

## NEW DRUGS: Galantamine HBr or Reminyl®

Submitted by Sara Kegler

Los Angeles County Dept of Coroner, 1104 N. Mission Rd, Los Angeles, CA, 90033

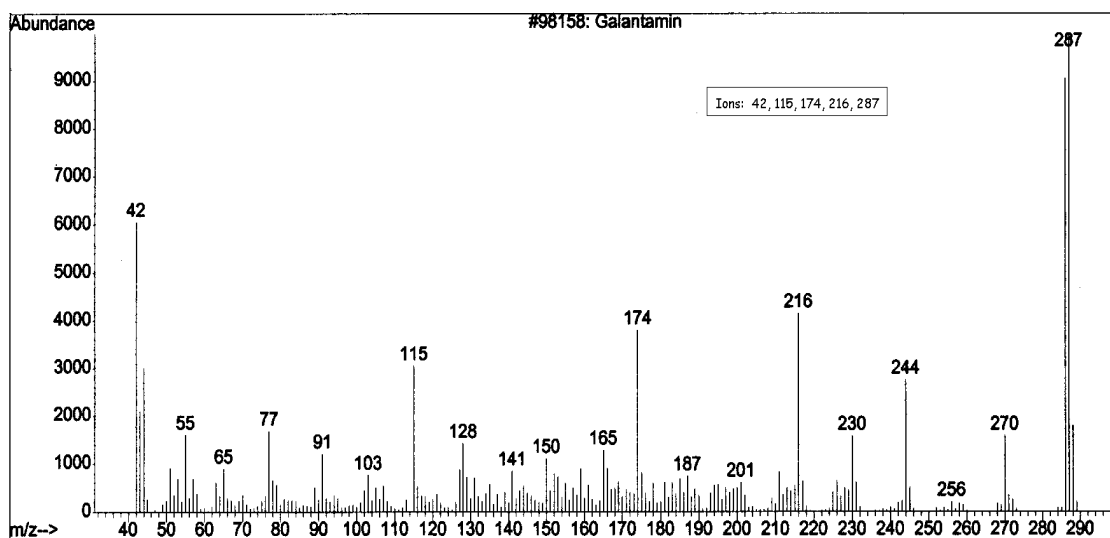
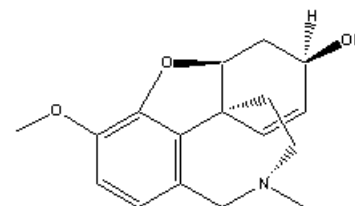
[skegler@coroner.co.la.ca.us](mailto:skegler@coroner.co.la.ca.us)

Reminyl (galantamine HBr) is an orally administered reversible, competitive acetylcholinesterase inhibitor that is prescribed as an anti-Alzheimer drug and distributed by Janssen. It is prescribed in circular biconvex film-coated tablets of 4, 8 and 12mg, or a 4mg/mL oral solution.



### Chemical Properties:

- (4a*S*, 6*R*, 8*aS*)-4a, 5,9,10,11,12-hexahydro-3-methoxy-11-methyl-6*H*-benzofuro[3*a*,3,2-*ef*][2]benzazepin-6-ol hydrobromide
- C<sub>17</sub>H<sub>21</sub>NO<sub>3</sub>•HBr
- Molecular Weight 287
- Formula Weight 368
- Galantamine is a drug that can be extracted with an n-butylchloride liquid/liquid extraction and can be detected after an acid back extraction.
- Detection of Galantamine is possible on either GC/NPD or GC/MS



**Elution Order:** Norchlorcyclizine, Promethazine, Benztropine, **GALANTAMINE**, Norsertraline, Sertraline, Citalopram

**Discussion:** Recently, a case came into the Los Angeles County Dept. of Coroner Toxicology Laboratory involving a 46-year-old female who expired suddenly and, reportedly, for no apparent reason. She had a history of alcohol abuse and an altered state of consciousness. At this time, cause of death is still pending toxicology results. However, Galantamine was detected in a central blood source using an n-butylchloride liquid/liquid extraction, and it appears to be the first reported instance of a forensic case involving this particular drug.