## G-1446 Prevalence of inappropriate prescribing of inhaled corticosteroids for respiratory tract infections in the Netherlands

Background: In Australian among patients with only one ICS dispensing and no other respiratory medications ('one off ICS'), 44% were co-dispensed oral antibiotics. These patients unlikely to have chronic airways disease.

Purpose: To investigate the extend of one-off ICS dispensing and their potential use for management of respiratory infections in the Netherlands.

Methods: Data were obtained from the Dutch Foundation of Pharmaceutical Statistics that collects dispensing data from almost all 1,950 Dutch community pharmacies. Patients with at least one ICS dispensing in 2011 were included. Patients with a single ICS dispensing in 2011 and no other respiratory medication one year before and after were identified (one off ICS). One off ICS with an oral antibiotic co-dispensed within 7 days was considered for treatment of a respiratory infection. With multivariate logistic regression the influence on receiving one-off ICS was calculated for co-dispensing of oral antibiotics as main predictor of interest.

Findings: Data were available from 1,725 pharmacies. Within 845,068 ICS users 10% were dispensed one-off ICS, from which 12.9% were co-dispensed oral antibiotics. For potential use for respiratory infections one-off ICS was dispensed mostly on GP's prescription. ICS was mainly prescribed in fixed combinations with long acting bronchodilators. Total costs for one off ICS dispensings in 2011 were € 555,000. The suspicion that one off ICS was also used for treatment of respiratory infections was confirmed by the finding that co− dispensed oral antibiotics increased risk of for a one-off ICS dispensing within all ICS users by 26% (OR 1.26, 95% CI 1.22 − 1.29).

Conclusion: Although in the Netherlands ICS prescribing for respiratory infections was considerable lower than in Australia, given the potential side effects of ICS and avoidable medication costs, there is still room for improvement of ICS prescribing in the Netherlands. Efforts for this should be undertaken by General Practitioners with community pharmacists.

Location of Primary Work: Netherlands