

# Abionic Signs Agreement to Optimize Asthma Management in the U.S. through Innovative Rapid Point-of-Care Tests

- In the U.S., 25 million people suffer from asthma, the majority of which have allergic asthma.
- Allergic asthma can be life threatening. This makes access to prompt, accurate diagnosis and appropriate treatment vital.
- Abionic's 5-minute point-of-care (POC) test will help physicians determine both total IgE as well as specific IgE levels to 5 major perennial allergens associated with allergic asthma.
- The pre-market process for the specific asthma panel will be managed by Abionic while Genentech will fund clinical and regulatory costs.

Biopôle, Lausanne, Switzerland, 5<sup>th</sup> September 2019 – Abionic SA, the developer of proprietary disruptive nanotechnology based rapid diagnostic solutions, and Genentech, a member of the Roche Group, announced today a strategic agreement to develop and provide an In Vitro Diagnostic (IVD) Asthma Test Panel using Abionic's POC abioSCOPE® platform in the United States. Abionic's POC abioSCOPE®, a compact, ultra-fast medical device powered by a patented nanofluidic technology, determines blood levels of immunoglobulin E (IgE), an underlying cause of allergic asthma. The platform provides labquality results in five minutes from a single drop of blood at the POC, enabling rapid diagnosis and the possibility of immediate treatment initiation.

Under the terms of the agreement, Abionic will carry out all pre-market process requirements for a specific Asthma Test Panel to quantify total IgE as well as IgE levels to 5 major perennial allergens associated with allergic asthma. Genentech will fund all clinical and regulatory costs for the tests.

"At Abionic we are focused on delivering true patient-centric diagnostic solutions, which means a rapid, reliable test available at any time, from anywhere, whenever a patient needs it. The agreement with Genentech, a leader in developing novel medicines in respiratory diseases including allergic asthma, is a great step towards more personalized and precise diagnostics," commented Nicolas Durand, PhD, Chief Executive Officer of Abionic.

"Uncontrolled allergic asthma significantly affects people's lives; the number of cases increased dramatically over the last 40 years with millions of patients being diagnosed annually in the US. This partnership is aligned with our commitment to Personalized Healthcare. Abionic's abioSCOPE® will allow for personalized POC testing making it easier for patients to be diagnosed." said Iwan Märki, PhD, Chief Technical Officer of Abionic.

## **Allergic Asthma Testing**

Asthma is a chronic inflammatory disease of the airways, that can cause difficulty breathing, coughing and wheezing and, in its most severe manifestation, can result in life-threatening exacerbations that demand urgent medical care. Allergic asthma is a subtype of asthma caused by the exposure and hypersensitivity to allergens. Allergic asthma is diagnosed by medical history, physical examination, lung function testing, skin testing and/or laboratory tests that identify sensitization to allergens. Current asthma diagnostics do not allow professionals to have immediate and quantitative results at the POC.<sup>1</sup>

The Allergic Asthma Kit on the abioSCOPE® is a POC test that offers quantitative total IgE level as well as IgE levels to major perennial allergens, i.e. dog and cat dander, the mold Alternaria alternata, house dust mite and German cockroach. The first IgE result is available after only 5 minutes and a complete allergic profile in less than 8 minutes from one drop of capillary blood. Abionic's technology allows to develop up to 14 allergy and asthma tests within a unique kit, what permits to customize the panel to the various clinical needs worldwide.

## About allergic asthma

In the U.S., an estimated 25 million people have asthma, of which approximately 60% have allergic asthma.<sup>2</sup> Allergic asthma is one of the most common long-term diseases in children.<sup>3</sup> It affects about 6.2 million people under 18 or one in 12 children in the U.S.<sup>4</sup> The American Academy of Pediatrics estimates that between 70 and 80 % of school-aged children with asthma also have allergies, which are among the most common triggers for asthma.<sup>5</sup>

#### **About Abionic**

Founded in 2010, Abionic is a Swiss Medtech company which has developed a revolutionary nanofluidic technology, providing healthcare professionals with a fast, simple and universal diagnostic tool.

Abionic's cutting-edge Nanotechnology enhances efficiency and versatility of standard ELISA tests to deliver optimal POC treatment options with the potential to reduce the current biological techniques from macroscale to nanoscale in a multi-analyte environment.

Abionic's In Vitro Diagnostic (IVD) platform provides lab-quality results in 5 minutes from a single drop of blood at the POC enabling personalized diagnostics and the possibility of immediate treatment initiation

Other certified products already exist in Sepsis, Allergy and Iron Deficiency today allowing for exploration of other targets for the IVD market of tomorrow.

For further information, visit <a href="https://www.abionic.com">https://www.abionic.com</a>.

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#### References

- 1. Swiss Allergy Center. Allergy tests <a href="https://www.aha.ch/swiss-allergy-centre/info-on-allergies/good-to-know/allergy-tests/?oid=1572&lang=en">https://www.aha.ch/swiss-allergy-centre/info-on-allergies/good-to-know/allergy-tests/?oid=1572&lang=en</a>
- Asthma cases attributable to atopy: Results from the Third National Health and Nutrition Examination Survey. <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2291202/">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2291202/</a>
- U.S. Centers for Disease Control and Prevention. What Is Asthma? <a href="http://www.cdc.gov/asthma/faqs.htm">http://www.cdc.gov/asthma/faqs.htm</a>. Accessed June 30, 2016.
- 4. U.S. Centers for Disease Control and Prevention. National Current Asthma Prevalence. <a href="http://www.cdc.gov/asthma/most\_recent\_data.htm">http://www.cdc.gov/asthma/most\_recent\_data.htm</a>. Accessed June 21, 2016.
- 5. American Academy of Pediatrics. Healthy Children.org. Guide to Your Child's Allergies and Asthma. <a href="https://www.healthychildren.org/English/health-issues/conditions/allergies-asthma/Pages/Allergies.aspx">https://www.healthychildren.org/English/health-issues/conditions/allergies-asthma/Pages/Allergies.aspx</a>. Accessed June 30, 2016.