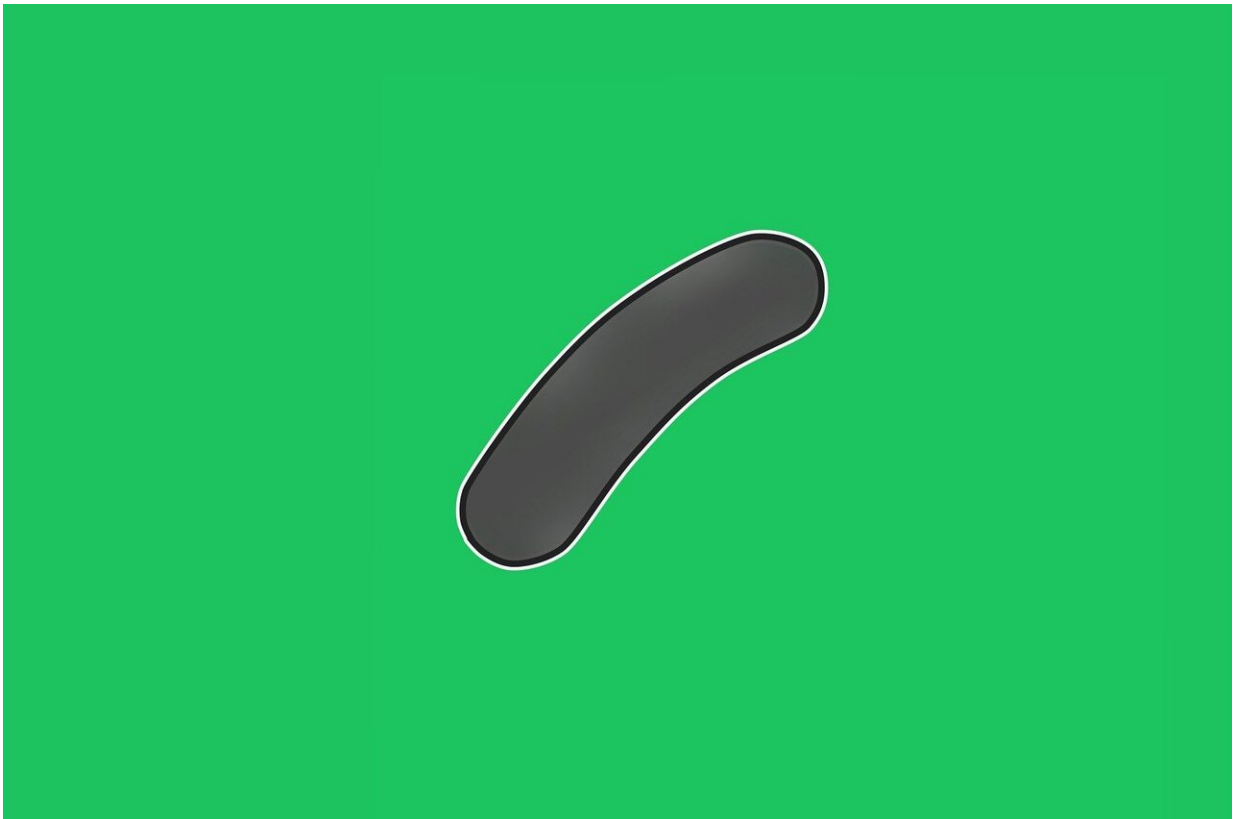# TGen and ABL pursue global rollout of advanced TB test

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In an important step toward eradicating tuberculosis (TB), the Translational Genomics Research Institute (TGen), an affiliate of City of Hope, has signed a licensing agreement with an international biomedical

firm, Advanced Biological Laboratories (ABL), to market and distribute TGen's patented Next Generation Sequencing based TB test technology.

For now, the test—called DeepChek-TB—is available for research use only. ABL is working toward distribution of a compact, portable and affordable diagnostic model that physicians worldwide could use to help determine the most appropriate treatment for each TB patient.

Current tests can take 6-9 weeks to complete. The DeepChek-TB test can be completed in just 2-3 days, and can identify drug-resistant TB among mixed infections.

Thanks to modern medicine, TB in the U.S. continues to be a relatively minor threat. Globally, however, nearly one-fourth of the world's population is infected with this lung-damaging communicable disease, which is estimated to kill more than 4,300 people a day—nearly 3 people every minute—worldwide.

"Significantly, our TB assay technology holds the potential to provide doctors—even those in relatively rural settings—a quick and economical way to accurately determine the exact drugs that can and can't be used for each patient," said Dr. David Engelthaler, Co-Director of TGen's Pathogen and Microbiome Division.

TB remains a major public health threat throughout developing nations and is increasing in some places as mutant versions of this infectious lung disease become resistant to current drug treatments. Identifying rapidly mutating, drug-resistant strains of TB is the greatest challenge to eradicating this disease.

ABL, based in Luxembourg, is a leading integrated diagnostics and medical technology company. Its licensing agreement with TGen will enable ABL to distribute DeepChek-TB through its worldwide network

of clinicians and distributors in more than 80 countries.

"We look forward to making the DeepChek-TB test available to our global network immediately, and expect a strong demand for this test from leading research facilities worldwide," said Dr. Chalom Sayada, Founder and CEO of ABL.

As a component of the World Health Organization's (WHO) UNITAID End TB Strategy, the DeepChek-TB test could help reach the target of a 95 percent reduction in TB deaths and a 90 percent reduction in new cases by 2035.

In the U.S., there are more than 9,000 TB cases diagnosed annually, which is a more than 80 percent reduction from 50 years ago. However, today's drug resistant TB places a huge economical toll on the healthcare system, costing more than $500,000 on average to treat each of the most drug-resistant patients.

"This is a precision medicine test, that is, it's a test designed to give specific treatment information for each patient," Dr. Engelthaler said. "Drug-resistance occurs when the wrong antibiotics are prescribed at the wrong time. This new approach is designed to not only help doctors better treat patients, but also to help slow or stop the global threat of multi-drug resistant Mycobacterium tuberculosis."

Provided by The Translational Genomics Research Institute

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