



PHILIPS

RESPIRONICS

RADA

Rapid Actigraphy Data Analyzer

Cutting Edge Algorithms, Advanced Analyses,
Invaluable Insights

RADA powered algorithms enable a statistically deeper dive into Motion Biosensor data, for more refined visibility. Uncover novel endpoints for a comprehensive view of a drug or therapy's impact on your study's subjects.

- Leverage RADA to extract possible disease discerning signals from a subject's motion data.
- Use algorithms developed via established signals, to provide disease identifying "novel" endpoints.
- Empower decision making for current and future study phases with enhanced clarity, regarding therapy impact to motion and/or sleep.

RADA is a Class II 510k Exempt Product

RADA is an analytical tool that drills deeper into subject data – for a more detailed understanding of your drug or therapy.

Conventional Endpoints via Actiware

- **Activity Endpoints:** Total Activity Counts, Avg. Activity, Max Activity, Mean Daily Activity, Activity Threshold Analysis, Daily Peak Activity
- **Sleep Endpoints:** Total Sleep Time, % Sleep, Onset Latency, Sleep Efficiency, Wake After Sleep Onset, Wake Time, % Wake, # Wake Bouts, Avg. Wake Bout Duration, Fragmentation Index

Novel Endpoints via RADA

- Capture continuous motion data (alternative to discrete data points collected during study visits) to detect varying activity patterns.
- Re-analyze collected data as new algorithms are developed.

Scratching

- Event Start Date
- Event Start Time
- Event Duration
- Wrist/s
- Mean Power

Extended cosinor

- Acrophase
- Amplitude
- Mesor
- Minimum
- M (width)
- R2
- F Statistic
- P Value
- Gamma (steepness)
- Up Mesor
- Down Mesor

Exploratory

- Statistical Endpoints
 - Mean, Percentiles
 - Skewness, Kurtosis
- Complexity Endpoints
 - Shannon's Entropy,
 - Sample Entropy
- Symbolic Dynamics
 - Sequences, Variations
- Signal Characteristics
 - RMSSD, Mean Crossings
- Threshold Crossings
 - S0 – S4 Smoothed Activity
- MVPA Endpoints
 - Moderate/vigorous physical activity bouts
 - Total Duration of Bouts
- And More!

