AB016: Metabolomic studies of green tea catechins and its applications in ocular research

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Abstract: Tea is the second most popular beverage worldwide after water. Green tea has the highest nutraceutical values with well-established general health benefits and wide safety margins. Natural polyphenols found in green tea, including (+)-catechin (C), (-)-epicatechin (EC), (+)-gallocatechin (GC), (-)-epigallocatechin (EGC), (-)-epicatechin-3-gallate (ECG), (-)-gallocatechin-3-gallate (GCG) and (-)-epigallocatechin-3-gallate (EGCG). They have many potent biological properties and therapeutic effects in human health and diseases. These small molecules have high bioavailability and specific therapeutic potential in eye tissues. Recently some researchers studied the metabolomic responses to the green tea. In this talk, summary of these studies will be reviewed and its potential applications in the ocular research will be discussed.

Keywords: Metabolomics; green tea; polyphenols; catechins