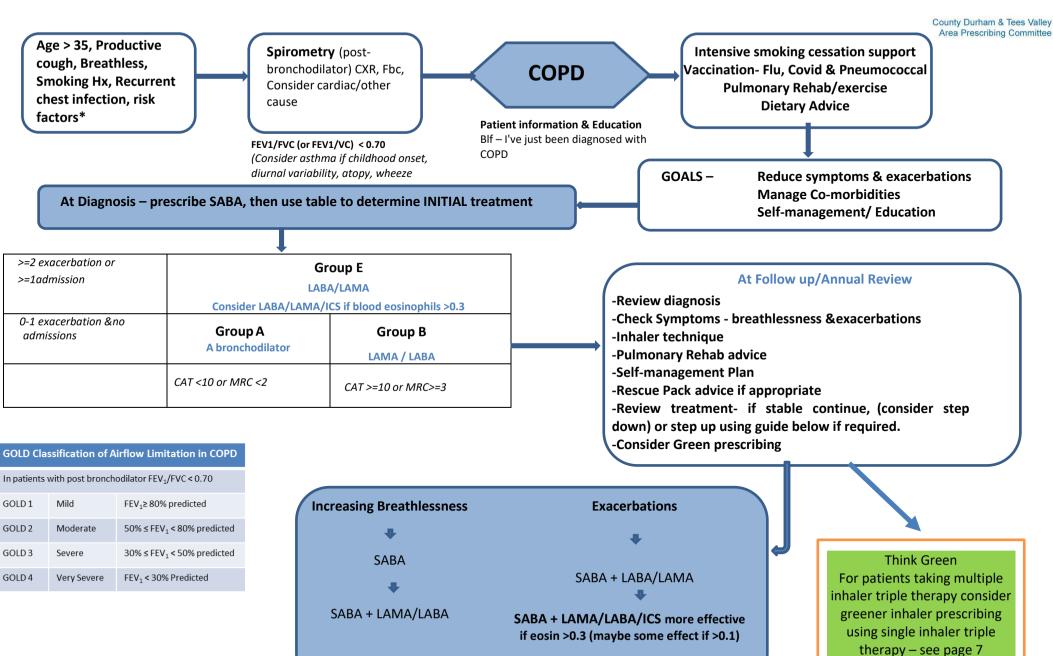
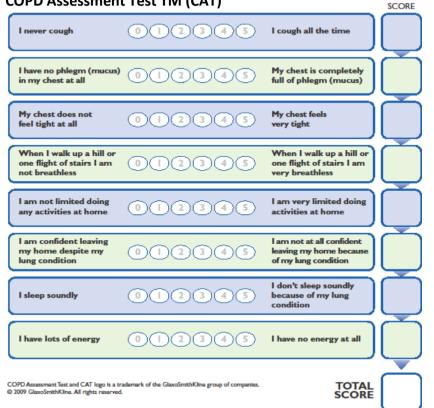
### Co. Durham & Tees Valley COPD Treatment Guide



Still poor control? Consider other cause or refer



#### How is your COPD? Take the COPD Assessment Test TM (CAT)



Grade	The MRC Breathlessness Scale					
1	Not troubled by breathlessness except on strenuous exercise					
2	Short of breath when hurrying on the level or walking up a slight hill					
3	Walks slower than most people on the level, stops after a mile or so, or stops after 15 minutes walking at own pace.					
4	Stops for breath after walking about 100yards or after a few minutes on level ground					
5	Too breathless to leave the house, or breathless when undressing					
Refer patients to British Lung Foundation for information and support BLF Helpline 03000 030 555 www.blf.org.uk/COPD						

- Smoking cessation support & vaccination are the most important interventions.
- Discuss inhaler type & check inhaler technique & compliance at each visit. Use the <u>RightBreathe website</u>
- The best inhaler is the one the patient can/will use. Inhaler Technique Assessment Tools, e.g. *In-Check®* device could be used.
- Pulmonary rehab improves symptoms, quality of life & reduces admissions.
   Offer to all patients with MRC >3 or patients with MRC of 2 and CAT score of >10.
- Monitor oxygen saturation: refer if SaO2 <92% on one or more occasion when well or if de-saturation occurs on exercise.
- Screen for co-morbidities lung cancer, CVD, Heart failure, weight, skeletal muscle dysfunction, osteoporosis, OSA, Depression/anxiety (example- FEV1 ok but v symptomatic, admission <24h)</li>
- Discuss self-management plans (Asthma + Lung UK Just diagnosed with COPD or managing my COPD <u>https://www.blf.org.uk/support-for-</u> you/copd/managing-my-copd

https://www.blf.org.uk/support-for-you/copd/ive-just-been-diagnosed

- Consider rescue packs and educate when to initiate for those who exacerbate.
- Code when rescue pack issued. Prescribe prednisolone 40mg daily for 5 days, amoxicillin or doxycycline for 5 days.
- Escalate medication up & down as required. Consider ICS stepdown if no PMH asthma, no exacerbation in last year, eosinophil count <0.1. Review after 1 month. Do not stop ICS if patient has asthma, although ICS dose reduction can be trialed. If exacerbations and eosinophil count >0.3, add ICS to inhaler combination.
- Refer for chest x-ray where clinically appropriate e.g., if patient not improving, frequent exacerbations, red flags.
- Mucolytics may improve cough & difficulty with expectoration. Consider 4 weeks trial (on acute Rx) if no benefit STOP. Do not start during exacerbation
- Weight Support patient to maintain BMI 20-25 range. If BMI < 20 may need dietary support.

Short-acting Adrenoreceptor Agonist Bronchodilators (SABA)						
Salamol Easi-breathe	Ventolin Accuhaler ✓ Low Carbon	6	Salamol MDI		Bricanyl ✓ Low Carbon	

Ipratropium is no longer recommended - Nebulisers no longer recommended, consider to community respiratory service if needed.

#### **Rightbreathe links:**

Salamol Easi-breathe -<u>https://www.rightbreathe.com/medicines/salamol-100microgramsdose-easi-breathe-inhaler-teva-uk-ltd-200-dose/?s=salamol&device\_type=&drug\_class=&drug\_name=&device\_type=</u>

Ventolin Accuhaler -<u>https://www.rightbreathe.com/medicines/ventolin-200microgramsdose-accuhaler-glaxosmithkline-uk-ltd-60-dose/?s=ventolin+&device\_type=&drug\_class=&drug\_name=&device\_type=</u>

Salamol MDI -<u>https://www.rightbreathe.com/medicines/salamol-100microgramsdose-inhaler-cfc-free-teva-uk-ltd-200-dose/?s=salamol&device\_type=&drug\_class=&drug\_name=&device\_type=</u>

Bricanyl turbohaler -<u>https://www.rightbreathe.com/medicines/2516/?s=bricanyl&device\_type=&drug\_class=&drug\_name=&device\_type=</u>

# County Durham & Tees Valley COPD Formulary Inhaler Choice

Inhalers are not in preference order, use right device for patient.

**Carbon Footprint**. Only low carbon inhalers are annotated. Further information on all inhalers and the importance of returning all inhalers to the pharmacy for disposal in an environmentally safe way is available on <a href="https://greeninhaler.org/">https://greeninhaler.org/</a>

	LAMA/LABA					
	Aclidinium / Formoterol	Umeclidinium / Vilanterol	Glycopyrronium / Indacaterol	Tiotropium/Olodaterol	Glycopyrronium/ formoterol	
Brand name	Duaklir Genuair® ✓ Low Carbon	Anoro Ellipta® ✓ Low Carbon	Ultibro Breezhaler <sup>®</sup> ✓ Low Carbon	Spiolto Respimat® ✓ Low Carbon	Bevespi Aerosphere	
Device	Dry powder inhaler	Dry powder inhaler	Dry powder (capsule)	Solution for inhalation cartridge	Pressurised inhalation, suspension	
		COURT COURT	Ultibro breezhaer*  Kovarn	Initially prescribe an Acute prescription for device + solution cartridge, followed by 5 repeat prescriptions for solution cartridge only. The device must be replaced every six months		
Strengths	340 / 12 microgram	55 / 22 microgram	85 / 43 microgram	2.5 / 2.5 microgram	7.2 micrograms/5 micrograms	
Adult COPD dose	The recommended dose is one inhalation twice daily.	The recommended dose is one inhalation once daily.	Inhalation of the content of one capsule once daily	The recommended dose is two inhalations once daily.	The recommended dose is two inhalations twice daily	
Inhaler technique- see rightbreathe link Send to patient via text/accurx if available	https://www.rightbre athe.com/medicines/ duaklir- 340microgramsdose- 12microgramsdose- genuair-astrazeneca- uk-Itd-60- dose/?s=duaklir&devi ce type=&drug_class =&drug_name=&devi ce type=	https://www.rightbreath e.com/medicines/anoro- ellipta- 55microgramsdose- 22microgramsdose-dry- powder-inhaler- glaxosmithkline-uk-ltd- 30- dose/?s=anoro&device_t ype=&drug_class=&drug_ name=&device_type=	https://www.rightbreathe.co m/medicines/ultibro- breezhaler- 85microgram43microgram- inhalation-powder-capsules- with-device-novartis- pharmaceuticals-uk-ltd-10- capsule/?s=ultibro&device_ty pe=&drug_class=&drug_name =&device_type=	https://www.rightbreathe.com/medi cines/2488/?s=spiolto&device_type= &drug_class=&drug_name=&device_ type=	https://www.rightbreathe.com/medicines/2530/?s=bevespi&device_type=&d rug_class=&drug_name=&device_type=	
Miscellaneous information	Dose counter Locks closed when empty No need to wash	Dose counter No need to wash In use shelf-life = 6 weeks If the inhaler cover is opened and closed without inhaling the dose, the dose will then be lost but securely held inside the inhaler	Powder taste and inhaler sound show inhaler working New inhaler with each pack of capsules – no cleaning	Dose indicator – notifies when 7 days' supply left Locks when empty Clean once a week In use shelf life = 3 months	Dose indicator Prime the inhaler by shaking it and actuating into the air four times before first use or two times when the inhaler has not been used for more than seven days, has been exposed to low temperatures, or has been dropped.	

## FACTORS TO CONSIDER WHEN INITIATING ICS TREATMENT

Factors to consider when initiating ICS treatment in combination with one or two long acting bronchodilators (note the scenario is different when considering ICS withdrawal

STRONG SUPPORT	CONSIDER USE	AGAINST USE			
<ul> <li>History of hospitalisations due to COPD exacerbations<sup>1</sup></li> <li>= or &gt; 2 moderate exacerbations of COPD per year<sup>1</sup></li> <li>Blood eosinophils &gt;0.3 x 10<sup>9</sup>cells/l</li> <li>History of, or concomitant asthma</li> </ul>	<ul> <li>1 moderate exacerbation of COPD per year<sup>1</sup></li> <li>Blood eosinophils 0.1 – 0.3 x 10<sup>9</sup> cells/l</li> </ul>	<ul> <li>Repeated pneumonia events</li> <li>Blood eosinophils &lt; 0.1 x 10<sup>9</sup> cells/l</li> <li>History of mycobacterial infection</li> </ul>			
<sup>1</sup> Despite appropriate long acting bronchodilator maintenance therapy					
NB. Blood eosinophils should be seen as a continuum; quoted values represent approximate cut-points; eosinophil counts are likely to					
fluctuate					
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			uss and issue a steroid emerge	
	Fluticasone Furoate/Umeclidinium/Vila nterol	Beclometasone /Glycopyrronium /Formoterol	Beclometasone /Glycopyrronium /Formoterol	Budesonide/ glycopyrronium/ Formoterol
Brand name	Treleg ✓ Low Y <sup>Carbon</sup> Ellipta	Trimbow ✓ Low Carbon NextHaler	Trimbow	Trixeo Aerosphere
Device	Dry powder	Dry Powder	pMDI	Pressurised inhalation, suspension
Strengths	92/55/22 microgram	88/5/9 microgram	87/5/9 microgram	5 /7.2/160 micrograms
Adult COPD	The recommended (and	The recommended dose is two	The recommended (and	The recommended and maximum dose is two inhalations
dose	maximum) dose is one	inhalations twice daily.	maximum) dose is twoinhalations	twice daily (twoinhalations in the morning and two
	inhalations of 92/55/22	The maximum dose is two	of 87/5/9 micrograms twice daily	inhalations in the evening).
	micrograms once daily	inhalations twice daily.		
	at the same time each day.	Elderly - No dose adjustment is required in elderly patients (65 years of age and older0		
Inhaler	https://www.rightbreathe.com/m	https://www.rightbreathe.com/medicines/	https://www.rightbreathe.com/medicines/tri	https://www.rightbreathe.com/medicines/2529/?s=tr
technique- see	edicines/2237/?s=trelegy&device	2592/?s=trimbow+nexthaler&device_type=	mbow-87microgramsdose-	<pre>eo&amp;device_type=&amp;drug_class=&amp;drug_name=&amp;device</pre>
rightbreathe	type=&drug class=&drug name	<u>&amp;drug_class=&amp;drug_name=&amp;device_type=</u>	5microgramsdose-9microgramsdose-inhaler-	<u>ype=</u>
•	<u>=&amp;device_type=</u>		<u>chiesi-ltd-120-</u>	
link			dose/?s=trimbow+&device_type=&drug_clas	
<b>C</b>			<pre>s=&amp;drug_name=&amp;device_type=</pre>	
Send to				
patient via				
text/accurx if				
available				

Miscellaneous information	<ul> <li>Inhaler is in 'closed' position when first removed from sealed tray</li> <li>Has a "discard by" date 6 weeks from thedate of opening the tray.</li> <li>If the inhaler cover is opened and closed without inhaling the dose, the dose will then be lost.</li> <li>The lost dose will be securely held inside the inhaler, but it will no longer be available to be inhaled.</li> </ul>		<ul> <li>Stored in the fridge (before dispensing only) shelflife of 4 months after dispensing (out of fridge)</li> <li>suitable for use with the AeroChamber Plus spacerdevice.</li> <li>Use with a spacer</li> <li>Single dose counter.</li> <li>Small particle size – therefore is not bioequivalentto same dose of BDP in other inhalers.</li> </ul>	<ul> <li>Prime the inhaler by shaking it and actuating into the air four times before first use or two times when the inhaler has not been used for more than seven days, after weekly washing or if it has been dropped.</li> <li>Shelf life - 2 years</li> <li>To be used within 6 weeks of opening the pouch (56 actuations)</li> <li>To be used within 3 months of opening the pouch (120 actuations)</li> <li>Use with a spacer</li> </ul>
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