Title: 18-year follow-up of the Epidemiological study on the Genetics and Environment of Asthma (EGEA3): study of the follow-up bias

Body: Epidemiological cohorts of well-characterized adults on respiratory health are warranted to better understand the long-term evolution of asthma. In 1991-95, 2,047 participants were enrolled in the EGEA cohort (388 asthmatic cases, their first degree relatives, 415 controls). 12 years later (EGEA2), 1,845 participants (92.2%) of the initial population still alive had answered
to a short self-completed questionnaire and 1,543 (77.1%) to the main questionnaire (+58 new family members).

A 18-year follow-up of the EGEA cohort (EGEA3) through a self-completed questionnaire with detailed phenotypic, treatment and environmental exposure information has been initiated mid-2011 among the EGEA2 population still alive (n=1,966).

As 02/2013, 1,455 returned the completed questionnaire (74%). Reminders are still ongoing to increase this response rate. Compared to EGEA3 participants, non-participants (n=511) were significantly younger (35 vs 43 yrs), more often men (56 vs 49%), and without occupation (14 vs 10%). After adjustments for age and sex, only the difference for smoking remained significant. Non-participants reported more often ever asthma (50 vs 42%, p<0.01) and had more often allergic sensitization at EGEA2 (64 vs 55%, p=0.01), but after adjustments for age and sex, these differences became non significant. No difference was observed for FEV1, current asthma and asthma control.

The 18-year follow-up of the EGEA cohort through a self-completed questionnaire has reached an excellent response rate, allowing to better characterize the temporal evolution of the disease, and to fully exploit the EGEA2 biobank.

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