

## **Caution needed when prescribing and dispensing inhalers.**

Prescribing & dispensing inhalers is becoming more complex:

- There are over 100 inhaler devices on the market.
- Combination inhalers are now encouraged in [asthma](#) and [COPD](#) guidelines to improve compliance, reduce the CO2 emissions and the number of inhalers prescribed.
- Prescribing by brand is recommended to ensure continuity of the device the patient has been counselled to use, but use of the brand name can make it less obvious which ingredients each inhaler contains.

Due to the increase in complexity of inhalers more prescribing and dispensing errors occur including duplication of ingredients when more than one inhaler is prescribed.

### **What is an inhaler duplication error?**

When two or more inhalers are prescribed which contain ingredients from the same therapeutic drug class, e.g. two long-acting beta agonists (LABAs), or two antimuscarinics (LAMAs).

**Patients should not be prescribed more than one inhaler containing the same drug class.**

Exceptions to this include, two inhaled corticosteroids if under specialist care for severe conditions, or where an inhaler device and a refill (e.g., Spiriva) are both on the patient's medication screen.

Across the Lancashire and South Cumbria ICB (LSC ICB) **over 800 patients** were found to be prescribed two or more inhalers which contained a duplication of ingredients from the same drug class.

### **What is the impact on the patient?**

**80%** of errors identified were process errors and duplicate devices were not being ordered by the patient.

**20%** of patients were ordering inhalers with more than one ingredient from the same drug class.

**10%** of the patients regularly ordering the inhaler duplication errors, presented to their GP or secondary care with symptoms suggesting drug related side effects.

**Symptoms** included tremor, palpitations, ECG changes, uncontrolled hypertension or anxiety.

### **What can be improved?**

- Raise awareness of the risk of inhaler errors within your work place – use the attached [Inhaler prescribing guide](#) and [Right Breathe](#) to identify safe inhaler combinations
- At the point of prescribing, authorising a prescription or completing a medication review:
  - check inhaler ingredients,
  - ensure there is no duplication of drug class.
  - prescribe the inhaler using the brand which the patient has been counselled to use.
- Be diligent to changes in medication and risk of errors occurring when patients transfer between care sectors and clinics.
- Communicate clearly if medication is stopped or started and give a rationale for the change.
- Update medical records to reflect current treatment and changes. Use the EMIS 'Replace' function when trialling new inhalers, and ensure past inhalers are archived.
- Only issue inhalers from the 'current medication screen'. Only permit clinicians to restart inhalers from the 'past medication screen' following a clinical review of inhaled therapy.
- When dispensing inhalers be aware of possible duplication, check ingredients, take care with similar brand names.
- Check patients understand how to use their inhalers and are fully aware of any changes made - community pharmacy can offer the [New Medicines Service](#).
- Challenge all unsuitable inhaler combinations and doses with the prescriber.

**Identifying the ingredients in each inhaler is key to preventing errors from occurring.**

# Quick reference prescribing guide to prevent inhaler duplication errors.

Name of Drug Class	SABA	SAMA	LAMA	LABA	ICS
Generic drugs names included. The ending helps identify the class	Salbutamol Terbutaline	Ipratropium (Atrovent)	Tiotropium Aclidinium Glycopyrronium Umeclidinium	Formoterol Salmeterol Olodaterol Indacaterol Vilanterol	Beclometasone Fluticasone Mometasone Budesonide Ciclesonide
Rules to observe when prescribing multiple inhalers	Can be prescribed with any other inhaler	Should not be prescribed with another muscarinic antagonist. e.g. SAMA or LAMA	Should not be prescribed with another muscarinic antagonist. e.g. SAMA or LAMA	Should not be prescribed with another long-acting beta <sub>2</sub> agonist (LABA)	Two ICS's can be used together under secondary care supervision, often Ciclesonide.
Examples of combination devices available where errors are most likely to occur			LAMA / LABA Combinations e.g. Duaklir <sup>®</sup> , Ultibro <sup>®</sup> , Spiolto Respimat <sup>®</sup> etc.	LABA / ICS Combinations e.g. Fostair <sup>®</sup> , Symbicort <sup>®</sup> , Seretide <sup>®</sup> , Combisal <sup>®</sup> etc.	LAMA / LABA / ICS Combinations e.g. Trelegy Ellipta <sup>®</sup> , Trimbow <sup>®</sup> , Trixeo <sup>®</sup> etc

**Prescribing, transcribing, completing medication reviews, writing letters / discharges, authorising prescriptions or dispensing.  
Think, what are the ingredients? Check for duplication.**

If you would like more information, please contact your local ICB medicines optimisation team.