Evaluation of the efficacy of drugs for the treatment of inflammatory bowel disease



Mathadrago	Evolution of the office of drugs for the treatment of inflormatory
Method name	Evaluation of the efficacy of drugs for the treatment of inflammatory
Organ system	Bowel
Subject area	Dowel Drug development
Area of application	
Relation of the method	Pontulation development
to the 2Pe	st inflommetery bowel disease
	of initiation bower disease
rigure	measurable through: - transepithelial resistance - transport studies with sodium fluorescein
	↑
	3. inflammation Caco-2 monolayer
	1. addition LPS ± active ingredient X epithelial cells (Caco-2) immune cells (MDM)
	measurable through: IL-6, IL-8, IL-10, TNF-α release (ELISA)
Brief description	The method is based on the combination of the cell types Caco-2 and MDM. By measuring TEER levels and cytokine release, initial conclusions can be drawn about the efficacy of a drug for treating inflammatory bowel disease. Additional viability tests (MTT/LDH) or excessive barrier collapse (measured by TEER) provide conclusions about the safety of a formulation.
Contact person 1	Sabrina Schnur
	Saarland University
	sabrina.schnur@uni-saarland.de
Contact person 2	Prof. Marc Schneider
	Saarland University
	marc.schneider@uni-saarland.de
Contact person 3	Dr. Marius Hittinger
	PharmBioTec gGmbH
	m.hittinger@pharmbiotec.de
Theme-based funding	EFRE project, E-Bio-Barriere
Publication	Schnur, Sabrina. 2022. "Inflammatory bowel disease addressed by Caco-2 and monocyte-derived macrophages: an opportunity for an in vitro drug screening assay." In vitro models.
	Schnur, Sabrina. 2023. "The Potential of Epigallocatechin-3-gallate (EGCG) as Complementary Medicine for the Treatment of Inflammatory Bowel Disease." Pharmaceuticals.

PharmBioTec gGmbH Dr. Marius Hittinger Am Nußkopf 39 66578 Schiffweiler m.hittinger@pharmbiotec.de



in vitro research & development