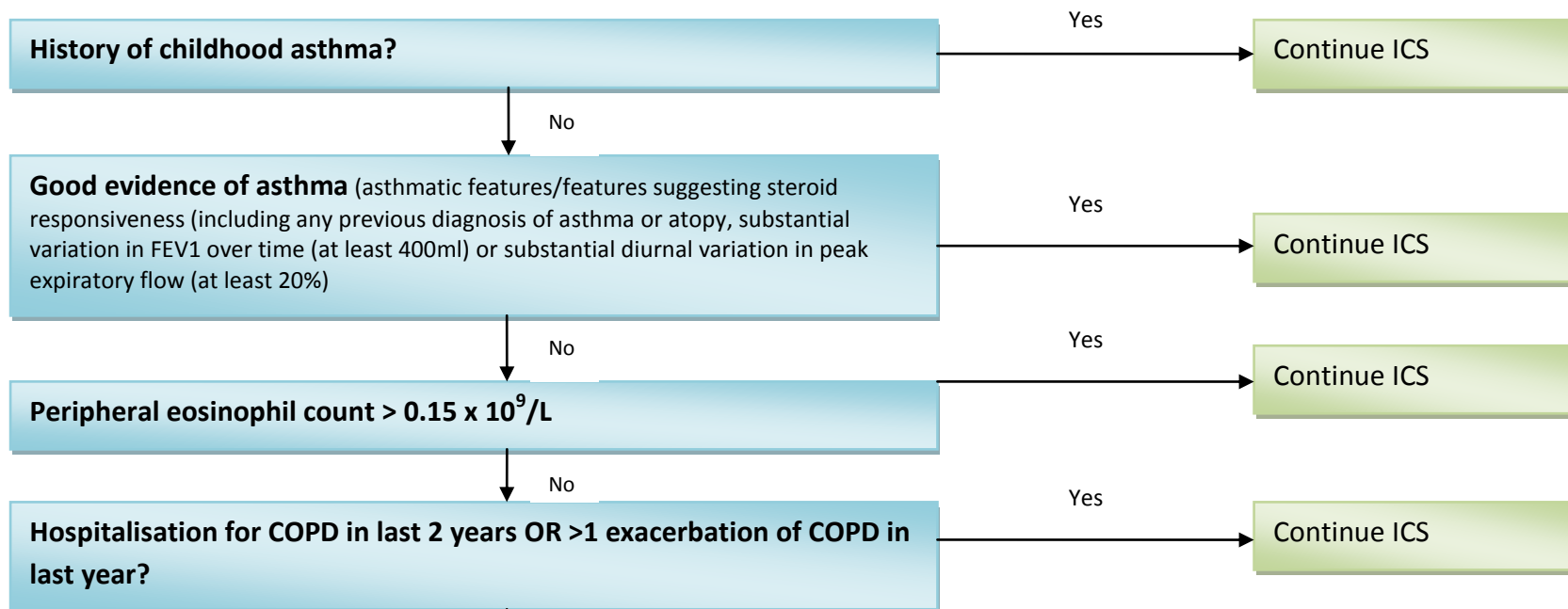


## Sheffield Protocol for Withdrawal of Inhaled Corticosteroids (ICS) in COPD



**Other patients**

Refer the following patients to secondary care for consideration of phased withdrawal of ICS

- A history of more than one episode of radiologically confirmed pneumonia **or**
- > 3 culture-positive exacerbations in the previous 12 months

**Discontinue ICS** – change to LAMA/LABA combination inhaler as per patient preference/inhaler technique (Anoro Ellipta, Ultibro Breezhaler or Duaklir Genuair are the formulary choices)

Consider baseline spirometry when stopping ICS  
Please note - ICS do not need to be phased out/reduced gradually in these patients

**Review at 6-8 weeks post change to LAMA/LABA**  
If clinically stable – continue LAMA/LABA. If in doubt repeat spirometry and review

## Background

This algorithm has been developed to help primary care clinicians identify people with COPD who might benefit from having ICS withdrawn.

The aim is to help individualise treatment and assess if patients are receiving the most appropriate treatment while aiming to avoid pneumonia and any avoidable side effects.

In Sheffield we recommend, for patients with predominant breathlessness, the use of combined dual bronchodilation with long acting beta agonist (LABA) and long acting muscarinic antagonist (LAMA) as first line therapy. ICS/LABA combinations are reserved for patients with 2 or more exacerbations in the last 12 months and a blood eosinophil count  $> 0.15 \times 10^9/L$  or previous history of asthma.

Long-term ICS use is associated with a significant risk of pneumonia [Yawn 2013; Suissa 2013; Kew & Seniukovich 2014] and systemic effects [Price 2012] and discontinuing ICS rapidly decreases the risk of serious pneumonia [Suissa 2015]. Guidance has highlighted the limited role of ICS in COPD for some time [GOLD 2001] yet despite this there is still evidence of inappropriate use of ICS in COPD patients who are at low risk of exacerbation [Vestbo 2014; Price 2014].

Recent studies have indicated that ICS can be withdrawn in both low- and high-risk patients, provided adequate bronchodilator therapy is in place [Rossi 2014a; Rossi 2014b; Magnussen 2014]. Withdrawal of ICS only increased exacerbation rates in patients with both raised eosinophils and a history of frequent exacerbations [Calverley 2016]. Such patients are already excluded using this algorithm.

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