Typing for Life - prevention of hospital infections

Development status

Phase 4

The transition from the prototype to the final and fully functional form. At this stage, the prototype is already fully tested, or the technology is certified and ready for mass deployment.

IP protection status

Classified know-how

Partnering strategy

Collaboration, licensing, spin-off

Institution

Palacký University Olomouc

Vlastník

Univerzita Palackého v Olomouci

Challenge

Nosocomial infections, or hospital-acquired infections, are a pressing problem in healthcare settings worldwide. They are the most common infections in healthcare centers, affecting up to 10% of patients. 1 half of these are caused by antibiotic-resistant pathogens. These infections arise either in the hospital or are introduced by patients from outside. In either case, they prolong hospital stays, prolong patient suffering, and can even cause death.

Description

The Typing for Life project is effectively addressing this issue. This low-cost, high-throughput, and automatable typing method can quickly detect any identical clone of a certain type of bacteria occurring in different patients or even in a hospital environment. The method combines two existing rapid analysis techniques—polymorphic DNA amplification and melting analysis—which can be performed quickly, economically, and efficiently.

Commercial opportunity

"Typing for Life" is an ideal tool for routine epidemiological surveillance of infections in healthcare facilities. Continuously using this method's results to adjust care can help prevent complications, prolongation of treatment, and, in the worst cases, loss of life. The motto “Monitor, prevent, save” accurately describes the comprehensive services that Typing for Life offers: monitoring the microbiological situation, preventing infections, and saving not only the health of patients and staff but also financial costs.