in person. In addition, any two members of the JSC may jointly call for an ad hoc meeting of the JSC by teleconference at any time, by giving the other members of the JSC advance written notice of at least two Business Days (each, an "Ad Hoc Meeting"). An Ad Hoc Meeting may be called to address any time-sensitive matter and, for clarity, may be held via teleconference or over email, if so determined by the JSC.

b) After the expiry of the Research Term, the JSC shall convene for one last time and decide on the number and frequency of meetings required of the JSC in its new role as a forum for the Parties to share information regarding Exploitation of Lead Compounds* and Products pursuant to this Agreement, with meetings led by AstraZeneca's chair thereafter.

8. Meetings of the JSC will be effective only if at least one JSC representative of each Party is present or participating. Each Party will be responsible for all of its own expenses of participating in the JSC meetings. The Parties will endeavour to schedule meetings of the JSC with at least 30 days advance notice.

9. Each Party may, with the prior consent of the other Party, bring additional employees to each meeting as non-voting observers.

10. The co-chair responsible for each meeting during the Research Term and AstraZeneca's chair after the Research Term (the "Responsible Chair") will, in consultation with other

members of the JSC, develop and set the JSC's agenda for each Scheduled Meeting. The Responsible Chair will include on such agenda each item requested within a reasonable time in advance of such Scheduled Meeting by a JSC member. The agenda and information concerning the business to be conducted at each Scheduled Meeting will be communicated in writing to the members of the JSC within a reasonable time in advance of such Scheduled Meeting to permit meaningful review. No agenda is required for an Ad Hoc Meeting.

11. The Responsible Chair, or such person as the Responsible Chair may designate, will prepare, and distribute to all JSC members, draft committee minutes within two weeks following each Scheduled Meeting or Ad Hoc Meeting and such minutes will be finalized by the JSC promptly thereafter. As part of the agenda of the first Scheduled Meeting, the JSC members will agree upon a standard procedure for review and approval of such draft committee minutes by the JSC.

Decisions

12. Each Party's JSC members will collectively have one vote, regardless of the number of its JSC members participating in any meeting. No votes will be taken unless there is at least one JSC member representing each of Regulus and AstraZeneca participating in such meeting. If only one JSC member is attending on behalf of a given Party, such JSC member may cast the vote allocated to such Party. Unless otherwise specified herein, all actions taken by the JSC as a committee will be by unanimous vote. Notwithstanding anything to the contrary, no decision by the JSC will require the other Party to: (i) breach any written agreement that such other Party may have with a Third Party (except where such agreement is entered into in breach of any representation, warranty, covenant or obligation of such Party under to this Agreement); (ii) perform any activities that are outside the scope of the Research Program; or (iii) violate any Applicable Law or principles of scientific integrity.

13. During the Research Term, if the JSC is unable to decide by unanimous vote on any issue within the scope of its authority and duties, then the JSC will promptly raise such issue to each Party's co-chairperson on the JSC, and such co-chairs will have 10 days to mutually agree on how to resolve such issue. If the co-chairs are unable to resolve such issue within the 10 day period, then such issue will be brought to the Senior Representatives. If the Senior Representatives are unable to resolve such matter within 10 days, then subject to good-faith consideration of the views of the other Party and subject to the other applicable provisions of the Agreement, including any provisions regarding a requirement of mutual agreement of the Parties rather than of (or in addition to) the JSC or any other limits set forth in the Agreement: (a) Regulus' Senior Representative shall have the tie-breaking vote regarding any material change in the activities or responsibilities of Regulus under the R&D Plan or the budget therefor including, without limitation, any change that would result in a change to the amount of cost and expense incurred or to be incurred by Regulus in performing its obligations under Article 3 (including corresponding obligations under Articles 4 and 5); and (b) subject to the matters subject to Regulus' tie-breaking vote described in subsection (a) and all limits contained in the Agreement (including any obligation of the Parties to reach mutual agreement on the matter), AstraZeneca's Senior Representative shall have the tie-breaking vote regarding (i) whether a Substitute Target shall replace any Discontinued Target, (ii) whether a Proposed Oncology Target shall replace a prior Target Pool microRNA, (iii) the Candidate Selection ID Criteria (iv) whether to initiate Exploratory IND Activities, (v) whether Candidate Selection ID Criteria is fulfilled (vi) approval of the GLP toxicology package plans, (vii) initiation of GLP toxicology studies (viii) whether to accept the GLP toxicology results (ix) whether to file

an IND for the Lead Compound*, (x) initiation of Phase 1. Any other decisions within the power of the JSC must be made by unanimous agreement. For clarity, any decision of the co-chairs or the Senior pursuant to this Paragraph 13 shall be deemed a decision of the JSC for purposes of the Agreement.

In addition, for clarity, the Parties acknowledge and agree that the IMRB shall have the final approval regarding whether Lead Compound Identification has occurred ([…***…]), following recommendation by the JSC of a Lead Compound.

14. Following the end of the Research Term, the JSC shall remain in place but shall no longer be responsible for making any decisions. Rather, the JSC shall continue in existence during the remainder of the Term and serve as a forum for discussion and exchange of information regarding the matters described above, including Exploitation of Lead Compounds and Products by or on behalf of AstraZeneca and its Affiliates and Sublicensees. For clarity, this Paragraph 14 shall not limit either Party's obligations under the Agreement to deliver reports or provide information to the other Party.

INTELLECTUAL PROPERTY SUB COMMITTEE (IPSC)

Purpose

To provide a forum for discussion and recommendations in relation to handling of intellectual property matter under the Agreement.

Responsibilities

To discuss and provide recommendations to the respective Parties in fulfilling their obligations or enforcing their rights in relation to patents and other intellectual property under the Agreement specifically to address matters relating to:

patent prosecution,

patent enforcement and infringements,

other patent matters referred to in Article 8 of the Agreement

To receive and discuss: (a) patenting strategies relevant to the Agreement that will be a Regulus Product Specific Patent or Joint Product Specific Patent; and (b) copies of relevant patent filing documents, prosecution documents (e.g., office actions, office action responses and other relevant correspondence) and maintenance-related documents required to be provided by the Parties under Article 8 of the Agreement.

Composition

The IPSC will initially have equal number of members designated by each Party. Each Party may replace its appointed IPSC representatives at any time upon written notice to the other Party.

Each IPSC member will have the requisite background, experience and training to carry out the duties and obligations of the JSC.

Each Party will designate one of its representatives as co-chairperson of the IPSC. Each of the co-chairpersons will be responsible, on an alternating basis, for scheduling meetings, preparing and circulating an agenda in advance of each meeting, and preparing the minutes of each meeting.

Decisions

No decisions are made by the IPSC relating to prosecution, maintenance or enforcement of intellectual property or other intellectual property matters under the Agreement, as all such decisions shall be made by the Parties in accordance with the terms of the Agreement, including Article 8. Rather, the IPSC shall make recommendations to the relevant Party which has a right or obligation under the Agreement. The IPSC shall have the right to make decisions regarding scheduling and documentation of minutes of the IPSC meetings, as well as other logistics related to meetings and other communications of the IPSC.

For clarity, in no event shall the provisions relating to the IPSC modify or otherwise affect any of the rights or obligations of the Parties relating to intellectual property matters as are set forth in the Agreement. Rather, the IPSC is intended to facilitate a collaborative environment between the Parties with respect to intellectual property matters and to serve as a forum for discussion regarding intellectual property matters to the extent desired by the Parties.

Meetings

Meetings shall be ad hoc and may be in person held via teleconference or over email, by giving the other members of the IPSC 1 day's advance notice of a meeting.

ASTRAZENECA IMED RESEARCH BOARD (IMRB)

Purpose

IMRB is the AstraZeneca governance body for the approval of […***…]. For the purposes of this Agreement, IMRB will be the body with the right to final approval over whether Lead Compound* Identification has occurred and for keys transitions as stated below. The IMRB shall have no other right or obligation under this Agreement.

Responsibilities

1. The Project team will write and submit the IPDP (summary of results and forward looking strategy) and make a presentation for approval of Lead Compound* Identification to IMRB following designation and recommendation of the Lead Compound* by the JSC in accordance with the Agreement.

2. IMRB will evaluate if the nominated Lead Compound* for the Collaboration Target meets the criteria set forth in the Candidate Selection ID Criteria and whether the nominated Lead Compound* is still capable of delivering a commercializable product.

3. IMRB will evaluate if the nominated Lead Compound* for the Collaboration Target meets the AstraZeneca criteria for IND submission and whether the nominated Lead Compound* is still capable of delivering a commercializable product.

4. IMRB will evaluate if the nominated Lead Compound* for the Collaboration Target meets the AstraZeneca criteria for Phase-1 testing and whether the nominated Lead Compound* is still capable of delivering a commercializable product.

Composition

Composition of IMRB to be determined by AstraZeneca Senior management

Decisions

(decisions may be delegated or passed on to another AstraZeneca senior management decision making body as appropriate)

1. IMRB will have the final decision on whether a compound has achieved Lead Compound* Identification. AstraZeneca agrees that the IMRB shall make this determination as soon as reasonably practicable following determination/recommendation by the JSC that a microRNA Compound meets the Candidate Selection ID Criteria.

2. IMRB will have the final decision on whether a compound can enter Phase-1 testing for purposes of milestones payment.

Further Limitations

Notwithstanding the creation of the JSC, IPSC, IMRB or any other committee or subcommittee, each Party shall retain the rights, powers and discretion granted to it under the Agreement, and neither the JSC, IPSC, IMRB nor any other committee or subcommittee shall be delegated or vested with rights, powers or discretion unless such delegation or vesting is expressly provided herein, or the Parties expressly so agree in writing. The JSC, IPSC and IMRB shall not have the power to amend or modify this Agreement, and no decision of the JSC, IPSC, IMRB or any committee or subcommittee shall be in contravention of any terms and conditions of this Agreement. It is understood and agreed that issues to be formally decided by the JSC and IMRB are only those specific issues that are expressly provided in this Agreement to be decided by the JSC or the committee or subcommittee, as applicable.