Novartis renews drug donation of *Egaten*® (triclabendazole) until 2022, reaffirming its commitment to the fight against liver fluke

- **Novartis extends agreement with the WHO for the donation of Egaten® for the treatment of liver fluke, a neglected tropical disease, also known as fascioliasis, that infects more than 2.4 million people globally**

- Since the start of the donation program in 2005, Novartis has donated approximately 4 million tablets of Egaten, valued at USD 41 million, helping to treat around 2 million fascioliasis patients worldwide

- **Egaten is currently the only treatment for fascioliasis recommended by the WHO and is on the WHO Model List of Essential Medicines**

**Basel, July 23, 2018** – Novartis reaffirms its commitment to the fight against liver fluke (fascioliasis), signing a renewed memorandum of understanding with the World Health Organization (WHO) to extend its drug donation for *Egaten*® (triclabendazole) until 2022. *Egaten* is currently the only treatment for fascioliasis recommended by the WHO and is on the WHO Model List of Essential Medicines.

This new four-year commitment (January 2019 to December 2022) includes the donation of 600,000 tablets of *Egaten* annually, expected to reach 300,000 patients per year. Since the start of the donation program in 2005, Novartis has donated approximately 4 million tablets of *Egaten*, valued at USD 41 million, helping to treat around 2 million people with fascioliasis in more than 30 countries worldwide.

Fascioliasis, commonly known as liver fluke infestation, is a neglected tropical disease that currently affects an estimated 2.4 million people worldwide¹, with an additional 180 million at risk of infection². It is caused by two species of parasitic flatworms or trematodes that mainly affect the liver (*Fasciola hepatica* or *Fasciola gigantica*). Both species can infect humans following ingestion of larvae in contaminated water or food (mainly raw or undercooked vegetation). The larvae mature into adult worms in the biliary tract.

No continent is free from fascioliasis; human cases have been reported from more than 70 countries worldwide¹. It is likely that where animal cases are reported, human cases also exist. Recognized areas of high transmission are the highlands of South America, the Nile valley, the Caspian sea basin, as well as east Asia and south-east Asia³.

“This donation will help increase access to treatment in many countries, particularly in communities where cases are clustered and among children of school age who have both the highest prevalence and intensity of infection,” said Antonio Montresor, M.D., Medical Officer, WHO Department of Control of Neglected Tropical Diseases.

Left untreated, fascioliasis can result in considerable pain and discomfort, leading to poor quality of life and loss of productivity. The acute phase of the disease is manifested with fever, abdominal pain, nausea, diarrhea and eosinophilia. The disease later progresses to a latent phase with less symptoms and ultimately into a chronic or obstructive phase. In children, fascioliasis can be a serious infection with high fever, enlarged tender liver, and anemia; in some cases deaths have been reported.
Egaten is a single-dose treatment for fascioliasis caused by Fasciola hepatica or Fasciola gigantica in patients 6 years of age or older. Novartis originally developed triclabendazole to treat fascioliasis in domestic livestock, and subsequently developed it for human use in partnership with the WHO.

“Novartis looks forward to its continued partnership with the WHO to reduce the burden of fascioliasis around the world through access to effective treatment,” said Patrice Matchaba, M.D., Group Head of Global Health and Corporate Responsibility. “The extension of our donation through 2022 is a testament to our company’s long-term commitment to reimagine the fight against neglected tropical diseases.”

Novartis has a long-standing commitment to the research and development of medicines for neglected tropical diseases. The Novartis Institute for Tropical Diseases is dedicated to finding new medicines to treat neglected diseases. Research currently focuses on parasitic diseases such as malaria, cryptosporidiosis (diarrheal disease) and three major kinetoplastid diseases: human African trypanosomiasis (sleeping sickness), Chagas disease and leishmaniasis.

About Novartis
Novartis provides innovative healthcare solutions that address the evolving needs of patients and societies. Headquartered in Basel, Switzerland, Novartis offers a diversified portfolio to best meet these needs: innovative medicines, cost-saving generic and biosimilar pharmaceuticals and eye care. Novartis has leading positions globally in each of these areas. In 2017, the Group achieved net sales of USD 49.1 billion, while R&D throughout the Group amounted to approximately USD 9.0 billion. Novartis Group companies employ approximately 125,000 full-time-equivalent associates. Novartis products are sold in approximately 155 countries around the world. For more information, please visit http://www.novartis.com.

Novartis is on Twitter. Sign up to follow @Novartis at http://twitter.com/novartis
For Novartis multimedia content, please visit www.novartis.com/news/media-library
For questions about the site or required registration, please contact media.relations@novartis.com

References
2. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4568335/

###

Novartis Media Relations
Central media line: +41 61 324 2200
E-mail: media.relations@novartis.com

Eric Althoff
Novartis Global Media Relations
+41 61 324 7999 (direct)
+41 79 593 4202 (mobile)
eric.althoff@novartis.com

Katerina Kontzalis
Head, Global Health & Corporate Responsibility
Communications & Advocacy
+41 61 324 1631 (direct)
+41 79 797 8393 (mobile)
katerina.kontzalis@novartis.com

Novartis Investor Relations
Central investor relations line: +41 61 324 7944
E-mail: investor.relations@novartis.com
<table>
<thead>
<tr>
<th>Central</th>
<th>North America</th>
</tr>
</thead>
<tbody>
<tr>
<td>Samir Shah</td>
<td>+41 61 324 7944</td>
</tr>
<tr>
<td>Pierre-Michel Bringer</td>
<td>+41 61 324 1065</td>
</tr>
<tr>
<td>Thomas Hungerbuehler</td>
<td>+41 61 324 8425</td>
</tr>
<tr>
<td>Isabella Zinck</td>
<td>+41 61 324 7188</td>
</tr>
<tr>
<td>Richard Pulik</td>
<td>+1 212 830 2448</td>
</tr>
<tr>
<td>Cory Twining</td>
<td>+1 212 830 2417</td>
</tr>
</tbody>
</table>