Next Generation Primary Cell+ Sensing DBS Device

The Medtronic Next Generation Primary Cell+ Sensing DBS Device, is a primary cell DBS system designed for chronic brain sensing and adaptive stimulation. This system may be used for research studies investigating activities of daily living, unique biomarker identification, brain state changes, and closed-loop control policies. The architecture includes a primary cell neurostimulator paired to a tablet and a patient handheld device through distance telemetry using a hub translator. Using the Clinician Tablet, the clinician can set up multiple event types for a patient to use for monitoring of disease outside of the clinic. The on-demand power spectrum of the brain recording that occurred at the event time is stored upon triggering by the patient and can be viewed by the clinician in a follow up visit. This data can subsequently be exported using the data export capability in the clinician tablet. The data is exported via secure telecommunication interfaces in standard electronic format.