The 138th Central Research Laboratory Seminar

Fibrinogen as a Plasma Protein Binding Partner for Lecanemab: Implications for Alzheimer's Therapy

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Venue Science Café
6th floor, Medical Science Research Bldg.

Abstract

Therapeutic antibodies targeting amyloid beta (Aβ) hold significant promise for reshaping treatment paradigms in Alzheimer's disease. We carefully examined the plasma protein binding (PPB) of a lecanemab biosimilar IgG and identified fibrinogen as a potential binding partner. Experimental data revealed that purified fibrinogen interacts with lecanemab biosimilar IgG, albeit with lower affinity compared to its interaction with monomeric Aβ.

In the context of lecanemab treatment, fibrinogen may play a significant role in shaping its pharmacokinetic profile. For instance, fibrinogen may serve as a reservoir for lecanemab in the bloodstream, potentially influencing its distribution and availability. Conversely, the short half-life of fibrinogen could also potentially influence the pharmacokinetics of lecanemab, potentially impacting its stability and therapeutic effectiveness.

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