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Title: Some benefit from non-oximes MB408, MB442 and MB444 in combination with the oximes HI-6 or obidoxime and atropine in antidoting sarin or cyclosarin poisoned mice

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## ACCEPTED MANUSCRIPT

Some benefit from non-oximes MB408, MB442 and MB444 in combination with the oximes HI-6 or obidoxime and atropine in antidoting sarin or cyclosarin poisoned mice

Running head: MB compounds and nerve agent poisoning

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## Highlights

- MB408, MB442 and MB444 are non-oxime bispyridinium experimental compounds
- MB compounds were investigated as adjuncts to therapy of nerve agent poisoning
- MB444 is significantly beneficial for treating cyclosarin poisoning in mice
- Higher dose of each MB compound usually brings slightly higher benefit

## Abstract

The effect of three newly developed bispyridinium non-oxime compounds (MB408, MB442, and MB444) on the therapeutic efficacy of a standard antidotal treatment (atropine in combination with the oxime HI-6 or obidoxime) of acute poisoning by two nerve agents (sarin and cyclosarin) in mice was studied. The therapeutic efficacy of atropine in combination with an oxime with or without one of the bispyridinium non-oximes was evaluated by determination of the 24 h LD<sub>50</sub> values of the nerve agents studied and by measurement of the

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