

28. **Pijnenburg MW**, Bakker EM, Hop WC, *et al.* Titrating steroids on exhaled nitric oxide in children with asthma: a randomized controlled trial. *Am J Respir Crit Care Med* 2005;**172**:831–6.
29. **Smith AD**, Cowan JO, Brassett KP, *et al.* Use of exhaled nitric oxide measurements to guide treatment in chronic asthma. *N Engl J Med* 2005;**352**:2163–73.
30. **Barnes PJ**, Dweik RA, Gelb AF, *et al.* Exhaled nitric oxide in pulmonary diseases: a comprehensive review. *Chest* 2010;**138**:682–92.
31. **Petsky HL**, Cates CJ, Lasserson TJ, *et al.* A systematic review and meta-analysis: tailoring asthma treatment on eosinophilic markers (exhaled nitric oxide or sputum eosinophils). *Thorax* Published Online First: 11 October 2010. doi:10.1136/thx.2010.135574.
32. **Szeffler SJ**, Mitchell H, Sorkness CA, *et al.* Management of asthma based on exhaled nitric oxide in addition to guideline-based treatment for inner-city adolescents and young adults: a randomized controlled trial. *Lancet* 2008;**372**:1065–72.
33. **Halder P**, Pavord ID, Shaw DE, *et al.* Cluster analysis and clinical asthma phenotypes. *Am J Respir Crit Care Med* 2008;**178**:218–24.
34. **Halder P**, Brightling CE, Hargadon B, *et al.* Mepolizumab and exacerbations of refractory eosinophilic asthma. *N Engl J Med* 2009;**360**:973–84.
35. **Nair P**, Pizzichini MM, Kjarsgaard M, *et al.* Mepolizumab for prednisone-dependent asthma with sputum eosinophilia. *N Engl J Med* 2009;**360**:985–93.

## Journal club

### Inhaled nitric oxide does not prevent bronchopulmonary dysplasia

The use of nitric oxide in premature infants at risk of developing bronchopulmonary dysplasia is controversial, although it improves gas exchange in animal models. This study tested the hypothesis that inhaled low concentration nitric oxide started early in babies with mild respiratory failure reduces the incidence of bronchopulmonary dysplasia.

Eight hundred preterm infants with a gestational age at birth between 24 and 29 weeks, weighing at least 500 g, requiring surfactant or continuous positive airway pressure for respiratory distress within 24 h of birth were included in this double-blind, multicentre randomised controlled trial. Three hundred and ninety-nine infants were randomly assigned to low-dose inhaled nitric oxide and 401 to placebo gas for a minimum of seven and a maximum of 21 days.

Treatment with inhaled nitric oxide and placebo did not result in significant differences in survival of infants without the development of bronchopulmonary dysplasia or in the development of bronchopulmonary dysplasia.

This study showed no benefit with low-dose inhaled nitric oxide as a preventive treatment strategy in premature babies at risk of developing bronchopulmonary dysplasia.

► **Mercier JC**, Hummler H, Durrmeyer X, *et al.*; for the EUNO Study Group. Inhaled nitric oxide for prevention of bronchopulmonary dysplasia in premature babies (EUNO): a randomised controlled trial. *Lancet* 2010;**376**:346–54.

#### A Bhatta

**Correspondence to** A Bhatta, ST3 Respiratory Medicine, Royal Albert Edward Infirmary, Wigan, Wing12, Block 1, Leigh Infirmary, The Avenue, Leigh WN71HS, UK; amrith.bhatta@doctors.org.uk

Published Online First 27 September 2010

*Thorax* 2011;**66**:520. doi:10.1136/thx.2010.149922