

Open access initiative reveals drug hits for deadly neglected tropical diseases

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The Drugs for Neglected Diseases initiative (DNDi) and Medicines for Malaria Venture (MMV) announce today the identification of three chemical series targeting the treatment of deadly neglected tropical diseases (NTDs), through DNDi's screening of MMV's open access Malaria Box. The resulting DNDi screening data are among the first data generated on the Malaria Box to be released into the public domain, exemplifying the potential of openly sharing drug development data for neglected patients.

The open access [Malaria Box](#) is an MMV initiative launched in December 2011 to catalyse drug discovery for malaria and neglected diseases. It contains 400 molecules, selected by experienced medicinal chemists to offer the broadest [chemical diversity](#) possible and is available free of charge. In return, MMV requests that any data gleaned from research on the Malaria Box are shared in the public domain within two years. To date, more than 100 Malaria Boxes have been delivered to over 20 countries for research on diseases including malaria, neglected diseases, HIV and cancer.

DNDi, in partnership with the Laboratory for Microbiology, Parasitology and Hygiene (LMPH), University of Antwerp, screened all the compounds in the Malaria Box against the parasites responsible for the three NTDs on which DNDi mainly focuses: [sleeping sickness](#) ([human African trypanosomiasis](#)), leishmaniasis (including [visceral leishmaniasis](#), or kala azar, also known as black fever), and Chagas disease. This initial screen identified two potential drug series for the

treatment of sleeping sickness and one for leishmaniasis. The DNDi screens have yielded valuable information that will strengthen DNDi's research pipeline. All the [biological data](#) from DNDi's screen, together with the existing preliminary data from MMV, are now publicly available on the open-source ChEMBL [database](#).

"This is a really great example of partnership in action," said Dr David Reddy, MMV's CEO. "MMV and DNDi already work synergistically to tackle tropical diseases. Now, through the Malaria Box we can freely explore molecules that could potentially work against several debilitating tropical diseases, for the benefit of vulnerable populations the world over. It's hugely gratifying to see the idea of the Malaria Box starting to pay off."

Today, DNDi and MMV also announce an agreement to collaborate on [drug discovery](#) research by sharing compounds from their respective preclinical pipelines. Compounds provided by DNDi will be screened by MMV for antimalarial activity, and early stage compounds provided by MMV will be assessed by DNDi for their activity against the parasites causing sleeping sickness, leishmaniasis, Chagas disease, and filarial parasitic-worm diseases. This agreement highlights the potential for increased collaboration among Product Development Partnerships (PDPs) like MMV and DNDi to accelerate the development of treatments for some of the world's most neglected diseases and patients.

"[Open access](#) initiatives, such as the Malaria Box, are part of an encouraging new paradigm," says Dr Bernard Pécoul, Executive Director of DNDi. "We have to maintain a sharp focus on neglected patient needs and increase our efforts to open up research knowledge, reduce duplication in research efforts, and work together to fill the R&D gaps for diseases that afflict the poorest populations of the world."

Provided by Drugs for Neglected Diseases Initiative

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