

Abionic SA Diagnostics closer to the treatment

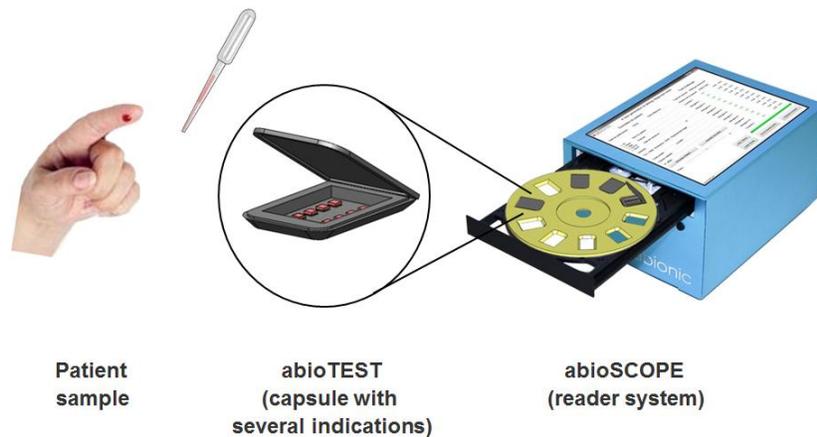
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Abstract

Abionic's core technology was developed by the founders at the EPFL, in collaboration with the Biomedical Optics Laboratory (LOB) and the Microsystems Laboratory (LMIS4). The technology incorporates unique nanofluidic biosensors, coupled with a modified optical disc reading system. Based on this innovative technology approach, Abionic is developing portable medical diagnostic kits providing fast, reliable and low-cost point-of-care tests. As a first product, Abionic will deliver a novel diagnosis test system for allergies.

Allergy is a fast growing market, with over 100 million allergy sufferers in Europe diagnosed in 2010. Consequently, the impact of the escalation of allergic diseases is a substantial burden on the European healthcare systems and economies. Within this medical field, the demand for solid, fast and reliable tools in allergy diagnosis is constantly growing.



Abionic will supply physicians and clinical researchers with the abioSCOPE, a biomedical diagnostic device that provides user friendly reliable low-cost allergy diagnosis promoting personalized medication. A small blood droplet delivers the patient's allergic profile within minutes. The overall process is as simple as loading a CD in a personal computer. The user fills one of the abioDISC capsules with a very small volume of patient blood sample and then places the abioDISC inside the abioSCOPE for measurement. A few minutes later, the quantitative results are ready for the physician. The Abionic in vitro test is designed to be a faster, reliable and low-cost alternative to the time-consuming blood tests that are analyzed by third party contracted laboratories. The innovative technology allows the physician to perform the quantitative blood analysis directly in his office, receiving the results during the patient's consultation.

Keywords: In-vitro diagnostics, point-of-care, Allergy diagnosis, Nanotechnology