

## Utilizing claims data to assess persistence with antidepressants

Hengstler, S.<sup>1</sup>, Leuner, K.<sup>1</sup>, Schüssel, K.<sup>2</sup>, Franzmann, A.<sup>2</sup>, Schulz, M.<sup>1,2</sup>, Müller, W.E.<sup>1</sup>

<sup>1</sup>Department of Pharmacology, Goethe-University Frankfurt at Main, <sup>2</sup>German Institute for Drug Use Evaluation (DAPI), Eschborn, Germany.

**Background and Objective:** Non-persistence and non-adherence with antidepressants (AD) is common and influenced by many different factors including adverse effects as well as prejudices of patients and healthcare professionals including pharmacists. To assess refill adherence, we conducted a retrospective cohort study using pharmacy claims data.

**Design:** Patients with a new (= index) prescription (IP) for an AD in the first quarter of 2006, who had not received any prescription for an AD in the past six months, but were eligible in the database, were included in the study and classified according to different drug classes of AD: tricyclic AD (TCA), selective serotonin reuptake-inhibitors (SSRI), MAO-inhibitors (MAOI), and other AD. Furthermore, we analyzed refill adherence depending on different pack size units i.e., N1=20, N2=50, and N3=100 tablets prescribed at IP.

**Setting:** DAPI database including >80% of community pharmacies' statutory health insurance claims data in Germany ([www.dapi.de](http://www.dapi.de)).

**Main outcome measures:** Percentage of patients presenting a second prescription of any AD within 12 months.

**Results:** In total, 433,615 patients were included with 61% receiving a TCA, 25% a SSRI, 0.4% a MAOI, and 14% other AD at IP. 255,414 (59%) received one or more further prescriptions within one year after their IP. Following patients for one year after IP, more patients receiving a SSRI at IP (67%) received a further prescription of any AD when compared to patients receiving a TCA at IP (54%). At the time of the first refill prescription, 84% of SSRI patients and 80% of TCA patients remained on the same drug, respectively. Of 120,727 patients with the smallest unit N1 of any AD prescribed at IP, 49% received no further prescription of any AD within one year. Of those who initiated their therapy either with the N2 unit (162,527 patients) or N3 unit (150,361 patients), 41% (N2) or 35% (N3) received no further prescription within one year.

**Conclusions:** Exploring this very large cohort, results indicate that early discontinuation of AD therapy is frequent in ambulatory care with only 60% receiving a refill prescription within 12 months. Persistence seems to be lower in patients receiving a TCA when compared to patients receiving a SSRI. Based on these data, we are planning to further evaluate drug persistence in an even larger cohort of patients as well as analyzing potential variables such as co-medication or type of prescriber (GP vs. specialist) which may influence patients' persistence and adherence.