Landscape technology

Allergies such as asthma or food allergies represent one of the more frequently medical disorders both in adults and in children and their prevalence is significantly increasing (Rubenhagen R et al., J Immunoassay Immunochem. 2017); moreover, the lifetime self-reported prevalence of allergy to common foods in Europe ranged from 0.1 to 6.0%(Nwaru BI et al., Allergy 2014).

There are many factors involved in an accurate diagnosis and an effective treatment plan, first of all the medical history of a patient followed to the skin prick test (SPT) and the detection of serum IgE antibodies. in this contest, although the SPT is considered a reliable method to test for allergy, it presents several issues, for example the SPT result interpretation is difficult in children younger than 2 yr and it presents low sensibility to food allergies. Therefore the measurement of serum IgE is becoming a very useful tool to complete the diagnostic assessment; to date, the blood test available are generally time-consuming (about 6 hr) from those the ImmunoCAP is considered the gold standard method; in figure 1 is reported the global markert (USD millions) related to IgE allergy blood test (from GlobalData Medical Intelligence Center)
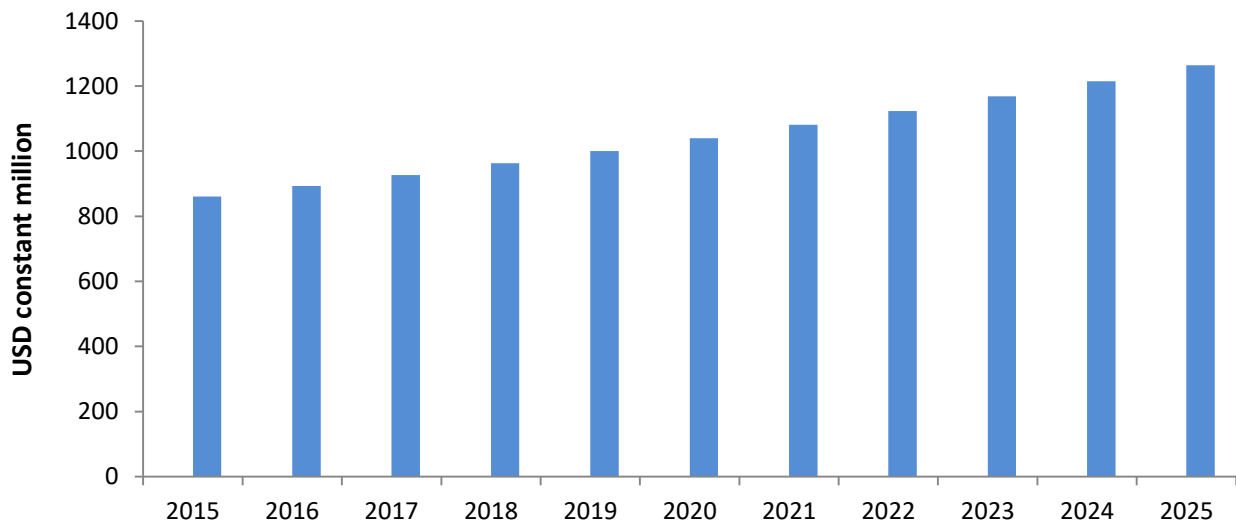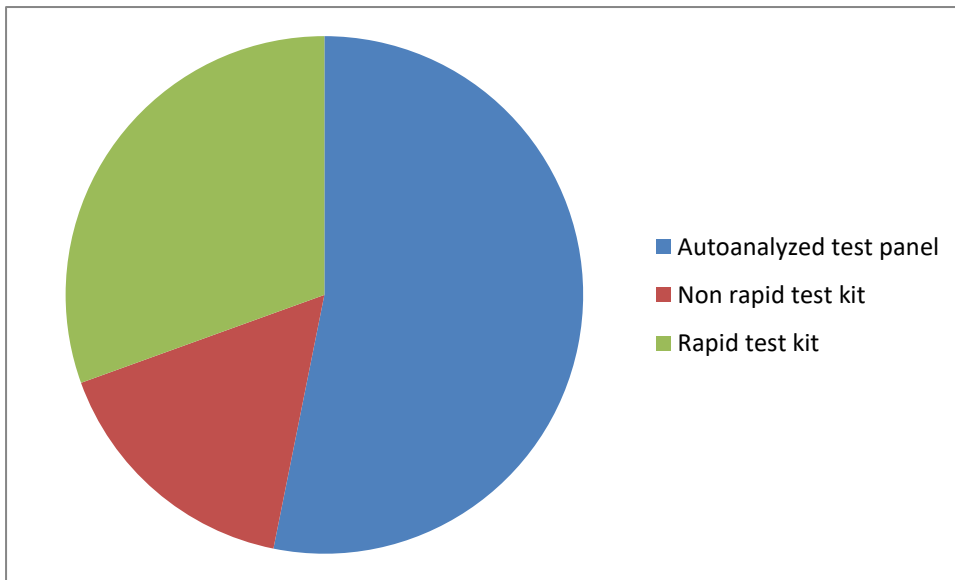

Figure 1. IgE Allergy Blood Market Global 2015-2025 (from GlobalData Medical Intelligence Center)

Beside the laboratory test, rapid test has been developed to allow the serum IgE measurement in decentralised settings; this tool can provide a result within 20 minutes, however it is a semi-quantitative test and is designed to detect few inhalant allergens

In figure 2 is reposted the market share forecast for the three systems used to measure serume IgE : autoanalyzer such as ImmunoCAP (Phadia AB) and Immulite (Siemens AG), rapid test kits and non-rapid test kit.

The invention A METHOD FOR IN VITRO DIAGNOSIS OF ALLERGY AND RELATED DEVICE can replace in clinical setting the autoanalyzer allowing for quick results, moreover this new method/device provide an indicator of the subject's predisposition to anaphylactic episodes by using the dynamic measurement of impedance.

NB: le previsioni di GD non si possono pubblicizzare senza loro consenso....