## **ESSENTIAL MEDICINE**

Section: 4. Antidotes and other substances used in poisonings > 4.2. Antidotes and other substances used in poisonings > Specific

	ATC codes: V03AB26
Indication	Exposure to or harmful effects of undetermined intent of analgesics, antipyretics or nonsteroidal anti-inflammatory drugs ICD11 code: PH44
INN	Methionine Methionine
Medicine type	Chemical agent
List type	Core
Formulations	Oral > Solid: 250 mg (DL)
EML status history	First added in 1987 (TRS 770) Changed in 2003 (TRS 920) Changed in 2007 (TRS 950) Removed in 2011 (TRS 965)
Sex	All
Age	Adolescents and adults
Therapeutic alternatives	The recommendation is for this specific medicine
Patent information	Patents have expired in most jurisdictions Read more about patents.
Wikipedia	Methionine 🗹

## Summary of evidence and Expert Committee recommendations

An application was prepared by Kristi Shiago, Isa Watson, and Professor Marcus Reidenberg, Weill Cornell Medical College, New York, USA for deletion of DL-methionine from the Model List. Expert reviews were prepared by Professor Abdol Majid Cheraghali and Dr Kalle Hoppu. The Committee considered evidence from one Cochrane Review (1) that reported that there were no head-to-head trials comparing N-acetylcysteine with DL-methionine but an indirect comparison based on pooled data from the individual studies suggested that acetylcysteine was slightly more effective. Both medicines have been used since the late 1970s and the safety profile is well established. The Committee noted that although the cost of methionine is lower than acetylcysteine, acetylcysteine has the advantage that it can be administered both orally and intravenously. The Committee was concerned that methionine may not be widely available as a single medicine in many countries, due to acetylcysteine having become the standard of care for paracetamol poisoning globally. The Committee recommended the deletion of DL-methionine from the Model List due to its reported limited availability as a single medicine, the unknown real cost difference between DL-methionine and N-acetylcysteine, and the fact that N-acetylcysteine has become the standard of care globally for the treatment of paracetamol poisoning. DL-methionine has already been deleted from the EMLc. References: 1. Brok J, Buckely N, Gluud C. Interventions for paracetamol (acetaminophen) overdose. Cochrane Database of Systematic Reviews, 2006, (2):CD003328.

