The Orion cortical stimulator is not yet FDA approved. We are currently in the process of preclinical laboratory and animal testing.

By implementing relatively minor modifications to the Argus II technology, the Orion I neural stimulator can be implanted directly on the surface of the brain in the visual cortex or other target areas, and may be able successfully to restore some functional vision in almost all cases of disease related blindness. Our small electronics case will be implanted under the scalp and the electronic array placed in the visual cortex region of the brain. A transmitter coil similar to the one in Argus II will send power and signals to the implanted device. Our electrode array may be placed in an indentation in the back of the brain where a location along the surface of the brain maps to a location in our visual world.

We anticipate that many of the challenges that we encountered and solved in the process of developing the Argus II System are largely the same challenges in developing a product intended for enabling some functional vision through directly stimulating the brain. For example, a robust implant with a large number of electrodes is required for a cortical or retinal visual prosthesis. We believe the knowledge and technology gained in the development of the Argus II System will contribute to accelerating the development of a cortical stimulator directed at treating blindness.

Figure 7 – Placement of Orion I on the cortical surface
Exhibit D

Argus II

   Surgical Manual
   Fitting Manual
   User Manual

Physical specifications, electrical specifications, programming parameters and other technical support related to Argus II and Orion I, as agreed to in a CRA.