

CONFERENCE OVERVIEW

Bringing innovation to the frontline: new tools to advance the global response to vector-borne diseases

11-12 May 2017

Fundación Ramón Areces, Madrid, Spain

Background

Vector-borne diseases account for nearly one-fifth of the estimated global burden of infectious diseases. This includes not only malaria (the most deadly), but also dengue fever, yellow fever, Japanese encephalitis, leishmaniasis, lymphatic filariasis, schistosomiasis and Chagas disease, as well as emerging arboviral diseases such as Zika virus and chikungunya, all of them transmitted by mosquitoes, ticks, flies and other arthropods. Recent outbreaks, including Zika, have served as a stark reminder of the need to advance the global response to vector-borne disease to address these public health threats. Not only does improved vector control lead to significant public health gains across numerous diseases, it can also contribute to the broader development agenda by addressing key Sustainable Development Goals such as reduced poverty and inequality.

Vector control tools are pivotal to the control and elimination of vector-borne diseases. Of the 663 million malaria cases averted in sub-Saharan Africa between 2001 and 2015, it has been estimated that nearly 80% were due to the use of Long Lasting Insecticide Treated Nets (LLINs) and Indoor Residual Spraying (IRS). Further, the World Health Organization (WHO) calculates that up to 50-60% of the funds invested in the control and elimination of malaria and other neglected tropical diseases in the following 15 years will be invested in vector control products and interventions.

Despite the gains achieved through the use of cost-effective vector control interventions, multiple factors threaten future progress. Critical among these are resistance to insecticides; outdoor disease transmission for which limited control tools are available; and residual transmission whereby disease transmission persists despite good coverage with high-quality vector control interventions. When added to the potential expansion of harmful vector species to broader geographical areas due to climate change, the risks associated with vector-borne diseases continue to expand. Ensuring the development of new tools that can advance the global response to these diseases is therefore a key priority.

Investments in innovative vector control tools by the private sector, the public-private partnership IVCC, academia and others has resulted in a rich R&D pipeline of novel candidates that offer the possibility of transforming the methods and impact of vector control to prevent diseases in humans. In addition to three new insecticides (designed to overcome pyrethroid resistance) expected to become available for public health use in the coming years, innovation has resulted in new insecticide applications –eaves tubes, wall liners and clothing, and attractive sugar baited traps– as well as in entirely new approaches ranging from drugs for vector control to genetic tools. However, these products share challenges in translating from innovation and early development to advanced development and introduction at scale in a complex, donor driven public health market.

In light of these challenges, and the efficiencies that can be gained by tackling vector-borne illnesses in an integrated way, UNITAID is partnering with WHO and the Barcelona Institute for Global Health (IS Global) to host a conference on new tools for vector-borne diseases. A convening on this topic is timely, as the WHO “Global Vector Control Response”, which addresses how to reduce the burden and threat of vector-borne diseases through effective locally-adapted and sustainable vector control, is currently under discussion and is expected to be endorsed by the World Health Assembly in May, 2017.

Recognizing that significant work is already underway to accelerate the adoption of innovative vector control tools, particularly for malaria through the Innovation to Impact in Vector Control Partnership (I2I), this conference will focus specifically on the R&D pipeline for new products to address vector-borne diseases. It will offer a space for innovators and developers with non-conventional ideas to discuss how to advance innovation to ensure impact and access. It will examine opportunities for investment in products in development, but also uniquely, the variety of factors that drive industry engagement and field introduction of new products, including the acceptance and scale needed for successful vector control that can advance global health and development objectives.

Objectives

This 2-day conference will bring together key stakeholders (innovators, technical experts, policy-makers, funders and national programme managers) to discuss challenges and opportunities related to research and development for new vector control tools. Focus will be on product development, rather than product evaluation and market introduction given that reforms are underway to address key challenges at this stage of the product pipeline.

Specific objectives include:

- Showcase innovative vector control tools/approaches under development that may be made available in the near future, including but not limited to:
 - Tools to address outdoor / residual transmission , as well as insecticide resistance
 - Strategies based on genetic manipulation of vectors or other relevant organisms
 - Wolbachia and other biological tools
 - Modelling to inform research and product development
 - Advanced development of trial design to ensure rapid translation of evidence into policy
- Review priorities for vector control research and product development, including perspectives from countries and leading R&D researchers in the field
- Discuss the variety of factors that drive industry engagement in public health vector control R&D, key incentives for innovation and alternative business models
- Identify funding opportunities and gaps for different classes of vector control tools, including late stage development and early implementation
- Discuss critical enablers to new product adoption and scale-up in endemic countries, including training and capacity building needs

Target audience and format

In order to allow real discussions and exchange of thoughts, the conference will reunite at least a range 80-150 representatives from a variety of sectors relevant to vector control, including:

- International organizations focused on innovation in vector control
- Funding bodies
- Industry investing in R&D for new vector control tools
- National programme managers from NTDs and malaria
- Entomological researchers and academia in the fields of NTDs and malaria

The conference will be open to registration.

The conference will be in English, with simultaneous translation to Spanish. Depending on the final list of participants, translation into French may be also considered.

The conference format will include a small number of targeted presentations, with a strong emphasis placed on panel and plenary discussions.

Travel grants

Limited travel fellowships are available, but restricted to those individuals from malaria endemic countries. Should you be interested in applying for such a travel grant, kindly contact Matiana González at matiana.gonzalez@isglobal.org, attaching a statement of interest and a short CV, before March, 31st.

Candidates will be selected by the Steering Committee and informed about the decision on April, 7th.

About UNITAID

UNITAID is engaged in finding new ways to prevent, treat and diagnose HIV/AIDS, tuberculosis and malaria more quickly, more cheaply and more effectively. It identifies health solutions that show promise and invests in them to establish their viability so that partner organisations can then make them widely available. In its strategic period 2017-2021, UNITAID will maintain its commitment to the three diseases, and will also support a more integrated approach to health.

UNITAID seeks to address innovation barriers to ensure that technologies in the development pipeline reach their full potential and are brought to bear in the front line of the global response to disease. It does so by accelerating the late-stage development and market introduction of better health products and by influencing the dynamics of the innovation landscape to benefit those people in low income countries and lower-middle income countries.