

COPD pathway based on GOLD principles Adapted from East Kent prescribing group decision COPD support tool

STEP 1 Use tables 1 and 2 to assess severity and dyspnoea (using MRC and COPD assessment test (CAT) score www.catestonline.org)

STEP 2 Use tables 3 and 4 to allocate a group. Use exacerbation risk and dyspnoea symptoms. If results indicate more than one group choose the highest risk group.

STEP 3 Use table 5 to select pharmacological agent.

Ref: Global Initiative for Chronic Obstructive Lung Disease (GOLD), Management and prevention of COPD. January 2015. Available via www.goldcopd.com

Table 1: Severity assessment		
Classification of Severity of Airflow Limitation in COPD (based of post-bronchodilator FEV1), in patients with FEV1/FVC <.070		
GOLD 1	Mild	FEV1≥80% predicted
GOLD 2	Moderate	FEV1≥50-79% predicted
GOLD 3	Severe	FEV1≥30-49% predicted
GOLD 4	Very severe	FEV1<30% predicted

Table 2: Medical Research Council (MRC) dyspnoea scale grade	
Grade	Degree of breathlessness related to activity
1	Not troubled by breathlessness except on strenuous activity.
2	Short of breath when hurrying or walking up a slight hill.
3	Walks slower than contemporaries on level ground because of breathlessness/has to stop for breath at own pace.
4	Stops for breath after walking about 100m or after a few minutes on level ground.
5	Too breathless to leave the house, or breathless when dressing or undressing.

Table 3: Assess group	GOLD category	Group A	Group B	Group C	Group D
	Step 1: Assess dyspnoea	Less symptoms	More symptoms	Less symptoms	More symptoms
	Step 2: Assess exacerbation risk	Low risk (0-1 exacerbations)	Low risk (0-1 exacerbations)	High risk (≥ 2 exacerbations or ≥ 1 leading to hospital admission)	High risk (≥ 2 exacerbations or ≥ 1 leading to hospital admission)

Table 4: Summary of groups	GOLD patient category	Characteristics	Spirometric classification	Exacerbations per year	CAT	mMRC
	A	Low risk, less symptoms	GOLD 1-2	0-1	<10	0-1
	B	Low risk, more symptoms	GOLD 1-2	0-1	≥10	≥2
	C	High risk, less symptoms	GOLD 3-4	≥ 2 exacerbations or ≥ 1 leading to hospital admission	<10	0-1
	D	High risk, more symptoms	GOLD 3-4	≥ 2 exacerbations or ≥ 1 leading to hospital admission	≥10	≥2

Table 5: Pharmacological agent	GOLD patient category	Recommended first choice	Alternative choice	Other possible treatments
	A	SAMA prn or SABA prn	LABA or LAMA* or SABA +SAMA	Theophylline
	B	LAMA or LABA	LAMA* + LABA	SABA and/or SAMA Theophylline
	C	ICS/LABA or LAMA	LAMA* + LABA	SABA and/or SAMA Theophylline
	D	ICS/LABA and/or LAMA	ICS/LABA + LAMA* or LAMA* + LABA	Carbocisteine SABA and/or SAMA Theophylline

* stop SAMA when LAMA prescribed

Drug therapy (30 day cost, Drug Tariff, October 2015 and Dictionary of Medicines and Devices)

Inhaler	Dose	Price
LABA		
Indacaterol Breezhaler® 150mcg/300mcg	One puff daily	£29.26
Salmeterol Accuhaler® 50mcg	One puff twice daily	£29.26
Salmeterol Evohaler® 25mcg	One puff twice daily	£29.26
Formoterol Easyhaler® 12mcg	One to two puffs twice daily	£11.88
Formoterol MDI	One puff twice daily	£18.04
Olodaterol Respimat® 2.5mcg	Two puffs daily	£26.35
LAMA		
Tiotropium Handihaler® 18mcg	One puff daily	£33.50
Tiotropium Respimat® 2.5mcg	Two puffs daily	£33.50
Aclidinium Genuair® 322mcg	One puff twice daily	£28.60
Glycopyrronium Breezhaler® 44mcg	One puff daily	£27.50
Umeclidinium Ellipta® 55mcg	One puff daily	£27.50

Inhaler	Dose	Price
LAMA/LABA		
Anoro Ellipta® 55/22	One puff daily	£32.50
Ultibro® Breezhaler® 85/43	One puff daily	£32.50
Duaklir Genuair® 400/12	One puff twice daily	£32.50
LABA/ICS		
Seretide® 500 Accuhaler®	One puff twice daily	£40.92
Symbicort 400/12 Turbohaler®	One puff twice daily	£38.00
Fostair® MDI 100/6	One to two puffs twice daily	£29.32
Duoresp® Spiromax® 400/12	One puff twice daily	£29.97