Editorial

Mario Plebani

CCLM Award for the Most Cited Paper

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This study evaluated the measurement of neurofilament light chains (NFLs) in blood samples utilizing the same antibody pairing in three different immunoassay platforms. As a marker for neurodegeneration and brain trauma, NFL is historically measured in cerebrospinal fluid (CSF) and the increased sensitivity of new techniques potentiates a shift towards blood analysis of brain-derived biomarkers. The less invasive procedure of blood sampling will ease distress for patients and enable quicker and more frequent sampling leading to more accurate diagnosis. In the years after this paper was published, numerous studies have shown that blood NFL is a highly sensitive biomarker for neurodegeneration that signals in the preclinical stage of neurodegenerative disorders such as Alzheimer’s disease. It also shows promise as an objective tool to monitor the effect on neurodegeneration by disease-modifying compounds in treatment trials for brain disorders.

The study is a collaboration between the teams of neurologist Jens Kuhle (Department of Biomedicine and Clinical Research, University Hospital in Basel) and neurochemistry professors Kaj Blennow and Henrik Zetterberg (Department of Psychiatry and Neurochemistry, University of Gothenburg). Their joint efforts provide frontline expertise in the fight against multiple sclerosis and Alzheimer’s disease along with other neurodegenerative diseases and brain trauma.

For the award ceremony, the authors were represented by Victor Liman of Blennow and Zetterberg’s group. Liman focuses his work on the development and optimization of new methods aiming to provide tools for diagnosis and the accretion of knowledge within the field of neurodegeneration.

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