



Iveric Bio's Zimura®, a Novel Complement C5 Inhibitor, Met its Primary Endpoint and Reached Statistical Significance in a Phase 2b Randomized, Controlled Clinical Trial in Geographic Atrophy Secondary to Dry Age-Related Macular Degeneration

October 28, 2019

- Overall Data Suggest a Dose Response Relationship Across Treatment Groups -

- Conference Call and Webcast Today, October 28, 2019 at 8:00 a.m. ET -

NEW YORK--(BUSINESS WIRE)--Oct. 28, 2019-- [IVERIC bio, Inc.](#) (Nasdaq: ISEE) today announced initial topline data confirming that Zimura® (avacincaptad pegol), the Company's complement factor C5 inhibitor, met its prespecified primary endpoint in reducing the rate of geographic atrophy (GA) growth in patients with dry age-related macular degeneration (AMD) in a randomized, controlled Phase 2b clinical trial. The reduction in the mean rate of GA growth over 12 months was 27.38% (p-value = 0.0072) for the Zimura 2 mg group as compared to the corresponding sham control group and 27.81% (p-value = 0.0051) for the Zimura 4 mg group as compared to the corresponding sham control group. These data for both dose groups were statistically significant. Although efficacy data from patients receiving Zimura 1 mg was not part of the prespecified statistical analysis, preliminary descriptive analysis indicated that, on average, the percent GA growth from baseline to month 12 for Zimura 1 mg group was less than for the corresponding sham control group. The overall data suggest a dose response relationship across treatment groups.

Zimura was generally well tolerated after 12 months of administration. There was no Zimura-related inflammation and there were no Zimura-related discontinuations from the trial. Further, there have been no ocular serious adverse events and no cases of endophthalmitis reported in the study eye in this ongoing clinical trial. During the first 12 months of the trial, the incidence of choroidal neovascularization (CNV) in the untreated fellow eye was 10 patients (3.5%), and in the study eye was 3 patients (2.7%) in the sham control group, 6 patients (9.0%) in the Zimura 2 mg group, and 8 patients (9.6%) in the Zimura 4 mg group. The most frequently reported ocular adverse events were related to the injection procedure.

"IVERIC bio's unwavering commitment to science has resulted in compelling Phase 2b data in GA secondary to dry AMD, a major public health problem that has devastating effects on our patients," stated Marco A. Zarbin, M.D., Ph.D., FACS, Professor and Chair, Institute of Ophthalmology and Visual Science, Rutgers-New Jersey Medical School, Newark, New Jersey. "As a retina specialist, Zimura's impressive efficacy results and favorable safety profile observed to date in this trial indicate its potential as a future treatment for this growing patient population, which represents an urgent unmet medical need."

"This is a major milestone for IVERIC bio and a potentially significant advancement for patients with GA secondary to dry AMD who currently have no treatment options," stated Glenn P. Sblendorio, Chief Executive Officer and President of IVERIC bio. "Based on these data, we intend to explore all options for the future development of Zimura, including the possibility for collaboration opportunities, licensing and / or potentially further internal development. I especially want to thank patients who participated in the trial, as well as our team, our collaborators and our shareholders that have supported IVERIC bio."

"Zimura's efficacy data in this clinical trial supports the potential role of C5 inhibition in GA secondary to dry AMD," stated Kourous A. Rezaei, M.D., Chief Medical Officer of IVERIC bio. "C5 activation may lead to retinal cell degeneration and ultimately cell death. We believe that the combination of statistically significant efficacy results for both Zimura 2 mg and 4 mg groups compared to their respective sham controls, with the lack of Zimura induced inflammation, zero rate of endophthalmitis and observed CNV conversion rate as compared to sham in this trial may potentially differentiate Zimura. We are encouraged by these exciting results, which we look forward to presenting in more detail at upcoming medical meetings in the near future."

Phase 2b GA Clinical Trial Design and Results

In this international, randomized, double masked, sham-controlled, multi-center clinical trial, the safety and efficacy of various doses of Zimura were assessed in patients with geographic atrophy secondary to dry AMD. A total of 286 patients were enrolled across two parts of the trial as follows:

- In Part 1 of the trial: 26 patients were randomized to receive monthly intravitreal injections of Zimura 1 mg; 25 patients were randomized to receive monthly intravitreal injections of Zimura 2 mg; and 26 patients were randomized to receive monthly sham injections.
- This trial was modified to add a 4 mg dose group. In Part 2 of the trial: 83 patients were randomized to receive monthly intravitreal injections of Zimura 4 mg, administered as two injections of Zimura 2 mg; 42 patients were randomized to receive monthly intravitreal injections of Zimura 2 mg plus a sham injection; and 84 patients were randomized to receive monthly sham injections, administered as two separate sham injections.

The prespecified statistical analysis plan for the primary and secondary endpoints used a model of repeated measures (MRM) to compare data for the Zimura 2 mg and Zimura 4 mg groups to the corresponding sham groups. The statistical analysis for the Zimura 2 mg group as compared to sham includes stratified data for patients from both Part 1 and Part 2 of the trial. Data from patients receiving Zimura 1 mg in Part 1 of the trial was not part of the prespecified statistical analysis for the efficacy endpoints.

Primary Efficacy Endpoint

The prespecified primary endpoint, mean rate of change in GA growth over 12 months, was measured by fundus autofluorescence (FAF) based on readings at three time points (baseline, month 6, and month 12) and was calculated using the square root transformation of the GA area. The FAF images were assessed by an independent masked reading center. Detailed data for the primary endpoint is shown below:

Mean Rate of Change in Geographic Atrophy (GA) Area from Baseline to Month 12
(Square Root Transformation)

Cohort	Zimura 2 mg (N = 67)	Sham (N = 110)	Difference	p-value	% Difference
Mean Change in GA ^a (mm)	0.292	0.402	0.11	0.0072^b	27.38%

Cohort	Zimura 4 mg (N = 83)	Sham (N = 84)	Difference	p-value	% Difference
Mean Change in GA ^a (mm)	0.321	0.444	0.124	0.0051^b	27.81%

^a Based on least squared means from MRM model

^b Reflects statistically significant p-value

Secondary Efficacy Endpoints

The prespecified secondary endpoints in this trial were the mean change in best corrected visual acuity (Early Treatment of Diabetic Retinopathy Study (ETDRS) letters) from baseline to month 12 and the mean change in low luminance best corrected visual acuity (ETDRS letters) from baseline to month 12. Detailed data for the secondary endpoints are shown below:

Mean Change in Best Corrected Visual Acuity (VA) from Baseline to Month 12

Cohort	Zimura 2 mg (N = 67)	Sham (N = 110)	Difference
Mean Change in VA ^a (ETDRS letters)	-7.90	-9.29	1.39

Cohort	Zimura 4 mg (N = 83)	Sham (N = 84)	Difference
Mean Change in VA ^a (ETDRS letters)	-3.79	-3.51	-0.28

^a Based on least squared means from MRM model

Mean Change in Low Luminance Best Corrected Visual Acuity (VA) from Baseline to Month 12

Cohort	Zimura 2 mg (N = 67)	Sham (N = 110)	Difference
Mean Change in VA ^a (ETDRS letters)	-1.03	-1.41	0.38

Cohort	Zimura 4 mg (N = 83)	Sham (N = 84)	Difference
Mean Change in VA ^a (ETDRS letters)	1.53	2.97	-1.44

^a Based on least squared means from MRM model

As per the clinical trial protocol, patients will continue to be treated and followed through month 18 in order to collect additional data regarding Zimura in GA.

About Dry AMD / Geographic Atrophy

Dry AMD is a significant cause of moderate and severe loss of central vision in older adults, affecting both eyes in the majority of patients. Although dry AMD is the most common form of AMD, there are no U.S. Food and Drug Administration or European Medicines Agency approved therapies to treat this condition. In dry AMD, thinning of the retinal pigment epithelial (RPE) cells in the central portion of the retina, or the macula, develops, along with other age-related changes to the adjacent retinal and choroidal tissue layers. Geographic atrophy, the advanced stage of dry AMD, is a disease characterized by degeneration of retinal tissue leading to further loss of vision.

About Zimura

Complement factor C5 is a central component of the complement cascade and is believed to be involved in the development and progression of dry AMD. Zimura is designed to target and inhibit complement factor C5. Zimura binds to C5 and inhibits its cleavage into the terminal fragments, C5a and C5b. By inhibiting the formation of complement system terminal fragments, Zimura may decrease the activation of inflammasomes and the formation of membrane attack complex (MAC), which occur at the end of the complement cascade. This mechanism of action could potentially prevent or slow down the degeneration of RPE cells providing the potential therapeutic rationale for GA secondary to dry AMD.

Conference Call/Web Cast Information

IVERIC bio's management team will host a conference call/webcast today at 8:00 a.m. Eastern Time to discuss the data. To participate in the conference call, dial 800-353-6461 (USA) or 334-323-0501 (International), passcode 9003903. A live, listen-only audio webcast of the conference call can be accessed on the Investors section of the IVERIC bio website at www.ivericbio.com. A replay will be available approximately two hours following the live call for two weeks. The replay number is 888-203-1112 (USA Toll Free), passcode 9003903.

About IVERIC bio

IVERIC bio is a biopharmaceutical company focused on the discovery and development of novel treatment options for retinal diseases with significant unmet medical needs. Vision is Our Mission. For more information on the Company please visit www.ivericbio.com.

IVERIC bio Forward-looking Statements

Any statements in this press release about the Company's future expectations, plans and prospects constitute forward-looking statements for purposes of the safe harbor provisions under the Private Securities Litigation Reform Act of 1995. Forward-looking statements include any statements about the Company's strategy, future operations and future expectations and plans and prospects for the Company, and any other statements containing the words "anticipate," "believe," "estimate," "expect," "intend," "goal," "may," "might," "plan," "predict," "project," "target," "potential," "will," "would," "could," "should," "continue," and similar expressions. In this press release, the Company's forward-looking statements include statements about the impact of results from the Company's Phase 2b clinical trial of Zimura for GA, including on the Company's development plan for Zimura, the timing, progress and results of clinical trials and other research and development activities, the potential utility and development potential of its product candidates and the potential for its business development strategy. Such forward-looking statements involve substantial risks and uncertainties that could cause the Company's development programs, future results, performance or achievements to differ significantly from those expressed or implied by the forward-looking statements. Such risks and uncertainties include, among others, those related to the initiation and the conduct and design of research and development programs and clinical trials, establishment of manufacturing capabilities, availability of data from these programs, reliance on university collaborators and other third parties, expectations for regulatory matters, need for additional financing and negotiation and consummation of business development transactions and other factors discussed in the "Risk Factors" section contained in the quarterly and annual reports that the Company files with the Securities and Exchange Commission. Any forward-looking statements represent the Company's views only as of the date of this press release. The Company anticipates that subsequent events and developments will cause its views to change. While the Company may elect to update these forward-looking statements at some point in the future, the Company specifically disclaims any obligation to do so except as required by law.

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