



It is time to end our love affair with short-acting β_2 -agonists in asthma? Yes

Copyright ©The authors 2023

This version is distributed under the terms of the Creative Commons Attribution Non-Commercial Licence 4.0. For commercial reproduction rights and permissions contact permissions@ersnet.org

Received: 20 Oct 2022
Accepted: 25 Oct 2022



To the Editor:

I read with interest the editorial by CROOKS and FARUQI [1]. I agree with almost all of the concepts; however, given my experience, I must question why the scientific community does not take a drastic decision regarding short-acting β_2 -agonists (SABA) use in asthma. In 2019, MARTIN and HARRISON [2] wrote a similar editorial. SABA overreliance was identified many times as the key issue [3–5]. But nothing happens. SABA's status quo has not been overcome for more than 30 years.

In 2014 we eradicated SABA from asthma management in our asthma centre in Argentina. We achieved a zero-asthma hospitalisation goal [6].

Education and treatment adherence are necessary but not enough to overcome the burden of asthma. Regardless of the adherence to maintenance therapy in the real world, it is safe to assume that patients will use SABA if they have SABA canisters readily available, either as a reliever or as maintenance treatment when they run out of inhaled corticosteroids (ICS) inhalers instead of refilling prescriptions. Therefore, eliminating SABA monotherapy use in alignment with the latest Global Initiative for Asthma recommendations [7] is important. First, do no harm.

Considering the increasing burden of asthma, we established the asthma centre in June 1993. Despite continuous education, routine lung function tests and follow-up by specialists, written asthma action plans and unrestricted access to ICS and as-needed SABA, we were unable to eliminate all asthma hospitalisations. Based on the study by O'BYRNE *et al.* [8], in which budesonide/formoterol combination as both maintenance and reliever therapy reduced exacerbation rates, we adopted this approach for the entire spectrum of asthma severity in our asthma centre in 2014, eliminating SABA from asthma management. Whilst free access to ICS and long-acting β_2 -antagonists contributed to the success of the programme, it is unlikely to be the most influential factor. Although educational initiatives and free access to medications were long a part of the programme, it was successful only after SABA was eliminated from asthma management.

Finally, is it time to end our love affair with short-acting β_2 -agonists in asthma [1]? Definitely YES.

Shareable abstract (@ERSpublications)

Why not directly eradicate SABA from asthma management? The time to leave behind SABA in asthma management is now. We wasted enough time identifying the key issue in asthma morbidity and mortality. Please, eradicate SABA. <https://bit.ly/3DU4mmo>

Cite this article as: Nannini LJ. It is time to end our love affair with short-acting β_2 -agonists in asthma? Yes. *ERJ Open Res* 2023; 9: 00555-2022 [DOI: 10.1183/23120541.00555-2022].

Luis J. Nannini

First Saba-free Asthma Department, Hospital de G. Baigorria, Universidad Nacional de Rosario, Rosario, Argentina.

Corresponding author: Luis J. Nannini (ljnannini@hotmail.com)

Provenance: Submitted article, peer reviewed.

Conflict of interest: L.J. Nannini reports the following relationships outside the submitted work: personal fees received from Novartis; consulting fees received from AstraZeneca; payment or honoraria for lectures,



presentations, speakers' bureaus, manuscript writing or educational events from AstraZeneca; payment for expert testimony received from AstraZeneca India; support for attending meetings and/or travel from AstraZeneca and Boehringer Ingelheim; and participation on a data safety monitoring or advisory board for AstraZeneca.

References

- 1 Crooks MG, Faruqi S. It is time to end our love affair with short-acting β_2 -agonists in asthma. *ERJ Open Res* 2022; 8: 00353-2022.
- 2 Martin MJ, Harrison TW. Is it time to move away from short-acting beta-agonists in asthma management? *Eur Respir J* 2019; 53: 1802223.
- 3 Suissa S, Ernst P, Boivin JF, *et al.* A cohort analysis of excess mortality in asthma and the use of inhaled beta-agonists. *Am J Respir Crit Care Med* 1994; 149: 604–610.
- 4 Noorduyn SG, Qian C, Johnston KM, *et al.* SABA use as an indicator for asthma exacerbation risk: an observational cohort study (SABINA Canada). *ERJ Open Res* 2022; 8: 00140-2022.
- 5 Nwaru BI, Ekstrom M, Hasvold P, *et al.* 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; 55: 1901872.
- 6 Nannini LJ, Neumayer NS, Brandan N, *et al.* Asthma-related hospitalizations after implementing SABA-free asthma management with a maintenance and anti-inflammatory reliever regimen. *Eur Clin Respir J* 2022; 9: 2110706.
- 7 Global Initiative for Asthma. Global Strategy for Asthma Management and Prevention 2022. <https://ginasthma.org/>
- 8 O'Byrne PM, Bisgaard H, Godard PP, *et al.* Budesonide/formoterol combination therapy as both maintenance and reliever medication in asthma. *Am J Respir Crit Care Med* 2005; 171: 129–136.