

Updated annually, the Global Initiative for Chronic Obstructive Lung Disease (GOLD) Report, “aims to provide a non-biased review of the current evidence for the assessment, diagnosis and treatment of patients with chronic obstructive lung disease (COPD) that can aid the clinician”. The recommendations within state that systemic (oral, parenteral) corticosteroids, utilized commonly for COPD exacerbations, not be used long-term due to side effects and lack of compelling evidence that they are beneficial.¹⁻⁴

Despite the scarcity of data, a portion of patients do gain dyspneic symptom control using systemic steroids at end-of-life. They are also useful for concomitant symptoms of pain and loss of appetite as well as the fatigue that is so prevalent in patients with advanced COPD.

Inhaled corticosteroids (ICS) are recommended along with an inhaled long-acting beta-agonist (LABA) to prevent exacerbations in COPD patients with a history of exacerbations on bronchodilators alone.¹ However, **patients with advanced COPD may face barriers to proper inhaler use** (e.g., dexterity issues, unable to deep breath or hold breath, financial hardships) and thus may not reap the full benefits of this therapy. In patients with COPD near end-of-life, clinicians are encouraged to trial systemic steroids, “to ensure patients are not denied a reasonable approach that may provide them with improvement in symptom control”.²

In addition, **there is evidence to support considering withdrawal of corticosteroid therapy altogether**. In a 12month, double-blind study of continuing versus discontinuing ICS therapy, 2485 patients with COPD exacerbation history were treated with inhaled tiotropium, salmeterol, and fluticasone for 6 weeks.⁵ Patients were randomly assigned to either continue fluticasone or be weaned off fluticasone. Although a greater decrease in lung function was measured in the group that discontinued fluticasone, the risk of exacerbation was similar between both groups.

INHALED CORTICOSTEROIDS ^{6,7}

Product examples:

- **ICS alone**— Flovent® Diskus (DPI) and Flovent® HFA (MDI) (fluticasone prop.); QVAR® RediHaler (beclomethasone) (MDI); Pulmicort® Flexhaler (DPI) and Pulmicort® Respules nebulizer suspension (budesonide)
- **ICS + LABA**— Advair® Diskus (salmeterol/fluticasone)(DPI); Advair® HFA (salmeterol/fluticasone)(MDI); AirDuo® RespiClick (salmeterol/fluticasone)(DPI); Breo® Ellipta (vilanterol/fluticasone)(DPI); Dulera® (formoterol/mometasone)(MDI); Symbicort® formoterol/budesonide)(MDI)
- **ICS + LABA + LAMA**— Trelegy® (vilanterol/umeclidinium/ fluticasone) (DPI) *ICS = inhaled corticosteroid; LABA = long-acting beta-agonist; LAMA = long-acting muscarinic antagonist; MDI = metered dose inhaler; DPI = dry powder inhaler*

Common side effects: Hoarseness, cough, thrush, increased risk for pneumonia

ORAL STEROIDS ^{6,7}

Products recommended: Dexamethasone (Decadron®)(PO, IV, PR), Prednisone (Deltasone®)(PO)

Common side effects: Increased appetite, mood swings, blurred vision, insomnia

Potential effects (long term use): Hyperglycemia, osteoporosis, increased infection risk, impaired wound healing

REFERENCES

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