EXERCISE CAPACITY IN COPD
Skeletal muscle bulk improves exercise capacity in COPD patients, and exercises to increase muscle mass are part of pulmonary rehabilitation. This randomised, double-blind, placebo-controlled trial in the Lancet (doi:10.1016/S2213-2600(15)00503-2) looked at the effect of neuromuscular electrical stimulation (NMES) to the quadriceps on exercise capacity in patients with severe COPD (FEV₁ < 50%, MRC score ≥4). Fifty-two patients were assigned to receive either active or placebo NMES over 6 weeks. Change in 6 min walk test distance (the primary end point) was greater in the active group than the placebo group, with a mean change of 35.7 m (95% CI 10.5 to 60.9) (p = 0.005). Patients receiving the NMES also reported greater ease in carrying out activities of daily living. Unfortunately, the effect waned 6 weeks after the intervention was stopped. The findings of this study could prove beneficial in the management of patients unable to undergo conventional pulmonary rehabilitation, as NMES can be carried out in the home environment, independently, and is well tolerated. However, the practicalities of recurrent neuromuscular stimulation would have to be overcome to maintain the effect.

CRYOBIOPSY IN ILD
Transbronchial lung cryobiopsy (TBLC) is an emerging diagnostic technique whereby a biopsy probe is inserted into the bronchus, rapidly cooled and then withdrawn with the tissue sample stuck to the probe. This seems to give bigger pieces of biopsied tissue for analysis with better preservation of tissue architecture and less crush artefact compared with transbronchial lung biopsy (TBLB). The two techniques provided the same diagnosis in 26 patients (46%). A diagnosis was reached for an additional 11 patients when TBLC was added to TBLB. Two patients required the more invasive video-assisted thoracoscopic surgery (VATS) to establish a diagnosis. TBLC could therefore prove useful in patients unable to undergo VATS or open lung biopsy.

SEVERE SEPSIS IN CAP
Severe sepsis may be present in a third of patients presenting to hospital with community-acquired pneumonia (CAP). This Spanish paper (doi:10.1371/journal.pone.0145929) aimed to identify which risk factors are associated with severe sepsis in CAP. The prospective multicentre cohort study across 13 Spanish hospitals looked at 4070 CAP patients, of whom 1529 (37.6%) presented with markers of severe sepsis. Perhaps unsurprisingly, factors independently associated with severe sepsis (and therefore poorer outcome with significantly higher mortality) were found to be age > 65 years (OR 1.34, 95% CI 1.15 to 1.55), renal disease (OR 1.31, 95% CI 1.21 to 2.03), COPD (OR 1.75; 95% CI 1.50 to 2.04), and alcohol misuse (OR 1.31; 95% CI 1.07 to 1.61). Previous antibiotic treatment was considered protective (OR 0.62; 95% CI 0.52 to 0.73).

PULMONARY REHABILITATION FOR SARCOIDOSIS?
Pulmonary rehabilitation is widely used for COPD and increasingly used for other diseases such as idiopathic pulmonary fibrosis. This prospective, randomised, controlled, double-blind study (doi:10.4187/respcare.04312) looked at the effect of inspiratory muscle training on multiple end points in patients with sarcoidosis including pulmonary function tests, diffusing capacity, exercise capacity, dyspnoea perception, respiratory muscle strength, fatigue and quality of life. Fifteen patients with sarcoidosis in the treatment arm received inspiratory muscle training, while 13 control subjects received sham therapy for 6 weeks. At the end of treatment there was significant improvement in functional (p < 0.001) and maximal exercise capacity (p = 0.038), respiratory muscle strength (PIMax (p < 0.001) and PEmax (p = 0.001)), severe fatigue (p = 0.002), and dyspnoea perception (p = 0.02) in the treatment group compared with controls. There were no significant improvements in pulmonary function and diffusing capacity, fatigue or quality of life between the two groups.
for platinum-based treatment, low-quality evidence suggests that non-platinum combination and single-agent therapy regimens have similar effects on survival. The comparability of their adverse event profiles is unclear. Further evidence on quality of life gathered from additional studies is needed to help inform decision making.

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