Dinner Symposium Saturday, 7 December 2019 • 18:00 – 19:30 • Function Room 1&2 (2/F)

## **Better Asthma Management Strategies**



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Dr. Lam is a Specialist in Respiratory and Sleep Medicine. She underwent fellowship training in respiratory and sleep medicine at Queen Mary Hospital, The University of Hong Kong. She obtained a Hong Kong Lung Foundation Fellowship Grant to pursue further training at the Woolcock Medical Research Institute and Royal Prince Alfred Hospital in Sydney, and was awarded her Doctor of Medicine degree with Sir Patrick Manson Gold Medal in 2009.

Dr. Lam is the Past President of the Hong Kong Society of Sleep Medicine and a council member of American Chest Delegation (Hong Kong & Macau Chapter). She has worked as a respiratory and sleep physician in Queen Mary Hospital before, and is currently working as the Honorary Consultant in Respiratory Medicine Centre, Hong Kong Sanatorium & Hospital. She has also been appointed as Honorary Clinical Assistant Professor at the University of Hong Kong and Honorary Associate Professor at the Chinese University of Hong Kong, actively involved in clinical services, undergraduate and postgraduate teaching as well as research projects in the field of respiratory and sleep medicine.

Asthma is an airway disease with typical presenting symptoms - coughing, wheezing, chest tightness or shortness of breath. It is defined as a reversible obstructive disease due to airway hyper-reactivity. Our understanding of asthma has evolved over time from a single medical disease to a complex of multiple phenotypes. This heterogeneity has led to challenges in different management approaches.

From the early established treatments of asthma with inhaled bronchodilators, anti-inflammatory or biologic therapies, the treatment outcomes were variable. More and more patient characteristics were identified in order to tailor-made better asthma management. Apart from clinical phenotyping, molecular disease pathways have been identified in different patient groups who have better responses to certain asthmatic therapies. The presence of eosinophils in both the sputum and blood has been implicated in the assessment of airway eosinophilic inflammation and treatment outcomes.

Eosinophilic inflammation is present in a significant proportion of patients with severe asthma and is associated with acute exacerbations. In the past few years, many clinical studies have used blood eosinophil measurements as a surrogate biomarker to indicate treatment response. Anti-IgE therapy inhibits the release of inflammatory mediators from mast cells and diminished recruitment of eosinophils and other inflammatory cells into the airways. And, anti-IL 5 biologic therapy has been developed to target for severe, uncontrolled eosinophilic asthma recently.

It has become increasingly recognized that asthma is a heterogeneous disease with multiple phenotypes representing different pathologies, presentations and treatment outcomes. It is important to characterize these phenotypes for targeted and individualized therapies for asthmatic patients.