

Which patient, which device?

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Chronic airway inflammation and hyper-responsiveness are two major traits to define asthma. Longterm goals of asthma treatment are to achieve good control and prevent future exacerbations and complications. Inhalation therapy is theoretically ideal for the purposes, as it can safely deliver anti-inflammatory or bronchodilatory drugs into target tissues.

The development and evolution of various inhaler devices and drug components now appears to provide clinicians the opportunity to personalize inhaler therapy for individual patients. Nevertheless, there are still considerable reports on poor inhaler utilization and related poor asthma control, including Korea. Not a few asthma patients are found to be non-adherent to inhalers, or have practical difficulty to use their medicines correctly. Partly due to the increase in the number of inhaler devices, clinicians who prescribe inhaler medicines also have trouble with specific inhalation technique and education.

Currently available asthma inhalers differ from each other in many ways, including devices and pharmacological characteristics such as drug particle size, lung deposition, stability, onset time, effect duration or side effects. Then we imagine, could we make use of the heterogeneity of asthma inhalers as to manage the heterogeneity of asthma patients? This personalization could be more relevant to asthma in special populations like the elderly. In this session, we will review the characteristics of current asthma inhalers and discuss the ways toward personalization.