dramatic fall in pulmonary artery pressure, the patient might fulfil the responder criteria (fall in mean pulmonary artery pressure by >10 mmHg to <40 mmHg in the presence of a cardiac output), and may, therefore, be a candidate for treatment with calcium channel blockers [1].

I agree with A.H. Morice and coworkers that the relatively short half-life of sildenafil (3–4 h) may be a drawback of this drug. Patients' compliance may rarely be an issue. However, the fluctuations in sildenafil plasma concentrations are poorly tolerated by some patients. A drug with a much longer half-life, such as tadalafil (~18 h), might be advantageous, but caution is necessary. Ghofrani *et al.* [2] have demonstrated substantial variability in the haemodynamic effects of several phosphodiesterase-5 inhibitors. For the time being, there is a strong body of evidence for the safety and efficacy of sildenafil in pulmonary arterial hypertension, but there is a lack of comparable data for other phosphodiesterase-5 inhibitors, such as tadalafil.

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# Efficacy of fluticasone on cough

To the Editors:

In the original article by PONSIOEN *et al.* [1], there is no mention of the predictive value of the type of airway inflammation that is associated with cough, or whether there was any benefit from inhaled corticosteroid treatment.

There is increasing evidence that eosinophilic airway inflammation, *i.e.* an eosinophilic bronchitis, which can be identified from spontaneous or induced sputum cell counts, predicts the benefit from corticosteroid treatment in chronic cough, asthma and chronic obstructive pulmonary disease and that a lack of eosinophilia indicates an absence of any benefit [2–6].

An eosinophilic bronchitis occurs in only 10–30% of patients referred to a specialist with an isolated chronic cough [7–9]. Hence, in an unselected population of patients with cough, the majority of whom will not have eosinophilic bronchitis, the benefit from inhaled steroid treatment is likely to be small, as indicated in the study by PONSIOEN *et al.* [1], or absent. Measurement of airway inflammation is necessary to interpret the results of treatment with anti-inflammatory medications.

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From the authors:

We would like to thank F. Hargreave and K. Parameswaran for their suggestion that sputum eosinophils and the provocative dose causing a 20% fall in forced expiratory volume in one



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second (PD20) might reflect partially distinct pathophysiological phenomena [1].

In our study, we did not find a relationship between bronchial hyperresponsiveness (PD20) and the change from baseline of the cough score. This applied to smokers as well as nonsmokers (both p>0.80) [2].

The "increasing evidence" regarding the mechanism of eosino-philic bronchitis refers to small uncontrolled studies [3, 4] or studies in severely obstructive patients [5, 6]. In the study by Pizzichine *et al.* [7], 44 adults (32 nonsmokers), with a daily bothersome cough for  $\geqslant 1$  yr, were included. None of the patients had sputum eosinophilia, and no effect was found of a 2-week treatment with budesonide compared with placebo.

Eosinophilic bronchitis occurs in 10–30% of patients referred to a specialist for chronic cough [8–10], and in 14 out of 82 (17%) primary care patients with cough (mean (range) duration 11 months (1–96)) [11]. However, in a subset of 36 patients who responded to budesonide only, seven out of 34 (thus, not more than in the studies mentioned previously) fulfilled the criterion for sputum eosinophilia (>3%) [12].

Interestingly, in our study [2], as well as the study of RYTILA *et al.* [12], cough appears to be at least as sensitive to anti-inflammatory therapy compared with other lower respiratory tract infection symptoms like wheeze and dyspnoea. Nevertheless, we agree with F. Hargreave and K. Parameswaran that the measurement of airway inflammation may help to clarify the mechanism of action of anti-inflammatory medications.

Cough may be a target symptom in studies of the mechanisms of anti-inflammatory treatment for lower respiratory tract symptoms in healthy subjects. The recent literature and the results of our study [2] suggest that investigation of sputum in nonsmoking patients, who present with unexplained cough to their doctor, is feasible and worthwhile.

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## EUS: confusion about terminology and its consequences

To the Editors:

In the March 2005 issue of the *European Respiratory Journal*, three original articles by Annema *et al.* [1], Caddy *et al.* [2], and RINTOUL *et al.* [3], accompanied by an editorial by VILMANN and LARSEN [4], appeared on ultrasound (US)-guided endoscopic

needle aspiration of mediastinal lymph nodes. All of these articles unquestionably contribute to the growing body of evidence that sampling of lymph nodes or masses in the chest using an endoscopic tool has a high yield and is safe. This letter was prompted by the new meaning of the abbreviation "EUS". The term endoscopy in the chest comprises the four entities:

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