



Models for drug absorption from the small intestine: where are we and where are we going?

Submitted by Pierre-André Billat on Sat, 02/04/2017 - 13:13

Titre	Models for drug absorption from the small intestine: where are we and where are we going?
Type de publication	Article de revue
Auteur	Billat, Pierre-André [1], Roger, Emilie [2], Faure, Sébastien [3], Lagarce, Frédéric [4]
Pays	Royaume-Uni
Editeur	Elsevier
Ville	Oxford
Type	Article scientifique dans une revue à comité de lecture
Année	2017
Langue	Anglais
Date	Mai 2017
Numéro	5
Pagination	761-775
Volume	22
Titre de la revue	Drug Discovery Today
ISSN	1359-6446
Résumé en anglais	<p>The small intestine is a complex organ with movements, flora, mucus and flows. Despite this, the most widely used absorption models consider the organ a cylindrical monoepithelial tube. This review presents the recent evolution of models to take into consideration the complex nature of gut physiology. The most commonly encountered issues are ethical (in vivo models) and differences in drug transport as a result of a modified expression of drug transporters or metabolic enzymes compared with human (in vitro and in vivo models). Finally, this review discusses the way forward to reach an ideal equilibrium between reproducibility, predictability and efficiency for predicting permeability. The features of an ideal model are listed as a guideline for future development.</p>
URL de la notice	http://okina.univ-angers.fr/publications/ua15578 [5]
DOI	10.1016/j.drudis.2017.01.007 [6]
Lien vers le document	http://www.sciencedirect.com/science/article/pii/S135964461730020X [7]
Titre abrégé	Drug Discovery Today

Liens

[1] <http://okina.univ-angers.fr/publications?f%5Bauthor%5D=26061>

[2] <http://okina.univ-angers.fr/emilie.roger/publications>

[3] <http://okina.univ-angers.fr/sfaure/publications>

[4] <http://okina.univ-angers.fr/frederic.lagarce/publications>

[5] <http://okina.univ-angers.fr/publications/ua15578>

[6] <http://dx.doi.org/10.1016/j.drudis.2017.01.007>

[7] <http://www.sciencedirect.com/science/article/pii/S135964461730020X>

Publié sur *Okina* (<http://okina.univ-angers.fr>)