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Innovative electrode and chip designs for transendothelial electrical resistance measurements in organs-on-chips

This review paper gives an overview of the latest chip designs to determine the transendothelial electrical resistance (TEER) in various organs-on-chips. The TEER provides information about the integrity of biological barriers, and can be measured label-free and non-invasive. After giving an overview of the theory and application of TEER, this review focuses on chip designs that differ from the traditional sandwich-chip design. Finally, the authors draw attention to current gaps and give recommendations on focus areas for future research.



and Loes I. Segerink, Lab Chip, 2024, 24, 1178.



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