

## **Novartis hosts scientific symposium in Philippines to review research approaches, clinical management, and growing presence of Dengue**

- *Currently no treatment for Dengue, yet global prevalence has risen by 20 times since 1970 – increase from 5 to more than 100 countries with confirmed cases<sup>1</sup>*
- *One-third of the population currently lives at risk of Dengue infection, and 653,000 disability-adjusted life years (DALYs) are lost globally per year<sup>1</sup>*
- *WHO estimates that 50 million cases occur annually, resulting in 500,000 hospitalizations and 24,000 deaths, mainly among children<sup>2</sup>*

**Basel, September 1, 2009** — The Novartis Institute for Tropical Diseases (NITD) is hosting a global symposium in the Philippines, bringing world-renowned Dengue experts together to discuss critical issues facing Dengue treatment and prevention. The four-day symposium will focus on best research practices and clinical management, as well as the growing global presence and unmet medical need to treat this neglected disease.

“Dengue is a devastating disease that is impacting the lives of millions globally, in the developing as well as the developed world” says Paul Herrling, Head of Corporate Research at Novartis and Chairman of the Novartis Institute for Tropical Diseases. “Our long-term commitment to helping reduce this global disease burden is part of Novartis' Corporate Citizenship efforts to improve access to medicines. By leveraging our experience, partnerships, and modern drug discovery tools, we hope to come closer to our goal of discovering effective treatments for tropical diseases.”

More than 50 million cases of Dengue and 500,000 Dengue-related hospitalizations occur each year in both developed and developing regions due to the under investment in research and development for effective tools to detect and treat the disease<sup>2</sup>. Dengue is one of the most prevalent emerging diseases in humans with no preventative vaccines or antiviral cures available at present.

### **NITD Approach to Dengue Research**

The Dengue research group at NITD focuses on developing Dengue antiviral compounds, the idea being that administering antivirals in particular areas at the first indication of an outbreak will be more cost-effective than mass inoculations.

Goals for Dengue research at NITD include discovering medicines that will reduce the viral load in people with dengue and curtail transmission of the virus as well as reduce dengue-related morbidity and mortality.

### **Importance of Partnership**

The NITD takes a collaborative approach to research, as evidenced by its membership in the Dengue consortium, which consists of six healthcare and research companies that have joined forces to study vector-borne diseases.

“Initiatives such as the Dengue consortium are paramount as they create best-in-class partnerships to support and develop successful, cost-effective treatments for neglected diseases,” said Philippine Department of Health Secretary Francisco T. Duque III. “Partnerships are an effective model for developing new drugs for important but hitherto neglected diseases, allowing us to bring much needed, effective and affordable treatments to those who need them most.”

### **Challenges in Dengue**

In 1970, only five countries in South East Asia reported Dengue. By 2007, Dengue was endemic in more than 100 countries<sup>1</sup>. Although one-third of the world’s population lives at risk of infection, little is known about the pattern and dynamics of Dengue virus within outbreak situations. Dengue illness appears similar to other febrile illness in the early stages, which means diagnosis is often delayed or confused with other illnesses. This reduces the effectiveness of using clinical diagnosis for patient care and disease surveillance.

To combat this, the NITD is currently conducting several studies to better understand, identify and use genomic data and the molecular epidemiology of dengue to predict outbreaks and severity levels of the disease. Additional surveillance studies could prove useful in disease management, diagnosing dengue and predicting the likelihood of hemorrhaging.

### **About NITD**

Today’s event is the first symposium held by Novartis on Dengue fever. In 2008, Novartis held a symposium on Tuberculosis (TB) in Maputo, Mozambique (the second symposium held by Novartis in East Africa). In 2006, Novartis held a symposium on TB in St. Petersburg, Russia, and in 2007 in Masan, Korea. The NITD hosts such events in endemic regions to help scientists and partners understand the true impact of the disease and the unique local challenges doctors, clinicians and patients in the region face.

The NITD represents a major part of Novartis’ bid to improve the developing world’s access to medicines. The NITD’s overarching goal is to discover novel treatments and prevention methods for major tropical diseases. In those developing countries where these diseases are endemic, the Novartis Group intends to make treatments readily available without profit.

The focus of the NITD is to apply Novartis’ drug-discovery expertise and cutting-edge technology platforms to fight against infectious diseases that are currently not well covered by modern treatment regimens, particularly dengue fever and tuberculosis.

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The foregoing release contains forward-looking statements that can be identified by terminology such as “will,” “commitment,” “hope,” “goals,” “predict,” “could,” “predicting,” “intends,” or similar expressions, or by express or implied discussions regarding the potential of an anti-Dengue drug, or regarding potential future revenues from such a drug. You should not place undue reliance on these statements. Such forward-looking statements reflect the current views of management regarding future events, and involve known and unknown risks, uncertainties and other factors that may cause actual results to be materially different from any future results, performance or achievements expressed or implied by such statements. There can be no guarantee that an anti-Dengue drug will be developed or approved for sale in any market. Nor can there be any guarantee that such a drug will achieve any particular levels of revenue in the future. In particular, management’s expectations regarding an anti-Dengue drug could be affected by, among other things, unexpected research difficulties; unexpected clinical trial results, including unexpected new clinical data and unexpected additional analysis of existing clinical data; unexpected regulatory actions or delays or government regulation generally; the company’s ability to obtain or maintain patent or other proprietary intellectual property protection; competition in

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## References

- 1 Mackenzie et al., 2004
- 2 World Health Organization (WHO) Dengue Fact Sheet.  
Available at <http://www.who.int/topics/dengue/en/>

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