

**EISAI ENTERS COLLABORATION WITH LIVERPOOL SCHOOL OF TROPICAL  
MEDICINE AND UNIVERSITY OF LIVERPOOL TO DISCOVER NOVEL  
ANTI-WOLBACHIA TARGETED ANTI-FILARIAL DRUGS**  
*JOINT RESEARCH PROJECT AWARDED GHIT FUND GRANT*

Eisai Co., Ltd. (Headquarters: Tokyo, President

world-class academy that has made major contributions toward understanding the mechanisms of drug action of several classes of anti-parasitic drugs, to identify and develop novel drug candidates that efficiently eliminate the bacteria *Wolbachia*. *Wolbachia* live inside the parasitic worms, known as filariae that cause lymphatic filariasis and onchocerciasis, two infectious diseases that together affect more than 150 million people worldwide. As filariae are dependent on these *Wolbachia* for growth, development, reproduction and survival, these worms can be effectively eradicated by first eliminating the *Wolbachia* inside them.

While current anti-filarial treatments are effective against larvae and microfilariae, they require many years of consistent, annual mass drug administration in a given endemic community in order to allow successfully eliminate the adult worms. Anti-*Wolbachia* therapy is expected to lead to worm sterility and effective worm eradication, thereby reducing treatment timeframes and providing superior therapeutic outcomes compared to existing anti-filarial drugs. Further, as anti-*Wolbachia* programs are still in their infancy, this collaboration is expected to potentially provide a unique opportunity to make a significant contribution to communities affected by filariasis.

To date, the screening of more than 10,000 potential anti-*Wolbachia* compounds has revealed approximately 50 compounds as confirmed hits, leading to identification of about six chemotypes with anti-infective potential. Eisai and its collaboration partners will focus on two of these six proposed types and aim to identify a single candidate for potential drug development within one to two years.

This unique approach was also evaluated and subsequently awarded a two-year grant by the Global Health Innovative Technology Fund (GHIT Fund), an international non-profit organization that aims to promote the discovery of new health technologies for eliminating infectious diseases prevalent in developing countries.

In support of the World Health Organization (WHO)'s program to eliminate lymphatic filariasis by 2020, Eisai is supplying diethylcarbamazine (DEC) free of charge to WHO. Under its collaboration with LST and UoL, Eisai aims to make new treatments available as early as possible to patients with filariasis and thereby further increase the healthcare benefits provided to these patients and their families in developing and emerging countries.

**[Please refer to the following notes for further information on anti-*Wolbachia* therapy,  
the Liverpool School of Tropical Medicine, the University of Liverpool, and the GHIT Fund.]**

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**[Notes to editors]**