COPD Tips for Therapy

Patient Description	Severity	Therapy (based on GOLD 2017)
THERAPY PRIMARILY BASED ON SYMPTOMS		
Symptoms • Breathless with strenuous exercise or when hurrying on the level or walking up a slight hill **Exacerbations** • 0 to 1/year (not leading to hospitalization)	mMRC 0 to 1 CAT < 10	Short acting bronchodilators • Salbutamol • Ipratropium • Combination of both
Symptoms • Breathlessness: **more** severe than SOB when hurrying on the level or walking up a slight hill **Exacerbations** • 0 to 1/year (not leading to hospitalization)	mMRC ≥ 2 CAT ≥ 10	LAMA **or** LABA + rescue inhaler • LAMAs and LABAs similarly improve lung function, symptom control and quality of life. • Choose either LAMA or LABA and if inadequate response, trial of the other. Use the 1 bronchodilator the patient prefers. ***If symptoms persist*** LAMA + LABA Farne Cochrane Review 2015 • Benefit vs LABA in quality of life: NNT 9 (7 to 15) for 6 months • Potential benefit in lung function vs. LABA Donohue 2013 • Benefit vs LAMA in quality of life: NNT 15 (11-23) for 6 months • Many outcomes show no benefit for combo vs individual agents If symptoms do not improve, consider going back to 1 agent
*THERAPY BASED ON **EXACERBATIONS** AND SYMPTOMS*		
Exacerbations • ≥ 2/year or ≥ 1 exacerbation requiring hospitalization/year **Symptoms** • Breathless with strenuous exercise or when hurrying on the level or walking up a slight hill	mMRC 0 to 1 CAT < 10	LAMA + rescue inhaler LAMA compared to LABA Chong Cochrane Review 2012 • Fewer patients experiencing ≥ 1exacerbations per year NNT 29 (19 to 59) for 1 year • Fewer severe exacerbations leading to hospitalization (ARR 2%) ***If further exacerbations*** LAMA/LABA **or** LABA/ICS - both combinations decrease exacerbation rates vs. LABA but not vs LAMA alone. Farne & Welsh Cochranes LAMA/LABA compared to LABA/ICS Wedzicha FLAME 2016 • LAMA/LABA benefit in exacerbations and time to 1st exacerbation (all exacerbations and moderate or severe) • Fewer patients experiencing ≥ 1 exacerbation/year NNT 20 (13 to 44) for 1 year • No difference in exacerbations leading to hospitalization • More patients had benefit in quality of life NNT 18 (11 to 47) 1yr • Fewer cases of pneumonia with LAMA/LABA ARR 1.6%
Exacerbations • ≥ 2/year or ≥ 1 exacerbation requiring hospitalization/year **Symptoms** • Breathlessness: **more** severe than SOB when hurrying on the level or walking up a slight hill	mMRC ≥ 2 CAT ≥ 10	LAMA **or** LAMA/LABA **or** LABA/ICS + rescue inhaler ***Persistent symptoms or further exacerbations*** LAMA+ LABA/ICS LAMA+LABA/ICS vs LAMA Rojas-Reyes Cochrane Review 2016 • All cause hospitalization reduced NNT 20 (11 to 124) for 1 year • Potential improvement in quality of life LAMA+LABA/ICS vs LAMA/LABA • Insufficient evidence to make choice Karner Cochrane Review 2011

CAT= COPD Assessment Tool (CAT>10 threshold for considering regular treatment for symptoms); mMRC = modified Medical Research Council

References are available in the document at http://www.medicine.dal.ca/departments/core-units/cpd/programs/academic-detailing-service.html