Press release

Deeplex® Myc-TB, a breakthrough innovation to effectively fight tuberculosis.

Lille — March 24, 2021

Tuberculosis has been a major scourge since antiquity. The fight against this disease requires ever more efficient technologies. GenoScreen, a French biotech company, has recently developed a new weapon for predicting antibiotic resistance in the germs responsible for this disease. This new test, which comes in the form of a kit, quickly and efficiently detects the genetic mutations in the DNA of pathogenic germs and guides doctors in their medical prescriptions. This test is already being implemented in some thirty countries.

Tuberculosis, an ongoing scourge

With 10 million new cases every year, and 1.4 million deaths in 2019, tuberculosis remains the world's most deadly bacterial infectious disease, and still ranks among the top 10 causes of death worldwide. Among the diseases caused by a single infectious agent, TB is the one that causes the most deaths (ahead of HIV). It is treated using heavy therapies, often combining several antibiotics over long periods (usually about 6 months).

The increasing dissemination of antibiotic-resistant and multi-resistant tuberculosis strains accentuates the health threat in many countries. These resistances make treatments less and less effective, to the point of leading to therapeutic impasses (total absence of treatment solutions). In 2019, more than 200,000 cases of rifampicin-resistant tuberculosis (the first-line antibiotic used to treat this infection) or multidrug-resistant tuberculosis (MDR-TB) were detected worldwide, an increase of 10% compared to 2018. These cases are

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only the visible part of this pandemic, due to the lack of effective means of detection. The WHO, in its 2018 report on tuberculosis considers that early diagnosis of tuberculosis and its possible resistance to treatment is an essential key to the fight against tuberculosis.

Deeplex® Myc-TB, a breakthrough in the fight against tuberculosis

This predictive test for Mycobacterium tuberculosis antibiotic resistance is both accurate and fast (results are obtained in less than 48 hours), making use of mass sequencing technologies. It does not require a prior culture step. The development of this test required the sequencing of 10,000 strains, from 16 countries, on five continents. International scientific studies highlight its quality and effectiveness.

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With this highly innovative diagnostic test, GenoScreen's commitment to the fight against the tuberculosis pandemic is taking shape.

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About GenoScreen

GenoScreen is a French biotech company founded in 2001, specialized in genomics and bioinformatics**.**

Its strategy of innovation through research enables it to provide services and innovative solutions for academic and industrial research teams, to analyze and exploit the DNA characteristics of any type of genome and metagenome.

Its portfolio of activities comprises 3 poles:

- **A Services division** that provides standardized and custom analyses services, under ISO certification, on all genome types (human, animal, plant, microbial).
- **An Expertise division**, that provides consultancy services for companies seeking to implement genomics projects. Genoscreen is specifically recognized for its expertise in microbial genome and metagenome analysis.
- **An Innovation division** charged with the production and commercialization of analytical solutions to meet the demand of various industries (health, cosmetics, agriculture, agronomy, environmental).

Its mission: to unlock the potential of genomic information for the benefit of human health and the environment.