Roche Position\textsuperscript{1} on R&D for Neglected Tropical Diseases

Roche’s Position
Roche’s main contribution towards global health is our investment in the development and commercialisation of diagnostic tests and medically differentiated medicines to help diagnose and treat serious and life-threatening diseases where there is unmet medical need and where we have the relevant expertise.

Our pharmaceutical R&D investments currently focus across five main disease areas – Oncology, Onco-immunology, Neuroscience, Infectious Diseases, Ophthalmology, and rare (hereditary monogenic) diseases. Many diseases in these areas are of epidemic proportions globally – these are areas where we can demonstrate success and where we believe we can make the greatest difference. For example, the infectious disease area includes the viral diseases hepatitis B and hepatitis C, of which as many people are infected with the hepatitis C virus as are with HIV. It is estimated that an estimated 257 million people are living with hepatitis B virus infection, which resulted in 887000 deaths in 2015 mostly from cirrhosis and hepatocellular carcinoma. Additionally, we have reentered the area of life-threatening bacterial diseases (antibiotics), and leverage our expertise in human immunology to bolster host defense.

We are constantly on the lookout for ways to improve health. If in the course of our research, discoveries are made which could have application in neglected tropical diseases and are outside our core focus, we will consider offering the molecule to a non-profit organisation or other companies who would be interested in developing these molecules further.

In addition, where possible, we utilise our current initiatives, capacities and capabilities to support other organisations’ efforts to investigate potential solutions towards neglected tropical diseases - this is clearly seen by our willingness to put at the disposal of competent third parties our Roche compound library, enabling them to screen for promising molecules.

Where relevant Roche supports and aligns with the UN Sustainable Development Goals as well as the London Declaration on Tropical Diseases\textsuperscript{2}.

Background
Neglected tropical diseases (NTD’s)\textsuperscript{3} are a group of chronic bacterial and parasitic infections affecting more than 1 billion people worldwide, mainly in the developing regions of Africa, parts

\textsuperscript{1} Pertains to SDG 3
\textsuperscript{2} \url{http://www.unitingtocombatntds.org/}
of Asia and the Americas - those living in remote rural areas, urban slums or conflict zones. Beyond their negative impact on health, NTDs contribute to an ongoing cycle of poverty and stigma that leaves people unable to work, go to school or participate in family and community life.

Some of these diseases have known preventive measures or acute medical treatments which are available in the developed world but which are not universally available in poorer areas. In a number of cases, the treatments are relatively inexpensive.

These diseases are contrasted with the big three diseases (HIV/AIDS, tuberculosis, and malaria), which generally receive greater treatment and research funding. The neglected diseases can also make HIV/AIDS and tuberculosis more deadly.

**Significantly-neglected diseases: a long-standing role**

Roche has a long-standing role in the provision of treatment for neglected diseases, where the majority of those affected do not have access to safe and affordable diagnostics and/or medicines:

- Roche developed the anti-malarial therapies Lariam and Fansidar, which are now off-patent and therefore publicly available for local production
- Roche donated expertise in both industrial drug development and specifically in malaria drug development to the Medicines for Malaria Venture in support of the molecule known as OZ277, which was developed and approved for therapeutic use.
- In 2003, we donated all rights and the technology to manufacture Benzonidazole, for the treatment of Chagas disease, to the Brazilian government, to assist in its efforts to reduce the impact of this neglected disease. Chagas disease was identified by the World Health Organization as one of the 17 neglected tropical diseases needing eradication
- Roche Diagnostics developed pediatric (infant) testing for HIV in response to the need for effective diagnostic testing for children with HIV/AIDS in developing countries – an area which has long been cited by non-governmental organisations as significantly neglected
- In 2008 we entered into a collaboration with the Institute of OneWorld Health, enabling the screening of compounds from the Roche library to identify a potential new drug for the treatment of diarrheal diseases, which kill approximately 2 million children in developing countries each year
- Twenty-nine medicines developed by Roche are deemed essential medicines by the World Health Organization (WHO) – meaning that they satisfy the priority healthcare

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needs of the population. Most of these medicines are no longer under patent protection and include life-saving antibiotics, anti-malarials and chemotherapy. Our innovation now means the whole world, including the poorest countries, have wide access to locally produced versions. They demonstrate our substantial and sustained contribution to global health which remains long after patent expiry. Co-trimoxazole is a widely used antibiotic and also recommended by the WHO as a simple, well-tolerated and cost-effective preventative treatment for opportunistic infections in adults and children living with HIV in resource-limited settings. (http://www.who.int/medicines/publications/essentialmedicines/en/)

- In 2017 Roche has launched the cobas Plasma Separation Card which allows easy sample collection and enables diagnostic testing in rural areas.

Through our Employee Secondment Programme, we facilitate and fund employees to contribute their skills and expertise to health related projects of Least Developed Countries for up to 12 months. This includes secondment to tropical disease research institutes.

In order to be able to continue delivering new medicines in the years to come, Roche is committed to sustain our responsibility to our stakeholders to provide long-term value through the research, development and commercialisation of medicines and diagnostics which add medical value to patients, payers and society. Wherever possible, we will continue to seek ways to contribute towards health improvements in Least Developed Countries.

This position paper was updated and approved by the Corporate Sustainability Committee on April 26, 2012 and was adopted by the Corporate Executive Committee. It was reviewed in April 2020.