





Oral corticosteroid prescription patterns for asthma in France, Germany, Italy and the UK

Trung N. Tran¹, Elizabeth King², Rajiv Sarkar³, Cassandra Nan⁴, Annalisa Rubino⁵, Caroline O'Leary², Ruvimbo Muzwidzwa², Laura Belton⁶ and Jennifer K. Quint⁷

Affiliations: ¹AstraZeneca, Gaithersburg, MD, USA. ²IQVIA, London, UK. ³IQVIA, Bengaluru, India. ⁴AstraZeneca, Mölndal, Sweden. ⁵Evidera, London, UK. ⁶AstraZeneca, Cambridge, UK. ⁷National Heart and Lung Institute, Imperial College London, London, UK.

Correspondence: Trung N. Tran, AstraZeneca, Gaithersburg, MD, USA. E-mail: trung.tran1@astrazeneca.com

This study gives a real-world snapshot of oral corticosteroid (OCS) use in western Europe, by highlighting an opportunity to shift towards corticosteroid-sparing therapies or safer alternatives that mitigate the risk of OCS-associated adverse effects http://bit.ly/3cB8kk8

Cite this article as: Tran TN, King E, Sarkar R, *et al.* Oral corticosteroid prescription patterns for asthma in France, Germany, Italy and the UK. *Eur Respir J* 2020; 55: 1902363 [https://doi.org/10.1183/13993003.02363-2019].

This single-page version can be shared freely online.

ABSTRACT Oral corticosteroids (OCS) are used to manage asthma exacerbations and severe, uncontrolled asthma, but OCS use is associated with adverse effects. We aimed to describe the patterns of OCS use in the real-world management of patients with asthma in western Europe.

We used electronic medical records from databases in France, Germany, Italy and the United Kingdom from July 2011 through February 2018. Patients aged ≥ 12 years with an asthma diagnosis, at least one non-OCS asthma medication within ±6 months of diagnosis, and available data ≥ 6 months prior to and ≥ 90 days after cohort entry were included. High OCS use was defined as OCS ≥ 450 mg prescribed in a 90-day window during follow-up. Baseline characteristics and OCS use during follow-up were described overall and by OCS use status.

Of 702685 patients with asthma, 14–44% were OCS users and 6–9% were high OCS users at some point during follow-up. Annual prevalence of high OCS use across all countries was ~3%. High OCS users had a mean of between one and three annual OCS prescriptions, with an average daily OCS dosage of 1.3–2.2 mg. For patients who continued to meet the high-use definition, daily OCS exposure was generally stable at 5.5–7.5 mg for \geq 2 years, increasing the risk of adverse effects.

Our study demonstrates that OCS use is relatively common across the four studied European countries. Data from this study may provide decisive clinical insights to inform primary care physicians and specialists involved in the management of severe, uncontrolled asthma.

Copyright ©ERS 2020. This version is distributed under the terms of the Creative Commons Attribution Non-Commercial Licence 4.0.