



Current Agreements

Dealdoc

Collaborative R&D agreement for RX-04 antibiotics

Sanofi
Melinta Therapeutics

Jul 06 2011

Collaborative R&D agreement for RX-04 antibiotics

Companies:	Sanofi Melinta Therapeutics
Announcement date:	Jul 06 2011
Deal value, US\$m:	186.0 : sum of upfront and milestone payments

- [Details](#)
- [Financials](#)
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- [Press Release](#)
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Details

Announcement date:	Jul 06 2011
Start date:	Jun 28 2011
Industry sectors:	Bigpharma Pharmaceutical
Therapy areas:	Infectives » Bacterial
Technology types:	Antibiotics Biological compounds Co-promotion Collaborative R&D
Deal components:	Development Licensing Option
Stages of development:	Discovery
Geographic focus:	Worldwide

Financials

Deal value, US\$m:	186.0 : sum of upfront and milestone payments
Upfront, US\$m:	10.0 : upfront payment 9.0 : near-term research-based milestones
Milestones, US\$m:	77.0 : further payments for the achievement of research, preclinical, regulatory and commercial milestones on a per product basis 100.0 : potential commercial milestone payments on a per product basis
Royalty rates, %:	n/d : royalty rates on net sales could reach low double digit figures

Termsheet

7 February 2012

Rib-X Pharmaceuticals announced the receipt of a \$3 million milestone payment from Sanofi.

The payment is the fourth received for milestones achieved following the signing in July 2011 of a worldwide research collaboration and option for license with Sanofi for novel classes of antibiotics resulting from Rib-X's RX-04 program for the treatment of drug resistant Gram-negative and Gram-positive pathogens.

The payment, which was part of the pre-specified terms of the agreement, was for the achievement of research-based milestones.

Under the RX-04 agreement, Sanofi has the right to license an unlimited number of product candidates targeting a discrete binding site within the ribosome.

Rib-X will retain all rights pertaining to their proprietary drug discovery platform, including all other binding sites within the ribosome and all future programs, as well as to any RX-04 compound that Sanofi does not exercise its option to develop during the three-year term of the collaboration.

Rib-X has received \$22.0 million to date in upfront and milestone payments under the collaboration.

Rib-X may receive up to a total of \$86.0 million per product for the achievement of research, development and regulatory milestones, up to a total of \$100.0 million per product for the achievement of commercial milestones, and tiered percentage royalties up to the low double digits on commercial sales.

Rib-X also has the right under the collaboration to co-commercialize one RX-04 product of the Company's choosing with Sanofi in the United States.

The RX-04 program is focused on using a discrete, novel binding site within the ribosome to design and develop new classes of antibiotics to treat some of the most deadly and difficult-to-treat, multi-drug resistant Gram-positive and Gram-negative infections.

Using Rib-X's proprietary drug discovery platform, the Company has developed three novel classes of antibiotics in less than three years that bind to this ribosome site.

6 July 2011

Exclusive worldwide research collaboration agreement and option for license with Sanofi for novel classes of antibiotics resulting from Rib-X's RX-04 program for the treatment of resistant Gram-positive and resistant Gram-negative pathogens.

Rib-X will receive \$10 million in an upfront payment.

Rib-X is also eligible to receive up to an additional \$9 million in near-term research-based milestones and will be eligible to receive further payments for the achievement of research, preclinical, regulatory and commercial milestones.

Sanofi has the right to develop multiple products under this agreement.

Except for those assets licensed to Sanofi through the agreement, Rib-X retains its rights to the discovery platform and its future programs.

The agreement could result in up to \$86 million in development and regulatory milestones on a per product basis.

Commercial milestones could exceed \$100 million on a per product basis.

Rib-X retains a co-promotion option in the United States on one of the molecules coming from the collaboration.

Royalty rates on net sales could reach low double digit figures.

Press Release

7 February 2012

Rib-X Pharmaceuticals Receives \$3 Million Milestone Payment from Sanofi in the RX-04 Collaboration

- Fourth milestone payment in deal to create entirely new classes of antibiotic therapeutics targeting bacterial ribosomes -

NEW HAVEN, Conn.--(BUSINESS WIRE)--Rib-X Pharmaceuticals, Inc. announced today the receipt of a \$3 million milestone payment from Sanofi (EURONEXT: SAN and NYSE: SNY). The payment is the fourth received for milestones achieved following the signing in July 2011 of a worldwide research collaboration and option for license with Sanofi for novel classes of antibiotics resulting from Rib-X's RX-04 program for the treatment of drug resistant Gram-negative and Gram-positive pathogens. The payment, which was part of the pre-specified terms of the agreement, was for the achievement of research-based milestones.

"This milestone payment from Sanofi reflects the continued progress we have made in advancing the RX-04 program toward the clinic," said Mark Leuchtenberger, President and Chief Executive Officer at Rib-X Pharmaceuticals. "This is the fourth milestone we have reached since signing the partnership with Sanofi and we look forward to working hard toward our joint continued success."

Under the RX-04 agreement, Sanofi has the right to license an unlimited number of product candidates targeting a discrete binding site within the ribosome. Rib-X will retain all rights pertaining to their proprietary drug discovery platform, including all other binding sites within the ribosome and all future programs, as well as to any RX-04 compound that Sanofi does not exercise its option to develop during the three-year term of the collaboration. Rib-X has received \$22.0 million to date in upfront and milestone payments under the collaboration. Rib-X may receive up to a total of \$86.0 million per product for the achievement of research, development and regulatory milestones, up to a total of \$100.0 million per product for the achievement of commercial milestones, and tiered percentage royalties up to the low double digits on commercial sales.

Rib-X also has the right under the collaboration to co-commercialize one RX-04 product of the Company's choosing with Sanofi in the United States.

The RX-04 program is focused on using a discrete, novel binding site within the ribosome to design and develop new classes of antibiotics to treat some of the most deadly and difficult-to-treat, multi-drug resistant Gram-positive and Gram-negative infections. Using Rib-X's proprietary drug discovery platform, the Company has developed three novel classes of antibiotics in less than three years that bind to this ribosome site.

About Rib-X:

Rib-X Pharmaceuticals, Inc. is a biopharmaceutical company developing new antibiotics to provide superior coverage, safety and convenience for the treatment of serious and life-threatening infections. The Company's proprietary drug discovery platform provides an atomic-level, three-dimensional understanding of interactions between drug candidates and their bacterial targets and enables design of antibiotics with enhanced characteristics. Rib-X has two antibiotic candidates in clinical development. Delafloxacin is an enhanced spectrum IV/oral antibiotic intended for use as first-line monotherapy primarily in hospitals and recently completed a Phase 2b clinical trial for the treatment of acute bacterial skin and skin structure infections. Radezolide is a next-generation IV/oral oxazolidinone designed to be a potent antibiotic with a safety profile permitting long-term treatment of resistant infections. The Company's pipeline also includes its preclinical RX-04 program, partnered with Sanofi, S.A., and other discovery stage anti-infective programs.

19 July 2011

Rib-X Pharmaceuticals Receives \$9 Million Milestone Payment from Sanofi in the RX-04 Collaboration

Milestone follows recent signing of deal to create entirely new classes of antibiotic therapeutics targeting bacterial ribosomes

NEW HAVEN, Conn.--(BUSINESS WIRE)--Rib-X Pharmaceuticals, Inc. announced today the receipt of a \$9 million milestone payment from Sanofi (EURONEXT: SAN and NYSE: SNY). The payment follows the recent signing of a worldwide research collaboration and option for license with Sanofi for novel classes of antibiotics resulting from Rib-X's RX-04 program for the treatment of drug resistant Gram-negative and Gram-positive pathogens. The payment, which was part of the pre-specified terms of the agreement, was for the achievement of several undisclosed research-based milestones.

"The receipt of this milestone payment from Sanofi on the heels of signing our worldwide collaboration agreement is representative of the rapid progress we have made in advancing the RX-04 program toward the clinic," said Mark Leuchtenberger, President and Chief Executive Officer at Rib-X Pharmaceuticals. "We look forward to working in partnership with Sanofi to continue advancing these treatments toward the clinic and eventually to bring them to patients as commercialized products."

Under the terms of the agreement announced on July 6, 2011, Rib-X received \$10 million in an upfront payment and has now received an additional \$9 million in near-term research-based milestones. Rib-X will be eligible to receive further payments for the achievement of research, preclinical, regulatory and commercial milestones. Sanofi has the right to develop multiple products under this agreement. Except for those assets licensed to Sanofi through the agreement, Rib-X retains its rights to the discovery platform and its future programs. The agreement could result in up to \$86 million in development and regulatory milestones on a per product basis. Commercial milestones could exceed \$100 million on a per product basis. Rib-X retains a co-promotion option in the United States on one of the molecules coming from the collaboration. Royalty rates on net sales could reach low double digit figures.

Rib-X's RX-04 program employs a proprietary approach for rational drug design resulting in entirely new families of compounds that have demonstrated efficacy at low, single doses in murine infection models. The RX-04 development program has shown antibacterial activity against a number of the most difficult to treat, clinically important, multi-drug resistant Gram-negative and Gram-positive pathogens, including NDM-1-producing Enterobacteriaceae, *P. aeruginosa* and *A. baumannii* and MRSA. The Rib-X RX-04 program targets bacterial ribosomes, an internal cell component, where proteins are synthesized from amino acids and RNA. Recently presented data confirms the novel classes directly impact ribosome function and exert their anti-bacterial activity by interfering with protein synthesis.

About Multi-drug Resistant Bacteria

Multi-drug resistant bacteria are an increasing public health crisis. According to the Centers for Disease Control, infections caused by such bacteria result in longer and more expensive hospital stays and may lead to death. According to the Infectious Disease Society of America (IDSA), hospital-acquired infections result in nearly 100,000 deaths per year in the United States, the vast majority of which are due to antibiotic-resistant pathogens. Based on studies of the costs of infections caused by antibiotic-resistant pathogens versus antibiotic-susceptible pathogens, IDSA estimates that the annual cost to the US health care system of antibiotic-resistant infections is \$21 billion to \$34 billion and more than eight million additional hospital days. Bacteria come in two major classes, defined by their appearance when stained to make them visible under a microscope: Gram-positive, which appear as violet blue typically lack the outer membrane found in Gram-negative bacteria, which appear pink after staining.

About Rib-X Pharmaceuticals, Inc.

Rib-X Pharmaceuticals is developing broad spectrum antibiotics with superior coverage, safety and convenience to deliver new standards of care for patients with serious infections. The Company's Nobel Prize winning platform enables a unique understanding of how antibiotics combat infection and has generated an industry leading pipeline spanning all phases of research and clinical development. www.rib-x.com

6 July 2011

Rib-X Pharmaceuticals and Sanofi Sign a Research Collaboration Agreement on Novel Classes of Antibiotics

Novel technology targets bacterial ribosomes creating an entirely new class of antibiotic therapeutics

NEW HAVEN, Conn.--(BUSINESS WIRE)--Rib-X Pharmaceuticals, Inc. announced today the signature of an exclusive worldwide research collaboration agreement and option for license with Sanofi (EURONEXT: SAN and NYSE: SNY) for novel classes of antibiotics resulting from Rib-X's RX-04 program for the treatment of resistant Gram-positive and resistant Gram-negative pathogens.

Rib-X's RX-04 program employs a proprietary approach for rational drug design resulting in entirely new families of compounds that have demonstrated efficacy at low, single doses in murine infection models. The RX-04 development program has shown antibacterial activity against a number of the most difficult to treat, clinically important, multi-drug resistant Gram-negative and Gram-positive pathogens. The Rib-X RX-04 program targets bacterial ribosomes, an internal cell component, where proteins are synthesized from amino acids and RNA. Recently presented data confirms the novel classes directly impact ribosome function and exert their anti-bacterial activity by interfering with protein synthesis.

Under the terms of the agreement, Rib-X will receive \$10 million in an upfront payment. Rib-X is also eligible to receive up to an additional \$9 million in near-term research-based milestones and will be eligible to receive further payments for the achievement of research, preclinical, regulatory and commercial milestones. Sanofi has the right to develop multiple products under this agreement. Except for those assets licensed to Sanofi through the agreement, Rib-X retains its rights to the discovery platform and its future programs. The agreement could result in up to \$86 million in development and regulatory milestones on a per product basis. Commercial milestones could exceed \$100 million on a per product basis. Rib-X retains a co-promotion option in the United States on one of the molecules coming from the collaboration. Royalty rates on net sales could reach low double digit figures.

"We could not be more excited about partnering with a preeminent global pharmaceutical company such as Sanofi. This partnership reflects our shared commitment to staying ahead of the growing problem of antibiotic resistance by delivering new standards of care for patients in need," said Mark Leuchtenberger, President and Chief Executive Officer at Rib-X Pharmaceuticals. "The RX-04 program's completely novel classes of antibiotics should lead to true breakthrough therapies and we look forward to working in partnership with Sanofi to advance these treatments into the clinic and eventually bring them to the global market. Importantly, this agreement will enable Rib-X to aggressively advance our clinical stage candidates, delafloxacin and radezolid, towards pivotal trials and support additional discovery-stage programs like RX-05 and RX-06."

"We are very enthusiastic about entering into this collaboration with Rib-X," said Elias Zerhouni, M.D., President, Global Research & Development, Sanofi. "The clinical need for new antibiotics is reaching crisis level, yet the antibiotic pipeline is running dry and fewer and fewer companies are working to develop drugs in this space. This partnership exemplifies Sanofi's commitment to translate novel approaches for treatment into patient solutions addressing the global critical need to combat the rising threat of antibiotic drug resistance."

About Multi-drug Resistant Bacteria

Multi-drug resistant bacteria are an increasing public health crisis. Infections caused by such bacteria result in longer hospital stays and may lead to death. According to the WHO, every year at least 25,000 patients in the European Union alone die from an infection caused by multi-drug resistant bacteria and estimated additional health-care costs and productivity losses are at least 1.5 billion Euros. Bacteria come in two major classes, defined by their appearance when stained to make them visible under a microscope: Gram-positive, which appear as violet blue typically lack the outer membrane found in Gram-negative bacteria, which appear pink after staining.

About Sanofi

Sanofi, a global and diversified healthcare leader, discovers, develops and distributes therapeutic solutions focused on patients' needs. Sanofi has core strengths in the field of healthcare with seven growth platforms: diabetes solutions, human vaccines, innovative drugs, rare diseases, consumer healthcare, emerging markets and animal health. Sanofi is listed in Paris (EURONEXT: SAN) and in New York (NYSE: SNY). www.sanofi.com

About Rib-X Pharmaceuticals, Inc.

Rib-X Pharmaceuticals is developing broad spectrum antibiotics with superior coverage, safety and convenience to deliver new standards of care for patients with serious infections. The Company's Nobel Prize winning platform enables a unique understanding of how antibiotics combat infection and has generated an industry leading pipeline spanning all phases of research and clinical development. www.rib-x.com

Filing Data

Not available.

Contract

COLLABORATION AND LICENSE AGREEMENT

by and between

Rib-X Pharmaceuticals, Inc.

and

Sanofi

Effective as of June 28, 2011

Portions of this Exhibit, indicated by the mark "[***]," were omitted and have been filed separately with the Secretary of the Commission pursuant to the Registrant's application requesting confidential treatment pursuant to Rule 406 of the Securities Act of 1933, as amended.

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Form of Sanofi Press Release

Exhibit I

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CONFIDENTIAL

COLLABORATION AND LICENSE AGREEMENT

This Collaboration and License Agreement ("Agreement"), dated as of the 28th day of June, 2011 (the "Effective Date"), is entered into by and between Rib-X Pharmaceuticals, Inc., a Delaware corporation, having a principal office at 300 George Street, Suite 301, New Haven, CT 06511-6663 ("Rib-X"), and Sanofi, a société anonyme organized under the laws of France, having a principal office located at 174 avenue de France, 75013, Paris, France ("Sanofi").

INTRODUCTION

WHEREAS, Rib-X is a biopharmaceutical company focused on discovering and developing broad spectrum antibiotics;

WHEREAS, Sanofi is a global pharmaceutical company with expertise and capability in the research, development, manufacture and commercialization of pharmaceutical products;

WHEREAS, Rib-X has a drug discovery program focused on developing novel small molecule antibiotics based on Rib-X's existing [***] of compounds that bind to [***] of the 50S subunit of the ribosome;

WHEREAS, Sanofi desires to collaborate with Rib-X on the identification and development of novel antibiotics based on RX04 Compounds (as defined herein), and to acquire an option to further develop and commercialize certain compounds of interest resulting from such collaboration, in each case, on the terms and conditions set forth in this Agreement; and

WHEREAS, Rib-X desires to collaborate with Sanofi on the identification and development of such antibiotics, and to grant Sanofi certain rights, in each case, on the terms and conditions set forth in this Agreement.

NOW, THEREFORE, in consideration of the mutual covenants contained in this Agreement and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Rib-X and Sanofi agree as follows:

ARTICLE I - DEFINITIONS

When used in this Agreement, each of the following terms, whether used in the singular or plural, will have the meaning set forth in this Article I:

1.1 "Affiliate" as to any entity means any other entity that, directly or indirectly, controls, is controlled by or is under common control with such entity. For the purposes of this definition, "control" refers to any of the following: (i) direct or indirect ownership of fifty percent (50%) or more of the voting securities entitled to vote for the election of directors in the case of a corporation, or of fifty percent (50%) or more of the equity interest with the power to direct management in the case of any other type of legal entity; (ii) status as a general partner in any partnership; or (iii) any other arrangement where an entity possesses, directly or indirectly, the power to direct the management or policies of an entity, whether through ownership of voting securities, by contract or otherwise.

Portions of this Exhibit, indicated by the mark "[***]," were omitted and have been filed separately with the Secretary of the Commission pursuant to the Registrant's application requesting confidential treatment pursuant to Rule 406 of the Securities Act of 1933, as amended.

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1.2 "Alliance Manager" has the meaning set forth in Section 3.7.

1.3 "Applicable Law" means all applicable laws, statutes, rules, and regulations as may be in effect from time to time, including applicable regulations, guidelines and other requirements of relevant Regulatory Authorities.

1.4 "Back-up Compound" with respect to any Target Compound, means another RX04 Compound that has all of the following properties when compared to such Target Compound:

(i) is built on the same [***] as such Target Compound;

(ii) occupies the same additional [***] as such Target Compound;

(iii) has the same [***] as such Target Compound;

(iv) has the same [***] activity as such Target Compound; and

(v) has at least [***] with such Target Compound, as defined by a [***] computed by [***] on molecular properties built by [***], based on the key properties and weights specified in the table below:

[***]

Descriptor

Explanation

Weight

[***]

[***] [***]

[***]

[***] [***]

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For purposes of determining the [***] under clause (v), the mere presence of [***] will not be treated as [***].

Portions of this Exhibit, indicated by the mark "[***]," were omitted and have been filed separately with the Secretary of the Commission pursuant to the Registrant's application requesting confidential treatment pursuant to Rule 406 of the Securities Act of 1933, as amended.

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1.5 "Business Day" means a day that is not a Saturday, a Sunday, nor a day on which banking institutions in New York, New York or Paris, France are authorized by law to remain closed.

1.6 "Calendar Quarter" means each of the three (3) month periods ending on March 31, June 30, September 30, and December 31 of any year.

1.7 "Calendar Year" means each successive period of twelve (12) months commencing on January 1, ending on December 31.

1.8 "Candidate Compound" means any Target Compound that is nominated as a Candidate Compound under Section 2.7.

1.9 "Clinical Trial" means a Phase 1 Clinical Trial, a Phase 2 Clinical Trial, a Phase 3 Clinical Trial or a Phase 4 Clinical Trial.

1.10 "COGS" or Cost of Goods Sold" means the aggregate of internal and external costs of Sanofi and its Affiliates to Manufacture the quantities of US Profit Share Product used in Development of the US Profit Share Product in the United States or sold by Sanofi or any of its Affiliates or Sublicensees in the United States, which shall include the following to the extent reasonably allocable to the Manufacture of such US Profit Share Product, all [***], provided, that any such amounts that are included in COGS will not be included in the calculation of Third Party and other Permitted Sales and Marketing Expenses so as not to double count such amounts.

1.11 "Collaboration Compound" means any RX04 Compound that is identified or reduced to practice (or can be reasonably expected to be reduced to practice) by or on behalf of either Party or any of its Affiliates during the Research Term, in each case excluding Rib-X Existing Compounds.

1.12 "Commercialization" and "Commercialize" means all pre-launch and post-launch activities undertaken by the Parties or any of their Affiliates relating to the marketing, promotion, offering for sale, distribution and sale of a US Profit Share Product in the United States, including conducting post-approval clinical trials; advertising; promotion; strategic marketing; market research; sales meetings; detailing; sample drops; activities related to national accounts, managed care accounts and other similar accounts and government programs; activities related to reimbursement; market and product support; customer service; medical support, educational initiatives; product storage and distribution; order entry; billing; collection; invoicing; returns; and other marketing, sales and distribution activities.

1.13 "Commercialization Plan" means, with respect to the US Profit Share Product, in each Calendar Year, the plan approved by the JSC for activities to be conducted by or on behalf of the Parties related to Commercialization of the US Profit Share Product in the United States under this Agreement and the budget for the costs to be incurred in connection with such activities.

1.14 "Commercially Reasonable Efforts" means, with respect to a Party, such level of effort [***].

Portions of this Exhibit, indicated by the mark "[***]," were omitted and have been filed separately with the Secretary of the Commission pursuant to the Registrant's application requesting confidential treatment pursuant to Rule 406 of the Securities Act of 1933, as amended.

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1.15 "Confidential Information" means all confidential Know-how of a Party which is disclosed (whether in written, graphic, oral, electronic or other form) by or on behalf of such Party (the "Disclosing Party") to the other Party (the "Receiving Party") pursuant to this Agreement, including: information regarding a Party's technology, products, programs, business, financial status, biological or chemical substances, formulations, techniques, methodology, equipment, sources of supply, patent positioning, and business plans. Notwithstanding the foregoing, after the Research Term, all Know-how related to any Target Compound or Returned Compound whether generated by or on behalf of Rib-X or Sanofi will be treated as the Confidential Information of Rib-X with Sanofi treated as the Receiving Party, subject to (i) the licenses granted to Sanofi under Sections 4.1.1 and 4.2.1; (ii) Sanofi's right to use such Confidential Information in accordance with Section 8.2; and (iii) the restrictions imposed on Rib-X under Section 8.4. For purposes of this Agreement, Confidential Information of Rib-X will also include Confidential Information obtained under the Yale Agreement, which such Confidential Information will be subject to the additional restrictions set forth in the Yale Agreement.

1.16 "Control" or "Controlled" means, with respect to any Patent Rights or Know-how, possession (whether by ownership or license, other than a license or ownership granted pursuant to this Agreement) of the ability to grant the licenses or sublicenses as provided for in this Agreement without violating the terms of any agreement or other arrangement with any Third Party.

1.17 "Cover", "Covering" or "Covered" means, with respect to a product, composition, technology, process or method that, in the absence of ownership of, or a license granted under, a Valid Claim, the manufacture, use, offer for sale, sale or importation of such product or composition or the practice of such technology, process or method would infringe such Valid Claim.

1.18 "CPI" means l'indice des prix à la consommation (IPC) as published by the Institut National de la Statistique et des Études Économiques

1.19 "Detail" or "Detailing" means, with respect to a US Profit Share Product, an interactive in-person visit by a representative of either (or both) Party's sales force, or other employee of either Party who may be deemed to be part of the Commercialization Plan with a medical professional having prescribing authority (other than a microbiologist or pharmacist) where the relevant characteristics of such US Profit Share Product are described to such medical professional by the representative in a fair and balanced manner consistent with the requirements of this Agreement and Applicable Law and in a manner that is customary in the industry for the purpose of promoting a prescription pharmaceutical product. A sample drop shall not constitute a Detail. When used as a verb, "Detail" means to engage in a Detail.

1.20 "Development," "Develop," or "Developing" means all preclinical and clinical drug development activities and regulatory affairs support conducted for the purpose of obtaining or maintaining Regulatory Approval of a product.

Portions of this Exhibit, indicated by the mark "[***]," were omitted and have been filed separately with the Secretary of the Commission pursuant to the Registrant's application requesting confidential treatment pursuant to Rule 406 of the Securities Act of 1933, as amended.

1.21 "Development Costs" means all internal and external, direct expenditures actually incurred by either Party in connection with the Development of a US Profit Share Product; provided that [***].

1.22 "Development and Commercialization Option" has the meaning set forth in Section 2.8.

1.23 "Development Plan" means, with respect to the US Profit Share Product in each Calendar Year, the plan approved by the JSC for activities to be conducted in such year by or on behalf of the Parties and their Affiliates and Sublicensees related to Development of the US Profit Share Product in the United States under this Agreement and the budget for such activities.

1.24 "EMA" means the European Medicines Agency or any successor agency thereto.

1.25 "Executives" means with respect to Rib-X, its Chief Executive Officer and, with respect to Sanofi, its President of Global Research and Development or such other similar position designated by Sanofi from time to time.

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

1.27 "Field" means all therapeutic, prophylactic and palliative uses in humans.

1.28 "First Commercial Sale" means, with respect to a Licensed Product in a country in the Territory, the first bona fide arms-length sale of such Licensed Product sold to a Third Party in such country by or on behalf of Sanofi, its Affiliates, or Sublicensees after Regulatory Approval has been obtained for such Licensed Product in such country or, if Regulatory Approval is not required, after the date on which sales are permitted under Applicable Law.

1.29 "Follow-on Compounds" means any RX04 Compound identified by or on behalf of Sanofi or any of its Affiliates during the Follow-on Period, excluding (i) any Licensed Compounds, and (ii) any RX04 Compounds identified by a Third Party during the Follow-on Period independent of any Know-how related to RX04 Compounds provided to such Third Party by Sanofi or any of its Affiliates and either purchased or in-licensed by Sanofi or any of its Affiliates.

1.30 "Follow-on Period" means the twenty-four month period following the earlier to occur of (i) the end of the Research Term, or (ii) termination of this Agreement.

1.31 "FTE" means a full-time equivalent person year of scientific, technical, regulatory or professional work. An FTE shall consist of a total of One Thousand Eight Hundred Eighty (1,880) hours per year, with any portion of an FTE calculated based upon hours worked divided by such annual total.

1.32 "FTE Cost" means, for any period, the product of (i) the actual total FTEs (and/or portion thereof) during such period, and (ii) the FTE Rate.

Portions of this Exhibit, indicated by the mark "[***]," were omitted and have been filed separately with the Secretary of the Commission pursuant to the Registrant's application requesting confidential treatment pursuant to Rule 406 of the Securities Act of 1933, as amended.

1.33 "FTE Rate" means €[***], increased or decreased at the end of each Calendar Year by the cumulative increase or decrease in the level of CPI as of December 31st of such year over the level of the CPI as of December 31st of the prior Calendar Year.

1.34 "Generic Product" means, with respect to any Licensed Product and any country in the Territory, any pharmaceutical product that meets all of the following criteria: [***].

1.35 "IFRS" means the International Financial Reporting Standards adopted by the European Union, as consistently applied by Sanofi.

1.36 "IND" or "Investigational New Drug Application" means an Investigational New Drug Application filed with the FDA in the United States or any equivalent counterpart in any country other than the United States, including all supplements and amendments thereto.

1.37 "Indemnitee" means (i) with respect to Rib-X, each Rib-X Indemnitee, and (ii) with respect to Sanofi, each Sanofi Indemnitee.

1.38 "Invention" means any method, process, means of manufacture, compound, formulation, or composition of matter, whether or not patentable or copyrightable, or any improvement thereof.

1.39 "Joint Inventions" has the meaning set forth in Section 7.1.

1.40 "Joint Patent Rights" means any Patent Rights owned by both Parties or together with any of their Affiliates Covering Joint Inventions.

1.41 "Joint Technology" means Joint Inventions and Joint Patent Rights.

1.42 "Joint Commercialization Committee" or "JCC" shall have the meaning set forth in Section 5.6.2.

1.43 "Joint Steering Committee" or "JSC" has the meaning set forth in Section 3.1.

1.44 "Know-how" means any information, inventions, know-how, data and materials, whether patentable or not, including (i) ideas, discoveries, improvements and trade secrets; (ii) pharmaceutical, chemical and biological materials, products and compositions; (iii) tests, assays, techniques, methods, procedures, formulas and processes; (iv) technical, medical, clinical, toxicological, and other data and other information, including the results of preclinical studies and Clinical Trials; and (v) drawings, plans, designs, diagrams, sketches, specifications, and other documents containing or relating to such information, inventions, know-how, data or materials; but excluding Patent Rights Covering the foregoing.

1.45 "Licensed Compound" means any Candidate Compound as to which Sanofi has exercised its Development and Commercialization Option under Section 2.8, and the two (2) Back-up Compounds to such Candidate Compound selected by Sanofi under Section 2.8, until such time as any such compound becomes a Returned Compound.

Portions of this Exhibit, indicated by the mark "[***]," were omitted and have been filed separately with the Secretary of the Commission pursuant to the Registrant's application requesting confidential treatment pursuant to Rule 406 of the Securities Act of 1933, as amended.

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1.46 "Licensed Product" means any product containing as an active pharmaceutical ingredient a Licensed Compound, [***].

1.47 "License Term" means, with respect to a Licensed Product, the period commencing upon Sanofi's exercise of its Development and Commercialization Option with respect to the relevant Licensed Compound and ending upon the earlier to occur of (i) expiration or earlier termination of this Agreement pursuant to Article XI or (ii) termination of Sanofi's rights with respect to such Licensed Product under Article XI.

1.48 "Major Countries" means: (i) the United States of America; [***].

1.49 "Manufacture" or "Manufacturing" means all activities related to the manufacturing of a US Profit Share Product, for use in clinical studies and manufacturing for commercial sale, including fill/finish, packaging, labeling, release of product, quality assurance/quality control testing (including in-process, in-process release and stability testing), shipping and storage of such product.

1.50 "NDA" means a New Drug Application or a supplemental New Drug Application, as defined in 21 C.F.R. §§314.50 and 314.70, respectively, filed with the FDA with respect to a Licensed Product, or an equivalent application filed with a Regulatory Authority of a country in the Territory other than the United States, including any application for Regulatory Approval filed with the EMA.

1.51 "Net Profit/Loss" means, with respect to the US Profit Share Product in a Calendar Quarter, Net Sales of such US Profit Share Product sold or otherwise disposed of by Sanofi and its Affiliates and/or Sublicensees during such Calendar Quarter in the United States less [***]. For purposes of clarity, it is understood that no costs and expenses are to be double-counted in the calculation of Net Profit/Loss.

1.52 "Net Sales" means the gross amount billed or invoiced for sales or other commercial disposition of a Licensed Product by Sanofi and its Affiliates and Sublicensees (each, a "Selling Party"), to Third Parties (other than a sale to a Sublicensee for further resale) (the "Gross Sales"), less the following deductions with respect to the sale of such Licensed Product, to the extent actually allowed or taken:

[***]

Such amounts will be determined from the books and records of Sanofi, its Affiliates or Sublicensees, maintained in accordance with IFRS consistently applied by the Selling Party. Any of the items set forth above that would otherwise be deducted from the invoice price in the calculation of Net Sales, but which are separately charged to, and paid by Third Parties will not be deducted from the invoice price in the calculation of Net Sales.

In the case of any sale of the Licensed Product for consideration other than cash, such as barter or countertrade, Net Sales will be calculated using the cash price that would be paid for Licensed Product in an arm's length transaction between two unrelated parties, using the average per unit Net Sales price for all arm's length transactions in the same country during the relevant period or, if none, then as determined in the relevant period by mutual good faith agreement of both Parties.

Portions of this Exhibit, indicated by the mark "[***]," were omitted and have been filed separately with the Secretary of the Commission pursuant to the Registrant's application requesting confidential treatment pursuant to Rule 406 of the Securities Act of 1933, as amended.

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Notwithstanding anything in this Agreement to the contrary, the following dispositions will not be included in the calculation of Net Sales: [***].

[***].

The sale of a Licensed Product between or among Sanofi or its Affiliates or Sublicensees for resale will not be included in Net Sales; provided, however, that the first sale or disposition to a Third Party who is not a Selling Party thereafter will be included in Net Sales. In the event an Affiliate or Sublicensee is the end-user of Licensed Product, the transfer of Licensed Product to such Affiliate or Sublicensee shall be included in the calculation of Net Sales at the average selling price charged in an arm's length sale to a Third Party who is not a Sublicensee in the relevant period. A sale of a Licensed Product is deemed to have occurred upon invoicing.

If any Licensed Product is sold as a Combination Product (as defined below), the Net Sales from the Combination Product, for the purposes of determining milestones and royalties, will be determined by multiplying [***], in each case during the applicable Calendar Quarter and in the relevant countries or, if sales of both the Sole Compound Product and the other significantly active compounds did not occur in such period, then in the most recent Calendar Quarter in which sales of both occurred. If such [***] cannot be determined for both the Sole Compound Product and the other significantly active compounds included in the Combination Product, Net Sales for the purposes of determining milestones and royalties will be calculated by multiplying [***]. In such event, the Parties will mutually agree in good faith on the respective [***] of the Sole Compound Product and the other significantly active compounds included in the Combination Product. "Combination Product" means a Licensed Product that consists of (i) a Licensed Compound and (ii) one or more other significantly active compounds that are not a Licensed Compound. "Sole Compound Product" means a Licensed Product containing no significantly active compounds other than a Licensed Compound. Notwithstanding the foregoing, in the event a US Profit Share Product is sold as a Combination Product, Net Sales of such US Profit Share Product will not be [***] but instead [***].

1.53 "New [***]" shall mean a specific [***] differing from any of the [***] existing [***] described in Exhibit C or any other specific [***] that cannot be classified within such other [***], and is invented by either Party during the Research Term.

1.54 "Option Exercise Fee" has the meaning set forth in Section 6.3.

1.55 "Party" or "Parties" means Rib-X and/or Sanofi, as the context requires.

Portions of this Exhibit, indicated by the mark "[***]," were omitted and have been filed separately with the Secretary of the Commission pursuant to the Registrant's application requesting confidential treatment pursuant to Rule 406 of the Securities Act of 1933, as amended.

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1.56 "Patent Rights" means any patents, including certificates of correction, substitutions, extensions (including supplemental protection certificates), registrations, confirmations, reissues, re-examinations and renewals, and patent applications, including any provisional applications, divisionals, continuations and continuations-in-part.

1.57 "Phase 1 Clinical Trial" means a human clinical trial (whether a phase 1a or a phase 1b trial) in any country, the principal purpose of which is a preliminary determination of safety in individuals or patients, that would satisfy the requirements of 21 C.F.R. §312.21(a), or an equivalent clinical study required by a Regulatory Authority outside of the United States.

1.58 "Phase 2 Clinical Trial" means a human clinical trial (whether a phase 2a or phase 2b trial) conducted in any country, intended to explore multiple doses, dose response or duration of effect and to generate initial evidence of safety and activity in a target patient population, that would satisfy the requirements of 21 C.F.R. §312.21(b), or an equivalent clinical study required by a Regulatory Authority outside of the United States.

1.59 "Phase 3 Clinical Trial" means a human clinical trial in any country that would satisfy the requirements of 21 C.F.R. §312.21(c), or an equivalent clinical study required by a Regulatory Authority outside of the United States.

1.60 "Phase 4 Clinical Trial" means a human clinical trial which is conducted on a product after Regulatory Approval of the product has been obtained from an appropriate Regulatory Authority, and includes (a) trials conducted voluntarily for enhancing marketing or scientific knowledge of an approved indication or (b) trials conducted after Regulatory Approval due to request or requirement of a Regulatory Authority or as a condition of a previously granted Regulatory Approval.

1.61 "Pre-Opt-in Development Costs" means, with respect to the US Profit Share Product, the sum of (i) [***] ([***]%) of the Development Costs that are incurred by Sanofi or any of its Affiliates during the Pre-Opt-in Period for all Development activities required to conduct Clinical Trials or obtain Regulatory Approval of the US Profit Share Product in the US, but only if the results of such Development activities will not be used in a substantial way to support Regulatory Approval of the US Profit Share Product in [***], the [***], and (ii) [***] percent ([***]%) of the Development Costs that are incurred by Sanofi or any of its Affiliates during the Pre-Opt-in Period for all Development activities required to conduct Clinical Trials or obtain Regulatory Approval of the US Profit Share Product worldwide, but solely to the extent the results of such Development activities will also be used in a substantial way to support Regulatory Approval of the US Profit Share Product in the U.S., and excluding any Development Costs included in subclause (i) of this definition.

1.62 "Pre-Opt-in Period" means, with respect to the US Profit Share Product, the period commencing on the date of the Option Exercise Notice and ending on the US Profit Share Option Exercise Date.

Portions of this Exhibit, indicated by the mark "[***]," were omitted and have been filed separately with the Secretary of the Commission pursuant to the Registrant's application requesting confidential treatment pursuant to Rule 406 of the Securities Act of 1933, as amended.

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1.63 "Profit/Loss Share Percentage" means, in the event Rib-X has exercised the US Profit Share Option, [***] percent ([***]%) of Net Profit/Loss to Sanofi and [***] percent ([***]%) of Net Profit/Loss to Rib-X.

1.64 "Regulatory Approval" means the receipt of any and all approvals, licenses, registrations or authorizations by a Regulatory Authority that are necessary for the marketing and sale of a pharmaceutical product in a country or group of countries, including all applicable pricing and reimbursement approvals.

1.65 "Regulatory Authority" means any federal, national, multinational, state, provincial or local regulatory agency, department, bureau or other governmental entity with authority over the marketing, pricing or sale of a pharmaceutical product in a country, including the FDA and the EMA.

1.66 "Research" means the research and preclinical activities conducted by or on behalf of the Parties and their Affiliates under the Research Plan.

1.67 "Research Plan" means the Research Plan attached to this Agreement as Exhibit A, as modified from time to time by the JSC during the Research Term in accordance with Section 2.3.

1.68 "Research Program" means the conduct of the research and preclinical activities described in the Research Plan during the Research Term.

1.69 "Research Term" means the period commencing on the Effective Date and ending on the third anniversary of the Effective Date, unless extended by mutual agreement of the Parties or earlier terminated by mutual agreement of the Parties or termination of this Agreement under Article XI.

1.70 "Returned Compounds" mean [***].

1.71 "Rib-X Internal Compound Modeling Criteria" means the modeling criteria set forth on Exhibit B.

1.72 "Rib-X Existing Compounds" means RX04 Compounds that were identified as meeting Rib-X Internal Compound Modeling Criteria by Rib-X prior to the Effective Date, in each case as specifically set forth on Schedule 1 to Exhibit B, and any Back-up Compounds to such compounds.

1.73 "Rib-X Know-how" means, subject to Section 13.8(b), any Know-How Controlled by Rib-X or any of its Affiliates as of the Effective Date or developed during the Research Term which are related to or useful in the identification, development, manufacture, use or sale of RX04 Compounds.

1.74 "Rib-X Licensed Technology" means the Rib-X Patent Rights and Rib-X Know-how.

Portions of this Exhibit, indicated by the mark "[***]," were omitted and have been filed separately with the Secretary of the Commission pursuant to the Registrant's application requesting confidential treatment pursuant to Rule 406 of the Securities Act of 1933, as amended.

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1.75 "Rib-X Patent Rights" means, subject to Section 13.8(b), all Patent Rights Controlled by Rib-X or any of its Affiliates as of the Effective Date or at any time during the Term of this Agreement which are related to or useful in the identification, development, manufacture, use or sale of RX04 Compounds; provided that "Rib-X Patent Rights" shall not cover any Patent Rights Controlled by Rib-X that cover Inventions conceived of after the Research Term which are not necessary for (or the absence of which would not make the following impracticable) the identification, development, manufacture, use or sale of RX04 Compounds by Sanofi, its Affiliates and Sublicenses.

1.76 "Royalty-bearing Product" means any Licensed Product other than the US Profit Share Product with respect to sales of such US Profit Share Product in the United States. For the sake of clarity a Licensed Product that is a US Profit Share Product in the United States will be deemed a Royalty-bearing Product outside the United States.

1.77 "RX04 Compound" any compound that [***] on the [***] of the large ribosomal subunit, defined more specifically as a [***].

1.78 "Sanofi Compound Specific Patent Rights" means those Sanofi Patent Rights that (i) Cover the composition of matter or method of manufacture or use of a specific RX04 Compound and (ii) do not Cover the composition of matter or method of manufacture or use of any other compound.

1.79 "Sanofi Know-how" means, subject to Section 13.8(b), (i) with respect to the license granted to Rib-X and its Affiliates under Section 4.1.2, any Know-How Controlled by Sanofi or any of its Affiliates as of the Effective Date or at any time arising from activities performed by Sanofi or any of its Affiliates or Sublicensees under the Research Plan during the Research Term which are used by Sanofi or any of its Affiliates or permitted Sublicensees in the identification, development, manufacture, use or sale of RX04 Compounds; and (ii) with respect to the licenses granted to Rib-X under Section 4.2.2, 4.2.3 and 11.3.1 as to a specific US Profit Share Product, Licensed Product or Returned Compound, any Know-how Controlled by Sanofi or any of its Affiliates during the Term and incorporated into such US Profit Share Product, Licensed Product or Returned Compound, as the case may be, or its manufacturing process or which has been generated or applied in a substantial way by Sanofi or any of its Affiliates or Sublicensees in the development, manufacture, use or commercialization of such US Profit Share Product, Licensed Product or Returned Compound, as the case may be, or that relates to the composition of matter or a use of any such US Profit Share Product, Licensed Product or Returned Compound, as the case may be.

1.80 "Sanofi Licensed Technology" means the Sanofi Patent Rights and Sanofi Know-how.

1.81 "Sanofi Patent Rights" means all Patent Rights Controlled by Sanofi or any of its Affiliates as of the Effective Date or at any time during or after the Term of this Agreement which (i) Cover any Invention arising from activities performed by Sanofi or any of its Affiliates or Sublicensees under the Research Plan during the Research Term; or (ii) Cover an Invention used by Sanofi or any of its Affiliates or Sublicensees in the development, manufacture, use or sale of RX04 Compounds.

Portions of this Exhibit, indicated by the mark "[***]," were omitted and have been filed separately with the Secretary of the Commission pursuant to the Registrant's application requesting confidential treatment pursuant to Rule 406 of the Securities Act of 1933, as amended.

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1.82 "[***]" means (i) any of the [***] specific [***] for molecules designated in Exhibit C through which variable [***] can be attached through standard organic chemical transformations; and (ii) any New [***]. Molecules sharing a [***] differ only by [***] of one or more [***]. [***] variations in the [***] will be considered [***].

1.83 "Shared Development Costs" means those Development Costs incurred by either Party or any of its Affiliates after exercise by Rib-X of its US Profit Share Option to the extent directly attributable to activities specifically required to conduct Clinical Trials and regulatory activities required to obtain Regulatory Approval of the US Profit Share Product anywhere in the world, but solely to the extent (i) such activities will be used in a substantial way to support regulatory filings in the United States and (ii) such costs are consistent with the then current Development Plan and the related budget contained therein

1.84 "Sublicensee" means a Third Party to whom Sanofi or one of its Affiliates has granted an express or implied license or sublicense under the licenses granted under Section 4.2.1 or otherwise with respect to the development, manufacture, use or sale of Licensed Product, but not including distributors who purchase Licensed Product in final finished form from Sanofi, its Affiliates or a Sublicensee for resale and do not market, such Licensed Product or perform any manufacturing, development or marketing activities.

1.85 "Target Compounds" means Collaboration Compounds and Rib-X Existing Compounds.

1.86 "Target Profiles" mean the parameters of compound activity set forth in Exhibit D.

1.87 "Term" has the meaning set forth in Section 11.1.

1.88 "Territory" means all countries of the world.

1.89 "Third Party" means any person or entity other than Rib-X or Sanofi or any of their respective Affiliates.

1.90 "Third Party and Other Permitted Sales and Marketing Expenses" means, with respect to any US Profit Share Product, the aggregate of the following incurred by either Party or any of its Affiliates with respect to such US Profit Share Product in the relevant Calendar Quarter to the extent attributable to activities in the United States and shown on the then applicable Commercialization Plan approved by the JSC or otherwise [***]. All the foregoing will be determined from the books and records of the applicable Party or its Affiliates, maintained in accordance with IFRS as consistently applied by the applicable Party and no such amounts will be counted twice.

1.91 "United States" or "US" or "U.S." means the United States of America, its territories and possessions.

Portions of this Exhibit, indicated by the mark "[***]," were omitted and have been filed separately with the Secretary of the Commission pursuant to the Registrant's application requesting confidential treatment pursuant to Rule 406 of the Securities Act of 1933, as amended.

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1.92 "US Profit Share Option" has the meaning set forth in Section 5.1.

1.93 "US Profit Share Option Exercise Date" has the meaning set forth in Section 5.2.

1.94 "US Profit Share Product" means the Licensed Product, if any, as to which Rib-X has exercised its US Profit Share Option under Section 5.2.

1.95 "Valid Claim" means any claim in any unexpired and issued patent that has not been disclaimed, revoked or held invalid or unenforceable by a decision of a court or other 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.

1.96 "Value Added Compound" means any Returned Compound that was either (i) a Rib-X Existing Compound which was resynthesized as part of the Research Program after completion of mouse pharmacokinetic studies; or (ii) a Collaboration Compound.

1.97 "Yale" means Yale University.

1.98 "Yale Agreement" means a certain Yale Exclusive License Agreement between Rib-X and Yale, dated as of December 6, 2001.

1.99 Additional Definitions. Each of the following definitions is set forth in the section of this Agreement indicated below:

Definition

Section

Bankruptcy Code

4.8

Breaching Party

11.2.2

Change of Control

13.8(d)

Combination Product

1.52

Data Package

5.2

Development Loan

5.3.1(a)

Development Plan Guidelines

5.3

Exchange Act

13.8(d)

Face-to-Face Customer Activities

5.6.1

Flow Chart

6.2(i)

Gross Sales

1.52

IFRS

1.35

Indemnified Party

10.3

Indemnifying Party

10.3.1

Initial Development Plan

5.2

Knowledge

9.2

Non-Breaching Party

11.2.2

Option Exercise Date

2.8

Option Exercise Notice

2.8

Paragraph IV Certification

7.6

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Definition

Section

Percentage Reduction of Net Sales

6.7.2(c)

Phase 3 Notice

5.2

Recovery

7.3.5

Reduction in Royalty

6.7.2(c)

Rib-X In-License Agreement

6.7.3(b)

Representatives

8.1

Rib-X Indemnitees

10.1

Royalty Term

6.7.2

Sanofi Indemnitees

10.2

Selling Party

1.52

Sole Compound Product

1.52

Standard Increase

5.3.1(a)

Third Party Research Costs

2.4

[***]

5.3.1(a)

ARTICLE II - RESEARCH PROGRAM

2.1 Overview. The objective of the Research Program is to identify [***] Candidate Compounds.

2.2 Conduct of Research Program. During the Research Term, each Party will use Commercially Reasonable Efforts to conduct the activities which are assigned to such Party under the then-current Research Plan. During the course of the Research Program, subject to the requirements of the Research Plan and this Agreement, each Party will have sole decision-making authority with respect to day-to-day conduct of the Research activities allocated to it under the Research Plan.

2.3 Research Plans. The initial Research Plan is attached hereto as Exhibit A. Periodically, during the Research Term, the JSC will review the Research Plan, and prepare and approve updates to the Research Plan. If the JSC cannot agree on a revised Research Plan, then the dispute will be resolved in accordance with the mechanism of Article XII.

2.4 Costs. Each Party will pay its own internal costs associated with the activities allocated to it under the Research Plan. Each Party will be responsible for Third Party costs it incurred in the conduct of the Research Program ("Third Party Research Costs") in accordance with the Research Plan.

2.5 Know-how Exchange. Rib-X will make available to Sanofi all Rib-X Know-how listed in Exhibit E as well as any other Rib-X Know-how reasonably requested by Sanofi. In addition, during the Research Term, each Party will share with the other Party such Rib-X Know-how or Sanofi Know-how, as the case may be, as is specifically related to Target Compounds and is developed, acquired or generated by or on behalf of such Party in the course of the Research Program, such Know-how to be provided in such format as the Parties will mutually agree. Results of Research will also be exchanged via status reports and JSC reporting

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as set forth in Section 3.6. Notwithstanding anything in this Agreement to the contrary, Rib-X will not have any obligation to transfer to Sanofi any Rib-X Know-how or any other Know-how Controlled by Rib-X related to or arising from the methodology necessary for crystallization and analysis of the crystal structure of the ribosome. For the sake of clarity, Rib-X will have no obligation to share any Know-how with Sanofi after the JSC has been disbanded and all Development and Commercialization Options have expired unexercised.

2.6 Record-keeping. All Research activities conducted by either Party under the Research Plan will be completely and accurately recorded in separate laboratory notebooks, in sufficient detail and in good scientific manner appropriate for patent and regulatory purposes. Upon reasonable advance notice, and at reasonable intervals, each Party will have the right to inspect and copy such records of the other Party reflecting work done under the Research Plan, to the extent reasonably required to carry out its respective obligations and to exercise its respective rights under this Agreement.

2.7 Nomination of Candidate Compound.

2.7.1 By JSC. At such time as a Target Compound is shown in the course of the Research Program to meet or exceed one or more of the Target Profiles, the JSC will review the data generated under the Research Program with respect to such compound, and will nominate such Target Compound as a Candidate Compound.

2.7.2 By Sanofi. Notwithstanding anything to the contrary set forth in Section 2.7.1, Sanofi will have the right at any time during the Research Term to nominate as a Candidate Compound any Target Compound that has met or exceeds one or more Target Profiles or otherwise has antibacterial activity, whether or not the JSC has agreed to take such actions.

2.8 Development and Commercialization Option. Rib-X hereby grants to Sanofi an exclusive right, but not the obligation, exercisable during the Research Term to acquire from Rib-X the license set forth in Section 4.2.1 with respect to each Candidate Compound, subject to the terms and conditions of this Agreement (each, a "Development and Commercialization Option"). Each Development and Commercialization Option will be exercisable as to a particular Candidate Compound during the Research Term. In the event Sanofi elects to exercise its Development and Commercialization Option as to a particular Candidate Compound, Sanofi will, no later than the close of business on the last day of the Research Term, deliver to Rib-X (i) a written notice specifying that Sanofi has elected to exercise its Development and Commercialization Option as to such Candidate Compound (the "Option Exercise Notice") and (ii) payment in full of the Option Exercise Fee for such Candidate Compound. In addition, for each Candidate Compound as to which Sanofi has exercised its Development and Commercialization Option under the preceding sentence, Sanofi will be entitled to designate two Back-up Compounds to such Candidate Compound to include as Licensed Compounds, such designation to be made by written notice given to Rib-X at any time during the Research Term or Follow-on Period. For the sake of clarity, no additional Option Exercise Fee will be due for the [***] ([**]) designated Back-up Compounds to a Candidate Compound as to which Sanofi exercises its Development and Commercialization Option, and these [***] ([**]) designated Back-up Compounds will be treated as Licensed Compounds as long as the Option Exercise Fee

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has been paid with respect to the corresponding Candidate Compound. The date, if any, on which Sanofi has properly exercised its Development and Commercialization Option in accordance with the preceding sentence will be the "Option Exercise Date" for such Licensed Compound for purposes of this Agreement. On the Option Exercise Date, the License Term will be deemed to have commenced as to the relevant Licensed Compounds. In addition to the rights set forth above in this Section 2.8, during the [***] of the Research Term, all Target Compounds shall be deemed Candidate Compounds, thereby allowing Sanofi to exercise its Development and Commercialization Option on all such compounds and receive the license set forth in Section 4.2.1 for any such Target Compound as to which Sanofi exercises its Development and Commercialization Option prior to the end of the Research Term.

2.9 Limitation on Activities During Option Period. Notwithstanding anything in this Agreement to the contrary, Sanofi will not have the right to conduct, or have conducted, GLP toxicology studies, or any clinical studies with respect to any Target Compound unless such Target Compound has become a Licensed Compound in accordance with Section 2.8.

2.10 Effectiveness of License. Commencing on the Option Exercise Date with respect to each Licensed Compound, the provisions set forth in Article I and Articles III - XIII of this Agreement will constitute the terms and conditions of the license granted by Rib-X to Sanofi with respect to Licensed Products based on such Licensed Compound in the Field.

2.11 Returned Compounds. Notwithstanding anything in this Agreement to the contrary, the right of the JSC and Sanofi to nominate Candidate Compounds and the right of Sanofi to exercise a Development and Commercialization Option with respect to any Candidate Compound will terminate at the end of the Research Term. At the end of the Research Term, all rights to all Target Compounds, including Collaborations Compounds, that have not become Licensed Compounds, will belong to Rib-X, including through the assignment provisions set forth in Section 4.2.3 subject to Sanofi's right of first negotiation under Section 4.7 and the restrictions on Rib-X under Section 4.6.

2.12 Use of Third Parties. Neither Party nor any of its Affiliates will use any Third Party to perform Research activities under the Research Program unless specifically authorized in the Research Plan or otherwise authorized by the JSC. In the event a Party is permitted to use a Third Party to perform Research activities under the preceding sentence, such Party will ensure that any Know-how or Patent Rights related to Target Compounds arising from the activities of such Third Party are assigned to the contracting Party with no rights retained by the Third Party.

ARTICLE III - GOVERNANCE; DECISION-MAKING

3.1 Formation and Membership. Within twenty (20) Business Days after the Effective Date, Sanofi and Rib-X will establish a joint steering committee (the "JSC" or "Joint Steering Committee"). The JSC will be comprised of three (3) members from Sanofi and three (3) members from Rib-X, or such other number, maintaining equal representation, as the Parties mutually agree, each such member appointed by a Party to have an appropriate level of decision making authority within such Party's organization. Each Party may change any one or more of its representatives to the JSC at any time upon written notice to the other Party. From time to

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time, the JSC may, in its discretion, establish one or more subcommittees or project teams to coordinate and monitor particular projects or activities over which the JSC has authority, as the JSC deems necessary or advisable, each of which will report to the JSC and, unless otherwise agreed upon by the JSC, the provisions of this Article III will apply to such subcommittee to the same extent as such provisions apply to the JSC.

3.2 Responsibilities. The JSC will have the following responsibilities:

- (i) review, coordinate, monitor and provide overall strategic direction to the Parties' activities under the Research Program;
- (ii) serve as a forum for an exchange and discussion of the results of the Research Program;
- (iii) serve as a forum for updates from Sanofi on its Development and commercialization activities related to Licensed Products; and
- (iv) if Rib-X exercises its US Profit Share Option, then the JSC shall oversee the Development and Commercialization of the US Profit Share Product in the United States, including the approval of Development Plans, Commercialization Plans, related budgets, the design of clinical studies, and the content of proposed regulatory filings, and to serve as a forum for review of all results of clinical studies and for updates on activities outside the United States, in each case with respect to the US Profit Share Product.

For the sake of clarity, it is expected that, with respect to the sharing of information regarding the US Profit Share Product, each Party will, through the JSC, and through regular communication between each Party's designated Alliance Manager, keep the other Party informed, at a detail level, about all activities related to the Development, Manufacture and Commercialization of the US Profit Share Product in the United States, including those activities related to Development, Manufacture or commercialization of the US Profit Share Product outside the United States that are relevant to or may affect Development, Manufacture or Commercialization of the US Profit Share Product in the United States.

3.3 Administrative Matters. The JSC will appoint a chairperson from among its members, who will be designated by Rib-X during the Research Term and thereafter will be designated by Sanofi. The chairperson will be responsible for calling meetings of the JSC and for leading the meetings, but will otherwise have no greater authority on the JSC than any other member. A JSC member of the non-chairing Party will serve as secretary of such meetings. The secretary will promptly prepare and distribute to all members of the JSC draft minutes of the meeting for review and comment, including a list of any actions or decisions approved by the JSC, with the goal of distributing final approved minutes of each JSC meeting within fifteen (15) days after the meeting.

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3.4 Meetings.

3.4.1 Schedule. The JSC will meet at least once per Calendar Quarter during the Research Term, and twice per Calendar Year thereafter. The location of JSC meetings will be as agreed by the Parties, and may be held in person, alternating locations between the Parties, or by telephone conference call or by videoconference. In addition, within fifteen (15) days after the end of the Research Term, the JSC shall meet to discuss, exchange and finalize the following information: (i) status of wind-up activities; and (ii) a list of all then existing Returned Compounds indicating which of such Returned Compounds are Value Added Compounds, as well as a list of related Sanofi Patent Rights.

3.4.2 Attendance and Expenses. Each Party will use reasonable efforts to cause its representatives to attend the meetings of the JSC. In addition, each Party may, at its discretion, invite a reasonable number of non-member employees, and, with the consent of the other Party, consultants or scientific advisors, to attend meetings of the JSC or the relevant portion thereof; provided, that any such consultants or scientific advisors are bound by written obligations of confidentiality and restrictions on use of Confidential Information that are at least as stringent as those set forth in Article VIII. Each Party shall be responsible for all travel and related costs for its representatives to attend meetings of, and otherwise participate on, the JSC or any subcommittee thereof.

3.4.3 Special Meetings. Either Party may also request that a special meeting of the JSC be convened for the purpose of reviewing or making a decision pertaining to any matter within the purview of the JSC, or resolving any dispute related to any such matter, by providing written notice to the other Party. Such meeting will be convened at such time as may be mutually agreed upon by the Parties, but in any event will be held within fourteen (14) days after the date of such notice.

3.5 Decision Making. Each Party will have one (1) vote on the JSC. Any action by the JSC will require unanimous vote. No vote will be taken without at least one member from each Party being present. Action on any matter may be taken at a meeting, by teleconference, videoconference or by written agreement. In the event of any dispute at the JSC, the terms of Article XII will apply, except that, in the event the JSC cannot agree on an amendment to the Research Plan and the dispute is not resolved by agreement of the Executives under Section 12.1 [***].

3.6 Status Reports. During the Research Term, prior to each quarterly meeting of the JSC, each Party will prepare and deliver to the members of the JSC a written report describing the status and results of such Party's Research and Development activities since the last report. After first exercise by Sanofi of a Development and Commercialization Option, Sanofi's report to the JSC will also include a summary of the status and results of Sanofi's development and manufacturing activities, including those of its Affiliates and Sublicensees, with respect to each Licensed Product. After the Research Term and until exercise by Rib-X of its US Profit Share Option, Sanofi will also provide as part of the foregoing status report a then-current budget for the projected costs of Development activities related to each Licensed Product. In the event Rib-X exercises its US Profit Share Option, each Party's report to the JSC will also include the status

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and results of its activities related to Development, Manufacture and Commercialization of the US Profit Share Product. Each report given under this Section may be provided in any reasonable written form as determined by the reporting Party. Each Party will provide the members of the JSC with copies, which may be in electronic format, of all materials it intends to present at a JSC meeting. The JSC may also request at any time specific data or information related to activities contemplated under this Agreement, and the Party or appropriate committee to whom such request is made will promptly provide to the other Party or the JSC such data or information. All data provided pursuant to this Section 3.6 shall be in a reasonable format specified by Sanofi.

3.7 Alliance Managers.

3.7.1 Appointment. Each of the Parties will appoint a single point of contact for coordination of activities and to facilitate the effective exchange of information between the Parties related to the Research Program (each, a "Alliance Manager"). Each Party may change its designated Alliance Manager from time to time upon written notice to the other Party.

3.7.2 Responsibilities. The Alliance Managers will: (i) coordinate the interactions between the relevant functional representatives of the Parties; (ii) identify and bring disputes to the attention of the JSC in a timely manner; (iii) assist with governance activities, such as the conduct of required JSC meetings and drafting of meeting minutes; (iv) ensure that relevant action items resulting from such meetings are appropriately carried out or otherwise addressed; and (v) serve as the initial point of contact to resolve any disputes between the Parties. The Alliance Managers may also be members of the JSC.

ARTICLE IV - LICENSES AND ASSIGNMENTS

4.1 Research Licenses.

4.1.1 To Sanofi. Subject to the terms and conditions of this Agreement, Rib-X hereby grants to Sanofi and its Affiliates a co-exclusive (with Rib-X) worldwide, fully paid-up right and license, without the right to grant sublicenses except as specifically authorized in the Research Plan, under the Rib-X Licensed Technology and Rib-X's interest in Joint Technology, solely to enable Sanofi and its Affiliates to conduct the activities allocated to Sanofi under the Research Plan during the Research Term.

4.1.2 To Rib-X. Subject to the terms and conditions of this Agreement, Sanofi hereby grants to Rib-X and its Affiliates a co-exclusive (with Sanofi), worldwide, fully paid-up right and license, without the right to grant sublicenses except as specifically authorized in the Research Plan, under the Sanofi Licensed Technology, solely to enable Rib-X and its Affiliates to perform the activities allocated to Rib-X under the Research Plan during the Research Term.

4.1.3 Limitation on Know-how transfer. For the sake of clarity, notwithstanding anything in this Agreement to the contrary, Rib-X will not have any obligation to transfer to Sanofi any Rib-X Know-how related to or arising from the methodology necessary for crystallization and analysis of the crystal structure of the ribosome.

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4.2 Development and Commercialization Licenses.

4.2.1 To Sanofi. Subject to the terms and conditions of this Agreement, including Section 4.2.2, Rib-X hereby grants to Sanofi an exclusive (even as to Rib-X), worldwide, royalty-bearing right and license, in the Field and throughout the Territory, with the right to grant sublicenses (solely in accordance with Section 4.3), under the Rib-X Licensed Technology and Rib-X's interest in Joint Technology to develop, make, have made, use, market, import, sell and have sold, Licensed Compounds and Licensed Products.

4.2.2 To Rib-X With Respect to US Profit Share Product. In the event, Rib-X exercises its US Profit Share Option, Sanofi hereby grants to Rib-X a co-exclusive (with Sanofi), royalty-free (subject to the Profit/Loss Share Percentage) right and license, during the Term in the United States, with the right to grant sublicenses (solely in accordance with Section 4.3) under the Sanofi Licensed Technology solely to perform the activities allocated to Rib-X with respect to such US Profit Share Product in accordance with the applicable Development Plan and Commercialization Plan.

4.2.3 Assignment to Rib-X of Sanofi Compound Specific Patent Rights and License Grant under Sanofi Licensed Technology. Effective at the end of the Research Term, Sanofi (i) assigns to Rib-X all right, title and interest of Sanofi and its Affiliates in all Sanofi Compound Specific Patent Rights Covering Returned Compounds and (ii) will be deemed to have granted to Rib-X an exclusive worldwide, fully paid-up, royalty-bearing (to the extent specified in Section 6.9) right and license, with the right to grant sublicenses, under the relevant Sanofi Licensed Technology to develop, make, have made, use, market, import, sell and have sold products comprising or incorporating Returned Compounds. Upon assignment under this Section the relevant Sanofi Compound Specific Patent Rights shall become Patent Rights or Know-how, as the case may be, of Rib-X. Sanofi agrees to take, and to cause its employees, Affiliates or Sublicensees, to take, all such reasonable actions and execute all such documents, as Rib-X may from time to time reasonably request to effect the provisions of this Section. Promptly following the end of the Research Term and during the Follow-on Period, Sanofi shall provide to Rib-X any Sanofi Know-how that is related to the Returned Compounds to the extent not previously shared with Rib-X, provided that the foregoing obligation will be limited to transfer of documented Sanofi Know-how in the possession of Sanofi and its Affiliates and Sublicensees, and will not be deemed to create an obligation on the part of Sanofi to teach or train Rib-X in the practice of such Know-how.

4.3 Sublicensing Rights.

4.3.1 Research Period. Neither Party may grant sublicenses under the rights granted to it by the other Party under Sections 4.1 except as expressly set forth in the Research Plan or otherwise with the prior written consent of the other Party.

4.3.2 Licensed Products. Except as set forth in Section 4.3.3, Sanofi will, have the right to grant sublicenses under the rights granted to it under Section 4.2.1 with respect to such Licensed Product, to develop, manufacture, have manufactured, use, commercialize or import such Licensed Product in the Field in the Territory (i) to its Affiliates (with the right to

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further sublicense) and (ii) to a Sublicensee without the right to grant further sublicenses. Sanofi and its Affiliates will provide to Rib-X written notice of any agreement with a Sublicensee reflecting each such license or sublicense promptly after the execution thereof. If Sanofi or any of its Affiliates grants such a license or sublicense, all of the relevant terms and conditions of this Agreement will apply to each such Affiliate or Sublicensee to the same extent as they apply to Sanofi, and Sanofi will require each such Affiliate and Sublicensee to agree in writing to the foregoing. Without limiting the foregoing, each sublicense agreement will contain the following provisions: (i) an obligation of the Sublicensee to assign to Sanofi at the end of the Research Term, with the right to further assign to Rib-X, any Patent Rights Covering the composition of matter or method of manufacture or use of any Returned Compounds, provided such Patent Rights do not also Cover the composition of matter or method of manufacture or use of any other compound; and (ii) a license grant to Sanofi with respect to Know-how and Patent Rights Controlled by such Sublicensee, with the right to grant a sublicense to Rib-X, such license from the Sublicensee to be triggered automatically by an obligation of Sanofi to grant a license to Rib-X under this Agreement, but solely to the extent such Know-how and Patent Rights of the Sublicensee will fall within the Sanofi Know-how and Sanofi Patent Rights being licensed to Rib-X once Sanofi obtains Control from such Sublicensee. Sanofi assumes full responsibility for the performance of all obligations so imposed on each Affiliate and Sublicensee and will itself

pay and account to Rib-X for all payments due under this Agreement by reason of operation of any such sublicense.

4.3.3 US Profit Share Products. Neither Party will have the right to grant sublicenses with respect to US Profit Share Products in the United States unless mutually agreed upon by the Parties.

4.4 Rights Retained by the Parties.

4.4.1 By the Parties. Any rights of Rib-X or Sanofi, as the case may be, not expressly granted to the other Party pursuant to this Agreement will be retained by the Party that owns such rights.

4.4.2 Yale Retained Rights. All licenses granted by Rib-X under this Agreement are subject to the rights retained by Yale and Howard Hughes Medical Institute under Section 3.3 of the Yale Agreement.

4.4.3 Government Rights. All licenses granted by Rib-X under this Agreement are subject to a nonexclusive, irrevocable, royalty-free license previously granted by Yale to the U.S. Government, a copy of which is attached to the Yale Agreement.

4.5 Diligence. Sanofi will use Commercially Reasonable Efforts to Develop, obtain Regulatory Approval for, and commercialize each Licensed Compound in the Field in the Major Countries.

4.6 Exclusivity.

(a) During Research Term. Subject to Sections 4.6(d) and 13.8(c) and except as contemplated by the Research Plan, during the Research Term, neither Party

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nor any of its Affiliates will conduct any research or development activities, fund any such activities by a Third Party, or grant any rights to a Third Party to the extent directed at the research, development, manufacture, commercialization or use of a RX04 Compound.

(b) During the Follow-on Period. Subject to Sections 4.6(d) and 13.8(c), during the Follow-on Period, neither Party nor any of its Affiliates will conduct any research or development activities, fund any such activities by a Third Party, or grant any rights to a Third Party, to the extent directed at the research, development, commercialization or use of any RX04 Compound other than Licensed Compounds.

(c) During the Term. Notwithstanding anything to the contrary, during the Term, Rib-X shall not, directly or indirectly, either by itself or with another party, commercialize, seek to commercialize, or grant another party any rights to commercialize, any compound which otherwise satisfies the criteria set forth in (i), (ii), (iii) and (iv) of the definition of "Back-up Compound" with respect to a Licensed Compound, including any prodrugs of such compounds.

(d) Effect of Termination for Breach. Notwithstanding anything in this Agreement to the contrary, in the event of a termination of this Agreement for breach under Section 11.2.2 or for bankruptcy of the other Party under Section 11.2.4 or a termination of this Agreement by either Party under Section 11.2.5, the provisions of this Section 4.6 shall not apply to the terminating Party, but shall apply only as to the breaching Party in the case of a termination under Section 11.2.2, or the Party subject to bankruptcy proceedings in the case of a termination under Section 11.2.4 or Sanofi, in the case of termination of this Agreement under Section 11.2.5.

4.7 Right of First Negotiation. During the Follow-on Period, Sanofi will have the first right to negotiate for a license to any RX04 Compound owned or Controlled by Rib-X. In the event Sanofi desires to exercise its right of first negotiation as to any RX04 Compound during the Follow-on Period, Sanofi shall provide written notice to Rib-X of Sanofi's desire to enter into negotiations for a license to a specified RX04 Compound (the "Exercise Notice"). In the event Sanofi exercises its right of first negotiation by delivering the Exercise Notice to Rib-X during the Follow-on Period, the Parties shall enter into good faith negotiations on the mutually agreeable terms of a definitive agreement. In the event the Parties cannot reach agreement on the terms of a definitive agreement despite good faith negotiations within ninety (90) days from the date of delivery of the Exercise Notice, Sanofi's right of first negotiation shall terminate as to such RX04 Compound. Upon expiration of the restrictions set forth in Section 4.6, Rib-X shall thereafter be free to license to any Third Party Rib-X's rights with respect to any RX04 Compound which is not the subject of a further definitive agreement between the Parties executed in connection with this Section.

4.8 Section 365(n) of the Bankruptcy Code. All rights and licenses expressly granted pursuant to any section of this Agreement are rights and licenses to "intellectual property" (as defined in Section 101(35A) of title 11 of the United States Code (the "Bankruptcy Code")). Each Party will retain and may fully exercise all of its rights and elections under the Bankruptcy

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Code. The Parties further agree that, in the event of the commencement of a bankruptcy proceeding by or against a Party or its Affiliates under the Bankruptcy Code or analogous provisions of Applicable Law outside the United States, the other Party, as a licensee under such bankrupt Party's intellectual property, will be entitled to a complete duplicate of (or complete access to, as appropriate) such specifically licensed intellectual property and all embodiments of such intellectual property, which, if not already in such licensee Party's possession, will be promptly delivered to it upon such licensee Party's request therefor. For clarity, so long as this Agreement has not expired or terminated by its terms prior to the date on which a case under the Bankruptcy Code is commenced, and so long as both Parties remain subject to material obligations hereunder (i.e., Rib-X's obligation to license the Rib-X Licensed Technology and Sanofi's obligation to make royalty payments on Licensed Products), this Agreement shall be recognized as an executory contract.

ARTICLE V - PROFIT-SHARE OPTION

5.1 US Profit Share Option. Rib-X will have the option to co-develop and co-promote one Licensed Product with Sanofi, in the United States, under a single trademark approved by Sanofi, in accordance with a joint Development Plan and Commercialization Plan for such Licensed Product. (the "US Profit Share Option").

5.2 Data Package and Option Period. Rib-X will have a US Profit Share Option with respect to each Licensed Product until Rib-X has exercised its US Profit Share Option for one Licensed Product, after which such exercise Rib-X will no longer have a US Profit Share Option for any other Licensed Product. Until Rib-X has exercised its US Profit Share Option, Sanofi will provide Rib-X with a written notice (the "Phase 3 Notice") that a Phase 3 Clinical Trial is planned along with the following information (the "Data Package") at least [***] ([**]) days prior to the commencement of the first Phase 3 Clinical Study of each Licensed Product: (i) a statement of [***] as of such date; (ii) a proposed Development Plan for Development of such Licensed Product through First Commercial Sale, which such Development Plan will include a detailed Clinical Trial plan, a proposed description of activities, [***] (the "Initial Development Plan"); (iii) the following data and documentation regarding non-clinical (including preclinical) and clinical Development activities: (a) the table and listings from the locked database for the most recently completed Phase 2 Clinical Trial; (b) a report describing the data and results of all other Phase 2 Clinical Trials for such Licensed Product; and (c) all other significant data with respect to such Licensed Product which is equivalent, in all material respects, to that data which [***]; and (iv) the most recent market research report, if any, prepared by or for Sanofi related to such Licensed Product. Rib-X understands that the Development Plans and [***] provided under clause (ii) of the preceding sentence are projections and estimates provided for informational purposes only and are subject to modification and amendment by Sanofi. Sanofi will also provide Rib-X the opportunity to discuss the foregoing information with Sanofi in a face-to-face meeting to occur within twenty (20) days of Sanofi's receipt of written request from Rib-X, which such written request will be delivered to Sanofi no later than thirty (30) days after Rib-X's receipt of the Data Package. Rib-X may exercise its US Profit Share Option as to the Licensed Product that is the subject of the "Phase 3 Notice", by, no later than [***] ([**]) days after Rib-X's receipt of the Data Package (the "US Profit Share Option Exercise Date"), delivering to Sanofi the following: (1) written notice of such exercise; (2) [***] (3) [***]

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percent ([**]%) of the Commercialization efforts in the U.S. involving interface with customers, as described in Section 5.6.1; provided, however that if Rib-X's sales force is not fully operational [***], then (i) all rights granted to Rib-X upon the exercise of such US Profit Share Option shall be null and void with no further effect, and (ii) Sanofi shall reimburse Rib-X for [***]% of the Pre-Opt-in Development Costs.

5.3 Development of US Profit Share Product.

5.3.1 For the United States. In the event Rib-X exercises its US Profit Share Option, Sanofi will continue to have responsibility for conduct of the Development activities, but will, after the US Profit Share Option Exercise Date, perform Development activities under the relevant Development Plan and subject to the oversight of the JSC. The Initial Development Plan, as included in the Data Package, will be the initial Development Plan governing activities after the US Profit Share Option Exercise Date, provided that the JSC will meet within thirty (30) days of the US Profit Share Option Exercise Date to update the Initial Development Plan and the accompanying [***], based on proposed substantive amendments submitted by both Parties with the goal of minimizing costs while achieving Regulatory Approval of the US Profit Share Product as soon as possible and ultimately maximizing the profitability of such US Profit Share Product (the "Development Plan Guidelines"). Thereafter the JSC will review the Development Plan not less frequently than annually at least ninety (90) days prior to the beginning of any Calendar Year, and shall develop updates with the input of both Parties, such updates to include an overall description of Development activities; and a [***] using a level of detail consistent with Sanofi's then current practices. Notwithstanding anything in this Agreement to the contrary, and subject to 5.3.1(a), if the JSC cannot agree on an update to a Development Plan ([***]), including an update to the Initial Development Plan, then the Executives shall use reasonable efforts to resolve the matter within ten (10) Business Days after the matter is referred to them, and if the Executives cannot resolve any such matter within ten (10) Business Days, the matter shall be decided by the Executive of Sanofi.

(a) If Sanofi, in its reasonable judgment, would like to increase the [***] plus [***] percent ([***]%). The Development Loan shall be fully creditable by Sanofi against any future payments to Rib-X under this Agreement, including payments then due but not yet paid, and including profit sharing payments under Section 6.8. For purposes hereof, "Standard Increase" means an increase in then current approved budget for Shared Development Costs (i) for the then current Calendar Year in excess of [***] percent ([***]%), (ii) for the first Calendar Year after the current Calendar Year in excess of [***] percent ([***]%). Sanofi's "[***]" shall equal the [***]. For purposes of clarity, Sanofi shall have no obligation to loan Rib-X any funds for increases in budgeted Shared Development Costs of Year 3 or Year 4 of any Development Plan.

5.3.2 Outside the United States. Sanofi will have sole decision-making authority with respect to Development, Manufacture or commercialization of a US Profit Share Product outside the United States.

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5.3.3 Safety Information Sharing. Sanofi will be responsible for maintaining the global safety database for the US Profit Share Product in compliance with all Applicable Laws.

5.4 Shared Development Costs. Rib-X will pay [***] percent ([***]%) and Sanofi will pay [***] percent ([***]%) of all Shared Development Costs to the extent incurred after the US Profit Share Option Exercise Date. Commencing upon the US Profit Share Option Exercise Date, each Party will report its actual Shared Development Costs to the other Party within thirty (30) Business Days after the end of each Calendar Quarter in each case tracked by activity to the amounts for such activities shown on the then current Development Plan. Notwithstanding the foregoing, within fifteen (15) Business Days after the end of the third month of each Calendar Quarter, Rib-X and Sanofi will each provide to the other an estimate of Shared Development Costs for such Calendar Quarter. The Parties will seek to resolve any questions related to any such reports within ten (10) Business Days after receipt. If a balancing payment is due to ensure that the Shared Development Costs have been allocated in accordance with the first sentence of this Section, the Party due the payment will invoice the other Party at the end of each Calendar Quarter for such other Party's share of Shared Development Costs for such Calendar Quarter calculated in accordance with this Section, and such paying Party will pay amounts due with respect to Shared Development Costs under this Section within forty-five (45) days after receipt of the corresponding invoice.

5.5 Record-Keeping. All Development activities conducted by either Party with respect to a US Profit Share Product will be completely and accurately recorded, in sufficient detail and in good scientific manner appropriate for patent and regulatory purposes. Upon reasonable advance notice, and at reasonable intervals, each Party will have the right to inspect and copy such records of the other Party reflecting on work done under the Development Plan, to the extent reasonably required to carry out its respective obligations and to exercise its respective rights hereunder.

5.6 Commercialization of US Profit Share Product.

5.6.1 Co-commercialization Right. In the event Rib-X exercises its US Profit Share Option, Rib-X must participate equally in those Commercialization efforts with respect to the US Profit Share Product in the U.S. that involve interfacing with customers, including Detailing, use of medical science liaisons (collectively, "Face-to-face Customer Activities"). Sanofi shall determine and establish the price and terms of sale for the US Profit Share Product in the US, including any rebates and discounts, and will maintain control of all managed care interactions. Rib-X shall have the right to participate in any material meetings or the preparation of any material meetings or the preparation of and material submissions to governmental authorities or managed care organizations relating to pricing in the US for the US Profit Share Product. At least [***] ([***]) days prior to the filing for Regulatory Approval of a US Profit Share Product the JSC (or its designate the JCC) shall prepare an initial Commercialization Plan allocating to Rib-X and its Affiliates [***] percent ([***]%) of the Face-to-face Customer Activities related to Commercialization of the US Profit Share Product in the U.S. Prior to Regulatory Approval of the US Profit Share Product in the U.S., the Parties will execute a Co-promotion Agreement that describes in more detail the roles and responsibilities of the Parties for Commercialization of the US Profit Share Product under this Section.

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5.6.2 US Profit Share Commercialization Plans. The JSC shall appoint a Joint Commercialization Committee ("JCC") whose purpose is to propose the US Profit Share Product Commercialization Plan to the JSC. Notwithstanding anything in this Agreement to the contrary, if the JCC cannot agree on Commercialization Plan (and budget), then the Executives shall use reasonable efforts to resolve the matter within ten (10) Business Days after the matter is referred to them, and if the Executives cannot resolve any such matter within ten (10) Business Days, the matter shall be decided by the Executive of Sanofi, subject to Section 12.2.2. The JCC shall consist of at least two executives from each Party and their responsibilities shall consist of

- (a) Developing the commercialization strategy of the US Profit Share Product in the US;
- (b) Developing the forecasts for the supply requirements and allocating the Face-to-face Customer Activities;
- (c) Reviewing any post marketing clinical development or investigator initiated trials; and
- (d) Validating plans and policies regarding journal and other publications in concert with the JSC.

5.6.3 Costs. Each Party will bear its own promotion costs associated with its Commercialization activities under the Commercialization Plan except that each Party's [***] will be factored into the calculation of Net Profit/Loss.

5.6.4 Net Profit/Profit Sharing. The Parties will share Net Profit/Losses in accordance with their respective Profit/Loss Share Percentage, subject to the terms of Section 6.8.

5.6.5 Labeling and Trademark. To the extent permitted by Applicable Law, Sanofi will include the Rib-X name and logo on all secondary packaging, literature, labels and other printed matter for the US Profit Share Product used in clinical Development in the U.S. or Commercialization in the U.S. Sanofi remains the owner of any trademark in the US for the US Profit Share Product.

5.7 Sales and Distribution. Regardless of whether Rib-X exercises its US Profit Share Option, Sanofi will be responsible for selling and booking all sales and for warehousing and distribution of US Profit Share Products in the Field in the U.S.

5.8 Promotional Materials. Sanofi shall be responsible for the creation, preparation and reproduction of all promotional materials, and Rib-X may review and comment on such materials prior to their distribution through the JCC/JSC. Sanofi shall maintain all rights to promotional materials, including copyrights.

Portions of this Exhibit, indicated by the mark "[***]," were omitted and have been filed separately with the Secretary of the Commission pursuant to the Registrant's application requesting confidential treatment pursuant to Rule 406 of the Securities Act of 1933, as amended.

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ARTICLE VI - FINANCIAL PROVISIONS

6.1 Initial License Payment. Sanofi will, within ten (10) Business Days of the Effective Date, make a non-refundable, non-creditable payment to Rib-X of Ten Million Dollars (\$10,000,000).

6.2 Research Milestone. Sanofi shall pay Rib-X the following research milestone payments based on the progression of each [***] with each payment to be made on a per [***] basis. Each payment will be payable once for each [***] if the corresponding activity is completed with a [***] covered by such [***] in accordance with Exhibit A. The payments will be due within ten (10) Business Days of receipt of written notice from Rib-X to Sanofi of the first completion of the corresponding activity with respect to each [***], as follows:

Research Milestone

Research Milestone

Payment per [***]

(i) First successful completion of a [***], provided that (i) with respect to a [***] from any of the [***] described in Exhibit C, the steps set forth in the "Current Leads to Candidates: Flow Chart" of the Research Plan (the "Flow Chart") that precede the [***] have been successfully completed with respect to the same [***] or a different [***] in the same [***]; and (ii) with respect to a [***] from a New [***], the steps set forth in the Flow Chart that precede the [***] have been successfully completed with respect to the same [***].

US\$ [***]

(ii) First successful completion of a [***], provided that the steps set forth and highlighted as "required" in the Flow Chart that precede such activity have been completed and the results of such highlighted steps would not block further development with respect to the same [***].

US\$ [***]

6.3 Option Exercise Fee. Within ten (10) Business Days of each exercise by Sanofi of a Development and Commercialization Option, Sanofi will pay to Rib-X an option exercise fee in the amount of US \$[***] per [***] (and the [***]) as to which the relevant Development and Commercialization Option was exercised (the "Option Exercise Fee"). By way of example, if Sanofi exercises its Development and Commercialization Option with respect to five (5) [***], the total amount of the Option Exercise Fee paid by Sanofi to Rib-X will be US \$[***].

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6.4 Milestone Payments. Sanofi will make the following non-refundable, non-creditable payments to Rib-X upon the first achievement of each of the events set forth below with respect to each [***]:

Milestone Event

Payment

(i) [***]:

\$ [***]

(ii) [***]:

\$ [***]

(iii) [***]:

\$ [***]

(iv) [***]:

\$ [***]

(v) [***]:

\$ [***]

(vi) [***]:

\$ [***]

For the sake of clarity, if a milestone related to a Clinical Trial or Regulatory Approval is reached with respect to a Licensed Product, then, upon such event (if not earlier), any earlier stage Clinical Trial milestones will also be deemed to have been reached with respect to such Licensed Product for purposes of this Section, whether or not such earlier milestone has actually occurred. For example, if Regulatory Approval for a Licensed Product is approved based on a Phase 2b Clinical Trial without a Phase 3 Clinical Trial, then upon Regulatory Approval, both the Regulatory Approval milestone and the initiation of a Phase 3 Clinical Trial milestone will be paid. Notwithstanding the foregoing, if any of the above milestones have been met with respect to a Licensed Product as to which Development is subsequently terminated in favor of [***] to such Licensed Compound, then Sanofi will not have any payment obligation with respect to achievement of those same completed milestones with respect to such Back-up Compound, but will be obligated to make milestone payments with respect to those milestones that were not reached with the original Licensed Compound.

6.5 Sales Milestones Payments. Sanofi will make the following non-refundable, non-creditable payments to Rib-X upon the first achievement of the events set forth below for each Licensed Product:

Milestone Event

Payment

(i) Worldwide annual Net Sales of a single Licensed Product exceed \$[***]

\$ [***]

(ii) Worldwide annual Net Sales of a single Licensed Product exceed \$[***]

\$ [***]

(iii) Worldwide annual Net Sales of a single Licensed Product exceed \$[***]

\$ [***]

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Annual Net Sales for purposes of determining whether the milestones under this Section 6.5 have been met will be based on Net Sales in the applicable Calendar Year.

6.6 Notification of Achievement. Sanofi will notify Rib-X of achievement of any of the foregoing milestone events set forth in Section 6.4 or 6.5, and, except as otherwise specified, will pay to Rib-X the corresponding milestone payment, within thirty (30) days of the date of achievements of such milestone event.

6.7 Licensed Product Royalties.

6.7.1 Royalty Payment. Subject to adjustment as set forth in Section 6.7.2, and 6.7.3, Sanofi will pay to Rib-X royalties on a Royalty-Bearing Product-by-Royalty-Bearing Product basis on the aggregate worldwide Net Sales of such Royalty-Bearing Products in a Calendar Year as follows:

Portion of Aggregate Worldwide Net Sales of each Royalty-Bearing Product in a Calendar Year

Royalty Rate

Less than \$[***]

[***]%

Equal to or greater than \$[***] but less than \$[***]

[***]%

Equal to or greater than \$[***] but less than \$[***]

[***]%

Equal to or greater than \$[***]

[***]%

6.7.2 Royalty Term and Adjustments.

(a) Royalty Term. Royalties under Section 6.7.1 will be payable, on a country-by-country and Licensed Product-by-Licensed Product basis, commencing on the First Commercial Sale in such country of such Licensed Product and will expire, on a country-by-country basis, and Licensed Product-by-Licensed Product basis, on the later of: (i) the expiration of the last Valid Claim within those Rib-X Patent Rights or Joint Patent Rights Covering the sale of such Licensed Product in the Field in such country; or (ii) the [***] of the date of the First Commercial Sale of such Licensed Product in such country by or on behalf of Sanofi or any of its Affiliates or Sublicensees to a Third Party who is not a Selling Party (the "Royalty Term"). Thereafter, the license granted to Sanofi pursuant to Section 4.2.1 will be fully-paid and royalty-free with respect to such Licensed Product in such country, on a Licensed Product-by-Licensed Product and country-by-country basis.

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(b) No Protection. Notwithstanding the foregoing, the royalty rate applicable to Licensed Product will be reduced on a country-by-country and Licensed Product-by-Licensed Product basis by [***] percent ([***]%) during any portion of the applicable Royalty Term when there is no Valid Claim within the Rib-X Patent Rights or Joint Patent Rights Covering such Licensed Product in the Field in the country of sale or country of manufacture and no other protective data or marketing exclusivity applies to such Licensed Product in the country of sale.

(c) Generic Competition. Notwithstanding anything to the contrary, if a Generic Product corresponding to a Licensed Product is launched in such particular country, then [***].

[***]

***]

***]

***]

***]

***]

***]

***]

6.7.3 Third Party Payments.

(a) Yale Agreement and Other Existing Rib-X Agreements. Rib-X will pay all amounts due under any agreements it has entered into as of the Effective Date, including, but not limited to all payments Yale University under the Yale Agreement, provided that any amounts paid under the Yale Agreement with respect to Net Sales in the U.S. for the US Profit Share Product will be treated as a Third Party and other Permitted Sales and Marketing Expense of Rib-X.

(b) Other Rib-X In-licenses. [***].

(c) Other Third Party Payments. [***].

6.7.4 Report and Payment. Sanofi will pay royalties pursuant to this Section 6.7 within forty-five (45) days after the end of each Calendar Quarter with respect to applicable Net Sales received in such Calendar Quarter, along with a written report setting forth the Gross Sales, Net Sales and adjustments made pursuant to Sections 6.7.2 and 6.7.3 (if applicable), on a Licensed Product-by-Licensed Product and country-by-country basis, and the total royalty payments payable to Rib-X. The report for the fourth (4th) Calendar Quarter in each Calendar Year will include a list of all countries in which a Licensed Product has been sold in the Territory for the applicable Calendar Year.

6.8 Net Profit/Loss. The following provisions of this Section 6.8 will apply with respect to the US Profit Share Product, if any.

6.8.1 Profit/Loss Share. Each Party will share in Net Profit/Loss according to such Party's Profit/Loss Share Percentage, continuing for as long as such Licensed Product is being Commercialized in the U.S. Exhibit F sets forth an example of the calculation of Net Profit/Loss and of a Party's Profit/Loss Share Percentage, and is provided solely for illustrative purposes.

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6.8.2 Accounting. Each Party will provide to the other Party within ten (10) Business Days after the end of each month during a Calendar Quarter a reasonably detailed written report of the actual [***] for the US Profit Share Product incurred by such Party or its Affiliates during such month, and Sanofi will report to Rib-X the total Net Sales for such month. Notwithstanding the foregoing, within four (4) Business Days after the end of the third month of each Calendar Quarter, Rib-X and Sanofi will each provide to the other an estimate of such amounts for such third month. The Parties will seek to resolve any questions related to any such report within ten (10) Business Days after receipt thereof. Within twenty (20) Business Days after receipt of Rib-X's report of actual amounts for the third month of each Calendar Quarter, Sanofi will submit to Rib-X a written report setting forth in reasonable detail the calculation of Net Profit/Loss with respect to the US Profit Share Product and the calculation of the net amount owed by Sanofi to Rib-X, taking into account [***] incurred by Rib-X, in order to ensure that the sharing of Net Profit/Loss is in accordance with each Party's respective Profit/Loss Share Percentage. Sanofi's written report will include the following with respect to such Calendar Quarter for such Licensed Product: (i) [***] with respect to such Licensed Product, on a country-by-country basis, during such Calendar Quarter; (ii) a reasonably detailed written report [***]; and (iii) [***] reported by both Parties. The net amount payable will be paid by Sanofi or Rib-X, as the case may be, within thirty (30) days after the end of the applicable Calendar Quarter.

6.9 Royalty Payment by Rib-X. Rib-X shall pay to Sanofi a royalty of [***] percent ([***]%) on Net Sales by Rib-X and its Affiliates and sublicensees of any product in the Field incorporating a "Value Added Compound", in each case with the applicable definitions and the provisions of Section 6.7.2, 6.7.3, 6.7.4, 6.11 and 6.12 applying to such royalty payments after making the necessary revisions to reflect the respective roles of the Parties.

6.10 Accounting.

6.10.1 Late Payment. Each Party will pay interest on the aggregate amount of any payments that are owed to the other Party under this Agreement and not paid on or before the tenth (10th) Business Day after which such payments are due under this Agreement at a rate per

annum equal to the lesser of (a) the [***] for United States dollars, as reported by The Wall Street Journal, Eastern Edition, plus [***], or (b) the highest rate permitted by Applicable Law, calculated on the number of days such payments are paid after the date such payments are due.

6.10.2 Method of Payment. Royalties on Net Sales and all other amounts payable by either Party hereunder will be paid by or on behalf of such Party in U.S. Dollars by electronic funds transfer to an account specified by the Party entitled to such payment.

6.10.3 Currency. All dollar (\$) amounts specified in this Agreement are in U.S. dollars. In the case of sales outside the United States calculations of Net Sales to determine the payment of sales milestones and royalties due hereunder shall first be determined in the currency of the country in which the Licensed Products in question were sold and then converted into

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equivalent U.S. funds. Any currency conversion will be made in a manner consistent with Sanofi's normal practices used to prepare its audited financial statements for internal and external reporting purposes, which uses a widely accepted source of published exchange rates.

6.11 Taxes. Rib-X shall bear any and all taxes levied on account of any payment received under this Agreement. In the event that Sanofi is required, under Applicable Laws, to withhold any deduction or tax from any payment due to Rib-X under this Agreement, such amount shall be deducted from the payment to be made by Sanofi, paid to the proper taxing authority, provided that Sanofi shall take reasonable and lawful actions to avoid and minimize such withholding and promptly notify Rib-X so that Rib-X may take lawful actions to avoid and minimize such withholding. Sanofi shall promptly furnish Rib-X with copies of any tax certificate or other documentation evidencing such withholding as necessary to satisfy the requirements of the relevant governmental authority related to any application by Rib-X for foreign tax credit for such payment. Each Party agrees to cooperate with the other Party in claiming exemptions from such deductions or withholdings under any agreement or treaty from time to time in effect.

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6.12 Records and Inspection.

6.12.1 Audit Rights.

(a) Each Party will keep, and will require its Affiliates and, with respect to Sanofi, its Sublicensees, to keep, full, true and accurate books of account containing all particulars that may be necessary for the purpose of calculating the amounts payable by the other Party under this Agreement, including records underlying COGS, Third Party and Other Permitted Sales and Marketing Expenses, Pre-Opt-In Development Costs, Shared Development Costs, Net Sales and the calculation of Net Profit/Loss, and, in the case of Sanofi, to enable Rib-X to confirm compliance with diligence obligations or to determine whether payment events have occurred. Such books of accounts will be kept at each Party's principal place of business for a period of at least three (3) full Calendar Years after the date on which the relevant cost was incurred or Net Sales was received or the relevant activity occurred. Each Party has the right to engage an independent, certified public accountant selected by such Party and reasonably acceptable to the other Party to perform, on behalf of the auditing Party, an audit of such books and records of the audited Party and its Affiliates and, as applicable, Sublicensees, that are deemed necessary by such accountant to report on the correctness of any report or payments made or to have been made under this Agreement.

(b) The auditing Party will provide reasonable notice to the audited Party of any requested audit and will conduct such audit during regular business hours in such a manner as to not unnecessarily interfere with the audited Party's normal business activities. Any audit will be limited to records for the three (3) full Calendar Years prior to audit notification.

(c) An auditing Party will not perform an audit more frequently than once per Calendar Year nor more frequently than once with respect to records covering any specific period of time.

(d) The auditing Party will use all such records of the audited Party only for the purpose of verifying payments due hereunder, and will treat such records as Confidential Information of the audited Party. The independent certified public accountant will only share the results of the audit with the auditing party, not the underlying records.

(e) Any final audit report will be shared by the auditing Party with the audited Party.

(f) Notwithstanding anything in this Agreement to the contrary, Sanofi shall permit Yale to audit the books and records maintained by Sanofi and its Affiliates and Sublicensees under Section 6.12.1, to the same extent as Rib-X is entitled to conduct any such audit, and shall permit Rib-X to

share with Yale information obtained from Sanofi or any of its Affiliates or Sublicensees in connection with any audit.

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6.12.2 Over- or Underpayment. If the audit reveals an underpayment by a Party, such Party will reimburse the other Party for the amount of the underpayment within thirty (30) days, with interest as set forth in Section 6.10.1 if such underpayment is by the audited Party and was due to an inaccuracy by the underpaying Party. If the audit reveals an overpayment, the Party who received the overpayment will, as instructed by the other Party, either credit the amount of such overpayment against the next payment owed by it to such other Party, or refund such amount to such other Party, in each case within thirty (30) days of receipt of instructions from the other Party, along with interest as set forth in Section 6.10.1 if such overpayment was due to an inaccuracy by the Party who received the overpayment.

6.12.3 Costs. The costs of any audit will be paid by the auditing Party unless the underpayment of amounts by the audited Party is determined to be greater than ten percent (10%) of the amount due for the entire period being audited, in which case the auditing Party will reimburse the audited Party for the audited Party's reasonable costs incurred in such audit.

ARTICLE VII - INTELLECTUAL PROPERTY MATTERS

7.1 Ownership. Except as provided in the assignment provisions of Section 4.2.3, each Party will exclusively own all inventions conceived or reduced to practice solely by employees, agents and consultants of such Party or its Affiliates, subject to the licenses granted under Article IV. Inventions conceived or reduced to practice jointly by employees, agents, or consultants of the Parties or their Affiliates will be jointly owned, subject to the licenses granted under Article IV and the assignment provisions of Section 4.2.3 (the "Joint Inventions"). Inventorship will be determined in accordance with U.S. patent laws.

7.2 Prosecution and Maintenance of Patent Rights.

7.2.1 General. Except as set forth in Section 7.2.3, each Party shall be responsible for preparing, filing, prosecuting and maintaining (including the defense of any interference or opposition proceeding) its own Patent Rights, at its expense and Rib-X shall be responsible for preparing, filing, prosecuting and maintaining Patent Rights describing and claiming Joint Inventions, at Rib-X's expense. Each Party shall file the Patent Rights within the scope of its authority related to composition of matter, method of use or method of manufacture of Target Compounds, and Rib-X shall file Patent Rights describing and claiming Joint Inventions related to composition of matter, method of use or method of manufacture of Target Compounds, in each case in at least the countries and jurisdictions listed in Exhibit G.

7.2.2 During the Research Term. During the Research Term, with respect to (i) Rib-X Patent Rights, (ii) Sanofi Patent Rights; and (iii) Patent Rights that describe and claim Joint Inventions, in each case that describe and claim the composition of matter, or method of manufacture or use, of RX04 Compounds and are not otherwise covered by the provisions of Section 7.2.3, each Party will provide to the other Party copies of all filings and material submissions and correspondence sent to or received from patent offices or Third Parties, and will provide the other Party with a draft of each such filing or material submission or correspondence reasonably in advance of its submission or following its receipt. Each Party will consider in good faith any comments that the other Party may timely provide with respect to such filings and

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material submissions and correspondence and Rib-X will give effect to or, in the event of a disagreement with Sanofi's comments, bring to the attention of the JSC, any comments that Sanofi may timely provide with respect to Patent Rights describing and claiming Joint Inventions. In addition, each Party will provide to the other Party such other information related to prosecution of Patent Rights hereunder as the other Party may from time to time reasonably request to allow the other Party to track prosecution and maintenance of such Patent Rights. Neither Party will discontinue prosecution or maintenance of any such Patent Rights without at least ninety (90) days prior written notice to the other Party. On a country-by-country basis, if a Party decides to discontinue prosecution or maintenance of any subject matter claimed or disclosed in any such Patent Right prosecuted by such Party hereunder, then, unless such subject matter is being abandoned in one application in favor of another application within the same group of Patent Rights, such Party will, at the written request of the other Party, made within thirty (30) days of receipt of written notice from the prosecuting Party of such intended abandonment, transfer to the other Party all patent files, and execute any document, including relevant powers of attorney forms related to such Patent Rights, sufficiently in advance of any loss of rights so that the other Party may, at its option, continue to prosecute and maintain such subject matter, in such other Party's name, at such other Party's sole expense.

7.2.3 During License Term. Following exercise by Sanofi of its Development and Commercialization Option as to a Licensed Compound, the following provisions will apply with respect to (i) Rib-X Patent Rights, (ii) Sanofi Patent Rights; and (iii) Patent Rights that describe and claim

Joint Inventions, in each case that specifically describe and claim the composition of matter, or method of manufacture or use, of such Licensed Compound and at Sanofi's cost:

(a) Promptly following the relevant Option Exercise Date, Sanofi will, at its sole expense, have, and Rib-X will transition to Sanofi, the responsibility for, and control over, preparing, filing, prosecuting, and maintaining (including the defense of any interference or opposition proceeding) such Patent Rights, including by obtaining power of attorney forms and other documentation required by the relevant patent offices for Sanofi to assume prosecution of such Patent Rights, in Sanofi's name.

(b) Sanofi will provide to Rib-X copies of all prosecution filings and material submissions and correspondence related to Patent Rights being prosecuted by Sanofi under this Section 7.2.3(a) sent to or received from patent offices, and, with respect to patent applications, and material submissions, will use reasonable efforts to provide Rib-X with a draft of each such filing or material submission reasonably in advance of submission, and will consider in good faith any comments that Rib-X may timely provide. In addition, Sanofi will provide to Rib-X such other information related to prosecution and maintenance of such Patent Rights hereunder as Rib-X may from time to time reasonably request to allow Rib-X to track prosecution and maintenance of such Patent Rights. Sanofi will not discontinue prosecution or maintenance of any such Patent Rights without at least ninety (90) days prior written notice to Rib-X. On a country-by-country basis, if Sanofi decides to discontinue prosecution or maintenance of any subject matter claimed or disclosed in any such Patent Right prosecuted by such Party hereunder then, unless such subject matter is being abandoned in one application in favor of another

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application within the same group of Patent Rights, Sanofi will, at Rib-X's written request made within thirty (30) days of receipt by Rib-X of written notice from Sanofi of such intended abandonment, transfer to Rib-X all patent files, including relevant powers of attorney forms related to such Patent Rights, sufficiently in advance of any loss of rights so that Rib-X will have the option to continue to prosecute and maintain such subject matter, at Rib-X's sole expense, and, in such event, any Valid Claims directed to such subject matter will be assigned to Rib-X and thereafter will be excluded from Rib-X Patent Rights for purposes of the licenses and rights granted to Sanofi and the royalties payable to Rib-X under this Agreement.

7.2.4 Patent Term Extensions. Rib-X and Sanofi will discuss together whether and on which patent(s) to seek patent term extensions or supplemental patent protection, including supplemental protection certificates, in any country in the Territory in relation to the Licensed Products described and claimed by Rib-X Patent Rights. Rib-X and Sanofi will cooperate in connection with all such activities. Notwithstanding the foregoing, if the Parties cannot agree, Sanofi will determine whether and on which patent(s) Rib-X or Sanofi will seek patent term extensions or supplemental patent protection in relation to the relevant Licensed Product, except that in the case of US Patent Rights that describe and claim a Profit Share Product, the final decision will be made by the JSC.

7.3 Third Party Infringement.

7.3.1 Notice. Each Party will promptly report in writing to the other Party during the Term any known or suspected infringement of any of (i) Rib-X Patent Rights, (ii) Sanofi Patent Rights and (iii) Patent Rights that describe and claim Joint Inventions, in each case, that Cover a Licensed Product, or known or suspected unauthorized use or misappropriation of any existing Rib-X Know-how used in the development, manufacture or commercialization of Licensed Product, of which such Party becomes aware, and will provide the other Party with all available evidence of such known or suspected infringement or unauthorized use or misappropriation.

7.3.2 Right to Enforce Patent Rights.

(a) With respect to the Patent Rights prosecuted by Sanofi pursuant to Section 7.2.3(a): Sanofi will have the first right, but not the obligation, to initiate a suit or take other appropriate action that it believes is reasonably required to prevent or abate actual or threatened infringement or misappropriation of, or otherwise protect or enforce any such Patent Rights against a Third Party who is researching, developing, making, using or selling a product that contains the relevant Licensed Compound in the Field. Rib-X and its Affiliates will join such suit if the relevant court would lack jurisdiction if Rib-X or such Affiliate were absent from such suit and Rib-X and such Affiliates will execute such legal papers and cooperate in the prosecution of such suit as may be reasonably requested by Sanofi; provided, that Sanofi will promptly reimburse all out-of-pocket expenses (including reasonable attorneys' fees and expenses) incurred by Rib-X and such Affiliates in connection with such cooperation.

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(b) With respect to the Patent Rights prosecuted by Rib-X pursuant to Section 7.2.3(b): Rib-X will have the first right, but not the obligation, to initiate a suit or take other appropriate action that it believes is reasonably required to prevent or abate actual or threatened infringement or misappropriation of, or otherwise protect or enforce any such Patent Rights against a Third Party who is researching, developing, making, using or selling a product that contains the relevant Licensed Compound in the Field. Sanofi and its Affiliates will join such suit if the relevant court would lack jurisdiction if Sanofi or such Affiliate were absent from such suit and Sanofi and such Affiliates will execute such legal papers and cooperate in the prosecution of such suit as may be reasonably requested by Rib-X; provided, that Rib-X will promptly reimburse all out-of-pocket expenses (including reasonable attorneys' fees and expenses) incurred by Sanofi and such Affiliates in connection with such cooperation.

(c) Other Party's Rights. If the Party having the first right to initiate an action under either (a) or (b) above, does not initiate a suit or take other appropriate action pursuant to Section 7.3.2(a) or Section 7.3.2(b) within sixty (60) days (fifteen (15) days in the case of a Paragraph IV Certification) after receipt of a written notice from the other Party, then the other Party will have the right to initiate a suit or take other appropriate action that it believes is reasonably required to protect the relevant Patent Rights and the Party not initiating such suit and its Affiliates will join such suit if the relevant court would lack jurisdiction if such Party or such Affiliates were absent from such suit and such Party and such Affiliates will execute such legal papers and cooperate in the prosecution of such suit as may be reasonably requested by the initiating Party; provided, that the initiating Party will promptly reimburse all out-of-pocket expenses (including reasonable attorneys' fees and expenses) incurred by the Party not initiating such suit and such Affiliates in connection with such cooperation. Notwithstanding the foregoing, Sanofi will have no right to initiate an action with respect to any Patent Rights that have been excluded from Rib-X Patent Rights under Section 7.2.3(b).

7.3.3 Right to Enforce Know-how. Responsibility for protecting (i.e., preventing or abating actual or threatened infringement or misappropriation of) or otherwise enforcing Know-how will be determined in the same manner as the relevant Patent Rights.

7.3.4 Conduct of Certain Actions; Costs. The Party initiating suit pursuant to this Section 7.3 will have the sole and exclusive right to select counsel for any such suit initiated by it. The initiating Party will assume and pay all of its own out-of-pocket costs incurred in connection with any litigation or proceedings initiated by it pursuant to this Section 7.3, including the fees and expenses of the legal counsel selected by it, except that, in the event the Licensed Product is a US Profit Share Product, such costs of outside counsel and court costs will be treated as Third Party and Other Permitted Sales and Marketing Expenses.

7.3.5 Recoveries.

(a) If Sanofi initiates suit as permitted in accordance with Section 7.3.2(a) or Section 7.3.2(c) or, with respect to Know-how, in the same manner as set forth in Section 7.3.2.(a) or Section 7.3.2(c), any damages, settlements, accounts of profits, or

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other financial compensation recovered by Sanofi from a Third Party based upon such suit, after deducting Sanofi's actual out-of-pocket expenses (including reasonable attorneys' fees and expenses) incurred in pursuing such suit (such net amount, the "Recovery"), will be treated as Net Sales (and will be subject to the milestone and royalty payment obligations or US Profit Share calculation hereunder, as the case may be).

(b) If Rib-X initiates suit pursuant to Section 7.3.2(b) or Section 7.3.2(c) or, with respect to Know-how, in the same manner as set forth in Section 7.3.2(b) or Section 7.3.2(c), Rib-X may retain any damages, settlements, accounts of profits, or other financial compensation recovered from a Third Party based upon such suit.

7.4 Patent Invalidity Claim. Each of the Parties will promptly notify the other in the event of any legal or administrative action by any Third Party against (i) Rib-X Patent Rights, (ii) Sanofi Patent Rights and (iii) Patent Rights that describe and claim Joint Inventions, in each case that Covers a Licensed Product of which it becomes aware, including any nullity, revocation, reexamination or compulsory license proceeding or, in accordance with Section 7.6, any Paragraph IV Certification. Responsibility for defending against any such action or Paragraph IV Certification will be determined in the same manner as enforcement of the relevant Patent Rights pursuant to Section 7.3.

7.5 Patent Marking. Sanofi will comply with the patent marking statutes in each country in which the Licensed Product is sold by Sanofi, its Affiliates, and Sublicensees.

7.6 Paragraph IV Certification. If a Party becomes aware of any certification filed pursuant to 21 U.S.C. §355(b)(2)(A)(iv) or 355(j)(2)(A)(vii)(IV), or any notice under any future analogous provisions of United States law relating to regulation or approval of pharmaceutical products (or any amendment or successor statute thereto), or any comparable law under any other jurisdiction, claiming that any Rib-X Patent Rights or Joint Patent Rights, in each case Covering a Licensed Product in the Field, is invalid or otherwise unenforceable, or that infringement will not arise from the manufacture, use, import, sale or offer of sale of a product by a Third Party (a "Paragraph IV Certification"), such Party will promptly notify the other Party in writing within one (1) Business Day after its receipt thereof, in accordance with Section 13.4.

7.7 Settlement. Notwithstanding anything in this Agreement to the contrary, in no event may (i) Sanofi settle or compromise any claim or proceeding relating to the Rib-X Know-how or Rib-X Patent Rights or Patent Rights that describe and claim Joint Inventions without first providing prior written notice to Rib-X, and (ii) Rib-X settle or compromise any claim or proceeding relating to the Sanofi Know-how or Sanofi Patent Rights or Patent Rights that describe and claim Joint Inventions without first providing prior written notice to Sanofi.

7.8 Yale Agreement. Notwithstanding anything in this Agreement to the contrary, in the event of any inconsistency between the rights granted to Sanofi under this Article VII and the rights of Yale under the Yale Agreement, the provisions of the Yale Agreement shall control.

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ARTICLE VIII - CONFIDENTIAL INFORMATION

8.1 Treatment of Confidential Information. During the Term of this Agreement and for ten (10) years thereafter, each Party will maintain the Confidential Information of the other Party in confidence, will not disclose, divulge, or otherwise communicate such Confidential Information to others and will not use it for any purpose other than in performance of its obligations or exercise of its rights pursuant to this Agreement, except that each Receiving Party may disclose the Disclosing Party's Confidential Information to the Receiving Party's directors, officers, employees, consultants, subcontractors, Affiliates, agents and advisors (collectively, "Representatives") who are bound by written or professional obligations of confidentiality and restrictions on use at least as stringent as those set forth in this Article VIII and who have a need to know such information to perform obligations or exercise rights on behalf of the Receiving Party under this Agreement. Each Receiving Party will exercise efforts that are at least as diligent as those generally used by such Party in protecting its own confidential and proprietary information of a similar nature (but no less than reasonable efforts), to prevent and restrain the unauthorized disclosure or use of the Disclosing Party's Confidential Information by any of the Receiving Party's Representatives. Each Party will be responsible for a breach of this Article VIII by its Representatives. Notwithstanding anything in this Agreement to the contrary, Sanofi agrees to comply with the obligations of Rib-X under Article 8 of the Yale Agreement with respect to Confidential Information marked "Confidential Information of Yale."

8.2 Permitted Uses. Notwithstanding anything in this Section to the contrary, the Receiving Party may disclose Confidential Information of the Disclosing Party (i) to Regulatory Authorities, to the extent necessary to obtain or maintain INDs or Regulatory Approvals for any Licensed Product (or, in the case of Rib-X, products incorporating any Returned Compound), as permitted under this Agreement; (ii) to outside consultants, service providers, scientific advisory boards, managed care organizations, non-clinical and clinical investigators and, in the case of Sanofi as the Receiving Party, to Sublicensees and potential Sublicensees, in each case to the extent necessary to research, develop, manufacture or commercialize any Licensed Product in the Field (or, in the case of Rib-X, products incorporating any Returned Compound) in accordance with this Agreement, provided, that such Receiving Party will bind such Third Parties other than Regulatory Authorities to written obligations of confidentiality and restrictions on use at least as stringent as those set forth in this Article VIII; (iii) under written obligations of confidentiality and restrictions on use no less stringent than the terms set forth in this Article VIII, to bona fide potential or actual acquirers, investors, lenders, investment bankers or other potential financial partners in connection with such Party's proposed financing or business combination activities and to advisors and consultants advising such Party in connection with such activities; and (iv) to the extent necessary to prosecute and enforce Rib-X Patent Rights in accordance with the terms of Article VII, and; in each of the foregoing cases, solely in accordance with this Agreement, provided, that, in each case under clauses (ii)-(iv), if Sanofi provides notice to Rib-X that certain Confidential Information of Sanofi is or may be, in Sanofi's reasonable determination, material to an investor making an investment decision in Sanofi, Rib-X will not disclose such Confidential Information to a Third Party until Sanofi has made a public disclosure of such information; provided, however, that, if Rib-X provides written notice to Sanofi that Rib-X has determined in good faith that Rib-X's interests would be materially adversely affected if Rib-X could not make such disclosure, then Sanofi will either make the applicable Sanofi Confidential

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Information public within ten (10) Business Days after Sanofi's receipt of such request or Rib-X may make such disclosure in strict accordance with this Section 8.2; and in a case under clause (iv), if Rib-X wishes to make use of Confidential Information that could materially adversely affect Patent Rights governed by Sanofi under 7.2.3(a), or if Sanofi wishes to make use of Confidential Information that could materially adversely affect Patent Rights governed by Rib-X under 7.2.3(b), Rib-X or Sanofi shall notify and coordinate with the other Party the extent of disclosure through the JSC.

8.3 Exceptions. Notwithstanding the foregoing, the Receiving Party's obligations under Section 8.1 will not apply to any Confidential Information of the Disclosing Party that, as shown by competent evidence:

(i) is known to the Receiving Party prior to disclosure by the Disclosing Party or being generated under this Agreement, as the case may be; or

(ii) either before or after the date of the disclosure to the Receiving Party, is lawfully disclosed to the Receiving Party by a Third Party, other than on behalf of the Disclosing Party, without any violation of any obligation to the Disclosing Party; or

(iii) either before or after the date of the disclosure to the Receiving Party or being generated by the Receiving Party, as the case may be, becomes published or generally known to the public through no fault or omission on the part of the Receiving Party or its Representatives; or

(iv) is independently developed by or on behalf of the Receiving Party outside of the activities contemplated by this Agreement without reference to or reliance upon the Disclosing Party's Confidential Information, as demonstrated by contemporaneous written records of the Receiving Party; or

(v) is required to be disclosed by the Receiving Party to comply with Applicable Laws or legal process, including the rules or regulations of the U.S. Securities and Exchange Commission, or similar agency in any country other than the United States, or of any stock exchange, including Nasdaq, or to defend or prosecute litigation, provided, that the Receiving Party promptly provides prior written notice, to the extent practicable, of such disclosure to the other Party and uses reasonable efforts to avoid or minimize the degree of such disclosure.

8.4 Additional Limits on Disclosure by Rib-X. Notwithstanding anything in this Agreement to the contrary, Rib-X agrees that, except as specifically contemplated by the Research Plan, or, in the case of a US Profit Share Product, the Development Plan or the Commercialization Plan, or as otherwise directed by the JSC, neither Rib-X nor any of its Affiliates, will disclose Confidential Information of Rib-X that is solely and specifically related to a Licensed Product except to the same extent as Rib-X is allowed to disclose Sanofi Confidential Information under Sections 8.1, 8.2 or 8.3.

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8.5 Publication Rights. During the Term of this Agreement, the following restrictions will apply with respect to publications and presentations relating to Licensed Products:

8.5.1 Publication.

(a) Rib-X will have the sole right, but not the obligation, to publish the results of the Research Program after the end of the Research Term, provided that, in no event will Rib-X publish any Confidential Information of either Party related to any Licensed Product without the prior written approval of Sanofi.

(b) Notwithstanding anything in this Agreement to the contrary, subject to paragraph (c) and Section 8.7, Sanofi will have the sole right to publish and to make presentations or public disclosure related to Sanofi's development and commercialization of Licensed Products in the Field conducted by or on behalf of Sanofi without the prior written consent of Rib-X.

(c) The JSC will determine the publication strategy for any publications or presentation of data or information generated arising from the development or commercialization of the US Profit Share Product.

8.5.2 Confidential Information in Patents. Nothing in this Agreement will prevent either Party from filing or prosecuting a patent application or maintaining or enforcing its resulting patents related to a Licensed Product; provided, that such Party is in compliance with Article VII.

8.6 Return of Confidential Information. Upon the expiration or termination of this Agreement, the Receiving Party will return to the Disclosing Party or, at the Disclosing Party's request, destroy all Confidential Information of the Disclosing Party in the Receiving Party's possession and all copies and reproductions thereof. Notwithstanding the foregoing, (i) the Receiving Party may retain one copy of the Disclosing Party's Confidential Information for archival purposes; (ii) the Receiving Party may retain and use the Disclosing Party's Confidential Information solely to the extent necessary to exercise the rights and licenses of the Receiving Party expressly surviving expiration or termination of this Agreement; (iii) the Receiving Party will not be required to return or destroy the Disclosing Party's Confidential Information stored on automatically created system-back-up tapes; and (iv) the Receiving Party will not be required to return or destroy the Disclosing Party's Confidential Information that the Receiving Party is required by law to maintain. Notwithstanding the return or destruction of the Disclosing Party's Confidential Information, the Receiving Party will continue to be bound by its obligations of confidentiality and other obligations under this Article VIII.

8.7 Press Releases and Other Disclosures. The terms of this Agreement will not be disclosed except as set forth in this Section 8.7. Rib-X and Sanofi may each issue a press release, in a form attached to this Agreement as Exhibit H-1 or Exhibit H-2, respectively, and on a date to be mutually agreed upon by the Parties, such agreement not to be unreasonably withheld, conditioned or delayed. Notwithstanding the foregoing provisions of Section 8.5 or this Section 8.7, (i) a Party may make any disclosure or public announcement if the contents of

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such disclosure or public announcement have previously been made public other than through a breach of this Agreement by such Party; (ii) if a Party reasonably determines that a public disclosure will be required by law, including in a public filing with the U.S. Securities and Exchange Commission, such Party may disclose the existence and terms of this Agreement and any material developments that occur under this Agreement, including in the Development or Commercialization of Licensed Products, where so required, provided, that such Party will, to the extent practicable and permitted by Applicable Law, notify the other Party and provide a copy of such proposed disclosure or filing to such other Party at least three (3) days prior to the planned disclosure or filing and allow such other Party to comment on the proposed disclosure, which comments will be considered by the disclosing Party in good faith; (iii) a Party may disclose the existence and terms of this Agreement, under obligations of confidentiality no less stringent than the terms set forth in this Article VIII, to bona fide potential acquirers, investors, lenders, investment bankers or other potential financial partners in connection with such Party's proposed financing or business combination activities and consultants and advisors advising such Party in connection with such activities; (iv) a Party may disclose the existence and terms of this Agreement to licensors of such Party's intellectual property licensed to the other Party hereunder, to the extent required pursuant to the relevant license agreement; (v) a Party may disclose the existence and terms of this Agreement, under obligations of confidentiality no less stringent than the terms set forth in this Article VIII, to bona fide potential or actual licensees of such Party's intellectual property licensed to the other Party hereunder; and (vi) a Party may disclose the terms and existence of this Agreement, under obligations of confidentiality no less stringent than the terms set forth in this Article VIII, to bona fide potential or actual sublicensees, as reasonably necessary in connection with an existing or potential sublicense under the licenses granted in this Agreement which sublicense is granted in accordance with this Agreement. Except as otherwise expressly provided in this Article VIII, Sanofi will not have the right to issue press releases and make public announcements related to any Target Compound or the results of the Research Program.

ARTICLE IX - REPRESENTATIONS, WARRANTIES AND COVENANTS

9.1 Mutual Representations. Each Party hereby represents and warrants to the other Party as of the Effective Date as follows:

9.1.1 It is duly organized and validly existing under the laws of its jurisdiction of incorporation and has the corporate power and authority to execute and deliver this Agreement and to perform its obligations hereunder.

9.1.2 The execution, delivery and performance of this Agreement by such Party has been duly and validly authorized and approved by proper corporate action on the part of such Party. It has taken all other action required by Applicable Law, its certificate of incorporation or by-laws or any agreement to which it is a party or by which it or its assets are bound, to authorize such execution, delivery and performance. Assuming due authorization, execution and delivery on the part of the other Party, this Agreement constitutes a legal, valid and binding obligation of such Party.

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9.1.3 The execution and delivery of this Agreement, and the performance as contemplated hereunder, by such Party will not violate any Applicable Law.

9.1.4 Neither the execution and delivery of this Agreement nor the performance hereof by such Party requires such Party to obtain any permit, authorization or consent from any governmental authority (except for any Regulatory Approvals, pricing or reimbursement approvals, manufacturing-related approvals or similar approvals necessary for development, manufacture or commercialization of Licensed Products), or from any other Third Party, and such execution, delivery and performance by such Party, including the granting of the licenses granted under this Agreement, will not result in the breach of or give rise to any conflict, termination of, rescission, renegotiation or acceleration under or trigger any other rights under any agreement or contract to which such Party may be a party existing as of the Effective Date.

9.2 Rib-X's Representations and Warranties. Rib-X hereby represents and warrants to Sanofi as of the Effective Date as follows:

9.2.1 Rib-X has the right to grant to Sanofi the rights and licenses described in this Agreement.

9.2.2 Exhibit I is a complete and correct list of all Rib-X Patent Rights in the Territory Controlled by Rib-X as of the Effective Date.

9.2.3 To Rib-X's Knowledge, no Third Party is infringing any of the Rib-X Patent Rights identified on Exhibit I.

9.2.4 Rib-X has not received any written notice of (i) any claim that any patent or trade secret right owned or controlled by a Third Party would be infringed or misappropriated by the conduct of the Research Program or the manufacture, use, sale, offer for sale or importation of Rib-X Existing Compounds in the Field in the Territory, or (ii) any threatened claims or litigation seeking to invalidate or otherwise challenge the Rib-X Patent Rights or Rib-X's rights therein.

9.2.5 To Rib-X's Knowledge, there exists no patent owned or controlled by a Third Party that would be infringed by the conduct of the Research Program or the manufacture, use, sale, offer for sale or importation of Rib-X Existing Compounds in the Field in the Territory, provided that Sanofi understands that Rib-X has not conducted a freedom to operate search with respect to Rib-X Existing Compounds.

9.2.6 Rib-X's rights to Rib-X Licensed Technology are, to Rib-X's Knowledge as of the Effective Date, held free and clear of any liens, security interests and similar encumbrances.

9.2.7 None of the Rib-X Patent Rights owned by Rib-X is the subject of any pending re-examination, opposition, interference or litigation proceedings.

9.2.8 Exhibit J sets forth a true and complete list of all agreements, pursuant to which a Third Party has licensed to Rib-X any Rib-X Licensed Technology existing on the

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Effective Date. With respect to any such agreement pursuant to which any such Rib-X Licensed Technology is exclusively licensed to Rib-X, (i) Rib-X is not in breach under any of such agreements, nor, to the Knowledge of Rib-X, is any other party thereto, (ii) Rib-X has not received any notice of breach under any of such agreements, (iii) Rib-X has previously provided Sanofi with access to true and complete copies of each of such agreements; (iv) such agreements are in full force and effect; and (v) Rib-X will maintain such Agreements in full force and effect during the Term, will perform all of its obligations thereunder and will not amend any such agreement in a manner that would adversely affect the rights and obligations of Sanofi under this Agreement. Rib-X will notify Sanofi promptly upon receiving any notice of a breach from a party thereunder.

9.2.9 There have been no inventorship or ownership challenges with respect to any of the Rib-X Licensed Technology.

For purposes of this Section, "Knowledge" of Rib-X shall mean the actual knowledge of, after reasonable and due inquiry on such matter by, the members of senior management of Rib-X including, without limitation the Chief Executive Officer; Chief Financial Officer; Senior Vice President-Development; Vice President-Business Development; Vice President-Discovery; and Vice President-Authorized House Counsel for Intellectual Property.

9.3 Sanofi's Representations. Sanofi hereby represents and warrants to Rib-X as of the Effective Date as follows:

9.3.1 Sanofi has the right to grant to Rib-X the rights and licenses described in this Agreement.

9.4 Covenants of the Parties. Each of the Parties covenants and agrees as follows:

9.4.1 Subject to Section 13.8(b), during the term of this Agreement, such Party will not, without the other Party's consent, grant or assign to a Third Party any rights, under the Rib-X Licensed Technology (if Rib-X is the representing Party), the Sanofi Licensed Technology (if Sanofi is the representing Party) that conflict with the rights granted to the other Party hereunder or that would cause Control of such intellectual property to be relinquished or diminished.

9.4.2 Each of Sanofi and Rib-X will require that all of its employees, consultants, service providers and those of its Affiliates involved in the conduct of the Research Program, or in the development, manufacture or commercialization of Licensed Products, have entered into written confidentiality and invention assignment agreements that are consistent with the terms of this Agreement and pursuant to which they assign any rights they may have in any inventions made during such work to Sanofi or Rib-X, respectively.

9.4.3 Each Party and its Affiliates will conduct, and will use Commercially Reasonable Efforts to cause its employees, Sublicensees, contractors, and consultants to conduct, all of their activities contemplated under this Agreement in accordance with all Applicable Law.

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9.4.4 Neither Party nor any of its Affiliates has been debarred or is subject to debarment and neither Party nor any of its Affiliates will use in any capacity, in the conduct of the Research Program or connection with the development, manufacture or commercialization of any Licensed Product, any person or entity who has been debarred pursuant to Section 306 of the United States Federal Food, Drug, and Cosmetic Act, or who is the subject of a conviction described in such section. Each Party agrees to inform the other Party in writing immediately upon becoming aware that any person or entity who is performing services hereunder is debarred or is the subject of a conviction described in Section 306, or if any action, suit, claim, investigation or legal or administrative proceeding is pending or, to the best of such Party's knowledge, is threatened,

relating to the debarment or conviction of such Party or any person or entity used in any capacity by such Party or any of its Affiliates in connection with the conduct of the Research Program or in the development, manufacture or commercialization of any Licensed Product.

9.5 No Warranty. EXCEPT AS OTHERWISE EXPRESSLY SET FORTH IN THIS AGREEMENT, NEITHER PARTY HERETO MAKES ANY REPRESENTATION AND NEITHER PARTY EXTENDS ANY WARRANTY OF ANY KIND, EITHER EXPRESS, IMPLIED, STATUTORY OR OTHERWISE, WITH RESPECT TO THE SUBJECT MATTER OF THIS AGREEMENT (INCLUDING ANY LICENSED COMPOUND OR LICENSED PRODUCT), INCLUDING ANY WARRANTY OF MERCHANTABILITY, NONINFRINGEMENT, OR FITNESS FOR A PARTICULAR PURPOSE. EACH PARTY DISCLAIMS ANY REPRESENTATION OR WARRANTY THAT THE RESEARCH PROGRAM WILL RESULT IN ANY CANDIDATE COMPOUNDS OR LICENSED COMPOUNDS, OR THAT DEVELOPMENT, MANUFACTURE AND COMMERCIALIZATION OF LICENSED PRODUCT PURSUANT TO THIS AGREEMENT WILL BE SUCCESSFUL OR THAT, IF COMMERCIALIZED, ANY PARTICULAR SALES LEVEL WILL BE ACHIEVED.

ARTICLE X - INDEMNIFICATION

10.1 Indemnification by Sanofi. Sanofi will indemnify, hold harmless and defend Rib-X, its Affiliates and their respective directors, officers, employees, consultants and agents (collectively, the "Rib-X Indemnitees") from and against any and all expenses, cost of defense (including reasonable attorneys' fees, witness fees and expert fees), damages, judgments, fines and amounts paid in settlement, to the extent arising from any Third Party claim or from any claim of Yale or Howard Hughes Medical Institute for indemnification under Sections 14.1 and 14.2 of the Yale Agreement, resulting from (i) the conduct of Research activities by or on behalf of Sanofi or any of its Affiliates; (ii) the development, manufacture, commercialization, use or importation of Licensed Products by or on behalf of Sanofi or any of its Affiliates or Sublicensees or any of their customers (including product liability claims); (iii) the breach or failure of any of Sanofi's representations, warranties or covenants hereunder or Sanofi's breach of this Agreement; (iv) the negligence or willful misconduct of any Sanofi Indemnitee, as defined in Section 10.2; or (v) any infringement of any Patent Rights of a Third Party or misappropriation of any Third Party Know-how in connection with the development, manufacture, commercialization, use or import of any Licensed Products by or on behalf of Sanofi or any of its Affiliates or Sublicensees or any of their customers, except, in each case, to

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the extent attributable to the negligence or intentional misconduct of any Rib-X Indemnitee or any breach or failure of any Rib-X representations, warranties or covenants under this Agreement or breach by Rib-X of any term of this Agreement. Notwithstanding anything in this Agreement to the contrary, in the event Rib-X exercises its US Profit Share Option, any amounts incurred by Sanofi in connection with any indemnified claim under Section 10.1 directly and exclusively related to the development, manufacture or commercialization of the US Profit Share Product in the U.S. will be included as Third Party and Other Permitted Sales and Marketing Expenses, except to the extent attributable to the negligence or intentional misconduct of Sanofi or any Sanofi Indemnitee, breach or failure of any of Sanofi's representations, warranties or covenants under this Agreement or Sanofi's breach of this Agreement.

10.2 Indemnification by Rib-X. Rib-X will indemnify, hold harmless and defend Sanofi, its Affiliates and their respective directors, officers, employees, consultants and agents (collectively, the "Sanofi Indemnitees") from and against any and all expenses, cost of defense (including reasonable attorneys' fees, witness fees and expert fees), damages, judgments, fines and amounts paid in settlement, to the extent arising from any Third Party claim resulting from (i) the conduct of Research activities by and on behalf of Rib-X or any of its Affiliates; (ii) the research, development, manufacture, commercialization, use or importation of any US Profit Share Products, or any products incorporating Returned Compounds by or on behalf of Rib-X or any of its Affiliates or Sublicensees or any of their customers (including product liability claims); (iii) the breach or failure of any of Rib-X's representations, warranties or covenants under this Agreement or Rib-X's breach of this Agreement; (iv) the negligence or willful misconduct of any Rib-X Indemnitee; or (v) any infringement of any Patent Rights of a Third Party or misappropriation of any Third Party Know-how in connection with the development, manufacture, commercialization, use or importation of any products incorporating Returned Compounds by or on behalf of Rib-X or any of its Affiliates or any of their customers, except, in each case, to the extent attributable to the negligence or intentional misconduct of any Sanofi Indemnitee or any breach or failure of any Sanofi representations, warranties or covenants under this Agreement or breach by Sanofi of any term of this Agreement. Notwithstanding anything in this Agreement to the contrary, in the event Rib-X exercises its US Profit Share Option, any amounts incurred by Rib-X in connection with any indemnified claim under Section 10.2, to the extent related to the development, manufacture or commercialization of such US Profit Share Product in the U.S., will be included as Third Party and Other Permitted Sales and Marketing Expenses, except to the extent attributable to the negligence or intentional misconduct of Rib-X or any Rib-X Indemnitee, breach or failure of any of Rib-X's representations, warranties or covenants hereunder or Rib-X's breach of this Agreement.

10.3 Procedure. In the event of a claim by a Third Party against any person entitled to indemnification under this Agreement (in such capacity, the "Indemnified Party"), the Indemnified Party must:

10.3.1 promptly notify the other Party (the "Indemnifying Party") of such claim;

10.3.2 permit the Indemnifying Party, at the Indemnifying Party's cost, to handle and control the claim, but the Indemnified Party will have the right to participate in the defense of the claim at its own expense; and

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10.3.3 give the Indemnifying Party, at the Indemnifying Party's cost and request, all reasonable assistance in the Indemnifying Party's handling of the claim.

The Indemnifying Party may settle such claim only with the consent of the Indemnified Party, which will not be unreasonably withheld, conditioned or delayed; provided, that the Indemnified Party will have no obligation to consent to any settlement of any such claim which imposes on the Indemnified Party any liability or obligation which cannot be assumed and performed in full by the Indemnifying Party. The Indemnifying Party will not have any indemnity obligation with respect to any claim settled by an Indemnified Party or by any Indemnitee without the Indemnifying Party's prior written consent, such consent not to be unreasonably withheld, conditioned or delayed.

10.4 Insurance. Each Party will maintain appropriate product liability insurance with respect to its activities hereunder in such amount as such Party customarily maintains with respect to its other products for similar patient populations and commercial markets. Each Party will maintain such insurance for so long as it continues to conduct such activities hereunder, and for so long as such Party customarily maintains insurance with respect to sales of its other products for similar patient populations and commercial markets.

10.5 No Consequential Damages. IN NO EVENT SHALL EITHER RIB-X OR SANOFI BE LIABLE TO THE OTHER PARTY FOR SPECIAL, INDIRECT, INCIDENTAL, EXEMPLARY, MULTIPLE OR CONSEQUENTIAL DAMAGES ARISING OUT OF THIS AGREEMENT BASED ON CONTRACT, TORT OR ANY OTHER LEGAL THEORY. NOTHING IN THIS SECTION 10.5 IS INTENDED TO LIMIT OR RESTRICT (A) THE INDEMNIFICATION RIGHTS OR OBLIGATIONS OF EITHER PARTY UNDER THIS ARTICLE X, OR (B) REMEDIES AVAILABLE TO EITHER PARTY WITH RESPECT TO A BREACH OF ARTICLE VIII.

ARTICLE XI - TERM AND TERMINATION

11.1 Term. This Agreement becomes effective as of the Effective Date and will continue until the earlier of (i) the end of the Research Term if Sanofi has not exercised at least one Development and Commercialization Option as of such date; (ii) the termination of this Agreement in accordance with Section 11.2 or (iii) the expiration of the last-to-expire of all payment obligations hereunder with respect to all Licensed Products following the cessation of all research, development, manufacturing and commercialization of Licensed Products in the Field by or on behalf of Sanofi and its Affiliates and Sublicensees (other than the Licensed Products for which the royalty obligations hereunder have been fully paid) (the "Term"). Upon expiration of the Term (but not termination of the Agreement) the license granted to Sanofi under Section 4.2.1 will convert to perpetual, exclusive fully-paid up, non-royalty-bearing licenses.

11.2 Termination.

11.2.1 Termination For Convenience. At any time, Sanofi will have the right to terminate this Agreement, in its entirety, or on a Licensed Compound-by-Licensed Compound

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basis, or on a country-by-country basis, or any combination thereof, for any or no reason upon ninety (90) days' prior written notice to Rib-X. Notwithstanding anything to the contrary, if Sanofi exercises its right to terminate this Agreement on a country-by-country basis prior to the end of the Royalty Term in such country of a given Licensed Product, and if Sanofi continues to sell such Licensed Product in such country, then the Net Sales of such Licensed Product in such country shall (i) continue to be subject to the payment obligations of Article VI until such time as the Royalty Term would have expired had there not been such a country-by-country termination and (ii) continue to be included in Net Sales for purposes of Section 6.5 and for purposes of determining the royalty rates under Section 6.7.1, provided that the foregoing provisions of this sentence will not be deemed to limit the effect of termination of this Agreement as to a specific country under Section 11.2.3 or 11.3 with respect to such Licensed Compound in such country.

11.2.2 Termination For Material Breach. If either Party (the "Non-Breaching Party") believes that the other Party (the "Breaching Party") is in material breach of this Agreement (including any material breach of a representation or warranty made in this Agreement), then the Non-Breaching Party may deliver written notice of such breach to the Breaching Party. If the Breaching Party fails to cure such breach within the sixty (60) day period after the Breaching Party's receipt of such notice, the Non-Breaching Party may terminate this Agreement in its entirety

upon further written notice to the Breaching Party. Without limiting Rib-X's rights under this Section 11.2.2, Rib-X may terminate the license granted under Section 4.2.1 of this Agreement as to a specific Licensed Compound in the event of a material breach by Sanofi of its obligation under Section 4.5 as to such Licensed Compound, effective upon sixty (60) days' prior written notice if Sanofi fails to cure such breach within the sixty (60) day period after Sanofi's receipt of such notice.

11.2.3 Termination as to Licensed Compound. Upon termination by Sanofi or Rib-X of the license granted under Section 4.2.1 of this Agreement as to a specific Licensed Compound, including termination as to a specific country but only as to such country: (i) such compound will no longer be a Licensed Compound and instead will be a Returned Compound and will be included in the assignment and rights granted to Rib-X under Section 4.2.3; and (ii) the provision of Section 11.3.1, including clause (iii) of Section 11.3.1, will apply but only with respect to such Returned Compound and products being Developed prior to the date of termination incorporating such Returned Compound.

11.2.4 Termination for Bankruptcy. To the extent permitted under Applicable Law, either Party may terminate this Agreement effective immediately with written notice:

(a) if the other Party shall have (i) voluntarily commenced any proceeding or filed any petition seeking relief under the bankruptcy, insolvency or other similar laws of any jurisdiction, (ii) applied for, or consented to, the appointment of a receiver, trustee, custodian, sequestrator, conciliator, administrator or similar official for it or for all or substantially all of its property, (iii) filed an answer admitting the material allegations of a petition filed against or in respect of it in any such proceeding, (iv) made a general assignment for the benefit of creditors of all or substantially all of its assets, (v) admitted in writing its inability to pay all or substantially all of its debts as they become due, or (vi) taken corporate action for the purpose of effecting any of the foregoing; or

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(b) if an involuntary proceeding shall have been commenced, or any involuntary petition shall have been filed, in a court of competent jurisdiction seeking: (i) relief in respect of the other Party, or of its property, under the bankruptcy, insolvency or similar laws of any jurisdiction, (ii) the appointment of a receiver, trustee, custodian, sequestrator, conciliator, administrator or similar official for such other Party or for all or substantially all of its property, or (iii) the winding-up or liquidation of such other Party; and, in each case, such proceeding or petition shall have continued undismissed for sixty (60) days, or an order or decree approving or ordering any of the foregoing shall have continued unstayed, unappealed and in effect for thirty (30) days.

11.2.5 Termination [***]. [***].

11.2.6 Sanofi Termination of Certain Rights in Addition to Terminating. In the event that Rib-X defaults with respect to any of its material obligations under this Agreement and does not cure such default within sixty (60) days after the receipt of a written notice from Sanofi specifying the nature of, and requiring the remedy of, such default (or, if such default cannot be cured within such sixty (60) day period, if Rib-X does not commence and diligently continue actions to cure same during such sixty (60) day period), then Sanofi may, in addition to exercising its terminations rights provided in Section 11.2.2, terminate Article V in whole or in part, but only if Rib-X did not previously exercise its US Profit Share Option.

11.3 Effects of Termination.

11.3.1 Effect of Termination of Agreement. Effective upon any termination of this Agreement as to a specific Licensed Compound or upon termination of this Agreement in its entirety, the following provisions shall apply (as to the terminated Licensed Compound or Licensed Product in the terminated countries, if this Agreement remains in effect, or as to all Licensed Compounds and Licensed Products if this Agreement is being terminated in its entirety); provided that 11.3.1(v) and 11.3.1(vii) shall not apply if Sanofi exercises termination rights under 11.2.2, 11.2.4 or 11.2.5:

(i) all licenses granted by Rib-X to Sanofi hereunder will terminate;

(ii) Sanofi will provide to Rib-X a fair and accurate description of the status and results of the development and commercialization of the Licensed Products through the effective date of termination and through the Follow-on Period;

(iii) Sanofi will be deemed to have automatically granted to Rib-X an exclusive (even as to Sanofi), worldwide, fully paid-up, royalty-free except for the royalties set forth in Section 6.9 and Section 11.3.2, right and license, with the right to grant sublicenses, under the Sanofi Licensed Technology, excluding any trademarks, to research, develop, manufacture and commercialize any product that was a Licensed Product as of the date of termination in the Field in the Territory, provided that the foregoing will not be deemed a limitation of Rib-X's rights under Section 4.2.3;

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(iv) To the extent not previously transferred under Section 4.2.3, then, effective upon such termination, Sanofi (i) assigns to Rib-X all right, title and interest of Sanofi and its Affiliates in all Sanofi Compound Specific Patent Rights Covering the Licensed Compounds, and Sanofi agrees to take, and to cause its employees, Affiliates or Sublicensees, to take, all such reasonable actions and execute all such documents, as Rib-X may from time to time reasonably request to effect such assignment.

(v) Sanofi will have an ongoing obligation to notify Rib-X in writing upon the identification of each Follow-on Compound identified by or on behalf of Sanofi, its Affiliates or Sublicensees during the Follow-on Period.

(vi) Sanofi will promptly transfer and assign to Rib-X all preclinical and clinical data (including pharmacology and biology data), regulatory documentation (including INDs, NDAs and other Regulatory Approvals and regulatory filings, and safety information), marketing and sales information, including customer lists and other requested information or materials related to Licensed Products, including any other documented Sanofi Know-how related to such Licensed Product, in each case in the possession or control of Sanofi or any of its Affiliates or Sublicensees and necessary or useful for the research, development, manufacture or commercialization of the Licensed Products in the Field in the Territory, including reports, records, structures and other materials relating to process conditions, in-process controls, analytical methodology and formulation for the manufacture of Licensed Products; provided, that Sanofi may retain copies of such items for its records; further provided, that any such transfers or assignments shall be at Rib-X's expense. In the event of a termination as to a country, but not a termination of this Agreement in its entirety, the Parties will promptly execute an agreement for the sharing of adverse event information with respect to Licensed Products in a form mutually agreeable to both Parties, such agreement not to be unreasonably withheld.

(vii) Sanofi will grant Rib-X an exclusive, worldwide, fully-paid-up, non-royalty-bearing (other than the royalty, if any, otherwise payable under Section 6.9) license to all trademarks representing the names of the Licensed Products in the countries for which the licenses are being terminated pursuant to Section 11.2.

(viii) Sanofi will promptly transfer to Rib-X responsibility for prosecution and maintenance of Rib-X Patent Rights and of any Sanofi Compound Specific Patent Rights related to Returned Compounds to the extent not previously assigned to Rib-X under Section 4.2.3 in such a manner as to ensure that there is no loss or rights, provided, that any such transfers or assignments shall be at Rib-X's expense.

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(ix) to the extent Sanofi or its Affiliate is engaged in the manufacture of a Licensed Product as of the effective date of termination or is having Licensed Product made, Sanofi or such Affiliate will, as requested by Rib-X, manufacture (or have manufactured) and supply Rib-X's requirements for such Licensed Product in the Field from the date of such termination until, with respect to each such Licensed Product, the earliest to occur of (a) such time as Rib-X secures an alternative manufacturing source committed to manufacture such Licensed Product and process validation has been completed by such alternative source; (b) eighteen (18) months after the effective date of termination (with respect to any Licensed Product existing on the effective date of termination); or (c) such time as Rib-X provides written notice to Sanofi that Rib-X is no longer in need of such manufacturing and supply support with respect to such Licensed Product; provided, that, with respect to each Licensed Product, Rib-X will use Commercially Reasonable Efforts to secure a satisfactory alternative manufacturing source and to have such alternative source complete process validation as promptly as reasonably practicable following the effective date of termination and will provide written notice to Sanofi as soon as such alternative source is secure and process validation has been completed that Rib-X is no longer in need of such manufacturing and supply support with respect to such Licensed Product. Sanofi will, at Rib-X's request, cooperate with Rib-X, and use reasonable efforts to try to convince any Third Party manufacturer of the relevant Licensed Product, including by using reasonable efforts to incorporate relevant provisions in the applicable agreement with such Third Party that such Third Party manufacturer cooperate with Rib-X, in the transfer, scale-up and validation of the manufacturing process for such Licensed Product to Rib-X or Rib-X's designee, including transfer of the master batch records and analytical methods and other relevant records related to production, testing and release of Licensed Product, and shall make its personnel reasonably available to Rib-X to answer questions in connection with the foregoing. In addition, at Rib-X's option, (1) Rib-X may purchase all or any part of Sanofi's worldwide unsold inventory of raw materials for Licensed Products, work-in-progress Licensed Products and finished goods inventory of Licensed Products and (2) Sanofi will, and will ensure that its Affiliates, use Commercially Reasonable Efforts to assign to Rib-X any Third Party manufacturing contract relating to such Licensed Products to which Sanofi or any of its Affiliates is a party (or the applicable provisions thereof, as the case may be). All Licensed Products supplied to Rib-X by Sanofi pursuant to this Section 11.3.1(ix) will be manufactured in compliance with then current Good Manufacturing Practices, and will be sold by Sanofi, and purchased by Rib-X, at [***]% of COGS; and

(x) Sanofi and its Affiliates will make reasonable efforts to allow Rib-X to negotiate agreements with such service providers to research, develop, manufacture or commercialize Licensed Products, including by providing any waivers of any obligations of confidentiality, non-competition and exclusivity imposed on its Third Party service providers (including manufacturers) that are necessary to negotiate such agreements. All licenses and

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sublicenses granted by Sanofi pursuant to Article 4.3 which are specific to Licensed Products and assignable will be promptly assigned to Rib-X, at Rib-X's request provided to Sanofi in writing within ninety (90) days after the date of termination of this Agreement and will otherwise terminate; or (ii) which are not specific to Licensed Products, will, at Rib-X's request provided to Sanofi in writing within ninety (90) days after the date of termination of this Agreement and at Rib-X's cost, be held for the benefit of Rib-X and Sanofi and its Affiliates will take such actions as Rib-X may reasonably request so as to provide Rib-X with the benefits thereunder with respect to the Licensed Products.

11.3.2 Royalty to Sanofi under Certain Termination Scenarios. If Sanofi exercises its termination rights under Sections 11.2.2 or 11.2.4, then Rib-X will pay a royalty to Sanofi on Net Sales of any product incorporating a compound that was at any point in time a Licensed Compound, [***].

11.3.3 Control. During the Term, Sanofi will not enter into any agreement or take any action that would prevent Rib-X from receiving a license to Sanofi Know-how incorporated into any Licensed Product or other Returned Compound, or any Sanofi Patent Rights Covering Licensed Product or other Returned Compounds, as contemplated by this Agreement; provided, however, that the foregoing shall not apply to any Know-How or Patent Rights which were developed by a Third Party and in-licensed by Sanofi after the Effective Date not specifically for Licensed Products. Notwithstanding the limitations on Sanofi's obligations under the preceding sentence, in the event Sanofi does not obtain the right to sublicense to Rib-X and its Affiliates and sublicensees any Know-how or Patent Rights licensed by Sanofi from a Third Party and incorporated into any Licensed Product to the extent such Know-how or Patent Rights would be included in Sanofi Know-how or Sanofi Patent Rights if Controlled by Sanofi, then Sanofi will, at the request of Rib-X upon triggering of the licenses granted by Sanofi to Rib-X under Section 4.2.3 or Section 11.3.1(iii), use Commercially Reasonable Efforts to assist Rib-X in obtaining a license from such Third Party to such Know-how or Patent Rights.

11.3.4 Effect of Termination of License as to Specific Licensed Compound. In the event of termination by Rib-X under Section 11.2.3 of the license granted to Sanofi under Section 4.2.1 with respect to a specific Licensed Compound, the provisions of Section 11.3.1 will apply but only with respect to any Licensed Products that incorporate the Licensed Compound as to which the license under Section 4.2.1 was terminated.

11.3.5 Survival.

(a) The following provisions will survive the expiration or termination of this Agreement: Sections 4.2.3, 6.9, 6.10 and 6.12 and Articles VIII, X, XI, XII and XIII.

(b) Each Party's right to receive any payments accrued under this Agreement as of the expiration or termination of this Agreement will survive the expiration or termination of this Agreement.

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11.3.6 Non-exclusive Remedy. Termination of this Agreement will be in addition to, and will not prejudice, the Parties' remedies at law or in equity, including the Parties' ability to receive legal damages and/or equitable relief with respect to any breach of this Agreement, regardless of whether or not such breach was the reason for the termination.

ARTICLE XII - DISPUTE RESOLUTION

12.1 Referral of Unresolved Matters to Executives. If, the JSC does not resolve any dispute within fourteen (14) days after the matter is first considered by it, the matter may be referred by either Party to their respective Executives (or his or her designee who must be a member of the applicable Party's senior management team with appropriate decision-making authority, but who is not a member of the JSC) who will meet at least once in person or by video conference to discuss the matter and use their good faith efforts to resolve the matter as soon as practicable but in no event later than fourteen (14) days after referral.

12.2 Final Decision-Making.

12.2.1 Decision-Making. If a dispute referred to the Executives has not been resolved in accordance with Section 12.1, then the following provisions apply, in each case subject to Section 12.2.2:

(a) In the event the dispute relates to an amendment to the Research Plan notwithstanding Sanofi's other rights under this Section, the then current Research Plan will remain in effect unless the Parties mutually agree on an updated Research Plan.

(b) In the event the dispute relates to a Development Plan or Commercialization Plan for the US Profit Share Product, then, notwithstanding Sanofi's other rights under this Section, unless the Parties mutually agree on an updated plan, Sanofi will have the final decision-making authority.

(c) Each Party will have final decision-making authority with respect to day-to-day operational decisions in connection with its activities under the Research Plan.

(d) Each Party will have final decision-making authority with respect to day-to-day operational decisions in connection with its activities related to Development of the US Profit Share Product, subject to the then applicable Development Plan and the terms of this Agreement.

(e) Each Party will retain final decision-making authority with respect to day-to-day operational decisions in connection with the Commercialization activities related to a US Profit Share Product allocated to it under the Commercialization Plan, subject in each case to the Commercialization Plan and the terms of this Agreement and of any Co-promotion Agreement entered into by the Parties.

12.2.2 Decision-Making Rules. Notwithstanding anything to the contrary set forth in Section 12.2.1:

(i) in no event may the deciding Party require the other Party to perform activities which such other Party has not agreed to perform as set forth in this Agreement or as otherwise agreed by such other Party;

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(ii) in no event may the deciding Party unilaterally amend the terms of this Agreement or override the non-deciding Party's rights in this Agreement;

(iii) in no event may the deciding Party unilaterally determine that it has fulfilled any obligations hereunder or that the non-deciding Party has breached any obligations hereunder;

(iv) in no event may the deciding Party unilaterally determine that the events required for the payment of milestone payments have or have not occurred;

(v) in no event may the deciding Party unilaterally make a decision that is expressly stated to require the mutual agreement of the Parties;

(vi) the deciding Party will not exercise its final decision-making authority in a manner that would require the other Party to perform any act that it reasonably believes to be inconsistent with law; and

(vii) the decision-making Party will make its decisions in good faith, subject to the terms and conditions of this Agreement.

12.2.3 No Limitation. Notwithstanding the foregoing, (i) nothing in this Article XII will be construed as limiting in any way the right of a Party to seek injunctive or other equitable relief from a court of competent jurisdiction with respect to any actual or threatened breach of this Agreement, (ii) subject to Section 12.2.2, nothing in this Article XII will override the provisions of Section 3.5 and 5.3, and (iii) each Party will have the right to institute judicial proceedings against the other Party (or anyone acting by or through such other Party) in any court of competent jurisdiction, in order to enforce such Party's rights under this Agreement, through reformation of contract, specific performance, injunction or similar equitable relief.

12.3 Arbitration. Unless the Parties mutually agree otherwise, any dispute arising out of or related to this Agreement or its breach, termination or validity which is not resolved in accordance with Sections 12.1 or 12.2 will be finally resolved by binding arbitration administered by the International Chamber of Commerce ("ICC") pursuant to its Dispute Resolution Rules in effect at the time such dispute arises, and judgment on the arbitration award may be entered in any court having jurisdiction thereof. To the extent such rules are inconsistent with this provision, this provision will control. The following rules will apply to any such arbitration:

(a) Any demand for arbitration must be made in writing to the other Party.

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(b) There will be three arbitrators, one of whom shall be appointed by each party and a third of whom shall be the chairman of the panel and be appointed by mutual agreement of the two arbitrators appointed by the Parties. If the two arbitrators cannot agree on the appointment of the third

arbitrator within thirty (30) days, then the ICC shall select the arbitrator. Any arbitration involving patent rights, other intellectual property rights or intellectual property will be heard by arbitrators who are expert in such areas.

(c) The arbitration will be held in the State of New York, or such other place as the Parties agree. The arbitrators will apply the substantive law of the State of New York in accordance with Section 13.2, without regard to conflicts of laws and except that the interpretation and enforcement of this arbitration provision will be governed by the Federal Arbitration Act, 9 U.S.C. Section 1 et. seq.

(d) Neither Party will have the right independently to seek recourse from a court of law or other authorities in lieu of arbitration, but each Party has the right before or during the arbitration to seek and obtain from the appropriate court provisional remedies to avoid irreparable harm, maintain the status quo or preserve the subject matter of the arbitration. There shall be a stenographic record of the proceedings. The decision of the arbitrators will be final and binding upon both Parties. The arbitrators will render a written opinion setting forth findings of fact and conclusions of law.

(e) The expenses of the arbitration will be borne by the Parties in proportion as to which each Party is defeated in arbitration. Each Party will bear the expenses of its counsel and other experts.

(f) The arbitration will be conducted in English.

12.4 Equitable Relief. Notwithstanding anything to the contrary, each of the Parties hereby acknowledges that a breach of their respective obligations under this Agreement may cause irreparable harm and that the remedy or remedies at law for any such breach may be inadequate. Each of the Parties hereby agrees that, in the event of any such breach, in addition to all other available remedies hereunder, the non-breaching Party shall have the right, through the arbitration process described in Section 12.3 or as set forth in Section 12.2.3, to seek equitable relief to enforce the provisions of this Agreement.

12.5 No Arbitration of Patent Matters. Unless otherwise agreed by the Parties, a dispute between the Parties relating to the validity, infringement or enforceability of patents will not be subject to arbitration and will be submitted to a court of competent jurisdiction in the country in which such Patent was granted. The Parties submit to the jurisdiction of such court and irrevocably waive any assertion that the case should be heard in a different venue or forum.

ARTICLE XIII - MISCELLANEOUS

13.1 No Use of Name. Except as expressly permitted under this Agreement or in the Commercialization of a US Profit Share Product, neither Party will use the name of the other Party or any of its Affiliates in any promotional context. In addition, Sanofi agrees to comply with Article 12 of the Yale Agreement with respect to the use of names connected with Yale or the Howard Hughes Medical Institute.

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13.2 Governing Law. This Agreement and any dispute arising from the performance or breach of this Agreement will be governed by, construed and enforced in accordance with the laws of the State of New York, other than any principle of conflict or choice of laws that would cause the application of the laws of any other jurisdiction; provided, that with respect to matters involving enforcement of intellectual property rights, the laws of the applicable country will apply.

13.3 Waiver. Waiver by a Party of a breach hereunder by the other Party will not be construed as a waiver of any succeeding breach of the same or any other provision. No delay or omission by a Party to exercise or avail itself of any right, power or privilege that it has or may have hereunder will operate as a waiver of any right, power or privilege by such Party. No waiver will be effective unless made in writing with specific reference to the relevant provisions of this Agreement and signed by a duly authorized representative of the Party granting the waiver.

13.4 Notices. All notices, instructions and other communications hereunder or in connection herewith will be in writing, will be sent to the address specified in this Section 13.4 and will be: (i) delivered personally; or (ii) sent via a reputable one or two-day, international courier service.

Notices to Rib-X will be addressed to:

Rib-X Pharmaceuticals

300 George Street, Suite 301

New Haven, CT 06511-6663

Attention: President and Chief Executive Officer

Notices to Sanofi will be addressed to:

Sanofi

174, avenue de France

75013, Paris France

Attention: General Counsel

With copies to:

Sanofi

174, avenue de France

75013, Paris France

Attention: Vice President, Corporate Licenses

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13.5 Entire Agreement; Amendment. This Agreement (including all attachments hereto) contains the complete understanding of the Parties with respect to the subject matter hereof and supersedes all prior understandings and writings relating to such subject matter, including (i) any and all term sheets relating to the transactions contemplated by this Agreement and exchanged between the Parties prior to the Effective Date and (ii) the Confidentiality Agreement between the Parties dated as of [***]. No amendment, change or addition to this Agreement will be effective or binding on either Party unless reduced to writing and duly executed on behalf of both Parties.

13.6 Headings. Headings in this Agreement are for convenience of reference only and will not be considered in construing this Agreement.

13.7 Severability. If any provision of this Agreement is held unenforceable by a court or tribunal of competent jurisdiction because it is invalid or conflicts with any law of any relevant jurisdiction, the validity of the remaining provisions will not be affected. In such event, the Parties will negotiate a substitute provision that, to the extent possible, accomplishes the original business purpose.

13.8 Assignment.

(a) Assignment Provisions. This Agreement may not be assigned or otherwise transferred by either Party, without the written consent of the other Party such consent not to be unreasonably withheld, conditioned or delayed; provided, however, that either Party may, without such consent, assign this Agreement, in whole or in part, (i) to any of its Affiliates, and (ii) to a Third Party successor or purchaser of all or substantially all of its business or assets to which this Agreement relates, whether by a merger, sale of stock, sale of assets or other similar transaction, provided that the Third Party successor or purchaser provides written notice to the other Party that such Third Party agrees to be bound by the terms of this Agreement. Any purported assignment in violation of this Section 13.8 will be void. Any permitted assignee will assume all obligations of its assignor under this Agreement.

(b) Effect of Change of Control. Notwithstanding anything in this Agreement to the contrary in the event of a Change of Control, as defined in paragraph (d), of Rib-X, any licenses granted by Rib-X to Sanofi under this Agreement will [***].

(c) Effect of Change of Control on Exclusivity. Notwithstanding anything in this Agreement to the contrary, in the event of a Change of Control of a Party, [***].

(d) Definition of Change of Control. For purposes of this Section, "Change of Control" means, with respect a Party any of the following: (a) the sale or disposition of all or substantially all of the assets of such Party or its direct or indirect parent to a Third Party; or (b) (i) the acquisition by a Third Party which constitutes one person, as such term is used in Section 13(d) and 14(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), together with any of such person's "affiliates"

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or “associates”, as such terms are defined in the Exchange Act, other than an employee benefit plan (or related trust) sponsored or maintained by such Party or any of its Affiliates, of more than fifty percent (50%) of the outstanding shares of voting capital stock of such Party or its direct or indirect parent corporation, or (ii) the acquisition, merger or consolidation of such Party or its direct or indirect parent with or into another entity, other than, in the case of this clause (b), an acquisition or a merger or consolidation of such Party or its direct or indirect parent in which the holders of shares of voting capital stock of such Party or its direct or indirect parent, as the case may be, immediately prior to such acquisition, merger or consolidation will beneficially own, directly or indirectly, at least fifty percent (50%) of the shares of voting capital stock of the acquiring third party or the surviving corporation in such acquisition, merger or consolidation, as the case may be, immediately after such acquisition, merger or consolidation.

13.9 Counterparts. This Agreement may be executed in any number of counterparts (including .pdf or fax), each of which will be deemed an original but all of which together will constitute one and the same instrument.

13.10 Force Majeure. No Party will be liable for failure of or delay in performing obligations set forth in this Agreement, and no Party will be deemed in breach of its obligations as a result of such failure or delay, if such failure or delay is due to any cause reasonably beyond the control of such Party, which may include natural disaster, explosion, fire, flood, tornadoes, thunderstorms, peril of the sea, earthquake, war, terrorism, riots, embargo, losses or shortages of power, labor stoppage, substance or material shortages, damage to or loss of product in transit, events caused by reason of laws of any Regulatory Authority or events caused by acts or omissions of a Third Party. The Party affected by such force majeure will provide the other Party with full particulars thereof as soon as it becomes aware of the same (including its good faith estimate of the likely extent and duration of the interference with its activities), and will use Commercially Reasonable Efforts to overcome the difficulties created thereby and to resume performance of its obligations as soon as practicable. Nothing in this Section will be deemed a limitation of a Party's right to terminate this Agreement under Section 11.2.

13.11 Non-solicitation. During the Research Term and [***], Sanofi will not, and will ensure that its Affiliates do not, without Rib-X's prior written consent, directly or indirectly recruit, solicit, induce to hire for employment or as an independent contractor, any employee of Rib-X or its Affiliates, or any individual who is an independent contractor to Rib-X or its Affiliates and who spends at least half of his/her typical contracting week providing services to such Rib-X or its Affiliates, or induce or attempt to induce any such employee to terminate his or her employment with Rib-X or its Affiliates or otherwise cease his or her relationship with Rib-X or its Affiliates. The foregoing restriction will not prohibit the placement of advertising of general circulation that may be received or viewed by the employees or such independent contractors of Rib-X or its Affiliates or the interviewing of any employee or such independent contractor of such other Party who responds to such advertising.

13.12 Third Party Beneficiaries. None of the provisions of this Agreement will be for the benefit of or enforceable by any Third Party other than the Indemnitees. No other Third

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Party will obtain any right under any provision of this Agreement or will by reason of any such provision have the right under this Agreement to make any claim in respect of any debt, liability or obligation (or otherwise) against either Party.

13.13 Relationship of the Parties. Each Party will bear its own costs incurred in the performance of its obligations hereunder without charge or expense to the other, except as expressly provided in this Agreement. Neither Party will have any responsibility for the hiring, termination or compensation of the other Party's employees or for any employee compensation or benefits of the other Party's employees. No employee or representative of a Party will have any authority to bind or obligate the other Party for any sum or in any manner whatsoever, or to create or impose any contractual or other liability on the other Party without such other Party's approval. For all purposes, and notwithstanding any other provision of this Agreement to the contrary, the legal relationship under this Agreement of each Party to the other Party will be that of independent contractor. Nothing in this Agreement will be construed to establish a relationship of partners or joint venturers between the Parties.

13.14 Performance by Affiliates. Either Party may use one or more of its Affiliates (and, in the case of Sanofi, its Sublicensees) to perform its obligations and duties hereunder, and, Affiliates of a Party are expressly granted certain rights herein; provided, that each such Affiliate or Sublicensee will be bound by the corresponding obligations of such Party and the relevant Party will remain liable hereunder for the prompt payment and performance of all their respective obligations hereunder.

13.15 Construction. Each Party acknowledges that it has been advised by counsel during the course of negotiation of this Agreement, and, therefore, that this Agreement will be interpreted without regard to any presumption or rule requiring construction against the Party causing this Agreement to be drafted. In construing this Agreement, (i) use of the singular includes the plural and vice versa; (ii) “including” means “including without limitation”, and (iii) except where the context otherwise requires, the word “or” is used in the inclusive sense.

[Remainder of page intentionally left blank.]

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IN WITNESS WHEREOF, the Parties have entered into this Collaboration and License Agreement as of the Effective Date.

RIB-X PHARMACEUTICALS, INC.

By: /s/ Mark Leuchtenberger

Mark Leuchtenberger

President and Chief Executive Officer

SANOFI

By: /s/ Philippe Goupit

Name: Philippe Goupit

Title: Vice President, Corporate Licenses

[Execution Page]

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Exhibit A

Research Plan

Exhibit A1. Organisation

The two Alliance managers will initially be [***] (Rib-X) and [***] (Sanofi). The Rib-X members of the joint steering will initially comprise [***] and [***], and the Sanofi members will be [***],[***] and [***] ([***] as non-voting member).

In addition to the JSC outlined in Article 3, other joint teams will be formed as follows:

- A joint project team whose function will be to oversee the day to day running of the drug discovery component of the collaboration (from initial synthesis through to identification of a development candidate) across initially [***]. The members of the joint project team and their oversight responsibilities will be:

[***]

Proposed Meeting frequency to be defined by the JSC.

- "[***] teams" ensuring coordination of the day to day medicinal chemistry on each [***]: meeting frequency to be defined by the JSC.
- A joint assay team responsible for assay harmonisation and validation. Meeting frequency to be defined by the JSC.
- A joint development team to oversee and coordinate pre-clinical and clinical development of drug candidates, the members of which will be [***] and [***] from Rib-X, along with a project director ([***] (Sanofi), a CMC expert or a clinician from Sanofi (to be determined by [***] when a compound enters pre-clinical development). Meeting frequency to be defined by the JSC.
- A joint commercial team comprising [***] members from each company.

It is to be noted that the development and commercial teams are to be formed as and when necessary and membership can vary as a function of development status of the compound. The decision on when to form the team and its composition is made by the JSC. Also the composition of the teams above may also be subject to modification as the collaboration progresses.

Exhibit A2. Work sharing and Resources

The assignment of responsibilities for the major activities will be as follows

- Chemistry

- [***] to perform X-ray Crystallography
- [***] to share computational chemistry, medicinal chemistry, laboratory scale-up and early process work to shadow medicinal chemistry ([***]). It should be noted that [***] will provide sufficient access for [***] computational chemists to the software and tools necessary to enable de novo drug design.
- [***] to perform library synthesis as relevant.
- Biochemistry & Microbiology
- [***] to perform ribosomal MOA studies, preliminary MIC90s, and resistance studies.
- [***] to do cell free translation assays, time kill, MBC and primary MIC panel. The strains for primary panel and for primary efficacy studies will be from the [***] strain collection. [***] will transfer the cell-translation assay to [***].
- The expanded microbiology panels are to be [***] and or performed by [***], and will need to cover both European and [***]

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-
- Pharmacology
 - [***] to perform the [***] assay.
 - [***] to perform some thigh infection PK/PD studies (different strains/species to those used by [***]).
 - [***] to perform some thigh infection PK/PD work (different strains/species to those used by [***]).
 - [***] and/or [***] to set up and use other in-vivo models for compound evaluation if deemed appropriate by the Joint Project Team.
 - ADMET and Physical Chemistry
 - [***] to measure protein binding.
 - [***] to measure thermodynamic aqueous solubilities at pH [***] and [***], microsomal lability, cytotoxicity in HepG2 and CHO cells.
 - [***] to perform logD @ pH [***], pKa, hepatocyte clearance, CYP profiling (3A4 contribution, inhibition, MBI and induction; 2D6 inhibition), Caco-2-cell permeability, Ames, MNT and hERG and other safety pharmacology studies such as receptor and enzyme profiling for secondary effects. It should be noted that [***] is committed to provide timely access of the collaboration to its ADMET platforms.
 - Animal Pharmacokinetics (PK - according to intended route(s) of administration)
 - [***] to perform mouse and rat PK, although it is understood that [***] will be responsible for at least [***] the studies.
 - [***] to perform [***], which may be outsourced.

[***] will be responsible continuing drug discovery in [***], and the other [***] will be exploited by [***]; for example Rib-X may work on [***] and Sanofi may work on [***] or vice versa (to be determined at the kick off meeting). The resources allocated to each [***] are summarized in the following table.

[***] [***] [***]

[***]

[***] [***]

* Chemistry coordinator preferably resident for some period of time at [***] **[***] process chemist to be involved in all [***]

The resources allocated by Rib-X to the joint assay team will be [***] people working on ribosome biochemistry, [***] on microbiology, [***] on pharmacology, [***] on bioanalytics; and [***] on formulation. In total Rib-X will contribute [***] FTEs to the discovery stage of the collaboration. Those allocated by Sanofi will comprise [***] biologists (including microbiology and pharmacology), [***] FTEs for Disposition/Safety and [***] FTEs for other Project support (analytics, formulation, library production and Process bench chemists) giving a total of [***] FTEs: this number will change significantly (increase) when a candidate for regulatory development studies has been identified.

Other resource allocations may include the following considerations:

- Synthesis of major intermediates may be outsourced to a company chosen by the JSC.
- As candidates for regulatory pre-clinical drug safety studies are identified, [***] will be responsible for allocating resources for scale up and process chemistry.
- If compounds active by the oral route are desired in near-term, [***] may reinforce [***]'s efforts in designing prodrugs.
- [***] will be approached for the large scale preparation of DNA, RNA, ribosomes, etc., for assays and crystallography design efforts.
- [***] may explore other potential sources of beam lines.

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Exhibit A3 Initial Work plan and collaboration flow chart.

The Alliance managers of both companies will organize a kick-off meeting to take place within a month of signature of the Collaboration and License Agreement. The object of this meeting will be to provide a formal presentation of partner companies, people and Project, to organize the project team and to plan the technology transfer necessary for each party to perform its agreed tasks.

As part of the opening phase of the collaboration the Discovery Project Team will

- Coordinate the establishment of a shared data-room (e.g. a secure e-room), which will contain a shared database enabling registration of new compounds, biological data input and SAR query as well as a virtual meeting room.
- Be responsible for the validation of key assays. Assay selection and validation will be performed by taking [***] Exemplar Compounds from each [***] testing them in a battery of tests including the full [***] profiling platform; in parallel, they will be assessed in a panel of tests within [***] (Physical chemistry, ADME/T and cytotoxicity). In addition to the [***] Exemplar compounds, small sets of compounds (N~10) will be selected to test activity ranges in key assays (e.g., cell-free translation). The results will then be assessed by the JSC, and Collaborative Lead Optimization will commence and the selection of [***] for the "Joint Team" will be finalised.
- Be responsible for the harmonization of bacterial strain collections for in vitro and in-vivo tests and the calibration of assays used by [***].
- Finalize [***] teams and priorities.
- Train Sanofi synthetic teams in key approaches and ensure ample supply of major intermediates for optimization.
- Share the [***] approach with [***] project team and design tools/models with [***] computational chemist.
- Finalize the flow chart, definitions and compound progression criteria, to be approved by the JSC.

Lead optimization Lead optimization will be then performed according to the Project flow chart (Figure 1). Those items in the flow chart that are shaded are required for a compound to progress. It should be noted that additional tests may be included subject to JSC approval as the collaboration evolves.

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Figure 1 Proposed Discovery Flow Chart

[***]

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Exhibit B

Rib-X Internal Compound Modeling Criteria and List of Rib-X Existing Compounds

Modeling criteria, including a description of the computational tools used for prospective design as well as a listing of specific data models that exist and will be shared with Sanofi during the collaboration, are described in Exhibit E2, "Rib-X Know-How".

As of July 16, 2011, there exist [***] RX-04 compounds that have been prepared, registered and entered into the RX-04 screening workflow. [***]. In the project database, the latter are represented collectively as “[***]” compounds. Compound characterization, including NMR and LC-MS traces, are stored for each molecule. Compounds exist both in liquid and dry stock.

Table 1. [***] Compounds, July 16, 2011 (RX-00XXXX)

[***]

Table 2. [***] Compounds, July 16, 2011 (RX-00XXXX)

[***]

Table 3. [***] Compounds, July 16, 2011 (RX-00XXXX)

[***]

Table 4. Other RX-04 [***] Molecules, July 16, 2011 (RX-00XXXX)

[***]

In addition to these, there exist [***] sets (N = [***] in each set) of targeted compounds that address hypotheses currently under investigation by the team. 2D chemical structures for the targeted compounds as well as computational data that support them are available in the dataroom and will be shared with Sanofi. Thematically, they cover the following areas:

[***]

Description

N

[***]

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Exhibit C

Description of [***]

General description

[***]

Each [***] contains an array of atoms that forms at least [***] hydrogen bonds with the [***] of the 50S ribosomal subunit. This array usually comprises [***], and a [***], as drawn below. These interact with a ribosomal RNA base, [***] numbering, that resides in the [***] of the large ribosomal subunit (50S).

Each [***] (schematically abbreviated as a boxed “P” in the graphic below) can be elaborated with optional [***] (for example, A and/or Y and/or Z). These optional [***] may be added to the [***] to increase binding affinity for the 50S [***] and to tune molecular properties. Improving molecular properties is critical for improved antibacterial spectrum, greater antibacterial potency, and better safety and efficacy.

[***]

While the [***] itself contributes a great deal to the overall binding affinity to the [***]

Additional [***] ([***) can optionally be added to other portions of the [***] to improve further the ribosomal affinity and properties. For example, some of these [***]. Notably, the different architectures of the various [***] allow these [***].

Specific examples of [***]

Of the various [***] synthesized, [***] have been most thoroughly explored: the [***] and [***]. Of these [***], most of the recent effort has been concentrated on the [***] to drive to the first clinical candidate. The [***] have in turn been much more thoroughly investigated than the [***].

A [***], the [***], has also been explored to a limited extent, and this [***] did show promise. A fair amount of early work was done on a [***], which also was active. An active [***] was also explored to a limited extent. A few compounds with a [***] were synthesized, but these showed

very poor activity in MICs as well as in cell-free translation assays. These compounds apparently prefer a [***] form that does not match the [***] consensus defined above.

[***]

[***] Number

[***]

[***]

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Exhibit D

Target Profiles

[***]

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Exhibit E

Rib-X Know-how to be provided to

Sanofi for Conduct of the Research Program

Exhibit E1. X-ray Crystal Structure Coordinates

As part of the technology transfer that will occur upon commencement of the research collaboration, Rib-X Pharmaceuticals will provide all atomic coordinates for the structures of RX-04 compounds in complex with the [***] 50S ribosomal subunit that have been determined to date. These structures were solved using X-ray crystallographic methods, and the coordinates have been refined against corresponding X-ray diffraction data. The listed files have been superimposed upon a reference set of [***] 50S coordinates. Also included in the transfer is the structure of one compound bound to the [***] 70S ribosome ([***]). The files are stored in Protein Data Bank format (*.pdb). The coordinate files which will be included in the initial transfer are listed, below.

[***]

Exhibit E2. Computational Design and Available Models

Computational design tools used at Rib-X fall under the collective umbrella known as "Analog". The individual programs, developed by Professor William L. Jorgensen of Yale University, are given, below:

Program name

Description

[***] [***]

[***] [***]

[***] [***]

[***] [***]

[***], the workhorse of the computational design efforts, produces atomic coordinates, in *.pdb format, for every hypothetical ribosome-ligand complex. Additionally, it produces a flat file, in *.csv format, of the intermolecular, and intramolecular parameters describing the ribosome-ligand interaction as well as [***] properties for the ligand. In addition to the parameters given in [***], we compute a measure of ligand efficiency (total intermolecular interaction energy divided by number of atoms in ligand) as well as a good/bad ratio of interactions. These have been helpful in prioritizing among molecules to prepare, when the focus is on improving affinity for the ribosome. These, and parameters from a refined structure from [***], are imported into [***], a statistical program, for analysis. Linear regression models describing affinity as well as TPP2 activity will be

shared in the collaboration as well as *pdb files for hypothetical molecules. These derive initially from a cluster analysis (Ward's hierarchical, using molecular features with pairwise correlations £ 80%), have been subjected to screening design and are refined using successive linear regression studies. [***]. It should be noted that targeted compound lists, such as those given in the table, above, are supported by other cluster members that may be additionally prepared if the properties in a particular cluster point to interesting activity or molecular properties.

Exhibit E3. Assay Protocols, Bacterial Strain Collections and Compound Sets for Assay Harmonization and Validation

Rib-X Pharmaceuticals will provide assay protocols for all in vitro and in vivo assays, including murine models of infection, used to evaluate RX-04 compounds. Additionally, protocols for bioanalysis will be shared. Directories housing these protocols have been constructed in the Rib-X dataroom; the folder names are given, below.

Bioanalytical Methods Mechanism of action

Crystallization Microbiological activity

CYPs Microsomal lability

Cytotoxicity Protein Binding

In vitro translation Solubility

In vivo methods

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Bacterial strains used in the RX-04 primary microbiological activity screen panel are found in under "primary_panel_bacterial_strains.doc". A set of [***] ([***]) compounds – [***] control compounds and [***] contemporary RX-04 compounds, chosen to harmonize and validate biochemical assays (translation, CYPs and cytotoxicity) across sites – may be found in the file "Validation_Set.xls".

Exhibit E4. Synthetic Protocol for Preparation of Compounds on the Existing RX-04 [***]

Complete protocols for the synthesis of analogs on the [***] major [***] ([***] as [***] as [***] and [***] as [***]) plus one relatively unexplored [***] ([***]) will be transferred to Sanofi. These have been included in the dataroom under "Synthetic Protocols". Specific final targets, shown as exemplars, are described; the associated RX-numbers are noted in the table, below.

[***]

Exhibit E5. Preparative Scale Syntheses on the Lead [***] ([***])

The following preparative scale syntheses are provided in the dataroom under "Synthetic Protocols":

- Synthesis of [***] on a 10-15g scale
- Synthesis of [***] on a 10-15g scale
- Synthesis of [***] on a 10-15g scale

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Exhibit F

Example of Calculation of Net Profit/Loss

[FOR ILLUSTRATIVE PURPOSES ONLY]

Quarterly True-Up

At the end of each Calendar Quarter, the Parties will calculate the net payment one Party shall make to the other Party (the "Quarterly True-Up") equal to (a) the US Profit Split minus (b) the Development Payments for such Quarter.

US Profit Split

The US Profit Split shall mean [***] per cent ([***] %) of the US profits in a Quarter. US Profits shall mean aggregate Net Sales of US Profit Share Products in the US in the Quarter less the sum of (a) [***], (b) [***], and (c) [***] in the Quarter.

An example of a calculation of the US Profit Split in a Quarter would be:

Aggregate Sanofi Rib-X

[***]

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Exhibit G

Key Countries for Patent Filings

PCT Application EPC Countries Including All extension states:

Regional EP Application [***]

[***]

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Exhibit H-1

Form of Rib-X Press Release

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Exhibit H-2

Form of Sanofi Press Release

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Exhibit I

Rib-X Research Patent Rights

1. [***] – WO2011047319: Antimicrobial Compounds and Methods of Making and Using the Same
2. [***] – WO2011047323: Antimicrobial Compounds and Methods of Making and Using the Same
3. [***] – WO2011047320: Antimicrobial Compounds and Methods of Making and Using the Same
4. [***], US 6,638,908 Crystals of the Large Ribosomal Subunit
5. [***], US 6,939,828 Crystals of the Large Ribosomal Subunit
6. [***], US 6,947,844 Modulators of Ribosomal Function and Modulators Thereof
7. [***], US 7,504,486 The Determination and Uses of Atomic Structures of Ribosomes and Ribosomal Subunits and their Ligand Complexes
8. [***], US 6,952,650 Modulators of Ribosomal Function and Modulators Thereof
9. [***], US 6,947,845 Method of Identifying Molecules that Bind to the Large Ribosomal Subunit

10. [***] Protein Synthesis Modulators
11. [***] Protein Synthesis Modulators
12. [***] Protein Synthesis Modulators
13. [***] Protein Synthesis Modulators

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Exhibit J

Third Party Agreements

1. [***] Master Services Agreement
2. [***] Work Order 8 and Amendments
3. [***] Master Services Agreement
4. [***] Master Services Agreement
5. [***] Master Services Agreement
6. Yale License Agreement
7. Cemcomco License Agreement
8. [***] License Agreement – Pseudomonas PA0750
9. [***] License Agreement – Pseudomonas Strains with various pump knockouts
10. [***] License Agreement
11. [***] License Agreement
12. [***] Master Services Agreement
13. [***] Master Services Agreement
14. [***] Master Services Agreement

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