8.01 Evolution of Respiratory Inhaler Prescribing Practices in Ireland; Longitudinal data over a 10 year period

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Background: Asthma and COPD are obstructive lung diseases associated with significant morbidity and mortality, with inhaled medications the cornerstone of pharmacotherapy. International guideline reviews in both asthma and COPD have changed recommended practise. The economic burden of inhaler therapy in Ireland is unknown, as is the effect on prescribing practises of international guidelines and the COVID-19 pandemic.

Methods: Using 'sell-in' pharmacy data, trends in national respiratory inhaler usage patterns were analysed from 2012-2023. The overall inhaler market share was analysed, along with the reliever inhaler and ICS-LABA markets specifically, and the relationship between inhaler usage and exacerabations.

Results: There has been a 34% increase in respiratory inhaler market volume in Ireland over the 10 year period, with salbutamol the most common inhaler prescribed (Figure 1A). Salbutamol currently holds 60% of the Irish reliever market while ICS-LABA holds 38% of the market, both demonstrating a growth rate of 29% and 35% respectively over the 10-year period (Figure 1B). ICS-Formoterol currently holds 44% of the Irish ICS-LABA market, with a 69% growth rate demonstrated, particularly since 2020, compared to a 17% growth rate over the same time period for other ICS-LABA (Figure 1C).

Conclusions: The direct economic burden of the inhaler market is increasing. The pattern of ICS-LABA reliever prescribing has changed particularly since 2019, indicating increased adherence to international guidelines. Salbutamol reliever use remains high, potentially due to the higher cost of ICS-LABA use. Future studies should assess the impact of integrated care hubs on local prescribing, and asthma initiatives to reduce salbutamol prescribing.

Keywords: Inhaler; obstructive airways; compliance; asthma; COPD

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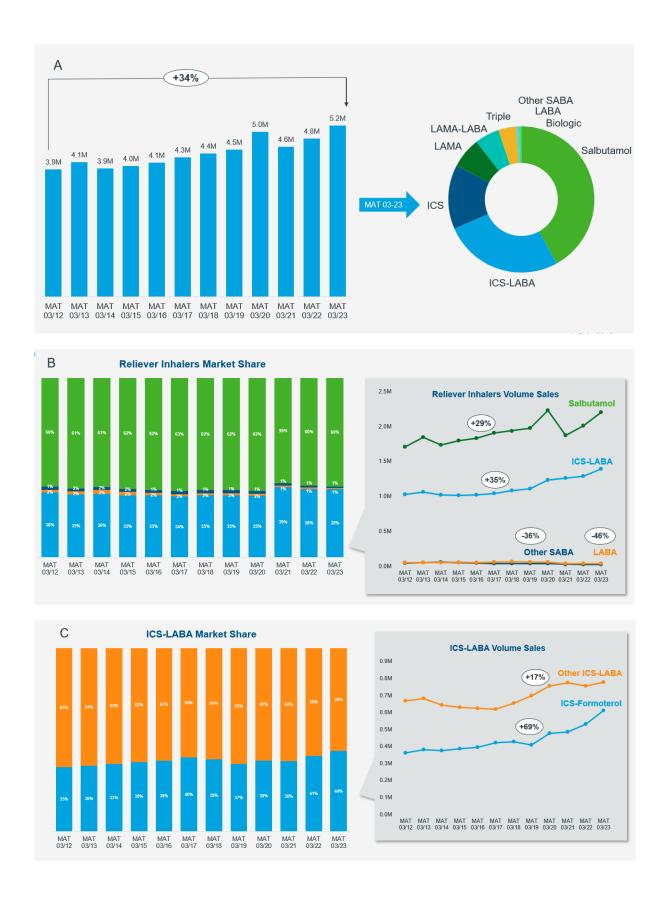


Figure 1: Respiratory inhaler market in Ireland 2012 – 2023.

A: Evolution of the Irish respiratory inhaler market 2012 To 2023 (IQVIA Ireland, Retail Sell-in data, Total Market considered all ATC R03 inhalers and nebules, MAT March 2012 to MAT March 2023)

B: Reliever inhalers market share in Ireland from 2012 to 2023 (IQVIA Ireland Retail Sell-in data, Total Market considered all Reliever inhalers and nebules (SABA,ICS-LABA and LABA) IQVIA, MAT March 2012 to MAT March 2023)

C: ICS-LABA market share from 2012 to 2023 (IQVIA Ireland Retail Sell-in data, Total Market considered all ICS-LABA inhalers IQVIA, MAT March 2012 to MAT March 2023)

Definition of abbreviations: ICS = inhaled corticosteroid; LABA = Long-acting beta-agonist; MAT= Moving Annual Total; SABA = short acting beta-agonist.