

## CORRESPONDENCE

### Ireland needs healthier airways and lungs: the evidence (INHALE)

To the Editor:

We would like to congratulate the European Respiratory Society on the publication of the *European Lung White Book*. Here, on the western periphery of Europe, we have felt that our Irish Health Service is not fully aware of the importance of lung diseases and the resources necessary to deal with them. Accordingly, we have recently published a report entitled "Ireland needs healthier airways and lungs: the evidence", which has been circulated with the latest issue of the *Irish Medical Journal*. This report describes morbidity, mortality and treatment data for all types of lung disease in children and adults, involving both primary care and the hospital service. We chose a national publication in order to target planners in our health service and the Irish Thoracic Society supported the launch of the document.

Our work uncovered some disturbing facts. In Ireland, deaths from respiratory disease equal those from coronary artery disease and exceed those due to nonrespiratory cancer. Ireland has the highest death rate from respiratory disease in western Europe; death rates are over twice the EU average and nearly twice the European average. In Europe, only

Kyrgyzstan, Kazakhstan and Turkmenistan have higher death rates from respiratory disease. The relative burden of respiratory disease in Ireland is rising, as that of heart disease decreases. The total direct medical cost for respiratory disease in Ireland was €388.7 million in 2001.

We invite readers of the *European Respiratory Journal* and members of the European Respiratory Society to read our document, which is available for free download in pdf format at [www.imj.ie](http://www.imj.ie) or [www.imo.ie](http://www.imo.ie). We believe that our document complements the contents of the *European Lung White Book* (available at [www.ersnet.org](http://www.ersnet.org)) and presents the statistics relating to lung disease in a more detailed national context for Ireland. By highlighting the scope of the problems in this large-volume, but politically unfashionable area, we hope that more effort and resources will be directed to policies and services that will improve standards of care for patients with pulmonary disease.

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### Exhaled breath condensate: a space odyssey, where no one has gone before...

To the Editor:

We read with great interest the editorial of RAHMAN [1] on the reproducibility of oxidative stress biomarkers in breath condensate. As a consequence, we would like to share some of our thoughts, as ultimately, we all may want to walk on planet Mars. However, this does not mean that we are already able to lift off, as many methodological problems first need to be properly addressed. Similarly, exhaled breath condensate (EBC) is an interesting noninvasive technique to explore inflammatory lung diseases, where no one has gone before... Many methodological issues are still waiting to be solved, as recently reviewed [2]. Indeed, the development of EBC is currently hampered by many conflicting reports on biomarker reproducibility. As clearly stated, one of the main obstacles consists of current analytical problems, due to limitations of sensitivity and specificity of the assays used to date [3].

However, the statement that "now with the use of EcoScreen, collection of EBC is being standardised in many leading laboratories" may be misleading, as it suggests that "this would no longer be a confounding factor contributing to the variations in biomarkers in EBC" [1]. We want to clearly point out that the EBC collection method still remains a possible confounding factor and an important source of biomarker variability, because standardisation involves applying more than one identical collection technique. To

our knowledge, there is no scientific evidence that the EcoScreen condenser would be the most valid technique to collect EBC for the measurement of inflammatory mediators in condensate. In fact, the key issue is not the reproducibility of a certain biomarker, but the reproducibility of a certain biomarker for a certain condenser system [2]. We compared the influence of different inner condenser coatings on the detection of human albumin and 8-isoprostane in EBC [4]. Our data show a much greater efficiency of condenser systems with a borosilicate glass or silicone coating, compared with the EcoScreen or condensers with aluminium, polypropylene and teflon coating. This implicates that the EcoScreen may not be the most valid apparatus, at least not for some biomarkers.

Although the need for clear-cut methodological recommendations is incontestable, one has to recognise that we are not yet able to give such recommendations. Further research on the reproducibility of biomarkers with different condenser systems is urgently needed.

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