

## Letter to the Editor

## Asthma and Infection

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Dear Editor,

I read with great interest the article by Bojesen et al. [1] about the association early asthma was associated with significantly increased risks of any infection, pneumonia and any non-respiratory tract infection in never smokers in general population and asthma had similar relative risk estimates for any infection when compared with diabetes in never smokers. This suggested that individuals with asthma may have impaired innate and adaptive immune functions and lead to increased susceptibility to infections. However, in my personal clinical experience, purely asthma-related infections appear not to be as severe and frequent as those with diabetic patients. Inhaled Corticosteroid use (ICS) are very commonly prescribed in asthmatic patients. However, ICS related pneumonia in asthma is not frequently reported, not likewise in Chronic Obstructive Pulmonary Disease (COPD) patients. Evidences demonstrated that ICS use in COPD increased the incidence of pneumonia, which may be related to impaired immunity of COPD patients with own disease severities, the different kinds and dose of ICS [2,3]. Furthermore, discontinuation of ICS use in COPD is associated with a reduction in

the elevated risk of serious pneumonia, particularly with fluticasone [4]. In a study of 152412 patients demonstrated that ICS use in asthma patients was associated with an increased risk of pneumonia and the risk was present for both budesonide and fluticasone [5]. In their study, there was an increased risk of pneumonia associated with current use of ICS from low dose to high dose. Another study also showed higher doses ICS had greater risk of pneumonia [6]. On the contrary, a systematic review and meta-analysis study showed ICS was associated with decreased risk of incident pneumonia in asthma [7]. If the authors Bojesen et al. can specify in detail the used duration, dosages and kinds of ICS, it is possible to clarify the correlation between asthma itself and related infections, or infection caused by the addition of ICS.

**References**

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