**CLIP: The Command-Line Interface to Phoenix NLME**

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**Objective:** Phoenix NLME [1] is a module of the Phoenix platform that performs population PK/PD modeling and simulation. The main objective of this work is to develop a command-line alternative to the graphical interface of Phoenix NLME that fully harnesses the power of Phoenix NLME from the command line.

**Methods:** A Python [2] based command-line environment was developed that provides an easy-to-use toolkit for both novice and advanced users that controls the creation and execution of the Phoenix NLME’s engine on a model file.

**Results:** CLIP supports modeling on a local system or computer clusters. CLIP can run, manage and edit models, interpret output, and create basic reports. It is easily extendible with custom scripts, and integrates smoothly with R. CLIP currently supports Phoenix NLME v1.4 and runs on Windows. The program has been able to accurately estimate models written in the Phoenix Modelling Language faster than its equivalent graphical operations and with equivalent accuracy. The method of stochastic simulation and estimation has also been implemented that indicates that the core of this program is extremely extensible, capable of performing non-trivial tasks with high performance and great ease.

**Conclusion:** CLIP is capable of not only duplicating the functionality of Phoenix NLME’s graphical interface at a faster speed, but it is also capable of more intensive operations not practical to perform in a graphical windows environment. Future development will involve extending this product to a Linux architecture.

**References:**