

FIND EXTENDS NEGLECTED TROPICAL DISEASES PORTFOLIO TO INCLUDE SCHISTOSOMIASIS

- Programme focuses on development of rapid diagnostic tests for schistosomiasis to support control and elimination efforts
- Initial work streams to be supported by catalytic funding from the Bill & Melinda Gates Foundation, with additional funding and partnership from Merck, through the Merck Global Health Institute.

Geneva, Switzerland – *14 March 2019* – The Foundation for Innovative New Diagnostics (FIND) announced today the launch of a new schistosomiasis programme within its neglected tropical diseases (NTD) portfolio. The programme focuses on developing rapid diagnostic tests (RDTs) for detection of circulating anodic antigen (CAA) in blood and/or urine, to support national control and/or elimination programmes in countries where schistosomiasis is regularly found.

Schistosomiasis is caused by parasitic worms carried by freshwater snails and affects over 206 million people across 78 tropical and sub-tropical countries, with most of the burden found in sub-Saharan Africa. People can become infected when they come into contact with fresh water that is infested with worm larvae, while carrying out routine activities. The infection triggers immune reactions resulting in progressive organ damage, which can lead to chronic ill-health and ultimately death, if left untreated. Current World Health Organization (WHO) guidelines for schistosomiasis diagnosis recommend examination of stool and/or urine samples by microscopy to detect worm eggs, but this can be challenging especially when the intensity of the infection is low. Analysis of multiple samples over several days by highly trained microscopists is both time-consuming and challenging to deploy; inaccurate diagnosis can lead to treatment being stopped too soon and, as a result, infections quickly returning to their original levels.¹

CAA is secreted continuously by living schistosomes. A laboratory-based test for the antigen, with high sensitivity for all species of schistosomes that are of public health importance, is available. However, in order to achieve optimal sensitivity, the test requires complex sample processing steps and a reader for detection.

FIND is leading a consortium, together with WHO, that includes Mologic, UK, and Leiden University Medical Center (LUMC), Netherlands, to develop novel RDTs for schistosomiasis infection. Two RDTs for CAA are being developed: one to support ongoing schistosomiasis control programmes by providing data to estimate prevalence and intensity of infection, supporting the update of guidelines on routine use of RDTs for schistosomiasis; the other one with a higher sensitivity to support elimination efforts by identifying low infection intensities.

Initial work streams are being supported by catalytic funding from the <u>Bill & Melinda Gates Foundation</u>, with additional funding from Merck, through the <u>Merck Global Health Institute</u>, which is amongst the scientific partners of this program. The science and technology company Merck launched its Global Health Institute in April 2017 with the mission to develop transformative health solutions to support control and elimination

¹ World Health Organization (2018). Schistosomiasis. <u>https://www.who.int/news-room/fact-sheets/detail/schistosomiasis</u> (Accessed 18 December 2018)

programs related to infectious diseases such as schistosomiasis, and to contribute to the United Nations Sustainable Development Goals (SDGs).

"Schistosomiasis is contracted from contaminated water, putting whole communities at risk," said Joseph Ndung'u, Head of Neglected Tropical Diseases at FIND. "The new diagnostic technologies will be a huge step forward, but to achieve real impact their use cannot be confined to labs. The RDT format will allow testing in community settings and enable essential surveillance and disease tracking."

"Contributing to the schistosomiasis control and elimination agenda is a priority for Merck," said Beatrice Greco, Head of R&D and Access at the Merck Global Health Institute. "This programme clearly addresses the need for new sensitive diagnostics in the fight against schistosomiasis."

"Seven out of the 10 diseases identified in the London Declaration for eradication, elimination or control by 2020 lack critical diagnostic solutions – including schistosomiasis," added Catharina Boehme, CEO, FIND. "With this addition to our neglected tropical diseases programme, we are pleased to extend our long-standing commitment of bringing diagnostic excellence to the fight against these diseases, contributing to WHO goals for control and, ultimately, elimination."

The programme to develop the CAA RDTs is expected to be complete within 4 years, with the first milestone of feasibility testing for the disease control test anticipated in 2019.

Catalytic funding from The Bill & Melinda Gates Foundation and <u>Merck</u> (through the Merck Global Health Institute) complements UK aid from the UK government and support from the Swiss Agency for Development and Cooperation (SDC).

About FIND

FIND is a global non-profit organization that drives innovation in the development and delivery of diagnostics to combat major diseases affecting the world's poorest populations. Our work bridges R&D to access, overcoming scientific barriers to technology development; generating evidence for regulators and policy-makers; addressing market failures; and enabling accelerated uptake and access to diagnostics in low- and middle-income countries (LMICs). Since 2003, we have been instrumental in the delivery of 21 new diagnostic tools used in 150 LMICs. Over 50 million FIND-supported products have been provided to our target markets since the start of 2015. A WHO Collaborating Centre, we work with more than 200 academic, industry, governmental, and civil society partners worldwide, on over 70 active projects that cross six priority disease areas. FIND is committed to a future in which diagnostics underpin treatment decisions and provide the foundation for disease surveillance, control and prevention. For more information, please visit www.finddx.org

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