

***PfarMineR*: An User-Friendly Expandable Front-End
For Biopharmaceutical Applications with R**
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Abstract:

R is a well-established software for statistical computing and graphics, which among other things serves as a platform for implementation of new statistical research methodology. Many statisticians who work in regulated work environments would like to access these methods but lack the training in R to do so. In order to serve this purpose we have created a package called *PfarMineR*.

PfarMineR provides a menu-driven computing environment for data manipulation and analysis. It includes basic as well as novel statistical methods with emphasis in applications to clinical data.

The default package contains four main sections – “Data”, “Exploratory Data Analysis”, “Classifications” and “Clustering”. Each section has a submenu containing its corresponding set of methods. The sections include many the popular modern techniques such as SVM, LASSO, Boosting and some Bayesian methods among others.

PfarMineR is structured in a way that it allows for updates and modifications, in particular it allows the user to (i) modify the output form and destination, (ii) change the options of a method and (iii) implement new methods.

PfarMineR is also being used for instructional purposes because it is easy to adapt to the content of a specific course.