environmental toxicants (eg, air pollutants) and therefore of public health relevance. Second, age was not predictive of nonpersistence in our study (see table 4 in the online supplement). Third, the non-persistence rate was lower in heavy smokers (14.0 cases/1000 person-years in heavy baseline smokers vs 19.2 cases/1000 person-years in all participants, see table 4 in online supplement) and approaches that observed in the more homogeneous NELSON study which included only smokers. Fourth, it is well established that additional risk factors beyond active smoking contribute to age-related lung function decline. COPD is acknowledged as being more than a smoking-related disease.<sup>2</sup> In the SAPALDIA cohort one-third of subjects with airflow obstruction at follow-up examination were never smokers.<sup>3</sup> Previous estimates from developed countries also ranged from 17.0% to 38.8%.<sup>2</sup> Fifth, it is important to differentiate between actual measurement error and true measurement variation. Lung function may show considerable variation over time due to different reasons, including changes in environmental conditions. This explains some of the observed non-persistence and incidence. From a population-based perspective it is, however, the average distribution of health parameters which matters and not the classification of individuals into fixed clinical categories. Sixth, previously reported values and SDs of longitudinal lung function change in the SAPALDIA cohort<sup>4</sup> were very comparable to those found in other stud-ies—for example, the ECRHS.<sup>5</sup> SAPALDIA has applied very stringent quality control procedures including different 'round robin' studies comparing devices and fieldworkers, as referenced in our paper.

However, we thank Dr Hoesein for pointing to the unusually low SDs in the percentage predicted values of forced vital capacity (FVC) and forced expiratory volume in 1 s (FEV<sub>1</sub>)/FVC. This is indeed a mistake in table 1 and the corrected values are provided in the revised table 1 shown here. Further, we would like to correct the third author's name which is PO Bridevaux and not B Pierre-Olivier.

Nicole M Probst-Hensch,<sup>1,2</sup> Ivan Curjuric,<sup>1,2</sup> Pierre-Olivier Bridevaux,<sup>3</sup> Nino Künzli,<sup>1,2</sup> Christian Schindler,<sup>1,2</sup> Thierry Rochat<sup>3</sup> <sup>1</sup>Department of Epidemiology and Public Health, Swiss Tropical and Public Health Institute, Basel, Switzerland; <sup>2</sup>University of Basel, Basel, Switzerland; <sup>3</sup>Division of Pulmonary Medicine, University Hospitals of Geneva, Geneva, Switzerland

**Correspondence to** Professor Dr Nicole M Probst-Hensch, Unit of Chronic Disease Epidemiology, Department of Epidemiology and Public Health, Swiss Tropical and Public Health Institute, Socinstrasse 57, P O Box, 4002 Basel, Switzerland; nicole.probst@unibas.ch

### Competing interests None.

**Ethics approval** Ethics approval for the original study was obtained from the respective Swiss and Cantonal Ethics Boards.

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## RETRACTION

# Prescribing of $\beta$ -adrenoceptor antagonists in asthma: an observational study

The authors regret to inform you that they have retracted the manuscript, Prescribing of  $\beta$ -adrenoceptor antagonists in asthma: an observational study,<sup>1</sup> from publication in *Thorax* due to concerns over the reliability of the oral steroid outcome following a new  $\beta$ -blocker prescription. One of the aims of this observational study was to determine the relative incidence of asthma patients prescribed oral steroids immediately

following a new oral  $\beta$ -blocker using prescriptions over a 2-year observation period. A new  $\beta$ -blocker was defined when patients received  $\beta$ -blocker prescriptions for the first time following a pre-exposure period of 114 days in order to reduce the possibility of patients receiving earlier prescriptions out with our 2-year window.

However, upon completion of a follow-up study using the same dataset, concerns were raised over completeness of  $\beta$ -blocker prescription data during the first year of the observation period. This has subsequently been checked with the data provider resulting in a significant proportion of patients previously defined as having received a 'new' prescription actually having received  $\beta$ -blocker therapy at an earlier date. The original analysis has therefore been performed using patients with a mixture of new and repeat  $\hat{\beta}$ -blocker prescriptions and given the potentially opposing effects of acute and chronic  $\beta$ -blocker therapy in asthma, this pooled analysis is difficult to interpret

The prevalence of  $\beta$ -blocker prescribing in asthma (including descriptions of average doses and numbers of repeat prescriptions) remain accurate but are representative of the second year of observation only. We are currently looking to clarify the effect of new  $\beta$ -blocker prescribing in relation to the use of oral steroids by obtaining data over a longer period of observation. In this way, we will be able to identify patients who are prescribed new  $\beta$ -blocker prescriptions more accurately.

### **Daniel R Morales**

**Correspondence to** DR Morales, School of Medicine, North Haugh, University of St Andrews, Fife KY16 9TF, UK; danielmorales@nhs.net

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