

Treatments	Examples	Benefits	Risk/precautions	Other notes
Smoking cessation		Improved survival , Reduced exacerbation, Improved rate of decline		greater success with programs that include pharmacotherapy
SABA	Albuterol, Proventil, Xopenex	symptomatic	tachycardia	no survival or exacerbation benefit
SAMA	Atrovent, Ipratropium Bromide	symptomatic	dry mouth	no survival or exacerbation benefit
LABA	Serevent, Forodil	reduced exacerbation	tachycardia	no survival benefit
LAMA	Tiotropium, Spiriva	reduced exacerbation	dry mouth, urinary retention in elderly BPH	Possible survival benefit
ICS	Flovent, Pulmocort	reduced exacerbation	increased pneumonia, cataracts	no survival benefit, consider using with LABA
LABA + ICS	Advair, Symbicort	reduced exacerbation	increased pneumonia, cataracts	no survival benefit
LAMA + LABA + ICS		reduced exacerbation	presumed pneumonia risk unchanged, cataracts	no data on survival benefit
systemic steroids	Prednisone, Medrol	shorten exacerbation	Osteoporosis, glucose intolerance, cataracts, delirium, hip avascular necrosis	little data to suggest benefit of use outside of exacerbations
PDE4 inhibitor	Roflumilast	reduced exacerbation	gastrointestinal side effects common, increased anxiety, may wish to avoid with depression	Use in individuals with bronchitis and severe disease with frequent exacerbations
pulmonary rehabilitation		less dyspnea with ADLs	Undiagnosed cardiac disease	no survival benefit
oxygen		Improved survival	Flame accelerant in current smokers	Unclear benefit in hypoxemia only during exercise
LVRS		Improved survival	Benefits only in properly chosen population	
Lung Tx		less dyspnea	5 year survival remains around 50%	
Chronic Macrolide	Erythromycin, Azithromycin, Clarithromycin	reduced exacerbation	Unknown long-term risk for selection of resistant organisms	
Theophylline	TheoDur, Uniphyll	Unclear benefit	narrow therapeutic window, smoking reduces levels	
antioxidant	Vitamin A, Vitamin E, acetylcysteine	No proven benefit	No proven benefit	