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Online annexe B: Summary of R&D reference document

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ANNEXE 1

ACRONYMS

Aggregate industry	Aggregate pharmaceutical and biotechnology companies	Colombian Colciencias	Colombian Department for Science, Technology and Innovation
AIDS	Acquired Immune Deficiency Syndrome	DALY	Disability adjusted life year
ALM	American Leprosy Missions	DC	Developing country
ALRA	Austrian Leprosy Relief Association	DNDi	Drugs for Neglected Diseases initiative
AmB	Amphotericin B	Dutch DGIS	Dutch Ministry of Foreign Affairs - Directorate General of Development Cooperation
ARV	Antiretroviral	EAggEC	Enteroaggregative <i>E. coli</i>
Australia - India SRF	Australia - India Strategic Research Fund	EDCTP	European & Developing Countries Clinical Trials Partnership
Australian ACH²	Australian Centre for HIV and Hepatitis Virology Research	EMA	European Medicines Agency
Australian DFAT	Australian Department of Foreign Affairs and Trade (formerly AusAID)	ETEC	Enterotoxigenic <i>E. coli</i>
Australian DIIS	Australian Department of Industry, Innovation and Science	EU	European Union, including the budget managed by the European Commission, European partnerships and other European initiatives
Australian NHF	Australian National Heart Foundation	EVI	European Vaccine Initiative
Australian NHMRC	Australian National Health and Medical Research Council	FDC	Fixed-dose combination
Brazilian DECIT	Brazilian Ministry of Health: Department of Science and Technology	FIND	Foundation for Innovative New Diagnostics
Brazilian FAPESP	State of Sao Paulo Research Foundation	French ANR	French National Research Agency
Brazilian FINEP	Brazilian Innovation Agency	French ANRS	French National Agency for Research on AIDS and Viral Hepatitis
Canadian CIHR	Canadian Institutes of Health Research	FRF	Fondation Raoul Follereau
Chilean FONDECYT	Chilean National Fund for Scientific and Technological Development	FY	Financial year
		Gates Foundation	Bill & Melinda Gates Foundation
		Gavi	Gavi, the Vaccine Alliance
		GBD	Global Burden of Disease Study
		GDP	Gross domestic product
		German BMBF	German Federal Ministry of Education and Research

ACRONYMS

German DFG	German Research Foundation	NIAID	National Institute of Allergy and Infectious Diseases
G-FINDER	Global Funding of Innovation for Neglected Diseases	NTS	Non-typhoidal <i>Salmonella enterica</i>
GHIT Fund	Global Health Innovative Technology Fund	OECD	Organisation for Economic Cooperation and Development
GSK	GlaxoSmithKline	OWH	OneWorld Health
HIC	High-income country	PDP	Product development partnership
HIV	Human Immunodeficiency Virus	Philippines DOH	Philippines Department of Health
IAVI	International AIDS Vaccine Initiative	POC	Point-of-care
IDC	Innovative developing country	R&D	Research and development
IDRI	Infectious Disease Research Institute	RCDC	US NIH's Research, Condition, and Disease Categorization Process
IMF	International Monetary Fund	RePORTER	US NIH's Research Portfolio Online Reporting Tools
Indian CSIR	Indian Council of Scientific and Industrial Research	RT-PCR	Reverse transcription polymerase chain reaction
Indian DBT	Indian Department of Biotechnology	S&T	Science & Technology
Indian ICMR	Indian Council of Medical Research	SME	Small pharmaceutical and biotechnology firms
Inserm	French National Institute of Health and Medical Research	South African MRC	South Africa Medical Research Council
IPM	International Partnership for Microbicides	Spanish MAEC	Spanish Ministry of Foreign Affairs and Cooperation for Development (MAEC) and/or Agency of International Cooperation for Development (AECID)
ISGlobal	Barcelona Institute for Global Health	SSI	Statens Serum Institute
IVCC	Innovative Vector Control Consortium	Swedish SIDA	Swedish International Development Agency
IVI	International Vaccine Institute	Swiss SDC	Swiss Agency for Development and Cooperation
LMIC	Low- and middle-income country	TB	Tuberculosis
LRI	Leprosy Research Initiative	TBVI	TuBerculosis Vaccine Initiative
MDR-TB	Multidrug-resistant tuberculosis	Thailand GPO	Thailand Government Pharmaceutical Organisation
MDT	Multidrug therapy	The Union	International Union Against Tuberculosis and Lung Disease
MIC	Middle-income country		
MMV	Medicines for Malaria Venture		
MNC	Multinational pharmaceutical company		
MSD	Merck Sharp & Dohme (Merck)		
MSF	Médecins Sans Frontières		
New Zealand HRC	Health Research Council of New Zealand		

ACRONYMS

TLMI	The Leprosy Mission International
UK	United Kingdom
UK DFID	UK Department for International Development
UK MRC	UK Medical Research Council
US	United States
US BARDA	US Biomedical Advanced Research and Development Authority
US CDC	US Centers for Disease Control
US DOD	US Department of Defense, including Defense Advanced Research Projects Agency (DARPA)
US FDA	US Food and Drug Administration
US NIH	US National Institutes of Health
USAID	US Agency for International Development
VHF	Viral haemorrhagic fevers
WHO	World Health Organization
WHO/TDR	World Health Organization Special Programme for Research and Training in Tropical Diseases
XDR-TB	Extensively drug-resistant tuberculosis
YOY	Year-on-year

ANNEXE 2

Advisory Committee members & additional experts

ADVISORY COMMITTEE MEMBER	ORGANISATION	TITLE
Ripley Ballou	GlaxoSmithKline Biologicals	Vice President and Head, Clinical Research and Translational Science
Graeme Bilbe	Drugs for Neglected Diseases initiative (DNDi)	Research & Development Director
François Bompard	Sanofi	Vice President, Deputy Head and Medical Director, Access to Medicines
Wanderley de Souza	Financiadora de Estudos e Projetos (FINEP)	President
Alan Fenwick	Imperial College London	Professor of Tropical Parasitology
Carole Heilman	US National Institute of Allergy and Infectious Diseases (NIAID)	Director, Division of Microbiology and Infectious Diseases
Vishwa Mohan Katoch	Indian Council of Medical Research (ICMR)	Former Director General
Sue Kinn	UK Department for International Development (DFID)	Team Leader and Research Manager
Line Matthiessen	European Commission	Head of Infectious Diseases and Public Health Unit, Directorate-General for Research and Innovation
Carl Mendel	Global Alliance for TB Drug Development (TB Alliance)	Senior Vice President, Research and Development
Firdausi Qadri	International Centre for Diarrhoeal Disease and Research (icddr,b)	Emeritus Scientist and Acting Senior Director, Infectious Diseases Division
John Reeder	World Health Organization: Special Programme for Research and Training in Tropical Diseases (WHO/TDR)	Director
Nelson Sewankambo	Makerere University College of Health Sciences	Principal (Head)
Wendy Taylor	United States Agency for International Development (USAID)	Director, Center for Accelerating Innovation and Impact
Tim Wells	Medicines for Malaria Venture (MMV)	Chief Scientific Officer

ADDITIONAL EXPERT	ORGANISATION	TITLE
Matthew Albert	Institut Pasteur Inserm U818	Head of the Laboratory of Dendritic Cell Immunobiology Director of Research
Darragh Duffy	Institut Pasteur	Research Manager, Immunology Department
Arnaud Fontanet	Institut Pasteur	Head of the Emerging Diseases Epidemiology Unit
Angela Loyse	St. George's University London	Academic Clinical Lecturer, Infectious Diseases Specialist Registrar
Mathieu Picardeau	Institut Pasteur	Head of the Biology of Spirochetes Unit
Harry Thangaraj	St. George's University London	Director, Access to Pharmaceuticals Project, Infections and Immunity Research Centre, Division of Clinical Sciences

ANNEXE 3

Survey respondent list

- AbbVie
- Aeras
- American Leprosy Missions (ALM)
- amfAR, The Foundation for AIDS Research*
- Anacor Pharmaceuticals
- Apopo VZW
- Argentinian Ministry of Science, Technology and Productive Innovation (MINCYT)
- Argentinian National Council for Scientific and Technical Research (CONICET)
- Arisan Therapeutics
- Atomo Diagnostics
- Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO)
- Australian Department of Foreign Affairs and Trade (DFAT)
- Australian Department of Industry
- Australian National Health and Medical Research Council (NHMRC)
- Australian Research Council (ARC)*
- Austrian Leprosy Relief Association (ALRA)
- Barcelona Institute for Global Health (ISGlobal)
- BASF SE
- Bayer CropScience
- Baylor College of Medicine
- Becton, Dickinson and Company (BD)
- Belgian Ministry of Foreign Affairs and the Belgian Development Cooperation (DGDC)
- Bernhard Nocht Institute for Tropical Medicine (BNI)
- Bill & Melinda Gates Foundation
- Biocan Diagnostics, Inc
- Biological E Ltd
- Bioneer
- Biovac Institute
- Brazilian Development Bank (BNDES)
- Brazilian Foundation for Support of Scientific and Technological Research in the State of Santa Catarina (FAPESC)
- Brazilian Foundation to Support Scientific and

- Technological Development Cearense (FUNCAP)
- Brazilian Innovation Agency (FINEP)
- Brazilian Ministry of Health: Department of Science and Technology (DECIT)
- Brazilian Research Support Foundation of the State of Bahia (FAPESB)
- Brazilian Research Support Foundation of the State of Minas Gerais (FAPEMIG)
- Canadian Department of Foreign Affairs, Trade and Development (Global Affairs Canada)*
- Canadian Institutes of Health Research (CIHR)
- Carlos III Health Institute
- Cebu Leprosy and Tuberculosis Research Foundation (CLTRF)
- Centre for the AIDS Programme of Research in South Africa (CAPRISA)*
- Cepheid
- Chilean National Commission for Scientific and Technological Research (CONICYT)
- Chilean National Fund for Scientific and Technological Development (FONDECYT)
- Colombian Department for Science, Technology and Innovation (Colciencias)
- CONRAD
- CSL Ltd
- Cuban Center for Genetic Engineering and Biotechnology (CIGB)*
- Damien Foundation (DFB)
- Danish Ministry of Foreign Affairs and the Danish International Development Agency (DANIDA)
- Defence Materials Technology Centre (DMTC)
- DesignMedix, Inc.
- Drugs for Neglected Diseases initiative (DNDi)
- Dutch Ministry of Foreign Affairs - Directorate General of Development Cooperation (DGIS)
- Dutch Organisation for Scientific Research (NWO)
- Eisai Co., Ltd.
- Emergent Biosolutions
- European & Developing Countries Clinical Trials

* Denotes organisations where data was only received via the HIV Vaccines and Microbicides Resource Tracking Working Group
* Funding data taken from publicly available sources

- Partnership (EDCTP)
- European Commission including the Directorate-General for Research and Innovation
- European Vaccine Initiative (EVI)
- FAIRMED - Health for the Poorest
- Fast-track Diagnostics Ltd
- Fio Corporation
- Fondation Mérieux
- Fontilles
- Foundation for Innovative New Diagnostics (FIND)
- French National Agency for Research on AIDS and Viral Hepatitis (ANRS)
- French National Institute of Health and Medical Research (Inserm)
- French National Research Agency (ANR)
- Fundació La Caixa
- Gavi, the Vaccine Alliance (previously the Global Alliance for Vaccines and Immunizations)
- GeoVax Labs, Inc.
- German Federal Ministry for Economic Cooperation and Development (BMZ)
- German Federal Ministry of Education and Research (BMBF)
- German Federal Ministry of Health (BMG)
- German Leprosy and TB Relief Association (DAHW)
- German Research Foundation (DFG)
- GlaxoSmithKline (GSK)
- Global Health Innovative Technology Fund (GHIT Fund)
- Global Solutions for Infectious Diseases
- GSK Bio
- Hawaii Biotech, Inc.
- Health Research Council of New Zealand (HRC)
- Hebron Farmacêutica Ltd
- Hospital Vall d'Hebron
- ImQuest Biosciences*
- Indian Council of Medical Research (ICMR)
- Indian Council of Scientific and Industrial Research (CSIR)

- Indian Department of Biotechnology, Ministry of Science and Technology (DBT)
- Indian Department of Science and Technology (DST)
- Indian Ministry of Health & Family Welfare
- Innovative Medicines Initiative (IMI)[#]
- Innovative Vector Control Consortium (IVCC)
- Institut Pasteur
- Institute of Tropical Medicine Antwerp/Prince Leopold Institute of Tropical Medicine (ITM)
- Integral Molecular
- International AIDS Vaccine Initiative (IAVI)
- International Centre for Genetic Engineering and Biotechnology (ICGEB), India
- International Partnership for Microbicides (IPM)^{*}
- International Union Against Tuberculosis and Lung Disease
- International Vaccine Institute (IVI)
- Irish Aid
- Japanese National Institute of Infectious Diseases (NIID)^{*}
- Johnson & Johnson
- Kineta
- KNCV Tuberculosis Foundation
- Laboratório Farmacêutico do Estado de Pernambuco (LAFEPE)
- Lepra India - Blue Peter Public Health & Research Centre (BPHRC)
- Leprosy Research Initiative (LRI)
- Liverpool School of Tropical Medicine (LSTM)
- Mahidol University^{*}
- Mapp Biopharmaceutical
- Max Planck Society - Max Planck Institute for Infection Biology (MPIIB)
- Médecins Sans Frontières (MSF)
- Medicines for Malaria Venture (MMV)
- Mexican National Council of Science and Technology (CONACYT)
- Mexican National Institute of Public Health, Instituto Nacional de Salud Pública (INSP)

- MSD (Merck)
- Mymetics
- Novartis
- Ontario HIV Treatment Network*
- Osel*
- Otsuka Pharmaceutical Co. Ltd
- Ouro Fino
- PATH including the Malaria Vaccine Initiative (MVI)
- Pfizer
- Population Council
- Public Health Agency of Canada (PHAC)*
- Public Health England
- Research Centre Borstel
- Research Council of Norway
- Royal Norwegian Ministry of Foreign Affairs and the Norwegian Agency for Development Cooperation (NORAD)
- Royal Society of New Zealand (RSNZ)
- Sabin Vaccine Institute
- Sanofi
- Sasakawa Memorial Health Foundation (SMHF)
- Science Foundation Ireland
- Serum Institute of India
- Shionogi & Co., Ltd.
- Sidaction*
- Sigma-Tau
- South Africa Medical Research Council (MRC)*
- South African Department of Science and Technology (DST)
- Spanish AIDS Research Institute (Institut de Recerca de la Sida) (IrsiCaixa)*
- Spanish Ministry of Foreign Affairs and Cooperation for Development (MAEC) and the Agency of International Cooperation for Development (AECID)
- State of Sao Paulo Research Foundation (FAPESP)^
- Statens Serum Institute (SSI)
- Strategic Research Council, Academy of Finland
- Sumagen Co. Ltd.*
- Swedish Research Council

- Swiss Agency for Development and Cooperation (SDC)
- Swiss National Science Foundation (SNSF)
- Swiss State Secretariat for Education, Research and Innovation (SERI)
- Swiss Tropical & Public Health Institute (Swiss TPH)
- Syngenta Crop Protection AG
- Takeda Pharmaceutical Company
- TB Alliance
- Thailand Government Pharmaceutical Organisation (GPO)
- Thailand National Science and Technology Development Agency (NSTDA)
- The Leprosy Mission International (TLM)
- The Wellcome Trust
- TuBerculosis Vaccine Initiative (TBVI)
- Turing Foundation
- UBS Optimus Foundation
- UK Department for International Development (DFID)
- UK Medical Research Council (MRC)
- University of Dundee
- University of Georgia (UGA)
- University of Nebraska Medical Center
- University of North Carolina
- University of Pittsburgh
- University of Siena
- US Agency for International Development (USAID)
- US Biomedical Advanced Research and Development Authority (BARDA)[#]
- US Centers for Disease Control (CDC)
- US Department of Defense (DOD) including the US Army Medical Research Institute of Infectious Diseases (USAMRIID), the US Naval Medical Research Center (NMRC) and the Walter Reed Army Institute of Research (WRAIR)
- US National Institutes of Health (NIH) including the US National Institute of Allergy and Infectious Disease (NIAID)
- US Veterans Health Administration*

* Denotes organisations where data was only received via the HIV Vaccines and Microbicides Resource Tracking Working Group

[^] FAPESP participated in the survey but data was received too late to be included in the analysis

[#] Funding data taken from publicly available sources

- Worcester Polytechnic Institute (WPI)
- World Bank
- World Health Organization: Special Programme for Research and Training in Tropical Diseases (WHO/TDR)
- Zolgen Labs

ANNEXE 4

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