WHY IS ASTHMA STILL OUT OF CONTROL

**Ongoing burden of asthma**

2016 was the 60th anniversary since the first modern inhaler was introduced into clinical use. However, over the last decades studies have shown little apparent improvement in asthma control. However, over the last decade studies have shown that asthma remains a major public health concern. The European Lung Foundation estimates that 30 million adults and children under the age of 45 in Europe are affected by asthma, resulting in a substantial economic burden. Lost productivity estimated to cost almost €9.8bn each year.

**Asthma affects 30 million adults and children under the age of 45 in Europe**

**REALISE study: suboptimal asthma control**

- 8,000 diagnosed asthma patients aged 18-50
- In European countries
- CRITIKAL survey was conducted in 2012 in asthma patients who were active on social media
- Funded by Mundipharma International Limited

**Over the previous year, surveyed had been to an emergency department because of an asthma exacerbation (asthma attack)**

**CRITIKAL study: errors in inhaler technique**

**CRITIKAL (CRITical Inhaler mistaKes and Asthma controL)**

- 3,660 patients in the iHARP asthma review service
- **First study** to investigate direct relationships between specific inhaler errors and asthma outcomes in patients on fixed-dose combination treatments
- **CRITIKAL study** was conducted between 2011 and 2014 and funding support was provided by Mundipharma Research Limited

**A few frequent errors were common to all devices in the study**


**Tackling suboptimal asthma control**

1. Many factors are associated with poor control including adherence and inhaler techniques
2. It’s necessary to assess asthma accurately in clinical practice and improve patient understanding to recognize and act on symptoms and exacerbations
3. When assessing inhaler technique, training could target the common errors associated with poor asthma control
4. May enable more patients in Europe to take control of their condition, in turn helping to reduce burden of asthma and improve patient outcomes

**Patients using Symbicort® Turbohaler® or Seretide® Diskus® dry-powder inhalers**

- 25% struggled with coordination, firing device before inhalation
- 33% made errors relating to lack of device knowledge or incorrect second dose preparation

**Patients using Seretide metered dose inhaler**

- Associated with uncontrolled asthma and increased exacerbations

**CRITIKAL**

**Right inhaler + Training by healthcare professionals = 60**


**A few frequent errors were common to all devices in the study**

- 34% of people didn’t sit or stand during inhalation
- Between 22-33% didn’t hold breath for more than 3 seconds after inhalation
- Between 26-32% didn’t breathe out to empty lungs before inhalation
- Errors were assessed by fully trained healthcare professionals

**Devices used in the study were Symbicort® Turbohaler® (n=2074), Seretide® Diskus® (n=826) and Seretide pMDI (n=760)**