

SABA overuse and impact on asthma – David Long

Fourteen things you may not know about the overuse (3 or more a year) of the most commonly used asthma medication - Inhaled Beta agonists.

1. 38% of asthmatics in UK overusing SABAs (Jansen 2020)
2. Make the airways more 'twitchy and irritable'
3. Make the airways more inflamed
4. Increased mortality (SABA and LABA)
5. Worsen asthma control
6. Increased hospitalisation
7. Increase duration of severe exacerbations
8. More than 2 inhalers a year is too much
9. Not just an issue with mild asthmatics but all severities
10. Even modest doses of inhaled corticosteroids can abrogate the risk, hence no asthmatic should be without ICS
11. Patient beliefs in SABA are still problematic (Chan 2020)
12. Increase exacerbation in all severities by 20-24%
13. 83% of SABA prescribing for asthmatics go to those overusing it
14. If we can reduce overuse of SABA we will reduce greenhouse gases produced by pMDI inhalers significantly

This shows a large proportion of asthmatics are sub-optimally treated and there is a need to target and educate clinicians and patients about this subject area. All asthmatics using more than 2 inhalers a year should be clinically assessed and treatment adjusted accordingly.

Multitude of papers, here are 4 examples to support the above:

FitzGerald JM, Tavakoli H, Lynd LD, Al Efraij K, Sadatsafavi M. The impact of inappropriate use of short acting beta agonists in asthma. *Respir Med.* 2017 Oct;131:135-140. doi: 10.1016/j.rmed.2017.08.014. Epub 2017 Aug 17. PMID: 28947020.

Nwaru BI, Ekström M, Hasvold P, Wiklund F, Telg G, Janson C. Overuse of short-acting β_2 -agonists in asthma is associated with increased risk of exacerbation and mortality: a nationwide cohort study of the global SABINA programme. *Eur Respir J.* 2020

Janson, C., Menzies-Gow, A., Nan, C. et al. SABINA: An Overview of Short-Acting β_2 -Agonist Use in Asthma in European Countries. *Adv Ther* 37, 1124–1135 (2020)

Chan AHY, Katzer CB, Horne R, Haughney J, et al, SABA Reliance Questionnaire (SRQ): Identifying Patient Beliefs Underpinning Reliever Overreliance in Asthma. *J Allergy Clin Immunol Pract.* 2020 Nov-Dec;8(10):3482-3489.e1. doi: 10.1016/j.jaip.2020.07.014. Epub 2020 Jul 20. PMID: 32702517.