

## SysPharmPediA

**Title** Systems pharmacology approach to difficult-to-treat pediatric asthma.

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### Project partners



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**Requested funding** 986.000 €

**Duration** 3 years

**Abstract** In the SysPharmPediA project we propose an innovative systems medicine approach in saliva, blood, feces, and exhaled breath samples in well-controlled asthmatic children and in asthmatic children that do not respond to standard therapy with ICS (non-responders). The main deliverables from the SysPharmPedia project will be: A large well-phenotyped European paediatric Asthma systems medicine cohort, and a set of standardized clinically relevant asthma phenotypes, predictive for ICS therapy response. The biological pathways behind these different asthma phenotypes might be used to find leads for new asthma drugs. Furthermore, SysPharmPedia will produce new algorithms for use in clinical practice to personalize asthma therapy. In the future this approach can reduce both the patient's burden of disease and the significant healthcare costs that result from non-response (leading to asthma



exacerbations and unscheduled health visits) to extensively prescribed but not always efficient medicines.

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