WHO–Product Development Partnerships Forum

Collaboration and perspectives during the COVID-19 pandemic

Meeting report
1–2 June 2022
As the COVID-19 pandemic is re-shaping global health, it is having profound implications on the work of product development partnerships (PDPs). For example, health systems in target countries of PDPs were weakened, and funding of PDPs has become less certain. At the same time, certain opportunities have arisen during the pandemic, especially in terms of technological breakthroughs and a renewed policy focus on health.

The goal of this forum was to offer a space for PDPs to deliberate on how best to adapt to the new situation created by the pandemic and to ensure that new opportunities outweigh the negative impact. Furthermore, the forum provided WHO with the opportunity to engage more closely with the PDP community, to update them on recent developments and to discuss possibilities for further collaboration, especially with WHO’s Science Division. PDP funders were invited to join the last two sessions of the forum in order to update them on the discussions held and to discuss means for facilitating the interaction between PDPs and WHO.

Senior management of WHO, including the Assistant Director-General, Access to Medicines and Health Products, Dr Mariangela Simão, and Chief Scientist, Dr Soumya Swaminathan, spoke at the meeting and shared their ambition to further improve and streamline interactions between PDPs and WHO. The meeting was organized by Dr Matthias Helble in the Evidence to Policy and Impact unit of the Research for Health Department of the Science Division under the supervision of Ms Tanja Kuchenmüller, Unit head, Evidence to Policy and Impact, and Dr John Reeder, Director, Research for Health Department, who moderated several sessions and led the overall discussions. The meeting was held in a hybrid format in the afternoons of 1–2 June 2022 at WHO headquarters. The agenda of the forum and the list of participants are attached as Annex 1.

Impact of the COVID-19 pandemic on the work of PDPs

PDPs reported disruption of their work throughout the pharmaceutical value chain due to the COVID-19 pandemic, as some continued their activities, while others took on work related to COVID-19. At each stage, from research and development (R&D) and manufacture to delivery of health care, PDPs overcame the challenges and contributed to global mobilization in response to the pandemic (Fig. 1). The shifting of priorities complicated R&D for existing pipeline products. At the same time, the COVID-19 pandemic has provided breakthroughs for several new technologies, especially messenger ribonucleic acid (mRNA) technology, which offers the potential for developing new vaccines against a range of diseases of poverty. mRNA vaccines, however, still have limited uptake because of the current requirement for thermostability. Furthermore, a number of additional obstacles will have to be overcome before mRNA vaccines can be developed for neglected tropical diseases, including the uncertain market for vaccines against these diseases, the complicated life cycles of the pathogens and the fact that the diseases result in high morbidity but, in some cases, low mortality.

1 As the meeting was held under Chatham House rules, the report does not attribute any statement to a particular participant.
A market for vaccines against endemic diseases may, however, be important for sustaining the manufacturing capacity in non-pandemic times. Global players will have to work to support the vision of mRNA technology transfer hubs, addressing the cost and supply of the raw materials, and tackle the barriers to intellectual property rights and access to knowledge.

COVID-19 resulted in staffing shortages at the manufacturing stage, and prioritization of shipping of COVID-19-related products disrupted supply chains. This, however, increased coalition-building and collaboration between the public and the private sectors to strengthen global security. Another positive element was the emergence of disruptive technologies in diagnostics, such as the spread of genomic sequencing and simplification, as well as decentralization, of existing tools (such as the polymerase chain reaction method).

COVID-19 had direct effects on health-care delivery, such as in the roll-out of both existing and new technologies, and there were also collateral effects, such as significant decreases in diagnosis and screening for drug-sensitive tuberculosis and diagnosis of malaria. COVID-19 also, however, resulted in the introduction of service delivery innovations by PDPs and other partners, from virtual case management and HIV/AIDS self-testing to multi-month dispensing of products.

Overall, the COVID-19 pandemic has highlighted the gaps in the value chain of delivering new health technologies, the lack of manufacturing capacity in Africa, inadequate capacity of regulatory authorities, delay in updating treatment guidelines in national health systems and insufficient distribution channels. WHO continues to focus on such inequities.

Participants noted that the pandemic has triggered a paradigm shift among PDPs, to an emphasis on preparedness and not just response. Preparedness involves increasing the R&D portfolio to other diseases, from Lassa and Rift Valley fever to today’s “disease X”, and using an end-to-end approach. Linking endemic disease to emergency response capacity would also help to demonstrate the full public health value of PDPs. This will require finding common technology goals to improve access and complement support for increasing capability, capacity and sustainability for locally relevant disease targets.

**Action points:**

- WHO to continue strengthening pharmaceutical production capacity in low- and middle-income countries, by initiatives such as establishment of a global mRNA vaccine technology transfer hub in South Africa and of a global biomanufacturing training hub in the Republic of Korea
- WHO to continue regulatory strengthening across the globe and to help PDPs with regulatory approval
- PDPs and WHO to start thinking about how parallel processes might accelerate or replace many sequential steps, such as steps that can be taken in parallel to accelerate the time to approval, introduction and scaling-up of health technologies
- PDPs to consider moving from pandemic response to pandemic preparedness, by developing an R&D portfolio for various diseases and using an end-to-end approach.

The COVID-19 pandemic and funding of PDPs

Participants highlighted the twin challenges of financing R&D for diseases of poverty, namely, lack of political pressure in the public sector and lack of economic benefit in the private sector. Underfunding of R&D in this area was illustrated by the fact that over US$100 billion have flowed to COVID-19 vaccines within 1 year, while, during the same period, R&D for all aspects of tuberculosis has attracted less than US$1 billion.

A number of policy tensions affect the landscape of biomedical innovation and access in low- and middle-income countries. (i) Although affordability is core to the PDP approach, reliance on the private sector may not result in commensurate returns; (ii) promotion of bilateralism works against capacity-building in disease-endemic countries; (iii) facilitation of research priority-setting at global level is not translated into national priorities; and (iv) some PDPs have concentrated on the COVID-19 response, while others have continued their mission.

These tensions are accompanied by a shortfall of funding for R&D, less unrestricted funding and stalled renewals of multi-year funding commitments since 2019. Furthermore, the possibility of diversifying funding is limited, and there is no “Global Fund for Access”, even as PDPs bring more products to the market. The system must be less fragile to ensure that the core mission of PDPs can be sustained.

Participants emphasized that, in the innovation ecosystem, the PDP model had demonstrated its resilience, due to the flexibility of its structure: no large expensive infrastructure, few fixed costs and minimal bureaucracy with relatively low overheads.
Several speakers proposed means for increasing PDP financing and showed how PDP expertise, training and capacity could be repurposed for the broader public health agenda while PDPs continue their work.

**Action points:**

- WHO to help make the case for existing donors to continue funding, particularly long-term, predictable funding. This could include making an investment case for specific target product profiles (TPPs) or products or by vouching for the work of PDPs
- WHO to invite new funders, such as multilateral development banks, in order to diversify and expand the funding base of PDPs, and to explore new business strategies for PDPs to sustain and scale up the development of new health technologies
- PDPs and WHO to assess how to benefit from new funding facilities, such as the Financial Intermediary Fund for pandemic prevention, preparedness and response, to increase PDP funding
- PDPs to consider positioning themselves as part of a resilient health research system to which governments can turn in time of crises such as a pandemic.

**COVID-19 and clinical trials**

PDPs cited numerous examples of how the COVID-19 pandemic has affected their clinical trials. Several PDPs reported that trials had been slowed for various reasons. For example, some trial participants were uneasy about travelling to clinic sites or were unable to because of social distancing measures. Malaria trials during the pandemic met other challenges, such as lack of surge capacity and staff shortages, delays and difficulty in maintaining trial infrastructure during the pandemic. Furthermore, COVID-19 diverted regulatory attention from existing products under review.

At the same time, expanded clinical testing for COVID-19 has resulted in significant lessons for managing the innovation ecosystem, from conducting large platform trials like SOLIDARITY and RECOVERY to encouraging open access to COVID-19 publications. Such lessons have, however, been uneven across the globe: clinical trial infrastructure was rapidly built up in some regions and especially in high-income countries with better research infrastructure, resulting in considerable inequity in where clinical trials were conducted.

Participants agreed that WHO had played an essential role with regard to clinical trials, especially in terms of (i) convening joint reviews in various diseases areas; (ii) coordinating considerations of quality; (iii) overseeing clinical trials to avoid duplication and waste; (iv) setting standards for clinical trials, registration of research sites and directories for PDP access; (v) countering fear and misinformation; and (vi) extending access to WHO research publications. Participants nevertheless suggested that WHO has additional opportunities for enhancing its role in clinical trials.

**Action points:**

- WHO to continue to support infrastructure for collecting clinical samples and harmonizing global clinical trials
- WHO national and regional offices to help to create an enabling environment for conducting clinical trials
- WHO to help to strengthen human resources in LMICs to conduct R&D and clinical trials
- WHO to work towards bringing order to the global approach to drug repurposing and encouraging low-cost production of monoclonal antibodies
- PDPs and WHO to work towards facilitating import licenses for products used in clinical trials.

**Future collaboration between PDPs and WHO**

PDPs agreed on the central role of WHO in defining research priorities. Given its convening power, WHO has the capacity to attract the world’s leading experts in each area. Furthermore, WHO could reconsider how to connect policy-makers on the demand side to the R&D pipeline. One example is the way in which the Coalition of Epidemic Preparedness Innovations and WHO helped to accelerate R&D for a vaccine against Lassa fever by engaging West African policy-makers. The participants requested that WHO raise the profile of their R&D agenda in its global disease plans and help to communicate it outside WHO.

Several PDPs highlighted the central role of WHO in advocating for, defining and coordinating public health TPPs and offered to contribute to the development of future TPPs under the leadership of WHO. Participants further noted that TPPs, data requirements and surveillance should be aligned. Multiple collections were considered valuable for surveillance, although standards for interoperability could enhance their value, from creators to users. The rapidly evolving evidence base might be used to build “living” TPPs; however, participants noted that manufacturers required some degree of certainty for developing products to specifications.

WHO’s role in providing living guidelines, updating existing guidelines and providing global emergency use approvals was seen as particularly valuable. Participants noted that WHO had rapidly adapted guidelines during the pandemic. They suggested that WHO establish guidelines for R&D on new health technologies. They further noted that a change in guidelines must be translated into actual changes of policies and be implemented by governments.

PDPs discussed their considerable difficulties in introducing new products onto the market. They recommended that WHO play a more prominent role in paving the way for new products, especially for those with greater cost-effectiveness but higher unit prices. WHO should continue to promote fair pricing. The participants also proposed that WHO country and regional offices support facilitation of regulatory approval and the introduction of products onto local markets.

Some discussions addressed ways in which WHO could support PDPs in shortening the “time to patients”, including local capacity-building and expediting the process in
the country. WHO should help shorten the time to approval, introduction and scale-up for health technologies and ensure back-up plans for surge support. Participants noted that WHO has developed tools to help countries make full use of scientific evidence in policy-making, which facilitate and accelerate the uptake of new technologies.

Throughout the Forum, there were recurrent calls for an end-to-end approach, which, at all stages, promotes equitable access and ensures that all the necessary evidence is considered and used in making decisions. A new initiative with this approach in mind is emerging in the SECURE Initiative involving the Global Antibiotic Research and Development Partnership, WHO and other partners.

**Action points:**

- WHO to further its role in defining global research priorities
- WHO to advocate for, define and coordinate TPPs for public health, and PDPs to contribute to their development
- WHO to consider establishing guidelines for R&D of new health technologies
- WHO to promote translation of new guidelines into changes in policies and their implementation
- WHO to help PDPs in introducing new health technologies onto markets, especially new products that are more cost-effective but have higher unit prices
- PDPs and WHO to promote an end-to-end approach to ensure better, more equitable access to new health technologies.

Adequate funding is necessary to realize the potential of increased collaboration between PDPs and WHO. Participants commented that adequate resources are necessary on both sides to assume new responsibilities and exploit the full potential of enhanced collaboration and coordination.

**As concrete next steps,** the Emergency Preparedness and Response unit of the Research for Health Department of the Science Division will identify, in coordination with relevant technical departments, how best to follow up on the action points listed above. Given the very positive feedback received and an explicit request, the unit will organize the WHO–PDP forum annually to ensure continuous dialogue between PDPs and WHO.

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**Annex 1. Agenda of the forum**

**Day 1. Wednesday 1 June 2022**

**Time:** 14:00–18:00 (CEST)

**14:00–14:15 Welcoming remarks**

*Soumya Swaminathan, Chief Scientist, WHO*

**14:15–15:30 Session 1. Providing access to new health technologies in stretched health systems**

The COVID-19 pandemic has put significant additional pressure on health systems, which risks undermining the capacity of PDPs to deliver new health technologies to the poorest and most vulnerable. This session discusses experiences by PDPs to cope with the current situation and, in general, to provide equitable access to new health technologies in low- and middle-income countries.

**Main questions to be discussed:**

- What are the biggest collateral effects of the pandemic for the work of PDPs in terms of delivery of new health technologies?
- What do PDPs expect WHO to do to promote continuity in providing access to new health technologies?

*Moderator: Mariangela Simão, Assistant Director-General, Access to Medicines and Health Products, WHO*

**Speakers:**

- Brid Devlin, Executive Vice-President, Product Development, International Partnership for Microbicides
- Emma Hannay, Chief Access Officer, FIND, the Global Alliance for Diagnostics
- Nanthalile Mugala, Chief, Africa Region, PATH
- Andrew Deyi Saibu, Africa Regional Coordinator, Innovative Vector Control Consortium
- Kavita Singh, Director, South Asia Regional Office, Drugs for Neglected Disease initiative

**15:30–15:45 Break**
The COVID-19 pandemic has led to a severe economic contraction around the world, and the fight against the virus has cost governments billions of dollars. In addition, the policy focus is shifting towards pandemic preparedness. As a consequence, PDPs are facing the risk of a funding shortfall. Furthermore, several PDPs have redirected some of their resources to respond to COVID-19. This session aims to evaluate the current situation and to outline possible options.

Main questions to be discussed:

- How do PDPs cope with funding shortfalls and uncertainties, and are there innovative ways forward?
- What could be WHO's role in promoting the PDP model and in enhancing financing stability of PDPs?

Moderator: Fatima Serhan, Executive Officer, Office of the Chief Scientist, WHO

Speakers:

- Jennifer Cohn, Global Access Project Leader, Global Antibiotic Research and Development Partnership
- Nick Drager, Executive Director, TB Vaccine Initiative
- Ole F. Olesen, Executive Director, European Vaccine Initiative
- Mel Spigelman, President and Chief Executive Officer, TB Alliance
- Joelle Tanguy, External Affairs Director, Drugs for Neglected Disease initiative

17:00–18:15 Session 3: High-level discussion on additional challenges for PDPs arising from the COVID-19 pandemic

This session aims to discuss additional key bottlenecks which have historically impacted on PDPs' work, and which have been compounded by the COVID-19 pandemic, and to identify way to address them through enhanced synergies between WHO and PDPs.

Main questions to be discussed:

- What additional key challenge/s have PDPs been confronted with so far in their work, including during the pandemic, and what are lessons learned?
- How could a strong collaboration between WHO and PDPs help to overcome those challenges?

Moderator: David Reddy, Chief Executive Officer, Medicines for Malaria Venture

Challenge 1: Alignment on target product profiles, data requirements and surveillance, In-Kyu Yoon, Acting Director, Programmes and Innovative Technology, Coalition of Epidemic Preparedness Innovations (tbc)

Challenge 2: Evidence requirements for the development of policy recommendation, prequalification listing, and country policy and regulatory process, Tom McLean, Chief Access Officer, Innovative Vector Control Consortium

Challenge 3: On-ramps for innovation to accelerate uptake, David Kaslow, Chief Scientific Officer, PATH

WHO's reflection (5 minutes)

19:00 Dinner (hosted by Drugs for Neglected Disease initiative and Medicines for Malaria Venture) (location tbc)

Day 2. Thursday 2 June 2022

Time: 13:00–18:00 (CEST)
**13:00–14:15 Session 4: Leveraging on expanded clinical trials infrastructure**

The emergency to develop COVID-19 vaccines has led to a fast build up and expansion of clinical trial infrastructure in some regions. In the future, PDPs might be able to leverage on this infrastructure which could bring down costs and accelerate vaccine, treatment, and diagnostic development. The session discusses how PDPs could best benefit from these trends to increase access to other public health priority products.

Main questions to be discussed:

- What are the lessons learned in terms of accelerating and scaling clinical trials?
- How could WHO assist PDPs in terms of clinical trials?

**Moderator:** Soumya Swaminathan, Chief Scientist, WHO

**Speakers:**

- Kundai Chinyenze, Executive Medical Director, International AIDS Vaccine Initiative
- Jerome Kim, Director General, International Vaccine Institute
- James Kublin, Executive Director, HIV Vaccine Trials Network
- David Reddy, Chief Executive Officer, Medicines for Malaria Venture

**14:15–15:30 Session 5: What does the mRNA technology hold for PDPs?**

The COVID-19 pandemic has helped the mRNA technology to its breakthrough. The latter offers the promise to develop vaccines against a range of diseases of poverty quicker, safer, and cheaper. The session discusses the opportunities and challenges using mRNA technology for PDPs.

Main questions to be discussed:

- What opportunities do PDP see in this new technology and should these be exploited jointly?
- In addition to current initiatives, such as the mRNA technology transfer hubs, how can WHO further support PDPs in their efforts to utilize mRNA technology?

**Moderator:** Vasee Moorthy, Lead, Research for Health Department, Science Division, WHO

**Speakers:**

- Corey Casper, Chief Executive Officer, Access for Advanced Health Institute
- David Kaslow, Chief Scientific Officer, PATH
- In-Kyu Yoon, Acting Director, Programmes and Innovative Technology, Coalition of Epidemic Preparedness Innovations

**15:30–15:45 Recap: Overview of key findings**

**Presenter:** Anthony D. So, Professor of the Practice, Innovation+Design Enabling Access Initiative, Johns Hopkins Bloomberg School of Public Health

**15:45–16:00 Break**

**16:00–17:00 Session 6: Fostering collaboration between PDPs and WHO (open to participation by PDP funders)**

In this session, WHO shares information and updates on PDP related activities offered by the Research for Health Department, such as the newly established Coordinated Scientific Advice, and by other WHO departments, and invites PDPs to provide comments and feedback.

Main questions to be discussed:

- How will the new products and activities strengthen the collaboration between PDPs and WHO?
- Which additional technical products and activities should WHO provide to facilitate the work of PDPs and the interaction with WHO?

**Moderator:** John Reeder, Director, Research for Health Department, Science Division, WHO

**Speakers:**

- Rogério Gaspar, Director, Regulation and Prequalification, WHO
- Anna Laura Ross, Unit Head, Emerging Technologies, Research Prioritization and Support, Research for Health Department, Science Division, WHO
- Vasee Moorthy, Lead, Research for Health Department, Science Division, WHO

**17:00–17:50 Session 7: Summary and ways forward (open to participation by PDP funders)**

This session provides a summary of all discussions held during the 2-day forum and offers the possibility of dialogue with the donor community. PDP funders are invited to have an informal exchange the opportunities and challenges identified.

**Moderator:** John Reeder, Director, Research for Health Department, Science Division, WHO

**Speaker:**

Bernard Pécoul, Executive Director, Drugs for Neglected Disease initiative

**17:50–18:00 Closing remarks**

Soumya Swaminathan, Chief Scientist, WHO
### Annex 2. List of participants

**PDPs (in alphabetical order)**

<table>
<thead>
<tr>
<th>Name of PDP</th>
<th>Name of participant</th>
<th>Position, contact details</th>
<th>How</th>
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<tbody>
<tr>
<td>Access to Advanced Health Institute (formerly Infectious Disease Research Institute)</td>
<td>Anna Marie Beckmann, PhD</td>
<td>Executive Vice-President, Product Development</td>
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<td></td>
<td>Dr Corey Casper</td>
<td>Chief Executive Officer</td>
<td>In person</td>
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<td></td>
<td>Alan Lew</td>
<td>Senior Clinical Operations Manager</td>
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<td>Zachary Sagawa</td>
<td>Senior Manager, Regulatory Affairs</td>
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<td></td>
<td>Emily Voigt, PhD</td>
<td>Principal Scientist</td>
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<tr>
<td>Coalition for Epidemic Preparedness Innovations</td>
<td>In-Kyu Yoon</td>
<td>Acting Director, Global Head of Programmes and Innovative Technology</td>
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<tr>
<td>Drugs for Neglected Diseases initiative</td>
<td>Michelle Childs</td>
<td>Director, Policy Advocacy</td>
<td>In person</td>
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<td></td>
<td>Dr Bernard Pécoul</td>
<td>Executive Director</td>
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<td>Dr Kavita Singh</td>
<td>Director, South Asia</td>
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<td></td>
<td>Nathalie Strub-Wourgaft</td>
<td>Medical Director</td>
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<td>Joelle Tanguy</td>
<td>External Affairs Director</td>
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<td>European Vaccine Initiative</td>
<td>Dr Ole F. Olesen</td>
<td>Executive Director</td>
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<td>FIND, the global alliance for diagnostics</td>
<td>Willo Brock</td>
<td>Vice-President, External Affairs</td>
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<td></td>
<td>Baptiste Fontaine</td>
<td>Senior Manager, Resource Mobilization</td>
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<td>Emma Hannay</td>
<td>Chief Access Officer</td>
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<td>Elena Ivanova Reipold</td>
<td>Deputy Director, Technology Innovations</td>
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<tr>
<td>Global Antibiotic Research and Development Partnership</td>
<td>Dr Jennifer Cohn</td>
<td>Global Access Project Leader</td>
<td>In person</td>
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<td>Matthew Doherty</td>
<td>Head of External Relations</td>
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<td>HIV Vaccine Trials Network</td>
<td>Dr James Kublin</td>
<td>Executive Director</td>
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<tr>
<td>International AIDS Vaccine Initiative</td>
<td>Dr Kundai Chinyenze</td>
<td>Executive Medical Director</td>
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<td>Dr Hester Kuipers</td>
<td>Executive Director, International AIDS Vaccine Initiative Europe</td>
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<td>International Partnership for Microbicides</td>
<td>Dr Brid Devlin</td>
<td>Executive Vice President, Product Development, Director, International Partnership for Microbicides Belgium</td>
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<td>Nelette van Niekerk</td>
<td>Senior Director, Biometrics</td>
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<td>Innovative Vector Control Consortium</td>
<td>Dr Nick Hamon</td>
<td>Chief Executive Officer</td>
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<td>Tom McLean</td>
<td>Chief Access Officer</td>
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<td>Andrew Deyi Salifu</td>
<td>Africa Regional Coordinator (Engagement Manager)</td>
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<td>International Vaccine Institute</td>
<td>Dr Jerome H. Kim</td>
<td>Director-General</td>
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<td>Medicines for Malaria Venture</td>
<td>Silvia Ferazzi</td>
<td>Senior Director, Advocacy</td>
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<td>Dr George Jagoe</td>
<td>Executive Vice-President, Access and Product Management</td>
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<td>Dr David Reddy</td>
<td>Chief Executive Officer</td>
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**PATH**
- Jeff Bernson, Chief, Programs & Innovation Officer (Zoom)
- Dr David C. Kastlow, Chief Scientific Officer (In person)
- Dr Nanthalile Mugala, Chief of Africa Region (Zoom)

**TB Alliance**
- Mr Thomas Lynch, Director, Communications (Zoom)
- Stephanie Seidel, Senior Manager, Community Engagement (Zoom)
- Dr Mel Spigelman, President and Chief Executive Officer (Zoom)
- Pietro Turilli, Senior Vice-President, External Affairs (Zoom)

**TB Vaccine Initiative**
- Dr Nick Drager, Executive Director (Zoom)
- Elly van Reit, Senior Scientist (Zoom)
- Gerald Voss, Scientific Director (Zoom)

**Funders**

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<tr>
<th>Name</th>
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<tr>
<td><strong>United States Agency for International Development, US President's Malaria Initiative</strong></td>
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<tr>
<td>Dr Meera Venkatesan</td>
<td>Acting team lead</td>
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<td><strong>UNITAID</strong></td>
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<tr>
<td>Mrs Janet Ginnard</td>
<td>Coordinator, Strategy</td>
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<td><strong>Kreditanstalt für Wiederaufbau</strong></td>
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<td>Mr Gerald Läzer</td>
<td>Portfolio manager</td>
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<td><strong>Foreign Commonwealth Development Office</strong></td>
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<tr>
<td>Dr Dirk H. Mueller</td>
<td>Senior Health Adviser, Health Research Team, Research and Evidence Division</td>
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**European and Developing Countries Clinical Trials Partnership**
- Ms Lara Pandya, Senior Strategic Partnerships Officer (Zoom)

**Global Health Innovative Technology Fund**
- Dr Isaac Chikwanha, MBCChB, MPH (Zoom)
- Dr Hayato Urabe, Senior Director, Investment Strategy, Portfolio Development and Innovations (Zoom)

**Funders Group Secretariat**
- Alexandra Fullem
- Susan Bill

**World Health Organization**

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<td><strong>Access to Medicines and Health Products</strong></td>
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<td>Dr Mariangela Simão</td>
<td>Assistant Director-General</td>
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<td>Rogerio Pinto de Sá Gaspar</td>
<td>Director, Regulation and Prequalification</td>
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<td><strong>Science</strong></td>
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<td>Dr Sourmya Swaminathan</td>
<td>Chief Scientist</td>
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<td>Dr Vasee Moorthy</td>
<td>Lead, Research for Health Department</td>
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<td>Anna Laura Ross</td>
<td>Unit Head, Emerging Tech, Research Prioritization and Support, Research for Health Department</td>
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<td>Martina Penazzato</td>
<td>Medical Officer, Research for Health Department</td>
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### Organizers

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<tr>
<td>Dr John Reeder</td>
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<td>Tanja Kuchenmüller</td>
<td>Unit Head, Emergency Preparedness and Response, Research for Health Department, Science Division</td>
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<td>Dr Matthias Helble</td>
<td>Scientist, Emergency Preparedness and Response, Research for Health Department, Science Division</td>
<td>Zoom</td>
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### Rapporteurs

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