Respiratory medicine—challenging times, hope for the future

The Lancet today is dedicated to respiratory medicine ahead of the 2012 European Respiratory Society (ERS) annual congress in Vienna, Austria, on Sept 1–5. An ageing population, poor smoking cessation rates, and environmental factors such as air pollution mean that the global burden of respiratory disease is set to increase: the European Lung Foundation estimates that, in 2020, 11·9 million of 68 million deaths worldwide will be caused by lung diseases. As ERS President Klaus Rabe discusses in his Comment, poverty and limited access to health care also have a substantial role, since social inequality causes a higher proportion of respiratory-related deaths than any other disease area.

In tackling respiratory disease it is imperative to focus not only on the household names of pulmonary medicine, asthma and chronic obstructive pulmonary disease, but also on rare and underfunded areas. The Lancet is taking the opportunity to raise awareness of the less publicised chronic respiratory disorders that continue to pose difficult diagnostic and treatment challenges. A clinical Series in this issue, which will be presented at a joint ERS-Lancet symposium on Sept 2 in Vienna, focuses on interstitial lung disease (ILD). ILD is a devastating and poorly understood group of more than 300 disease entities for which there has been a paucity of therapeutic clinical trials. With concerted efforts from groups such as the Idiopathic Pulmonary Fibrosis (IPF) Network and the Pulmonary Fibrosis Foundation, the amount of research has increased, especially in IPF—the most prevalent ILD and the one with the worst prognosis. The Series papers review the cellular and molecular pathogenesis of IPF, treatment options in IPF and hopes for new therapeutic targets, and the possibility of improving the diagnosis of and cause-specific treatments for ILD associated with connective tissue diseases. There remains no proven drug treatment to modify the clinical course of IPF, and patients rely on lung transplantation or on being recruited to clinical trials. However, the papers published today are optimistic that, with improved understanding of the disease processes involved in ILD, targeted clinical trials can begin to unravel some of the mystery that surrounds effective treatment.

One of the most difficult aspects of ILD is narrowing down an individual’s presentation to a specific diagnosis. One of the key lectures at the ERS congress this year is on the classification of idiopathic interstitial pneumonias, which is set to change later this year. The hope is that this reclassification will allow greater prognostic precision and that future studies can be more informative.

The Lancet is excited to be publishing two clinical trials in specialised areas of respiratory medicine that show the importance of targeting research to specific subgroups of patients. Ian Pavord and colleagues report the results of the DREAM trial in which mepolizumab was effective and well tolerated in reducing exacerbations in patients with severe eosinophilic asthma. In a disorder with few treatment options, the effect of reducing exacerbations leads us to eagerly anticipate the results of ongoing trials into the possible role of mepolizumab as a corticosteroid-sparing agent for patients with severe asthma. In another relatively uncommon disorder, non-cystic-fibrosis bronchiectasis, Conroy Wong and colleagues focus on the use of azithromycin for prevention of exacerbations. The use of prophylactic macrolide antibiotics in these patients was largely based on their efficacy in patients with cystic fibrosis, and the results of the EMBRACE trial, which show a reduction in exacerbation rates in non-cystic-fibrosis bronchiectasis, are encouraging. Further studies are needed, however, to define the subgroups in which these prophylactic antibiotics should be used and to guide doctors better in treating this challenging disease.

The complex nature of respiratory diseases and the challenges they pose mean an integrated, multidisciplinary approach is vital. Improving outcomes in chronic lung disease will hopefully follow through shared experience and knowledge. Therefore, with the desire to stimulate further debate through quality research, reviews, news, and opinion, The Lancet is proud to announce the launch of The Lancet Respiratory Medicine in early 2013. The new journal will be the fourth Lancet specialty journal, and will offer the same unique fast-track experience offered by its sister journals for selected research.

Although there are challenging times ahead for respiratory medicine, if the scientific community can work collaboratively and provide policy makers with a strong evidence base with which to tackle issues effectively, there is hope for the future. ■ The Lancet