

From: Lindy Yow [mailto:LYow@doheny.org]
Sent: Thursday, October 07, 2010 2:34 PM
To: Cole, Dean
Subject: RE: Retina 4th Quarter Joule

Dean,
We are pleased to report the quarterly joule.

July- Sept 2010 Q4
Goal: Implantation of Initial Preclinical 200+ Systems

Met by: 2 preclinical 200+ systems were surgically implanted into preclinical animal models and functionality was verified by the successful transmission of power and telemetry across the wireless link. The characteristics of more than 200 electrodes were verified to be within the design parameters after the implantation.

Lindy Yow

-----ORIGINAL MESSAGE-----

FROM: LINDY YOW [MAILTO:LYOW@DOHENY.ORG]
SENT: THURSDAY, JULY 01, 2010 2:02 PM
TO: COLE, DEAN
CC: MARK HUMAYAN (USC); SATINDERPALL S. PANNU
SUBJECT: RE: JOULE DUE JULY 8TH

DEAN,
OUR 3RD QUARTER MILESTONE IS:
TESTING AND VERIFICATION OF PRECLINICAL 200+ SYSTEMS

WE HAVE MET THIS BY:
A COMPLETE PRECLINICAL 200+ SYSTEM WAS ASSEMBLED AND FUNCTIONALITY WAS VERIFIED BY THE TRANSMISSION OF WIRELESS POWER AND TELEMETRY. THE ELECTRODE AND LIFETIME PARAMETERS WERE CHARACTERIZED BY IMMERSING THE PRECLINICAL 200+ SYSTEM IN PHYSIOLOGICAL BUFFERED SALINE. PRELIMINARY RESULTS HAVE SHOWN ELECTRODE IMPEDANCES WITHIN DESIGN PARAMETERS AND ACCELERATED LIFETIME GREATER THAN ONE YEAR.

LINDY YOW

-----ORIGINAL MESSAGE-----

FROM: LINDY YOW [MAILTO:LYOW@DOHENY.ORG]
SENT: WEDNESDAY, MARCH 31, 2010 4:25 PM
TO: COLE, DEAN
CC: MARK HUMAYUN
SUBJECT: RE: Q2 JOULE DUE DATE

DEAN,

WE ARE HAPPY TO REPORT THAT WE HAVE MET THE MILESTONES OF THE Q2 JOULE.

Q2: ASSEMBLY OF PRECLINICAL 200+ SYSTEMS

THE ASSEMBLY OF THE COMPONENTS INCLUDING THE THIN FILM ELECTRODE ARRAY AND THE ELECTRONICS PACKAGE FOR A PRECLINICAL 200+ SYSTEM HAS BEEN COMPLETED. INITIAL FUNCTIONAL TESTING HAS VERIFIED THAT WIRELESS POWER AND TELEMETRY WAS TRANSMITTED AND RECEIVED FROM THE PRECLINICAL 200+ SYSTEM.

LINDY YOW
SCIENCE PROJECT DIRECTOR
DOHENY EYE INSTITUTE
1450 SAN PABLO STREET
DVRC SUITE 111
LOS ANGELES, CA 90033
(323) 442-6571 OFFICE
(323) 384-5361 BLACKBERRY
[HTTP://ARTIFICIALRETINA.ENERGY.GOV/](http://artificialretina.energy.gov/)

-----Original Message-----

From: Lindy Yow [mailto:LYow@doheny.org]

Sent: Monday, January 04, 2010 1:55 PM

To: Cole, Dean

Subject: FW: First Quarter Presidential Milestone Due

Dean,

We are please to say that we have met the goals of the quarter.

Goal: Oct- Dec 2009 Q1 Design Verification of Subsystems for Preclinical 200+ System

Accomplishment: The design verification of the subsystems for the preclinical 200+ system has been completed. The thin film electrode array and the demultiplexer which were updated based on the A - 60 clinical trials have been fabricated and successfully tested.

Lindy Yow
Science Project Director
Doheny Eye Institute
1450 San Pablo Street
DVRC Suite 111
Los Angeles, Ca 90033
<http://artificialretina.energy.gov/>