

An R tools platform in Cosmetic Industry

Jean-François COLLIN¹

1. L'Oréal Research and Innovation, Aulnay-sous-bois, France

*Contact author: jfcollin@rd.loreal.com

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In vitro, in vivo or ex vivo studies are continually performed on ingredients and formulae in our laboratories for efficacy and safety purposes. Results must be statistically analyzed, and stored together with the programs used affording a sustainable research policy. In such a context, a statistical platform was created including R (a language and environment for statistical computing) tools that integrate automatic reporting system connected to a centralized data basis.

Some applications aim at helping researchers to carry on analysis of their data by their own whereas more general tools are dedicated to statisticians for quickly producing accurate statistical reports with a wide variety of statistical methods: mixed models, multidimensional analysis, exploratory analysis etc...

This platform comprises tools that are entirely built within R (Graphical User Interface and statistical programs). This presentation will focus upon the platform, its functionalities and technical aspects. The tools built to perform exploratory analysis and mixed model analysis will be presented. Examples of a 'non statistician' tool and some packages specifically conceived for answering to our laboratories needs will be given.