MediBeacon®

Accurate physiological measurements merit the most robust and precise data analytics software.

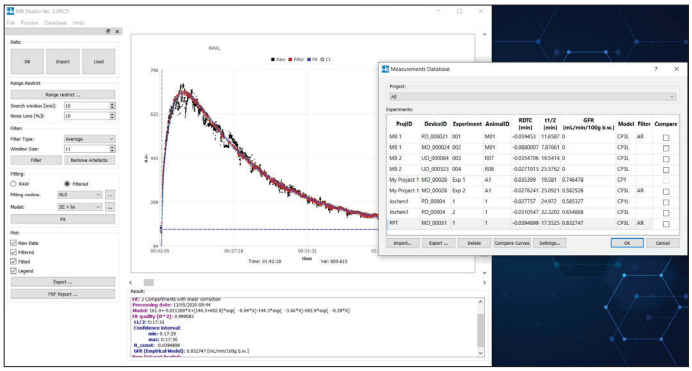
The latest kinetic model utilizes the complete data set from the measured excretion kinetics (see references).

An additional compartment covers the fluorescent tracer agent injection and distribution phase, thus more completely describing measurement progression.

Baseline shifts observed occasionally during measurement can be adjusted in one, two and three compartment models.

The Studio 2 software offers enhanced and customizable data management which facilitates storage, organization, viewing and export of transdermal data sets.

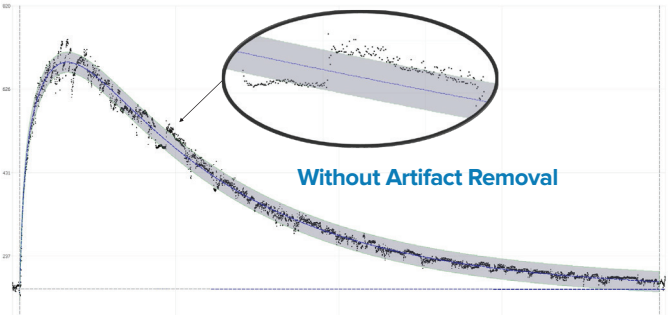
Half-life ($t_{1/2}$) conversion into GFR is automated and integrated into the database (valid for rat and mouse preclinical research).

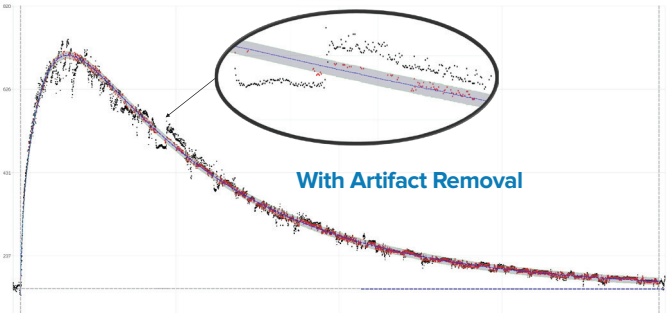


Advanced Studio 2 Features

PRECISION

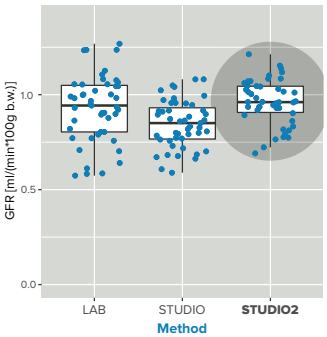
- Multiple compartment models
- Automatic baseline correction for all component models
- Convenient charts with confidence bands
- Advanced signal noise filters
- Machine learning based motion artifacts removal
- Optimized curve fitting uses Basis Function Method





SUPERIOR USABILITY

- Software protection dongle installation
- Automated conversion of $t_{1/2}$ in GFR
- Customizable database columns
- Curve comparison in single chart
- Interactive marker repositioning, offset and crop
- Accelerated artifacts removal computation
- Excel®, Matlab® and PDF result reports
- Supports Mac or PC



Improved Precision Demonstrated

Comparison of 46 measurements in healthy SD rats demonstrates the improved precision that is possible with the Studio 2 evaluation algorithms.

The reduced group variability that is achieved using the Studio 2 algorithms is shown to the left.

NOT FOR HUMAN USE

References

J. Friedemann, R. Heinrich, Y. Shulhevich, M. Raedle, J. Pill, D. Schock-Kusch, "Improved kinetic model for transcutaneous measurement of glomerular filtration rate in experimental animals." Kidney International (2016) 90, 1377–1385; https://doi.org/10.1016/j.kint.2016.07.024

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