



AB014. Metabolomics in retinal angiogenic diseases

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Abstract: Retinal angiogenic diseases, such as diabetic retinopathy (DR) and age-related macular degeneration (AMD) represent the leading causes of vision impairment in developed countries. There is strong evidence that dysregulated metabolic pathways contribute to DR as known risk factors do not explain all cases and the phenomenon of metabolic memory persists for decades or longer. Some early studies also showed that changes of plasma metabolic profiles are associated with AMD. Metabolic abnormalities can be explored using the techniques of the new science of metabolomics. In this presentation, several metabolomics workflows as well as the application of data independent acquisition mass spectrometry (DIA-MS) in metabolomics will be discussed. Our recent findings from metabolomics studies on DR and AMD will be presented.

Keywords: Metabolomics; diabetic retinopathy (DR); age-related macular degeneration (AMD); data independent acquisition mass spectrometry (DIA-MS)

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