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Published in:
Chest

DOI:
10.1016/j.chest.2019.04.094

Publication date:
2019

Document Version
Peer reviewed version

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Journal:	*CHEST*
Manuscript ID	CHEST-19-0749
Article Type:	Correspondence
Date Submitted by the Author:	02-Apr-2019
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Keywords:	COPD (CHRON. OBSTRUCT. PUL. DIS.), INHALED CORTICOSTEROIDS, Long acting bronchodilators

Real world studies in infrequently exacerbating patients with COPD

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Competing Interests: Dr Lipworth has either received research grants, participated in advisory boards, acted as a speaker received support for equipment or to attend educational meetings from Boehringer Ingelheim, AstraZeneca, Chiesi, Novartis, GlaxoSmithKline, Sandoz, Cipla, Sanofi, Genentech, Mylan, Glenmark, Circassia, ERT, Thorasys. Dr Lipworth's son works for AstraZeneca. Dr Kuo has acted as a speaker for AstraZeneca, Pfizer, Bristol-Myers Squibb, and received support to attend educational meetings from Circassia.

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The benefits of inhaled corticosteroids (ICS) as dual or triple combination therapy are more pronounced in patients with the frequent exacerbating eosinophilic (FEE) phenotype of COPD, corresponding to GOLD group D[1]. The real life study of Suissa et al[2] looked at a cohort of COPD patients in whom 82% had zero or one prior exacerbations, corresponding to GOLD group B. In infrequently exacerbating patients one might expect there to be little impact conferred by using an ICS in combination with a long acting beta-agonist (LABA). In such patients using two long acting bronchodilators as LABA along with long acting muscarinic antagonist (LAMA) has not been shown to be superior to LAMA alone (as tiotropium) in reducing exacerbations[3]. The low prevalence of patients with the FEE phenotype in the dataset of Suissa et al would preclude any meaningful post hoc analysis to investigate the putative benefits of ICS/LABA over LABA/LAMA.

We believe a more worthwhile real life study might perhaps be to compare patients taking LABA/LAMA versus ICS/LABA/LAMA, especially since randomised controlled and real world trials have shown clear superiority of triple therapy compared to ICS/LABA on exacerbations[4,5]. An important point not considered by Suissa et al is the impact of different inhaler types in each group, which in turn might exhibit potential confounding effects on lung deposition and patient adherence. In this regard prospective randomised controlled trials have demonstrated triple therapy to be superior to LABA/LAMA when both are taken via the same single dry powder inhalers[5].

We would therefore suggest extreme caution in extrapolating the findings of Suissa et al to patients with the FEE phenotype of COPD, where ICS containing dual or triple therapy is likely to be effective. Furthermore their findings of more pneumonias with ICS/LABA is likely to be specific to fluticasone propionate due to its increased lipophilicity and associated prolonged lung retention[1].

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