

## **Prescription Patterns and trends IN the use of ICS-LABA Combinations in Indian children with asthma: The RAINBOW survey (Respicon 2024)**

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**Introduction:** Guidelines recommend use of combination of inhaled corticosteroid and long-acting beta-2 agonist (ICS-LABA) in children uncontrolled on ICS-alone. There is inadequate data on use of ICS-LABA in Indian children. This study aimed to characterize prescription trends of ICS-LABA for management of asthma in Indian children.

**Methods:** A digital cross-sectional survey was conducted among clinicians managing pediatric asthma across 19 Indian states between Aug'2023-Jun'2024.

**Results:** 454 clinicians (55.7% respiratory physicians, 44.3% pediatricians) participated in the survey. 62.7% pediatricians and 24.11% respiratory clinicians reported seeing >20 pediatric asthmatics/month,  $p<0.001$ . Usage of ICS-LABA was similar between the 2 specialties, with 64.03% respiratory physicians and 74.13% pediatricians reporting up to 50% of their patients being prescribed the combination. Asthma uncontrolled on low-dose ICS (53.96%), ICS + leukotriene inhibitors (49.78%) and PRN SABA (44.93%) were most cited reasons for prescribing ICS-LABA; more respiratory physicians compared to pediatricians reported using the combination in those uncontrolled on PRN-SABA (50% vs 39%,  $p=0.019$ ). Reduction in night-time symptoms (34.33%) and emergency clinic visits (32.34%) were the most cited reasons for preferring ICS-LABA by pediatricians, whereas respiratory physicians cited reduction in daytime (32.41%) and night-time (27.27%) symptoms and emergency clinic visits (32.34%) as the most important benefits. Budesonide-formoterol was the most frequently used ICS-LABA by respiratory physicians and pediatricians (78.66% vs 61.69%,  $p<0.001$ ), followed by fluticasone-salmeterol (11.86% vs 27.36%,  $p<0.001$ ). The practice of using ICS-formoterol as maintenance and reliever therapy was more prevalent among respiratory physicians as compared to pediatricians (83% vs 63.68%;  $p<0.001$ ). Majority of respiratory physicians and pediatricians preferred using ICS-LABA in children aged 6-12 years (77.87% vs. 89.05%,  $p=0.002$ ). Pressurized metered dose inhaler + spacer was the most preferred device.

**Conclusion:** The results demonstrate good acceptance of ICS-LABA for management of pediatric asthma in India with budesonide-formoterol being the most preferred combination. ICS-LABA was reported to offer benefits such as reduction in symptoms and emergency clinic visits.