

## *Atomoxetine (Tomoxetine) or Strattera®*

### Some Analytical Information

Submitted by Dan Anderson

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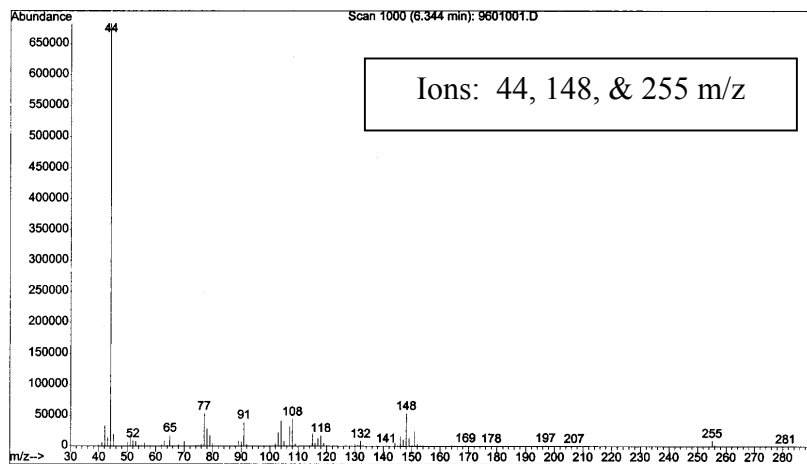
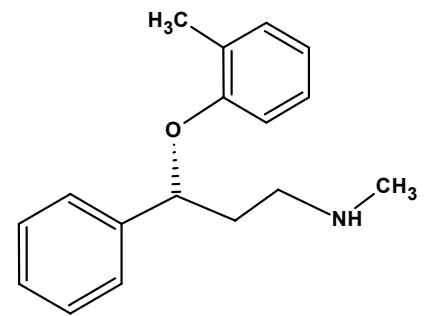
This is a continuation from Chip Walls Tox-Talk submission on Atomoxetine.

Atomoxetine is the first non-stimulant treatment of Attention-Deficit/Hyperactivity Disorder (ADHD). It is prescribed in Capsules: 5 mg, 10 mg, 18 mg, 25 mg, 40 mg, and 60 mg.



#### **Chemical Properties**

- (-)-N-methyl-3-phenyl-3-(*o*-tolylloxy)-propylamine hydrochloride.
- C<sub>17</sub>H<sub>21</sub>NO·HCl
- Molecular weight 255
- Formula weight 291
- Atomoxetine is a basic drug that can be extracted with an n-butylchloride liquid/liquid extraction and can be detected after an acid back extraction.
- Detection of Atomoxetine is possible on either a GC/NPD or GC/MS.



**Elution Order:** PCP, Doxylamine, Orphenadrine, Tramadol, **ATOMOXETINE**, Tramadol metabolite Chlorpheniramine, Metoprolol

- Currently, the Los Angeles County Dept. of Coroner has detected Atomoxetine in two postmortem cases at therapeutic concentrations.
  - Single 20 mg dose----0.142 ug/ml at 1 hour
  - Single 90 mg dose----0.315 to 1.23 ug/ml at 1-1.5 hours
  - 20 mg oral doses twice daily for 5 days -----0.184 ug/ml at 1 hour
- Atomoxetine can be purchased from Sigma/Aldrich
  - Catalog number T 7947 (R)Tomoxetine HCl
  - 25-mg \$509.20
  - 5-mg \$127.30