

## S16-4 **Liquid chromatography-mass spectrometric approach in clinical chemistry**

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In recent years, mass spectrometry has advanced remarkably and has been used widely in life sciences. In current proteomic and metabolomic studies, liquid chromatography-mass spectrometry (LC-MS) is indispensable for the analyses of physiologically active substances, including both low-molecular-weight and high-molecular weight substances such as peptides and proteins. In clinical chemistry, it is important to determine the levels of biologically important substances in biological samples in order to elucidate the etiology and pathophysiology of several diseases. Therefore, the use of appropriate standard samples and the development of reliable analytical methods are required.

In this presentation, we will discuss our approaches that involve the use of LC-MS for the analysis of urinary conjugated tetrahydrocorticosteroids and novel conjugates of bile acids for the diagnosis of endocrine and metabolic disorders.