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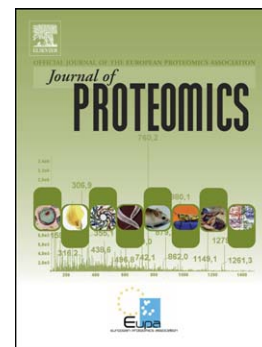
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## An Untargeted Approach for the Analysis of the Urine Peptidome of Women with Preeclampsia

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Preeclampsia (PE) is a pregnancy complication characterized by high blood pressure and proteinuria. The disorder usually occurs after the 20<sup>th</sup> week of pregnancy and gets worse over time. PE increases the risk of poor outcomes for both the mother and the baby. In the study we applied LC-MS/MS method for the analysis of the urine peptidome of women with PE. Samples were prepared using size-exclusion chromatography method which gives more than twice peptides identities if compared with solid phase extraction. Thirty urine samples from women with mild and severe preeclampsia and the control group were analyzed. In total 1786 peptides were identified using complementary search engines (Mascot, MaxQuant and PEAKS). A high level of agreement in peptide identification was observed with previously published data. Label-free data comparison resulted in 35 peptides which reliably distinguished a particular PE group (severe or mild) from controls. Our results revealed unique identifications (correlate to alpha-1-antitrypsin, collagen alpha-1(I) chain, collagen alpha-1 (III) chain, and uromodulin, for instance) that can potentially serve as early indicators of PE.

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