



National Prescribing Service Limited



# Case study 53: Maximising benefits with inhaled therapy

(for GPs, pharmacists, nurses and other health professionals)

NPS case studies are designed to help you refine your clinical decision-making skills. After you complete and submit the case study, you will receive expert commentaries along with aggregated responses that provide a snapshot of your colleagues' responses.

## Scenario

Jane, a 60-year-old primary school teacher with stable COPD (diagnosed 2 years ago) presents with a wheeze and increased breathlessness, especially at night, several times over the past week following a viral infection.

On examination, PEF is 60% of her previous best normal value. Spirometry results today reveal mild COPD with a reversible component; FEV<sub>1</sub> 77% of predicted (> 12% improvement from pre-bronchodilator result) and FEV<sub>1</sub>/FVC 60%. Blood pressure is 135/86 mmHg, pulse 76, mildly distressed respiratory rate 22 and she is afebrile. Auscultation of the chest reveals widespread expiratory wheeze. Chest X-ray shows a hyper-inflated chest with no acute changes. Her body mass index is 18 kg/m<sup>2</sup>.

There is a family history of atopy and an uncle has asthma. She has no pets. She smokes about 20 cigarettes per day and has done so for the last 20 years. Past attempts to quit smoking 'cold turkey' have been unsuccessful. She has a medical history of hypertension, stable ischaemic heart disease and eczema. Her regular respiratory medications include tiotropium 18 micrograms daily and salbutamol inhaler 200 micrograms every 4–6 hours when required. Prior therapy with ipratropium bromide did not relieve her symptoms. She is also taking enalapril 20 mg, amlodipine 10 mg, isosorbide mononitrate 120 mg and aspirin 150 mg (all once daily). She uses glyceryl trinitrate spray when required and mometasone cream during eczema flare-ups.

Abbreviations: FEV<sub>1</sub> = forced expiratory flow in 1 second (post bronchodilator),  
FEV<sub>1</sub>/FVC = ratio of FEV<sub>1</sub> to forced vital capacity, PEF = peak expiratory flow.

## How to participate

**All participants:** Complete ALL questions, fill in appropriate details and sign the consent agreement in the 'Your details' box (see over).

**GPs:** To be included in the **Quality Prescribing Initiative** of the **Practice Incentives Program (PIP)**, quote your **provider and prescriber numbers** in the spaces provided.

**Pharmacists:** This activity is recognised for continuing professional development by the Pharmaceutical Society of Australia (PSA), the Society of Hospital Pharmacists of Australia (SHPA) and the Australian Association of Consultant Pharmacy (AACP). PSA members, quote your membership number in the space provided. SHPA and AACP members, please self-record this activity. For details on recording participation, see <http://casestudy.nps.org.au>

**Send to NPS by:**  
**25 July 2008**

**Send to:** NPS  
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**Or fax to:** (02) 9211 7579

Complete and submit your case study  
online at: <http://casestudy.nps.org.au>

