Respiratory Inhalers
Identification Guide
Version 2

This booklet has been produced by NHS Greater Glasgow and Clyde together with the following companies, Almirall, AstraZeneca, Boehringer Ingelheim Ltd, Chiesi, GSK, Napp and Novartis as a service to medicine. Endorsed by NHSGGC Respiratory Managed Clinical Network, September 2013
Designed by Medical Illustration Services
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#### Respiratory Inhaler Identification

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**Spacer Devices**
Some inhaler devices are relatively more expensive than others. Examples of some of the higher cost devices are provided below. (Costs from eMIMS May 2013)

**Examples of High Cost Respiratory Inhaler Devices**

Seretide Accuhaler®
- 250 strength (60 doses) £35
- 500 strength (60 doses) £40.92

Seretide Evohaler®
- 125 strength (120 doses) £35
- 250 strength (120 doses) £59.48

Symbicort Turbohaler®
- 200/6 strength (120 doses) £38
- 400/12 strength (60 doses) £38

Spiriva®
- cap pack with HandiHaler® device £34.87
- 30 cap refill £33.50

NB. For patients on Seretide® 500 micrograms twice daily, the 250 evohaler® is more expensive than the equivalent 500 accuhaler®
** Important points to consider before issuing or prescribing inhalers **

- Approximately £1.5 million\(^1\) was spent in 2012/13 on inhalers within NHSGGC Acute care. A lot of inhaler wastage occurs across NHSGGC Acute and most would be considered preventable.

- By adhering to the following recommendations, inhaler wastage could be minimised. Patient safety would also be improved by ensuring patients receive the correct inhaler, strength and device during hospital admission.

- Encourage the use of patient’s own inhalers.

- Always ask patients if they have their own inhaler(s) before ordering or issuing a new inhaler. If patients have their own inhaler(s), check the expiry date and if it is the current inhaler prescribed by the GP. If they don’t have their inhaler, ask if a relative or carer could bring it in at their earliest convenience.

- If a patient is transferred to another ward, ensure inhaler(s) are transferred with the patient. Similarly, if a patient has been transferred from another ward, always check if they have been issued with inhaler(s) prior to transfer.

- Always check what type of inhaler device and strength the patient uses before ordering or issuing a new one. If unsure, discuss with the doctor, clinical pharmacist, or respiratory nurse specialist.

- Ensure the correct device is clearly prescribed on the medicine prescription form (e.g. Accuhaler\(^\circ\), turbohaler\(^\circ\), evohaler\(^\circ\)) prior to administration.

- Always check if a patient has an inhaler before documenting code ‘13’ (patient self administration) on the medicine prescription form. Do not assume that patients have their own inhalers and they are using them as prescribed.

- When patients are started on inhalers for the first time, inhaler technique should be assessed. Seek advice from pharmacy or respiratory nurse specialist if unsure of the most suitable device.

** Stop and think before ordering, issuing or prescribing inhalers **

\(^{1}\) (costs from Ascribe business objects acute database)
Respiratory Inhaler Identification

There are many different inhaler devices available. Examples of the different types of inhaler devices are illustrated to aid identification. Please note however, that different strengths of inhalers may be slightly different colours than those shown. The manufacturer’s packaging may also differ from time to time. The following images are for illustrative purposes only. If the patient does not have any of the inhaler devices illustrated, and you are unsure what device the patient normally uses, please speak to a pharmacist or respiratory nurse specialist for further advice.

This booklet is not intended to be a prescribing guide. Although dosage information is provided for some preparations, always refer to the BNF or manufacturer’s Summary of Product Characteristics (SPC) for current dosage advice and further information.

The examples of the medicine prescription forms (kardexes) are for illustrative purposes only and do not reflect all doses available for each inhaler preparation.

The Asthma UK website has useful information on how to use spacers and different inhaler devices. Refer to the link below to access videos on inhaler technique:
http://www.asthma.org.uk/knowledge-bank-treatment-and-medicines-using-your-inhalers
**Bronchodilator – short-acting beta$_2$ agonist (blue/reliever) Inhalers (SABAs)**

**SALBUTAMOL**

Salbutamol
*MDI (aerosol)*  
(brands include Ventolin evohaler®)

Strength: 100 micrograms/metered inhalation

Salamol
**Easi-Breathe®**  
(aerosol)

Strength: 100 micrograms/metered inhalation

Airomir
**Autohaler®**  
(aerosol)

Strength: 100 micrograms/metered inhalation

Adult Dose
*By aerosol inhalation*

100-200 micrograms; for persistent symptoms up to 4 times daily. Refer to manufacturer’s dosing instructions or BNF for further advice.

Example of medicine prescription form

(*MDI = metered-dose inhaler)

NB. Different strengths of inhalers may be slightly different colours to those illustrated.
Bronchodilator – short-acting beta\(_2\) agonist (blue/reliever) Inhalers (SABAs)

**SALBUTAMOL**

- **Pulvinal\(®\)**
  - Salbutamol (dry powder)
  - Strength: 200 micrograms/metered inhalation

- **Easyhaler\(®\)**
  - Salbutamol (dry powder)
  - Strengths: 100, 200 micrograms/metered inhalation

- **Asmasal Clickhaler\(®\)**
  - Strength: 95 micrograms/metered inhalation

- **Ventolin Accuhaler\(®\)**
  - Strength: 200 micrograms/metered inhalation

\(^\text{Refer to manufacturer’s dosing instructions or BNF for further advice.}\)

**Example of medicine prescription form**

NB. Different strengths of inhalers may be slightly different colours to those illustrated.
Bronchodilator – short-acting beta\textsubscript{2} agonist (blue/reliever) Inhalers (SABAs)

**TERBUTALINE SULPHATE**

**Bricanyl Turbohaler\textsuperscript{®}**
(dry powder)

Strength: 500 micrograms/metered inhalation

**Adult Dose**

*By inhalation of powder*

500 micrograms; for persistent symptoms up to 4 times daily. Refer to manufacturer’s dosing instructions or BNF for further advice.

**Example of medicine prescription form**

NB. Different strengths of inhalers may be slightly different colours to those illustrated.
Long-acting beta₂ agonist Inhalers (LABAs)

**SALMETEROL**

*Serevent Accuhaler®*
(dry powder)
Strength: 50 micrograms/metered inhalation

Adult Dose
*By inhalation of dry powder*
50 micrograms twice daily; up to 100 micrograms twice daily.
Refer to manufacturer’s dosing instructions or BNF for further advice.

Example of medicine prescription form

*NB. Different strengths of inhalers may be slightly different colours to those illustrated.*
Long-acting beta\textsubscript{2} agonist Inhalers (LABAs)

**FORMOTEROL FUMARATE**

**Oxis Turbohaler\textsuperscript{©}**
(dry powder)

Strengths\textsuperscript:^: 6, 12 micrograms/metered inhalation

\textsuperscript{^}Refer to manufacturer’s dosing instructions or BNF for further advice.

**Easyhaler\textsuperscript{®} Formoterol**
(dry powder)

Strength: 12 micrograms/metered inhalation\textsuperscript(^)

**Atimos Modulite\textsuperscript{®}**
(aerosol)

Strength: 12 micrograms/metered inhalation\textsuperscript(^)

Example of medicine prescription form

NB. Different strengths of inhalers may be slightly different colours to those illustrated.
Long-acting beta₂ agonist Inhalers (LABAs)

INDACATEROL

Adult Dose: By inhalation of dry powder
150 micrograms once daily, increased to max. 300 micrograms once daily.
Refer to manufacturer’s dosing instructions or BNF for further advice.

Onbrez Breezhaler®
(inhalation powder, hard capsule)
Strengths: 150, 300 micrograms/metered inhalation

Example of medicine prescription form

NB. Different strengths of inhalers may be slightly different colours to those illustrated.
Antimuscarinic Bronchodilator Inhalers – short-acting muscarinic antagonists (SAMAs)

IPRATROPIUM BROMIDE

**Atrovent®**

**MDI (aerosol)**

Strength: 20 micrograms/metered inhalation

Adult Dose

*By aerosol inhalation*

20-40 micrograms 3-4 times daily. Refer to manufacturer’s dosing instructions or BNF for further advice.

Example of medicine prescription form

**NB.** Different strengths of inhalers may be slightly different colours to those illustrated.
TIOTROPIUM

Spiriva®
(inhalation powder, hard capsule for use with HandiHaler® device)
Strength: 18 microgram cap

Adult Dose
By inhalation of powder
18 micrograms once daily. Refer to manufacturer’s dosing instructions or BNF for further advice.

Spiriva Respimat®
(solution for inhalation) Please note. Spiriva Respimat is currently non-formulary in NHSGGC.
Strength: 2.5 micrograms/metered inhalation

Adult dose
By inhalation
5 micrograms (2 puffs) once daily. Refer to manufacturer’s dosing instructions or BNF for further advice.

Example of medicine prescription form

NB. Different strengths of inhalers may be slightly different colours to those illustrated.
ACLIDINIUM BROMIDE

**Eklira Genuair**®
(dry powder)

Strength: 400 micrograms/metered inhalation

Equivalence: each 400 micrograms metered inhalation of aclidinium bromide delivers 375 micrograms of aclidinium bromide which is equivalent to 322 micrograms of aclidinium.

**Adult Dose**

*By inhalation of dry powder*

1 inhalation twice daily.

Refer to manufacturer’s dosing instructions or BNF for further advice.

**Example of medicine prescription form**

**NB. Different strengths of inhalers may be slightly different colours to those illustrated.**
Antimuscarinic Bronchodilator Inhalers – long-acting muscarinic antagonists (LAMAs)

GLYCOPYRRONIUM

Adult Dose
By inhalation of powder
50 micrograms
once daily. Refer to
manufacturer’s dosing
instructions or BNF for
further advice.

Seebri Breezhaler®
(inhalation powder, hard capsule)

Strength: 50 micrograms cap

Equivalence: each 50 microgram capsule
of glycopyrronium delivers 44 micrograms
of glycopyrronium

Example of medicine prescription form

NB. Different strengths of inhalers may be slightly different colours to those illustrated.
Corticosteroid (brown/preventer) Inhalers

BECLOMETASONE DIPROPIONATE

** NOTE: BECLOMETASONE CFC-FREE AEROSOL INHALERS ARE NOT INTERCHANGEABLE AND MUST BE PRESCRIBED BY BRAND NAME **

Clenil Modulite®
(CFC-free) MDI (aerosol)
Strengths: 50, 100, 200, 250 micrograms/
metered inhalation

Adult Dose
By aerosol inhalation
200-400 micrograms twice
daily (up to 1mg twice daily)
Refer to manufacturer’s
dosing instructions or BNF for
further advice.

Example of medicine prescription form

NB. Different strengths of inhalers may be slightly different colours to those illustrated.
Corticosteroid (brown/preventer) Inhalers

**NOTE:**
BECLOMETASONE CFC-FREE AEROSOL INHALERS ARE NOT INTERCHANGEABLE AND MUST BE PRESCRIBED BY BRAND NAME **

Qvar®
(CFC-free) MDI (aerosol)
Strengths: 50, 100 micrograms/
metered inhalation

Qvar Autohaler®
(aerosol)
Strengths: 50, 100 micrograms/
metered inhalation

Qvar Easi-Breathe®
(aerosol)
Strengths: 50, 100 micrograms/
metered inhalation

Adult Dose
*By aerosol inhalation*
50-200 micrograms twice
daily (up to 400 micro-
grams twice daily). Refer
to manufacturer’s dosing
instructions or BNF for
further advice.

Example of medicine prescription form

NB. Different strengths of inhalers may be slightly different colours to those illustrated.
Corticosteroid (brown/preventer) Inhalers

BECLOMETASONE DIPROPIONATE

Pulvinal®
Beclometasone (dry powder)
Strengths\(^\text{a}\): 100, 200, 400 micrograms/metered inhalation

Easyhaler\(^\circledR\)
Beclometasone (dry powder)
Strength\(^\text{a}\): 200 micrograms/metered inhalation

Asmabec
Clickhaler\(^\circledR\)
(dry powder)
Strengths\(^\text{a}\): 100, 250 micrograms/metered inhalation

\(^\text{a}\)Refer to manufacturer’s dosing instructions or BNF for further advice.

Example of medicine prescription form

NB. Different strengths of inhalers may be slightly different colours to those illustrated.
**Corticosteroid (brown/preventer) Inhalers**

**FLUTICASONE PROPIONATE**

**Flixotide**
**Evohaler®**
*MDI (aerosol)*

- Strengths: 50, 125, 250 micrograms/metered inhalation

**Adult Dose**
*By aerosol inhalation*
100-500 micrograms twice daily (up to 1mg twice daily)
Refer to manufacturer’s dosing instructions or BNF for further advice.

**Example of medicine prescription form**

- Fluticasone 125 micrograms
  - 2 puffs Inhal 01/02/13
  - A N Other (A N OTHER)
  - Flixotide evohaler

- Fluticasone 250 micrograms
  - 1 puff Inhal 01/02/13
  - A N Other (A N OTHER)
  - Flixotide accuhaler

**Flixotide**
**Accuhaler®**
*(dry powder)*

- Strengths: 50, 100, 250, 500 micrograms/metered inhalation

**Adult Dose**
*By inhalation of dry powder*
100-500 micrograms twice daily (up to 1mg twice daily)
Refer to manufacturer’s dosing instructions or BNF for further advice.

**Example of medicine prescription form**

NB. Different strengths of inhalers may be slightly different colours to those illustrated.

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Corticosteroid (brown/preventer) Inhalers

**BUDESONIDE**

- **Pulmicort Turbohaler**
  - (dry powder)
  - Strengths: 100, 200, 400 micrograms/metered inhalation

- **Easyhaler® budesonide**
  - (dry powder)
  - Strengths: 100, 200, 400 micrograms/metered inhalation

- **Budelin novolizer®**
  - (dry powder)
  - Strength: 200 micrograms/metered inhalation

^Refer to manufacturer’s dosing instructions or BNF for further advice.

**NB. Different strengths of inhalers may be slightly different colours to those illustrated.**
Compound Preparations (Corticosteroid/ Long-acting beta2 agonist)

FLUTICASONE/SALMETEROL

Seretide Accuhaler®
(dry powder)

Strengths^:
100 Accuhaler®
(fluticasone 100 micrograms/salmeterol 50micrograms)
250 Accuhaler®
(fluticasone 250 micrograms/salmeterol 50micrograms)
500 Accuhaler®
(fluticasone 500 micrograms/salmeterol 50micrograms)

Seretide Evohaler®
MDI (aerosol)

Strengths^:
50 Evohaler®
(fluticasone 50 micrograms/salmeterol 25micrograms)
125 Evohaler®
(fluticasone 125 micrograms/salmeterol 25micrograms)
250 Evohaler®
(fluticasone 250 micrograms/salmeterol 25micrograms)

^Refer to manufacturer’s dosing instructions or BNF for further advice.

Example of medicine prescription form

NB. Different strengths of inhalers may be slightly different colours to those illustrated.
**Compound Preparations (Corticosteroid/ Long-acting beta₂ agonist)**

**BUDESONIDE/FORMOTEROL**

**Symbicort Turbohaler®**
(dry powder)

Strengths^:
- 100/6 Turbohaler® (budesonide 100 micrograms/formoterol 6micrograms)
- 200/6 Turbohaler® (budesonide 200 micrograms/formoterol 6micrograms)
- 400/12 Turbohaler® (budesonide 400 micrograms/formoterol 12micrograms)

^Refer to manufacturer’s dosing instructions or BNF for further advice.

NB. Different strengths of inhalers may be slightly different colours to those illustrated.
Compound Preparations (Corticosteroid/ Long-acting beta$_2$ agonist)

**BECLOMETASONE/FORMOTEROL**

**Fostair® (aerosol)**

Strength: 100/6 (bèclometasone 100 micrograms/ formoterol 6 micrograms)$^\wedge$

$^\wedge$Refer to manufacturer’s dosing instructions or BNF for further advice.

**NB. Different strengths of inhalers may be slightly different colours to those illustrated.**
Compound Preparations (Corticosteroid/ Long-acting beta$_2$ agonist)

FLUTICASONE/FORMOTEROL

Flutiform®
(aerosol)

Strengths^: 50/5 (fluticasone 50 micrograms/formoterol 5 micrograms)
125/5 (fluticasone 125 micrograms/formoterol 5 micrograms)
250/10 (fluticasone 250 micrograms/formoterol 10 micrograms)

^Refer to manufacturer’s dosing instructions or BNF for further advice.

NB. Different strengths of inhalers may be slightly different colours to those illustrated.
Spacer Devices

Some patients use spacer devices which remove the need for coordination between actuation of a pressurised metered-dose inhaler (MDI) and inhalation. Spacers reduce the velocity of the aerosol and subsequent impaction on the oropharynx and allow more time for evaporation of the propellant so that a larger proportion of the particles can be inhaled and deposited in the lungs.

Spacers should be cleaned once a month and replaced every 6 to 12 months. It is important to prescribe a spacer device that is compatible with the MDI. Spacer devices should not be regarded as interchangeable; patients should be advised not to switch between spacer devices.

Volumatic®

- Large-volume device
- Compatible with all GlaxoSmithKline brand MDIs eg. Ventolin®, Serevent®, Flixotide®, Seretide® and also Clenil Modulite®
- Also available with paediatric facemask
Spacer Devices

AeroChamber® Plus
- Medium-volume device
- For use with all pressurised (aerosol) inhalers*
- Available as standard device (blue), child device (yellow), infant device (orange)
- Also available with facemask

Able Spacer®
- Small-volume device
- For use with all pressurised (aerosol) inhalers*
- Available with infant (small), child (medium) or adult (large) mask

A2A Spacer®
- For use with all pressurised (aerosol) inhalers*
- Available with small or medium mask

Optichamber®
- For use with all pressurised (aerosol) inhalers*
- Available with small, medium or large mask

Vortex Spacer®
- Medium-volume device
- For use with all pressurised (aerosol) inhalers*
- Available with infant, child or adult mask

Pocket Chamber®
- Small-volume device
- For use with all pressurised (aerosol) inhalers*
- Available with infant, small, medium or large mask

*Please check compatibility of all inhaler devices before prescribing. Flutiform® has not been tested with all of the spacers listed on this page.