Clinical Impact of Not Achieving Recommended Dose on Duration of Atomoxetine Treatment in Adults with Attention-Deficit/Hyperactivity Disorder

David B. Clemow, Allen W. Nyhuis and Rebecca L. Robinson

CNS NEUROSCIENCE & THERAPEUTICS (August 2016)
DOI : 10.1111/cns.12595

Summary

Aim
To compare atomoxetine (ATX) length of therapy (LoT) among adults with ADHD who reached the recommended dose of 80 mg/day (ATX ≥ 80) versus those who did not (ATX < 80) analyzed separately in patients prescribed ATX as monotherapy (mono) and in combination with other ADHD medications (combo).

Methods
This was a retrospective observational cohort study of the Truven Health Marketscan Commercial Claims Database from January 1, 2006–September 30, 2013, with a 6-month preindex period free of ATX (1st ATX claim as index event) and a 1-year follow-up. LoT during follow-up was calculated using prescription claim fill dates and included all days with medication on hand regardless of treatment gaps.

Results
Only 45.0% of the 36,076 mono and 77.9% of the 1548 combo patients reached an ATX dose of ≥80 mg/day in 1-year follow-up. When patients filled at least one 80 mg prescription, their total days of therapy over the course of a year were significantly greater than if they did not (mono: 159.3 vs. 65.6 days; combo: 237.4 vs. 172.0; P < 0.0001). Across all timepoints examined (Day 14, 30, 60, 90, 210) for mono and combo, ATX ≥ 80 versus ATX < 80 patients had greater mean doses (P < 0.0001). Combo patients had longer ATX LoT than mono patients regardless if they reached 80 mg or not (P < 0.0001), but mono patients LoT was 93.8 days longer for ATX ≥ 80 versus ATX < 80 patients compared to 65.5 days for combo patients. Of patients reaching 80 mg/day, 71.7% of mono and 62.8% of combo patients did so by Day 30. For mono ATX ≥ 80 and ATX < 80 patients, LoT was significantly (P < 0.0001) less in previously treated patients compared to naive patients.

Conclusion
Ensuring adult ADHD patients are treated with ATX at a target dose of 80 mg/day is an important clinical consideration for maximizing patient days on therapy, which can be important for treatment optimization.