



Key Update Asthma and Inhaled Corticosteroids (ICS)

The 2020 Global Initiative for Asthma (GINA) report is no longer recommending the use of a Short Acting Beta Agonist (SABA) alone, without an Inhaled Corticosteroid (ICS), as this has potential to increase risk for severe exacerbations. By adding an ICS, the risk would be greatly reduced with an aim to reduce both the probability of serious adverse outcomes, as well as, exacerbations at a population level. An inhaled SABA has been 1st line treatment for asthma for 50 years; this dates from an era when asthma was thought to be a disease of bronchoconstriction. Patient satisfaction and reliance on SABA treatment has been reinforced by its rapid relief of symptoms, its prominence in emergency department and hospital use to manage exacerbations, and its low cost.

For safety, GINA no longer recommends SABA-only treatment for Intermittent Asthma use (Step 1)

- This decision was based on evidence that SABA-only treatment increases the risk of severe exacerbations, and that adding any ICS significantly reduces the risk

Regular or frequent use of SABA is associated with adverse effects

- Receptor downregulation, decreased Broncho-protection, rebound hyperresponsiveness, decreased bronchodilator response
- Increased allergic response and increased eosinophilic airway inflammation

Higher use of SABA is associated with adverse clinical outcomes

- Dispensing of ≥ 3 canisters per year (average 1.7 puffs/day) is associated with higher risk of ED presentations
- Dispensing of ≥ 12 canisters per year is associated with higher risk of death

GINA now recommends all adults and adolescents with asthma to receive an ICS containing controller treatment, to reduce risk of serious exacerbations

- The ICS can be delivered by regular daily treatment or, in mild asthma, delivered by as-needed low dose ICS-formoterol
- This is a population-level risk reduction strategy

Reference:

1. *Global Strategy for the Diagnosis, Management and Prevention of Asthma*, Global Initiative for Asthma (GINA) Updated December 2019. <https://ginasthma.org/gina-reports/>
2. *Global Strategy for the Diagnosis, Management and Prevention of COPD*. Global Initiative for Chronic Obstructive Lung Disease (GOLD) Updated December 2019. <https://goldcopd.org/wp-content/uploads/2019/11/GOLD-2020-REPORT-ver1.0wms.pdf>.