Combimatory Asthma Endotyping Assay
Diagnostic Test for Asthma Subtype Differentiation

Invention
Asthma is a disease of several subtypes characterized by different severity and a distinct immunological background. Most importantly, several subtypes of allergic asthma need to be correctly identified and distinguished from forms of non-allergic asthma. Recently, some therapeutic approaches have been established to treat such subtypes of asthma by means of specific therapeutic antibodies. However, there is still a lack of an appropriate diagnostic test with clinical relevance to these therapeutic approaches. The present invention provides a novel easy-to-use test for a more precise stratification of asthma patients and thus facilitates a personalized and better targeted therapeutic strategy that avoids costs and delayed treatment response resulting from potential uncertainties in the selection of the best effective antibody. The invention is a PCR-based method for the differential diagnosis (combinatory transcriptomic endotyping) of asthma subtypes from blood (liquid biopsies). The method comprises the measurement of 32 RNA-biomarkers (including two house-keeping markers), a dedicated PCR microwellplate for the assay and a combinatory methodology including a software algorithm for analysis and determination of the asthma subtype.

Commercial Opportunities
The invention is offered for licensing and further co development in collaboration with the researchers.

Current Status
In case of interest we shall be pleased to inform you about further details and the patent status.

An invention of the University of Bonn.

Competitive Advantages
- First diagnostic test for asthma endotyping that is relevant to the therapeutic strategy, particularly regarding the identification of the asthma subtype and the selection of the best suitable antibody
- Easy-to-use and cost efficient
- Compatible with existing laboratory equipment and routine

Technology Readiness Level
123456789
Technology validated in lab

Industries
- Diagnostics

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