

## Comparison of European Birth Cohort Studies on Allergies and Asthma as Part of the Global Allergy and Asthma European Network (GA<sup>2</sup>LEN)

### Summary:

GA<sup>2</sup>LEN is a network of 26 leading research centres in Europe that aim to establish a European Research Area of Excellence in the study of allergies and asthma.

Examining the factors associated with the development of allergic diseases and asthma requires epidemiological longitudinal investigations, especial birth cohort studies. Accordingly, one of the GA<sup>2</sup>LEN subprojects has compared all existing European cohort studies.

Thus far, we have been able to compile the characteristics of 24 birth cohort studies on asthma and allergies from 9 European countries. The first studies were initiated in 1985 in Northern Europe (Denmark, later: Sweden, Norway) and Western Europe (Great Britain, Germany, the Netherlands); in recent years, long-term birth cohort studies have also begun in Southern and Eastern Europe (Spain, Italy, Lithuania). The majority of these have investigated asthma and allergies primarily in children from large cities rather than from rural surroundings. Many of the studies were able to achieve high participation in follow-up examinations, even after 5 years.

As part of this GA<sup>2</sup>LEN subproject, the various subjective and objective methods used in these studies to evaluate allergies and asthma have been compared. Meanwhile data of 12 birth cohorts have been pooled. In a first common analysis, data of 23,000 children are being investigated to examine if contact to pets in the first years of life increases the risk for asthma and allergies, or, as some research suggests, protects from allergies. Moreover, the findings of this GA<sup>2</sup>LEN initiative will be used in the planning of future allergy and asthma studies.

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