## **Abstract**

Metamphetamine is worldwide problem and in the Czech republic is 2-3 % of people older than 15 years exposed to it. There are 34,7 thousand long-term users in Czech republic and 19 methamphetamine-related deaths in 2022. The impact on the neuroimmune system has only started to be studied in recent years. Understanding its effect on the neuroimmune system may outline new treatment options, as there is no cure for methamphetamine addiction to date. This paper summarizes its effects on the different components of the neuroimmune system and outlines some substances that could be used in treatment.

Key words: methamphetamine, neuroimmune system, inflammation, microglia, astrocytes