New Inhibitors of Botulinum Neurotoxins
(ref. 983638)

A joint effort undertaken by scientists from Serbia and the United States of America is to develop ‘drug-like’ small molecule, non-peptidic, inhibitors (SMNPIs) as therapeutic countermeasures that will rescue intoxicated victims from Botulinum neurotoxins (BoNTs), as well as serve as prophylactics, thus providing NATO, its Partners, and its Mediterranean Dialogue Partners with a defense against this bioterror agent. The scientific research within this project focuses on translating the existing SMNPIs of the BoNT serotype A LC (BoNT/A LC) into bioavailable, nM range therapeutic candidates. Concurrently, the study focuses on the discovery and development of SMNPIs of the BoNT serotype B LC (BoNT/B LC) as therapeutic candidates. Finally, the group will also cross examine all SMNPIs of the BoNT/A LC and the BoNT/B LC against one another, as well as against the BoNT serotype E. Over the coming months, efforts will continue towards the development of BoNT/A LC SMNPIs and in vitro efficacy evaluation, as well as the commencement of testing BoNT SMNPIs in a PBMC toxicity assay.

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