

A CHEMOMETRIC APPROACH FOR
CHARACTERIZATION OF SERUM
TRANSTHYRETIN IN FAMILIAL
AMYLOIDOTIC POLYNEUROPATHY TYPE I
(FAP-I) BY ELECTROSPRAY IONIZATION-
ION MOBILITY MASS SPECTROMETRY

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**A CHEMOMETRIC APPROACH FOR CHARACTERIZATION OF SERUM
TRANSTHYRETIN IN FAMILIAL AMYLOIDOTIC POLYNEUROPATHY
TYPE I (FAP-I) BY ELECTROSPRAY IONIZATION-ION MOBILITY MASS
SPECTROMETRY**

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ABSTRACT

In this study, we describe a chemometric data analysis approach to assist in the interpretation of the complex datasets from the analysis of high-molecular mass oligomeric proteins by ion mobility mass spectrometry (IM-MS). The homotetrameric protein transthyretin (TTR) is involved in familial amyloidotic polyneuropathy type I (FAP-I). FAP-I is associated with a specific TTR mutant variant (TTR(Met30)) that can be easily detected analyzing the monomeric forms of the mutant protein. However, the

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