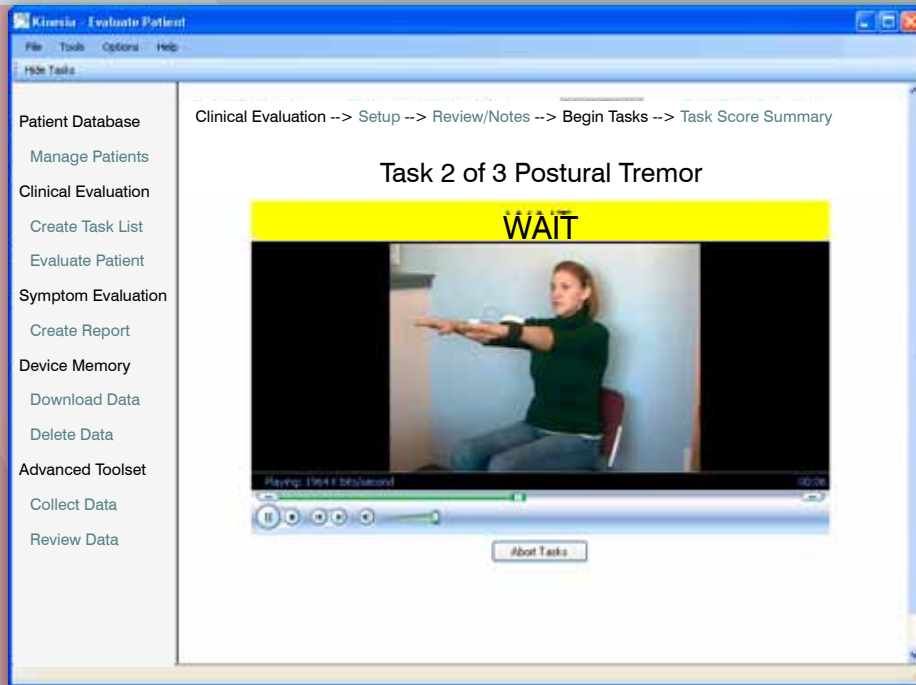


Kinesia is a compact wireless system for quantifying motor symptoms of movement disorders such as Parkinson's disease and essential tremor. The patient worn device is placed on the hand while software based video instructions demonstrate a series of motor tasks to be completed. Data is wirelessly transmitted to a computer for patient evaluation, symptom severity scoring and report generation. Kinesia's untethered design allows great flexibility for in clinic measurements or continuous monitoring at a patient's home.



## Hardware

The Kinesia patient unit consists of two parts, the Finger Sensor and the Wrist module, connected by a thin flexible cable. The Wrist Module contains a radio for wireless data transmission, on board memory, a connector for two channels of electromyography, a rechargeable battery and a push button patient diary. The Finger Sensor uses accelerometers and gyroscopes to sense patient motion. The patient unit can send data to a PC in real-time for online viewing and saving or store up to 50 hours of data in memory for later download.



## Software

The Kinesia software is a sophisticated clinical application, allowing physicians to easily assess and report patient symptom severity information. It includes an automated interface that guides patients through motor tasks similar to those completed during a clinician motor evaluation. With video and audio cues, such as hands at rest, arms extended and nose touching, the patients are instructed on the task to be completed, when to start and when to stop. Data is saved and tremor tasks are automatically scored on a 0-4 scale. Score information is then displayed in a customizable report template.

## Tremor Scoring and Reporting

After the patient evaluation is complete, the Kinesia software automatically generates a 0-4 score correlating to symptom severity. Scored tasks include those for rest, postural and kinetic tremor. Clinicians can then generate customized reports that detail the patient's scores over a period of days, weeks and months in a color coded chart as well as a table with itemized scores for each task.

