Haut Conseil des Biotechnologies

LAVIELLE

Marc

Domaine(s) de compétence :
Statistique

Etablissement /organisme de rattachement ou d'origine :
Inria Saclay

Fonction et position :
DIrecteur de Recherche

Marc Lavielle is a statistician specialized in computational statistics and healthcare applications. He created and directed the Monolix team at Inria. He has worked on the development of new statistical methods, applied to a broad area of applications (geophysics, signal processing, neuro-imaging, agronomy, genetics, PKPD,…). Marc Lavielle is the author of the book Mixed Effects Models for the Population Approach: Models, Tasks, Methods and Tools (Chapman & Hall/CRC Biostatistics Series, 2014). He has also co-authored several papers on various aspects of statistical estimation and on SAEM algorithm. Several of the methods that he developed are implemented in the Monolix software. He recently developed Simulx and the mlxR package for clinical trial simulations.
Marc Lavielle holds a Ph.D. in applied mathematics from Université Paris-XI, Orsay, France (1991). He was named Assistant Professor in 1991 and Professor in 1998 at Paris Descartes University, and joined Inria in 2007 as Research Director.

Publications marquantes

Lavielle M."Mixed Effects Models for the Population Approach. Models, Tasks, Methods & Tools. ", Chapman & Hall/CRC Biostatistics Series, 2014

Mbogning C., Bleakley K., Lavielle M."Joint modeling of longitudinal and repeated time-to-event data with maximum likelihood estimation via the SAEM algorithm", Journal of Statistical Computation and Simulation, vol. 85, n. 8, 1512--1528, 2015

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Dubois A., Lavielle M., Gsteiger S., Pigeolet E., Mentré F. "Model-Based Analyses of Bioequivalence Crossover Trials Using the SAEM Algorithm", Statistics in Medicine, vol. 30, pp. 2582-600, 2011

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Snoeck E., Chanu P., Lavielle M., Jacqmin P., Jonsson N., Jorga K., Goggin T., Jumbe S. , Frey N. "Hepatitis C Viral Dynamics Explaining Breakthrough, Relapse or Response after Chronic Treatment", Clinical Pharmacology and Therapeutics, Vol 87 (6), pp 706-713, 2010

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