Gmail

Prabhu Raghavan <prabhu@mdqr.solutions>

Re: Q220469 Email Feedback

1 message

Prabhu Raghavan <prabhu@mdqr.solutions> Fri, Jun 10, 2022 at 10:27 AM
To: "Francisco Delgado [FRANCISCO.DELGADO]" <francisco.delgado@fda.hhs.gov>

Francisco,

Hope you are doing well.

First, we again thank you for taking the time to provide the detailed feedback received on May 27, 2022. In this initial stage we are obviously hopeful that our ideas will have significant clinical applications, and as we try to identify and focus on the direction for our technology your insights on our compliance pathway are invaluable. So thank you.

We do consider the suggestion that once a specific clinical indication for neuromodulation using low intensity focused ultrasound (LOFU) is solidly identified a premarket submission would likely be the appropriate next FDA filing for us. The base technology is obviously decades old, with numerous versions on the market for both diagnostic and therapeutic uses. We will be targeting a pre-market submission once we have fully developed our application and use profile.

Accordingly, we are going to forego the previously requested meeting. We believe we can use your feedback as a guidepost for developing and presenting a better context for performance testing, but that we need to refine the research parameters and functionality of the device prior to engaging in meaningful discussion with the agency. Thank you for the opportunity to meet, but as indicated in your feedback we have a number of issues to address first.

Going forward our immediate and continuing focus will of course be safety. While we believe that the device and its controls, labeling, and proposed training for researchers is a nonsignificant risk device, we need more than our present belief. We need to fully show our testing and address gaps in risk assessment that you identified. Thus, as next steps, Openwater will complete all its internal safety and performance testing for its current research device.

To support the clinical research, a more detailed risk analysis than what was presented in the pre-submission will be completed. The risk analysis will be supported by the internal safety and performance testing including a demonstration that the device has safety controls and strictly limited power to ensure that the output of the device is well within all safety limits. The limits, which are based on diagnostic ultrasound limits defined in FDA Guidance, “Marketing Clearance of Diagnostic Ultrasound Systems and Transducers”, dated June 2019, include spatial-peak temporal-average intensity well below 720 mW/cm2 and a mechanical index well below 1.9. The risk analysis will stratify the risk based on FDA Guidance, “Significant Risk and Nonsignificant Risk Medical Device Studies,” dated January 2006 to determine if the system with its safety controls along with training of the clinical research staff for the specific clinical study and indication would pose a minimal risk to the patient. If the risk stratification determines that the Openwater device is indeed a nonsignificant risk device, then Openwater would approach a clinical site and its IRB to review the clinical study protocol. This approach follows the aforementioned guidance, which notes that “Sponsors are responsible for making the initial risk determination and presenting it to the IRB” and that “Unless FDA has already made a risk determination for the study, the IRB must review the sponsor's SR or NSR determination for every investigational medical device study reviewed and modify the determination if the IRB disagrees with the sponsor.” Following this guidance and pursuant to §812.2(b), Openwater would present the detailed risk assessment to the clinical site’s IRB to pursue the truncated IDE process as provided in the regulations. If the site’s IRB approves the clinical study protocol, its associated documents and determines that the Openwater device would be of non-significant risk, Openwater would proceed with the clinical study.

Note that if either Openwater’s internal risk stratification analysis or the IRB are not able to conclusively determine that the device is a non-significant risk device, Openwater will follow the reporting guidelines - Openwater is cognizant of its responsibilities if the IRB determines that the device poses a significant risk pursuant to §812.150(b)(9) - and detail for the FDA the IRB findings as such (if applicable), and thereafter complete a Study Risk Determination Q-submission.

After obtaining IRB approval for the clinical study, Openwater will further proceed as follows:

- Label the device in accordance with §812.5 including the device bearing the statement: "CAUTION - Investigational Device. Limited by Federal (or United States) law to investigational use"
- Obtain Informed Consent from each subject in accordance with §50.20
- Obtain and maintain IRB approval throughout the clinical study investigations

- Maintain Sponsor responsibilities including monitoring the clinical study following FDA Guidance, “Oversight of Clinical Investigations — A Risk-Based Approach to Monitoring”, dated August 2013 as well as reviewing FDA Draft Guidance, “A Risk-Based Approach to Monitoring of Clinical Investigations Questions and Answers”, dated March 2019
- Maintain specific records and make certain reports as required in sec. §812.2(b)(1)(v)

Openwater recognizes that the device is intended only for clinical investigational use that will be used to define the efficacy of the device for the specific indication noted in the IRB approved clinical study protocol. Additionally Openwater will not market or commercialize the device until the necessary premarket review processes have been completed.

At this time we believe that our therapeutic use would be neuromodulation of the prefrontal cortex to treat symptoms of depression. This specific indication would be similar to transcranial magnetic stimulation devices, a Class II device under product code OBP. Openwater has started outlining clinical study protocols to assess the use of LOFU for this indication.

If all goes well, and the device shows efficacy in its therapeutic uses, Openwater will re-engage with the FDA based on the results of the research noted above, (or sooner if the IRB requests Openwater to seek Agency feedback for determination of the study’s risk.)

Please let me know if you have any questions or concerns regarding Openwater’s next steps.

Regards,
Prabhu
Principal Consultant, MDQR, LLC
(408) 316-5707

On Fri, May 27, 2022 at 9:02 AM Francisco Delgado [FRANCISCO.DELGADO] <francisco.delgado@fda.hhs.gov> wrote:

> May 27, 2022
>
> Please find attached FDA's written feedback for Q220469. We look forward to discussing this feedback with you at our upcoming meeting. If you have any questions regarding this submission, or no longer feel it necessary to meet, please contact the lead reviewer, Francisco Delgado.
>
> *** This is a system-generated email notification ***