## Development and application of mass spectrometry-based metabolomics methods for disease biomarker identification

Mass spectrometry is a powerful tool for discovering novel disease biomarkers and biologically active compounds from complex mixtures such as natural product extracts. Here, we provide examples of the development and use of mass spectrometry-based approaches (i.e., proteomics, glycomics, lipidomics, peptidomics) to elucidate proteinglycan interactions, endogenous lipids regulating adipogenesis, and proteolytic pathway of bioactive peptides.