



## Key Points Summary

Guedes VA, Lai C, Devoto C, Edwards KA, Mithani S, Sass D, Vorn R, Qu BX, Rusch HL, Martin CA, Walker WC, Wilde EA, Diaz-Arrastia R, Gill JM, Kenney K. Extracellular Vesicle Proteins and MicroRNAs Are Linked to Chronic Post-Traumatic Stress Disorder Symptoms in Service Members and Veterans With Mild TBI. *Front Pharmacol.* 2021 Oct 6;12:745348. doi: 10.3389/fphar.2021.745348. PMID: 34690777.

### Primary Question this Study Addresses

What are relationships between PTSD symptoms and extracellular vesicles (EV) levels of proteins and miRNAs in Service Members and Veterans with and without remote mild TBIs (mTBIs)?

### Study Findings That Add to Our Knowledge

EV levels of neurofilament light chain (NfL) were elevated in participants with more severe PTSD symptoms (PCL-5 $\geq$ 38) and positive mTBI history, when compared to no TBI controls and mTBI participants with less severe PTSD symptoms.

Levels of EV NfL, plasma NfL, and hsa-miR-139-5p were linked to PTSD (PCL-5) scores in regression models.

### How Study Evidence Might Be Used in Practice

Our findings provide insights into signaling pathways linked to the development of persistent PTSD symptoms after TBI and biological mechanisms underlying susceptibility to PTSD.

For information on current PTSD best practice:

 [Resource](#)

To access the study abstract, click here:

 [Abstract](#)

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