



Skin toxicology: There Models in Toxicology

Akira Sugawara*

Faculty of Pharmaceutical Sciences, University of Tokyo, Japan

Abstract

Our skin is exposed daily to substances; many of these are neutral and safe but others are potentially harmful. In order to estimate the degree of toxicity and damage to skin tissues when exposed to harmful substances, skin toxicology studies are required. If these studies are coupled with suitably designed mathematical models, they can provide a powerful tool that allows appropriate interpretation of data. This work reviews mathematical models that can be employed in skin toxicology studies. Areas covered: Two types of mathematical models and their suitability for assessing skin toxicology are covered in this review.

Keywords: Skin; Layer; Models

Electronic journals: Mathematical models are an important tool for

References

1. Kandarova H, Hayden PJ.(2021) Standardised Reconstructed Skin Models in Toxicology and Pharmacology: State of the Art and Future Development. *Handb Exp Pharmacol* 57-71.
2. Li YF, Ouyang SH, Tu LF, Wang X, Yuan WL, et al. (2018) Caffeine Protects Skin from Oxidative Stress-Induced Senescence through the Activation of Akt. *Chin Chem Lett* 49: 1073-1076.
3. Bertero A, Augustyniak J, Buzanska L, Caloni F(2019) Species-specific models in toxicology: in vitro epithelial barriers. *Environ Toxicol Pharmacol* 103-203.
4. Schindler J, Brown SC, Birchford N, et al. (2016) Emerging predictive Toxicology Models for Skin. *Toxicol Sci* 151: 1-11.
5. Kawanishi S, Endo S, Oshida Y, et al. (2016) Establishment of a Toxicology Model for Skin. *Toxicol Sci* 151: 1-11.

*Corresponding author: Akira Sugawara, Faculty of Pharmaceutical Sciences, University of Tokyo, Japan, E-mail: sugawara55univtok@yandex.com

Received: 16-Feb-2022, Manuscript No. tyoa-22-58285; Accepted: 17-Mar-2022, DOI: 10.4172/2476-2067.1000173

Citation: Sugawara A (2022) Skin toxicology: There Models in Toxicology. *Toxicol Open Access* 8: 173.

Copyright: © 2022 Sugawara A. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.