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PATENT ASSIGNMENT COVER SHEET

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| Name: | GLAXOS | MITHKLINE BIOLOGICALS SA | | | | | |
| Street Address: | 89, RUE I | DE L'INSTITUT | | | | | |
| City: | RIXENSA | RT | | | | | |
| State/Country: | BELGIUM | 1 | | | | | |
| Postal Code: | B-1330 | | | | | | |
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| Application Number: | 14 | 1603935 | | | | | |
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LICENSE AND ASSIGNMENT AGREEMENT

This License and Assignment Agreement ("Agreement") is made effective as of the 4th day of May 2012, between Infectious Diseases Research Institute, having a place of business at Seattle Life Science Center, 1124 Columbia Street, Suite 400, Seattle WA 98104, USA (herein referred to as "IDRI") and GLAXOSMITHKLINE BIOLOGICALS SA, having a place of business at 89, rue de l'Institut, B-1330 Rixensart, Belgium (herein referred to as "GSK"),

WITNESSETH THAT:

WHEREAS, IDRI and GSK are named as co-owners of international patent application PCT/EP2006/004319; and

WHEREAS, IDRI and GSK are named as co-owners of and/or jointly control all right, title and interest in certain of the patents and patent applications derived from international patent application PCT/EP/2006/004319 and identified in Appendix A hereto; and

WHEREAS, IDRI agrees that they have no entitlement to the subject matter specifically described in Appendix B and originally disclosed in PCT/EP2006/004319 ("GSK MATTER"); and

WHEREAS, IDRI has an assignment of title from the inventors Steven REED and Rhea COLER to an invention which is not GSK MATTER and also disclosed and/or claimed in the patents and patent applications identified in Appendix A hereto and is thereby a co-owner of said invention; and

WHEREAS, IDRI and GSK are parties to a Material Transfer Agreement Ref. No 04-002, dated February 9, 2004 ("MATERIAL TRANSFER AGREEMENT") identified in Appendix C hereto under the terms of which GSK shall be granted a worldwide royalty free exclusive license with the right to sublicense under any rights resulting from the use of a sample provided under the said MATERIAL TRANSFER AGREEMENT; and

WHEREAS, GSK desires to exercise its rights under the MATERIAL TRANSFER AGREEMENT and obtain a license from IDRI under the patents and patent applications, identified in Appendix A hereto which are co-owned or controlled in whole or in part by IDRI

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and which are not otherwise assigned to GSK hereunder and IDRI is willing to grant to GSK such license; and

WHEREAS, GSK desires that IDRI assigns to GSK any rights, titles and interests IDRI has in the patents and patent applications identified in Appendix A which claim GSK MATTER only and IDRI is willing to execute such assignment.

NOW, THEREFORE, in consideration of the covenants and obligations expressed herein and intending to be legally bound, and otherwise to be bound by proper and reasonable conduct, the parties agree as follows:

1. DEFINITIONS AND INTERPRETIVE RULES

- 1.1. "AFFILIATE(S)" shall mean any corporation, firm, partnership or other entity, whether de jure or de facto, which directly or indirectly owns, is owned by or is under common ownership with a Party to the extent of at least fifty percent (50 %) of the equity (or such lesser percentage which is the maximum allowed to be owned by a foreign corporation in a particular jurisdiction or such lesser percentage provided the operational control is held by that Party) having the power to vote on or direct the affairs of the entity and any person, firm, partnership, corporation or other entity actually controlled by, controlling or under common control with said Party.
- 1.2. "GSK MATTER" shall mean the subject matter described in Appendix B hereto and originally disclosed in PCT/EP2006/004319 (publication number WO2006/117240).
- 1.3. "MATERIAL TRANSFER AGREEMENT" shall mean the Material Transfer Agreement Ref. No 04-002, dated February 9, 2004 entered into by and between GSK and IDRI, which is identified in Appendix C hereto.
- 1.4. "PATENTS" shall mean all patents and patent applications derived from international patent application PCT/EP2006/004319 (publication number WO2006/117240), identified in Appendix A hereto. Included within the definition of PATENTS are any continuations, continuations-in-part, divisions, patents of addition, reissues, renewals or extensions thereof, and SPCs based on any of the above.
- 1.5. "LICENSED PATENTS" shall mean all PATENTS which are not GSK MATTER PATENTS and which are or become owned and/or controlled, in whole or in part, by IDRI or to which IDRI otherwise has, now or in the future, the right to grant licenses.

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- 1.6. "GSK MATTER PATENTS" shall mean all PATENTS which claim GSK MATTER only.
- 1.7. "SPCs" shall mean all supplementary protection certificates for medicinal products provided under the Regulation (EC) No 469/2009 of the European Parliament and of the Council of May 6, 2009, and applications and extensions thereof, and their equivalents under foreign laws and regulations.
- 1.8. "THIRD PARTY" shall mean a party other than IDRI, GSK or their AFFILIATES.
- 1.9. For purposes of this Agreement, except as otherwise expressly provided herein or unless the context otherwise requires : (a) defined terms include the plural as well as the singular and the use of any gender shall be deemed to include the other gender; (b) references to "Sections" and other subdivisions, and to "Appendix" or "Appendices" without reference to a document, are to designated Sections and other subdivisions of and to Appendix and/or Appendices to this Agreement; (c) the use of the term "including" means "including but not limited to"; and (d) the words "herein", "hereof", "hereunder" and other words of similar import refer to this Agreement as a whole and not to any particular provision.

2. GRANT OF LICENSE

- 2.1. IDRI hereby grants to GSK a worldwide royalty free, fully paid-up, exclusive license, with the right to grant sublicenses, under LICENSED PATENTS, to make, have made, use, have used, dispose of, offer for disposal, have disposed, keep and import all subject matter encompassed within the scope of LICENSED PATENTS.
- 2.2. IDRI shall use all reasonable efforts to maintain during the term of this Agreement the rights to grant the licenses hereunder to GSK.
- 2.3. Notwithstanding the exclusivity of the license granted to GSK under Section 2.1, IDRI hereby retains the non-exclusive right to perform non-commercial research on the subject matter of the LICENSED PATENTS. For the avoidance of doubt, nothing in this Clause 2.3 should be interpreted providing rights of access to GSK MATTER PATENTS or any other rights of GSK.

3. ASSIGNMENT OF PATENTS

3.1. IDRI hereby assigns to GSK its rights, titles and interests in GSK MATTER PATENTS.

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- 3.2. GSK hereby agrees that any GSK MATTER PATENTS for which IDRI has assigned its rights, titles and interests to GSK will be used for the pursuit of claims to GSK MATTER only.
- 3.3. If, for whatever reason, it becomes necessary that any GSK MATTER PATENT for which IDRI has assigned its rights, titles and interests to GSK is used for the pursuit of claims which include subject matter to which IDRI is jointly entitled, unless claims which include subject matter to which IDRI is jointly entitled are removed, GSK hereby agrees to take the necessary steps to restore IDRI as co-owner and such co-owned PATENTS shall be considered LICENSED PATENTS.
- 3.4. Upon request, IDRI shall provide full and immediate assistance, execute all documents and perform all acts which are considered necessary by GSK to give full effect to the assignment of GSK MATTER PATENTS hereunder, including without limitation in any procedures with patent offices, registries or courts in the world. Any assistance beyond ordinary and reasonable execution of documents will be performed at GSK's expense.

4. PATENT PROSECUTION AND LITIGATION

- 4.1. GSK shall have the right but not an obligation to control the filing, prosecution, defence (e.g. declaratory judgment, opposition, re-examination, reissue, revocation, nullification, any official proceeding and interference) and maintenance of LICENSED PATENTS in whichever manner it sees fit, at its own expense. GSK does not warrant to IDRI that it will be able to obtain patent protection for the LICENSED PATENTS. It will not be a breach of this Agreement and GSK will not have liability hereunder with respect to the patenting if any patent office refuses to grant a patent for LICENSED PATENTS.
- 4.2. If requested, IDRI shall cooperate with GSK's patent counsels at GSK's expense and shall provide the necessary assistance and support to ensure that the patent counsels engaged by GSK prosecuting, maintaining and enforcing the LICENSED PATENTS continue such prosecution, maintenance and enforcement (as the case may be) in a timely manner without a risk of lapse or abandonment of any LICENSED PATENTS. IDRI will and will ensure that all inventors employed or engaged, currently or previously by IDRI execute all documents, and perform all acts reasonably necessary to enable GSK to prosecute, maintain and enforce the LICENSED PATENTS under the terms of this Agreement.
- 4.3. In the event that IDRI or GSK becomes aware of actual or threatened infringement of a LICENSED PATENT, that party shall promptly notify the other party in writing. GSK

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shall have the right but not the obligation to bring, at its own expense, an infringement action against any THIRD PARTY and to use IDRI's name in connection therewith. IDRI has no obligation to bring an infringement action against any THIRD PARTY in connection therewith, unless GSK specifically requires IDRI to bring such infringement action and GSK agrees to pay all expenses of IDRI in connection therewith. In conducting such action GSK shall have full control over its conduct, including settlement thereof. In any event, IDRI and GSK shall assist one another, cooperate in and keep one another informed in any such litigation at the other's request without expense to the requesting party (except in the event that GSK has required IDRI to bring infringement action).

- 4.4. IDRI and GSK shall recover their respective actual out-of-pocket expenses, or equitable proportions thereof, associated with any litigation or settlement thereof from any recovery made. Any excess amount shall remain with GSK.
- 4.5. IDRI shall authorise GSK to act as IDRI's agent for the purpose of making any application for any extensions of the term of LICENSED PATENTS or SPCs and shall provide reasonable assistance therefor to GSK, at GSK's expense.

5. TERM AND TERMINATION

- 5.1. This Agreement shall expire upon the final expiration or final invalidation of the last remaining LICENSED PATENT in any country.
- 5.2. Expiration of this Agreement under this provision shall not preclude GSK from continuing to use the LICENSED PATENTS without any further obligations towards IDRI.
- 5.3. Notwithstanding the bankruptcy of IDRI, or the impairment of performance by IDRI of its obligations under this Agreement as a result of bankruptcy or insolvency of IDRI, GSK shall be entitled to retain the licenses granted herein, without any further obligations to IDRI.

6. REPRESENTATIONS AND WARRANTIES

6.1. IDRI represents and warrants that it has not previously granted any right, title or interest in and to the PATENTS to THIRD PARTIES which would prevent it to grant the rights, titles and interests to GSK as agreed in this Agreement.

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6.2. IDRI acknowledges receipt of the 'Prevention of Corruption – Third Party Guidelines' attached hereto as Appendix D and agrees to perform its obligations under the Agreement in accordance with the principles set out therein. IDRI shall comply fully at all time with all applicable laws and regulations, including but not limited to applicable anti-corruption laws, of the territory in which IDRI conducts business with GSK.

7. GOVERNING LAW

7.1. This Agreement, its form, execution, validity, construction and effect shall be determined in accordance with the laws of the Commonwealth of Pennsylvania without giving effect to its principles of conflicts of law.

8. ARBITRATION

- 8.1. Any dispute, controversy or claim arising out of or relating to this Agreement, including any question regarding its existence, validity or termination, that cannot be resolved by good faith negotiation between the parties over a period of at least ninety (90) days shall be resolved by arbitration conducted in the English language in Philadelphia, Pennsylvania before a panel of one (1) arbitrator under the then current rules and procedures of the International Chamber of Commerce, or other rules and procedures as the parties may agree, which are deemed incorporated herein by reference. The prevailing party in any such proceeding shall be entitled to an award of its reasonable attorneys' fees and other costs, including the fees and expenses of the arbitrators, providing that the same may be apportioned between the parties by the arbitrators if they determine that each party has prevailed in part. The arbitral award shall be binding and conclusive on both parties and may be enforced in any court of competent jurisdiction. Notwithstanding the foregoing, either party may, on good cause shown, seek a temporary restraining order and/or preliminary injunction from a court of competent jurisdiction to be effective pending the institution of the arbitration process and the deliberation and award of the arbitration panel.
- 8.2. The parties agree that the arbitration shall be kept confidential and that the existence of and any aspect of the proceeding shall not be disclosed beyond the arbitration tribunal, the parties and their AFFILIATES, their counsel, insurers and re-insurers, accountants and auditors, and any person necessary to the conduct of the proceedings. The confidentiality obligations shall not apply if i) disclosure is required by law or ii) to the extent necessary to enforce the rights arising out of the award.

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9. SEPARABILITY

- 9.1. In the event any portion of this Agreement shall be held illegal, void or ineffective, the remaining portions hereof shall remain in full force and effect.
- 9.2. If any of the terms or provisions of this Agreement are in conflict with any applicable statute or rule of law, then such terms or provisions shall be deemed inoperative to the extent that they may conflict therewith and shall be deemed to be modified to conform with such statute or rule of law.

10. ENTIRE AGREEMENT

10.1. This Agreement, entered into as of the date first written above, together with MATERIAL TRANSFER AGREEMENT, constitutes the entire agreement between the parties relating to the subject matter hereof and supersedes all other writings and understandings. To the extent that any provision of MATERIAL TRANSFER AGREEMENT may contradict this Agreement, this Agreement shall prevail. No terms or provisions of this Agreement shall be varied or modified by any prior or subsequent statement, conduct or act of either of the parties, except that the parties may amend this Agreement by written instruments specifically referring to and executed in the same manner as this Agreement.

11. NO WAIVER

11.1. The failure of either party at any time to exercise any of their respective rights under this Agreement shall not be deemed a waiver thereof, nor shall such failure in any way prevent either party, as the case may be, from subsequently asserting or exercising such rights.

12. NOTICES

12.1. Any notice required or permitted under this Agreement shall be sent by courier, certified mail, return receipt requested, postage pre-paid to the following addresses of the parties:

if to IDRI: Infectious Disease Research Institute 1124 Columbia Street, Suite 400 Seattle, WA 98104

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Attention: General Counsel

if to GSK: GlaxoSmithKline Biologicals SA Rue de l'Institut, 89 B-1330 Rixensart, Belgium Attention : President, General Manager

With a copy to: General Counsel, Legal Department Parc de la Noire Epine Avenue Fleming 20 B-1300 Wavre, Belgium

12.2. Any notice required or permitted to be given concerning this Agreement shall be effective upon receipt by the party to whom it is addressed.

13. ASSIGNMENT OF AGREEMENT

13.1. Neither this Agreement nor any interest hereunder shall be assignable by either party without the written consent of the other provided, however, that either party may assign this Agreement or any of its rights or obligations hereunder to any AFFILIATE or to any corporation with which it may merge or consolidate or to which it may sell all or substantially all of its assets, without obtaining the consent of the other party, but shall notify the other party of any such assignment forthwith. This Agreement, the assignment and the licenses herein granted shall be binding upon and inure to the benefit of the successors in interest of the respective parties.

SIGNATURE PAGE TO FOLLOW

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IN WITNESS WHEREOF, the parties, through their authorised officers, have executed this Agreement as of the date first written above.

Infectious Diseases Research Institute

BY: artin DWALLON ; IDRI OUP

GlaxoSmithKline Biologicals S.A.

BY: Emmanuel MANON

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APPENDIX A

PATENTS

| Country | Case | Relation | Filing | Filing | Status | App. Date | App. No. | Grant Date | Patent Number |
|----------------------------------|------------|--------------------|---------------------------------------|----------|------------|-----------------|----------------|---------------|------------------|
| | | | | NO. | Filed | 27-Apr-06 | 070744 | | |
| Algeria | Regular | Original Filing | Patent Cooperation Treaty | | riieu | 27-Mpi-00 | 0/0144 | | |
| Armenia | Regular | Original | PCT/Eurasi | | Granted | 27-Apr-06 | 200702081 | 30-Oct-10 | 012576 |
| Annenia | / Cogcator | Filing | an Patent Convention | | | | | | |
| Australia | Regular | Original Filing | Patent Cooperation | | Filed | 27-Apr-06 | 2006243357 | | |
| Australia | Regular | Division | Treaty National | 1 | Filed | 20-Sep- | 2011224145 | | |
| Austria | Regular | Original | PCT/EPC | | Granted | 11 27-Apt-06 | EP1877426 | 01-Feb- | E543832 |
| | 1 | Filing | Application | | Į | | | 12 | 012578 |
| Azerbaljan | Regular | Original Filing | PCT/Eurasi an Patent Convention | | Granted | 27-Apr-06 | 200702081 | 30-Oct-10 | 012078 |
| Belarus | Regular | Original Filing | PCT/Eurasi an Patent | | Granted | 27-Apr-06 | 200702081 | 30-Oct-10 | 012576 |
| Belgium | Regular | Original | Convention PCT/EPC | | Granted | 27-Apr-06 | 06753623,7 | 01-Feb- 12 | EP1877428 |
| D | Bandan | Filing | Application Patent | | Filed | 27-Apr-06 | PI0611347-8 | + | |
| Brazil | Regular | Original Filing | Cooperation Treaty | | 1 1154 | 27-50-00 | | | |
| Brazil | Regular | Division | National | 1 | Filed | 29-Dec- | X | | |
| Bulgaria | Regular | Original Filing | PCT/EPC Application | | Granted | 27-Apr-08 | 06753523.7 | 01-Feb- 12 | EP1877428 |
| Canada | Regular | Original | Patent | <u> </u> | Filed | 27-Apr-06 | 2607715 | 1 | } |
| -anata | 1.2280101 | Filing | Cooperation Treaty | | | | | | <u> </u> |
| Canada | Regular | Division | National | 1 | Docketed | | | | |
| China P.R. | Regular | Division | National | 1 | Filed | 23-Sep- 11 | 201110297422.6 | | |
| China P.R. | Regular | Original Filing | Patent Cooperation Treaty | | Filed | 27-Apr-06 | 200680023551.3 | | |
| Colombia | Regular | Original Filing | Patent Cooperation | | Filed | 27-Apr-06 | 07-114,249 | | |
| Colombia | Regular | Oivision | Treaty National | 1 | Filed | 28-Oct-11 | 07-114.249A | - | ******* |
| Crostia | Regular | Original Filing | PCT/EPC Application | <u>.</u> | Granted | 27-Apr-06 | EP1877426 | 01-Feb- 12 | P2012033 |
| Cyprus | Regular | Original | PCT/EPC Application | | Granted | 27-Apr-06 | 06753523.7 | 01-Feb- 12 | EP187742 |
| Czech | Regular | Piling Original | PCT/EPC | | Granted | 27-Apr-06 | 08753523.7 | 01-Feb- | EP187742 |
| Republic | | Filing | Application | | Granted | 27-Apr-05 | 06753523.7 | 01-Feb- | EP187742 |
| Denmark | Regular | Original Filing | Application | | Graniceu | 27-40-00 | 0013302.5.7 | 12 | |
| Egypt | Regular | Original Filing | Patent Cooperation | | Filed | 27-Apr-06 | 1178/2007 | | |
| | 1 | } | Treaty | | | <u> </u> | | hungan | |
| European Patent | Regular | Original Filing | PCT/EPC Application | | Granted | 27-Apr-05 | 06753523.7 | 01-Feb- 12 | EP187742 |
| Convention European Patent | Regular | Division | European Patent Case | 2 | Filed | 22-Nov- 11 | 11190080.9 | | } |
| Convention | 1 | { | <u>}</u> | <u>}</u> | | <u>.</u> | | 4 | <u> </u> |
| European Patent | Regular | Division | European Patent Case | 1 | Filed | 22-Nov- 11 | 11190079.1 | | |
| Convention Estonia | Regular | Original | PCT/EPC | <u> </u> | Granted | 27-Apr-08 | 06753523.7 | C1-Feb- | EP187742 |
| Europaire | Regular | Filing Original | Application PCT/Eurasi | <u> </u> | Granted | 27-Apr-06 | 200702081 | 30-Oct-10 | 012576 |
| Eurasian Patent Convention | rtegular | Filing | an Patent Convention | | 1,000,0004 | 23 190-000 | | | |
| Finland | Regular | Original | PCT/EPC | <u>,</u> | Granted | 27-Apr-08 | 06753523.7 | 01-Feb- 12 | EP187742 |
| France | Regular | Filing Original | Application PCT/EPC | | Granted | 27-Apr-06 | 06753523 7 | 01-Feb- | EP187742 |
| United | Regular | Filing Original | Application PCT/EPC | } | Granted | 27-Apr-06 | 06753523.7 | Di-Feb | EP187742 |
| Kingdom | Hanna | Filing | Application PCT/EPC | <u> </u> | Granted | 27-Apr-06 | 06753523.7 | 01-Feb | EP187742 |
| Germany | Regular | Original Filing | Application | | Granted | 27-Apr-06 | 06753523.7 | 01-Feb- | EP187742 |
| Greece | Regular | Original Filing | PCT/EPC Application | <u> </u> | [| | | 12 | |
| Hong Kong | Confirm | Original | PCT/EPC | \$ | Filed | 02-Apr-08 | 08103728.5 | 2 | 1 |

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| Country | Case Type | Relation | Filing Tvoe | Filing No. | Status | App Date | Арр No | Grant Date | Patent Number |
|-----------------------|--------------|------------------------------|---------------------------------------|---------------|--------------|-----------------|---------------------------------------|---------------------|------------------|
| Hungary | Regular | Original | PCT/EPC | **** | Granted | 27-Apr-06 | EP1877428 | 01-Feb- | E06753523 |
| iceland | Regular | Filing Original | Application PCT/EPC | | Granted | 27-Apr-06 | 06763523.7 | 12 01-Feb- | EP1877426 |
| | <u></u> | Filing | Application | | 1 | 1 | • • • • • • • • • • • • • • • • • • • | 12 | |
| india | Regular | Original Filing | Patent Cooperation Treaty | | Filed | 27-Apr-06 | 4585/KOLNP/2007 | | |
| Indonesia | Regular | Original Filing | Patent Cooperation | | Filed | 27-Apr-06 | W00200703579 | | ······ |
| Indonesia | Regular | Division | Treaty National | 1 | Docketed | } | | | |
| Ireland | Regular | Original | PCT/EPC | + | Granted | 27-Apr-06 | 06753523.7 | 01-Feb- | EP1877426 |
| Israel | Regular | Filing | Application National | + | Filed | 13-Sep- | 215112 | 12 | |
| Israel | Regular | Original | Pateni | | Filed | 11 27-Apr-06 | 186654 | ļ | |
| | reguiai | Elling | Cooperation | | FREM | 21990 | 100004 | | |
| italy | Regular | Original | Treaty PCT/EPC | | Granted | 27-Apr-06 | 06753523,7 | 01-Feb- | EP1877426 |
| Japan | Regular | Filing Division | Application National | 1 | Filed | 22-Sep- | 2011-207361 | 12 | ····· |
| | | | | <u> </u> | | 11 | Ş | | |
| Japan | Regular | Original Filing | Patent Cooperation Treaty | | Filed | 27-Apr-06 | 2008-508169 | | |
| Kazakhstan | Regular | Original Filing | PCT/Eurasi an Patent Convention | | Granted | 27-Apr-06 | 200702081 | 30-Oct-10 | 012576 |
| Korea South | Regular | Division | National | 1 | Filed | 30-Mar- | 10-2012-7008426 | | |
| Korea South | Regular | Öriginal Filing | Patent Cooperation | | Flied | 12 27-Apr-06 | 10-2007-7027885 | | |
| Kyrgyzstan | Regular | Original Filing | Treaty PCT/Eurasi an Patent | | Granted | 27-Apr-08 | 200702081 | 30-Oct-10 | 012576 |
| Latvia | Regular | Original | Convention PCT/EPC | | Granted | 27-Apr-05 | 06753523.7 | 01-Feb- | EP1877426 |
| Lithuania | Regular | Filing Original | Application PCT/EPC | <u>.</u> | Granted | 27-Apr-06 | 06753523.7 | 12 01-Feb- | EP1877426 |
| Luxembourg | | Filing Original | Application PCT/EPC | ļ | Granted | 27-Apr-06 | 06753523.7 | 12 01-Feb- | EP1877426 |
| | Regular | Filing | Application | | | | | 12 | EF 1077420 |
| Mexico | Regular | Division | National | 1 | Filed | 05-Aug- 11 | MX/a/2011/008301 | | |
| Mexico | Regular | Division | National | 2 | Filed | 05-Aug- 11 | MX/a/2011/008298 | | |
| Mexico | Regular | Original Filing | Patent Cooperation Treaty | | Filed | 27-Apr-06 | MX/a/2007/013240 | | |
| Moldova | Regular | Original Filing | PCT/Eurasi an Patent | | Granted | 27-Apr-06 | 200702081 | 30-Oct-10 | 012576 |
| Monaco | Regular | Original | Convention PCT/EPC | | Granted | 27-Apr-06 | 06753523.7 | 01-Feb- | EP1877426 |
| Morocco | Regular | Filing Original | Application Patent | | Granted | 27-Apr-06 | PV/30313 | 12 01-Aug- | 29678 |
| | | Filing | Cooperation Treaty | | | | | ČВ | |
| Netherlands | Regular | Original | PCT/EPC | [| Granted | 27-Apr-06 | 06753523 7 | 01-Feb- | EP1877426 |
| New Zesland | Regular | Filing Original Filing | Application Patent Cooperation | | Granted | 27-Apr-06 | 562729 | 12 11-Feb- 10 | 562729 |
| Nigeria | Regular | Original Fillog | Patent Cooperation | | Filed | 27-Apr-06 | 583/07 | | |
| Norway | Regular | Original Filing | Treaty Patent Cooperation | | Filed | 27-Apr-06 | 20075201 | | |
| Norway | Regular | Division | Treaty National | 1 | Filed | 28-Mar- | 20120381 | | |
| Pateni | Regular | Original | Patent | | inactive | 12 27-Apr-06 | PCT/EP2006/0043 | | |
| Cooperation | regular | Filing | Cooperation | | maonvo | ~~~~pr=ud | 19 | | |
| Freaty Philippines | Regular | Original Filing | Treaty Patent Cooperation | | Filed | 27-Apr-06 | 1-2007-502365 | | |
| hilippines | Regular | Division | Treaty National | 1 | Filed | 30-Sep- | 1-2011-501966 | | |
| oland | Regular | Original | PCT/EPC | | Granted | 11 27-Apr-06 | 06753523.7 | C1-Feb- | EP1877426 |
| Portugal | Regular | Filing Original | Application PCT/EPC | | Granted | 27-Apr-06 | 06753523.7 | 12 01-Feb- | EP1877426 |
| | | Fliing | Application | | Commenter of | all com-and | | 12 | |

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| Country | Clase Type | Relation Type | Filing Type | Filing No: | Status | App Date | Арр No | Grant Date | Patent Number |
|-----------------------|---------------------------|--------------------|---------------------------------------|---------------|----------|---------------|-----------------|---------------|------------------|
| Romania | Regular | Original Filing | PCT/EPC Application | | Granted | 27-Apr-05 | 06753523,7 | 01-Feb- 12 | EP1877426 |
| Russian Federation | Regular | Original Filing | PCT/Eurasi an Patent Convention | | Granted | 27-Apr-06 | 200702081 | 30-Oct-10 | 012576 |
| South Africa | Regular | Orginal Filing | Patent Cooperation Treaty | | Granted | 27-Apr-05 | 2007/09209 | 27-Jan-10 | 2007/09209 |
| Switzerland | Regular | Original | PCT/EPC Application | ******* | Granted | 27-Apr-06 | 06753523.7 | 01-Feb- 12 | EP1877426 |
| Singapore | Regular | Original Filing | Patent Cooperation Treaty | | Granted | 27-Apr-06 | 200717016-0 | 15-Oct-10 | P-136649 |
| Slovenia | Regular | Original Filing | PCT/EPC Application | | Granted | 27-Apr-06 | 06753523.7 | 01-Feb- 12 | EP1877426 |
| Slovak Republic | Regular | Original Filing | PCT/EPC Application | | Granted | 27-Apr-06 | 06753523.7 | 01-Feb- 12 | EP1877426 |
| Spain | Regular | Öriginal Filing | PCT/EPC Application | | Granted | 27-Apr-06 | 06753523.7 | 01-Feb- 12 | EP1877428 |
| Sweden | Regular | Original Filing | PCT/EPC Application | | Granted | 27-Apr-06 | 06753523.7 | C1-Feb- 12 | EP1877426 |
| Turkmenistan | Regular | Original Filing | PCT/Eurasi en Patent Convention | | Granted | 27-Apr-06 | 200702081 | 30-Oct-10 | 012576 |
| Trinidad | Regular | Original Filing | Patent Cooperation Treaty | | Filed | 27-Apr-06 | TT/A/2007/00253 | | |
| Тигкеу | Regular | Original Filing | PCT/EPC Application | | Granted | 27-Apr-06 | 06753523.7 | 01-Feb- 12 | EP1877426 |
| Ukraine | Regular | Original Filing | Patent Cooperation Treaty | | Filed | 27-Apr-06 | s200711567 | | |
| Ukraine | Regular | Division | National | 1 | Filed | 30-Sep- 11 | ø201111598 | | |
| United States | Provisi onal Filing | Original Filing | National | P | Inactive | 29-Apr-05 | 60/676549 | | |
| United States | Regular | Original Filing | Patent Cooperation Treaty | | Filed | 27-Apr-06 | 11/912730 | | |
| Vietnam | Reguiar | Original Filing | Patent Cooperation Treaty | | Filed | 27-Apr-06 | 1-2007-02538 | | |
| Vietnam | Regular | Division | National | 1 | Filed | 31-0ct-11 | 1-2011-02952 | | |
| Tajikistan | Regular | Original Filing | PCT/Eurasi an Patent Convention | | Granted | 27-Apr-06 | 200702081 | 30-Oct-10 | 012576 |

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APPENDIX B

GSK MATTER

The fusion protein provided in SEQ ID No: 4 of PCT/EP/2006/004319 and related aspects, specifically:

(i) Polypeptides comprising or consisting of the amino acid sequence of SEQ ID No: 4,

(ii) Polynucleotides comprising or consisting of a nucleic acid sequence encoding the amino acid sequence of SEQ ID No: 4, including polynucleotides comprising the nucleic acid sequence of SEQ ID No: 3.

(iii) Pharmaceutical compositions comprising the polypeptides of (i) or polynucleotides of (ii), including where the polynucleotide is provided in a viral vector or a bacterial host cell, including where the bacterium is *Bacillus* Calmette-Guerin.

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APPENDIX C MATERIAL TRANSFER AGREEMENT

[attached]

 $H: \label{eq:constraint} May 2012_F(NAL:doex) = Constraint + 4 May 2012_F(NAL:doex) = Constraint} = Constraint}$

GlaxoSmithKline Biologicals SA ("GSK") Sample Study Agreement, governing supply by GSK of samples for external investigation

| Please return one copy of this form duly completed and signed to Jean-Paul Pricets at : | GiaxoSmithKiine Biologicais SA Rue de l'Institut 69, B-1330 Rixensari, Belgium Tai : 32-2-666 81 11 Fax : 32-2-656 81 13 | Ref. n°: 04-002 |
|---|---|-----------------------------|
| Requestor (block letters please) : Steve REED | GSK Sample : Mtb721 and derivative | 98 |
| Organization or Institution : Intectious Diseases Research Institute (IDRI) | Amount requested : as needed | |
| Address : Seattle Life Science Center, 1124 Columbia Street, Sub 6-00, Seattle WA98104, USA | GSK Contact : Yves LOBET | |
| Statement of proposed use (refer to attachment if necessa efficacy of GSK Sample in in vitro and in vivo models. | ry): GSK Sample will be used for preclinic | al evaluation of protective |

Anticipated date for completion of investigation : January 31", 2006

Terms and conditions governing supply of GSK Sample by GSK (For the avoidance of doubt, reference to "GSK Sample" includes any and all derivatives thereof).

- 1. GSK Sample and any related information disclosed by GSK are supplied in confidence, will remain the property of GSK and will not be passed to any other party.
- 2. GSK will be held harmless and will be indemnified against any liability in relation to the use of GSK Sample.
- Publication of any results of the investigation will not take place without the prior written agreement of GSK. GSK's contribution shall be acknowledged in any publication by co-authorship or acknowledgment, whichever is appropriate.
- 4. GSK Sample will be used only for the purpose specified above and in accordance with all relevant laws and regulations. For the avoidance of doubt, no modification of GSK Sample or use other than specified above will be permitted without GSK's prior written agreement.
- 5. GSK Sample will not be administered to man and in so far as it is administered to animals, no animal to which GSK Sample is administered, or animal product derived therefrom, will be used for food, therapeutic or diagnostic purposes, or kept as a domestic pet or livestock.
- 6. GSK will be advised promptly of the results of investigation. The results shall be kept confidential and shall not be disclosed nor made available to any third party without GSK's prior written consent. GSK shall be granted a worldwide royalty free exclusive license with the right to sublicense under any rights resulting from the use of GSK Sample. In addition, in the event of a patentable invention resulting from the use of GSK Sample, the question of whether and where patent protection should be sought, shall be at GSK's sole discretion. If GSK decides to seek patent protection, the costs related thereto will be borne entirely by GSK.
- Any amount of GSK Sample which is surplus to requirements for the specified use at the anticipated date of completion of the investigation will be returned to GSK within a period of two (2) months.
- You shall not disclose to any other person or party the terms of this agreement, definitively or in principle, or the nature or content of negotiations leading to such terms.
- 9. GSK MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, WITH RESPECT TO GSK SAMPLE INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, NOR THAT THE USE OF GSK SAMPLE HEREUNDER WILL NOT INFRINGE PATENT RIGHTS OR INTELLECTUAL PROPERTY RIGHTS VESTED IN ANY THIRD PARTY.

Please acknowledge your agreement to the above terms and conditions by the return of this Sample Study Agreement signed by a duly authorized officer or representative of your Company or Institution. The requested sample will be dispatched to you as soon as practically possible on receipt of the duly signed form.

| Accepted by requesting investigator/institutions | |
|--|--|
| Requestor's signature : | Authorized representative of Organization/Institution |
| Mikrod | (signature) Vous Victor |
| Name : Steve REED | Name: David Webster |
| TRIO: CEO | Title: COO |
| Date: Feb 9,2004 | Date: Feb 9,2004 |
| Approved by GlacoSmithAline Biologicals SA | |
| By : Joe COHEN Title : Director R&D Vaccines For Emerking Diseases Program | GSK Contact : Yves LOBET Title : Associate Director DAP Vaccines for Emerging Disserts P |
| Date: Jam. 19, 04 | Date: Joner, Long < |
| Related information (optionally provided by GSK) : | |
| | \sim |

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APPENDIX D PREVENTION OF CORRUPTION – THIRD PARTY GUIDELINES

The GSK Anti-Bribery and Corruption Policy (POL-GSK-007) requires compliance with the highest ethical standards and all anti-corruption laws applicable in the countries in which GSK (whether through a third party or otherwise) conducts business. POL-GSK-007 requires all GSK employees and any third party acting for or on behalf of GSK to ensure that all dealings with third parties, both in the private and government sectors, are carried out in compliance with all relevant laws and regulations and with the standards of integrity required for all GSK business. GSK values integrity and transparency and has zero tolerance for corrupt activities of any kind, whether committed by GSK employees, officers, or third-parties acting for or on behalf of GSK.

Corrupt Payments – GSK employees and any third party acting for or on behalf of GSK, shall not, directly or indirectly, promise, authorise, ratify or offer to make or make any "payments" of "anything of value" (as defined in the glossary section) to any individual (or at the request of any individual) including a "government official" (as defined in the glossary section) for the Improper purpose of Influencing or Inducing or as a reward for any act, omission or decision to secure an improper advantage or to improperly assist the company in obtaining or retaining business.

Government Officials – Although GSK's policy prohibits payments by GSK or third parties acting for or on its behalf to any individual, private or public, as a "quid pro quo" for business, due to the existence of specific anticorruption laws in the countries where we operate, this policy is particularly applicable to "payments" of "anything of value" (as defined in the glossary section), or at the request of, "government officials" (as defined in the glossary section).

Facilitating Payments – For the avoidance of doubt, facilitating payments (otherwise known as "greasing payments" and defined as payments to an individual to secure or expedite the performance of a routine government action by government officials) are no exception to the general rule and therefore prohibited.

GLOSSARY

The terms defined herein should be construed broadly to give effect to the letter and spirit of the ABAC Policy. GSK is committed to the highest ethical standards of business dealings and any acts that create the appearance of promising, offering, giving or authorising payments prohibited by this policy will not be tolerated.

Anything of Value: this term includes cash or cash equivalents, gifts, services, employment offers, loans, travel expenses, entertainment, political contributions, charitable donations, subsidies, per diem payments, sponsorships, honoraria or provision of any other asset, even if nominal in value.

Payments: this term refers to and includes any direct or indirect offers to pay, promises to pay, authorisations of or payments of anything of value.

Government Official shall mean:

- Any officer or employee of a government or any department, agency or instrument of a government;
- Any person acting in an official capacity for or on behalf of a government or any department, agency, or instrument of a government;
- Any officer or employee of a company or business owned in whole or part by a government;
- Any officer or employee of a public international organisation such as the World Bank or United Nations;
- Any officer or employee of a political party or any person acting in an official capacity on behalf of a political party; and/or
- Any candidate for political office

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PATENT REEL: 035645 FRAME: 0902

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