



uniQure Announces Two-Year Follow-Up Data from the Phase IIb Study of Etranacogene Dezaparvovec and Long-Term Follow-Up Data for AMT-060 in Patients with Hemophilia B

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~ Sustained FIX Activity at Therapeutic Levels¹ with a Mean of 44% of Normal at Two Years After Administration of Etranacogene Dezaparvovec in Phase IIb Study ~

~ Long-term Clinical Benefit and Tolerability Maintained in All Patients Through up to Five Years of Follow-Up in Phase I/II Study of AMT-060 ~

LEXINGTON, Mass. and AMSTERDAM, Dec. 07, 2020 (GLOBE NEWSWIRE) -- [uniQure N.V.](https://www.uniqure.com) (NASDAQ: QURE), a leading gene therapy company advancing transformative therapies for patients with severe medical needs, today announced updated clinical data on the three patients treated in uniQure's ongoing Phase IIb study of [etranacogene dezaparvovec](https://www.uniqure.com), an investigational [AAV5](https://www.uniqure.com)-based gene therapy containing a patent-protected FIX-Padua variant for the treatment of patients with severe and moderately severe hemophilia B. These clinical data were presented today in an oral presentation at the virtual 62nd Annual Meeting of the American Society of Hematology (ASH). In addition, uniQure presented up to 5 years of follow-up data on the 10 patients in the Phase I/II trial of AMT-060, its first-generation gene therapy for the treatment of hemophilia B, in a poster presentation at the meeting. The oral presentation slides and poster are available in the Investor Relations section of uniQure's website at www.uniqure.com under Investor Downloads.

At Least Two Years of Stable, Therapeutic Levels of FIX Activity in Patients Treated with Etranacogene Dezaparvovec

The Phase IIb study of etranacogene dezaparvovec is an open-label, single-dose, single-arm, multi-center trial being conducted in the United States. Three patients with severe hemophilia (endogenous Factor IX (FIX) activity less than or equal to one percent) were enrolled in the study and received a single intravenous infusion of 2×10^{13} gc/kg. Prior to the administration of etranacogene dezaparvovec, all three patients showed low levels of pre-existing neutralizing antibodies to AAV5 but were not excluded from the trial on that basis. The patients in the Phase IIb study have now been followed for two years to assess FIX activity, bleeding rates and usage of FIX replacement therapy, and will be monitored for five years to evaluate the safety of etranacogene dezaparvovec.

In today's oral presentation at ASH, two-year follow-up data show that all three patients have sustained FIX activity at therapeutic levels after the one-time administration of etranacogene dezaparvovec. Mean FIX activity for the three patients at two years after administration was 44.2% of normal (compared to 41% of normal at 52 weeks), with the first patient achieving FIX activity of 44.7% of normal, the second patient achieving FIX activity of 51.6% of normal and the third patient achieving FIX activity of 36.3% of normal. The second and third patients had previously screen-failed and were excluded from another gene therapy study due to pre-existing neutralizing antibodies to a different AAV vector. Reported FIX activity was measured using an activated partial thromboplastin time (aPTT) assay performed at a central laboratory.

At two years after dosing, two of the three participants remain free from bleeds and use of FIX replacement therapy. A single bleed has been reported in one participant, who has used a total of two FIX infusions (excluding surgery). All patients have remained free of prophylaxis in the two years since receiving etranacogene dezaparvovec.

"These clinical data show that a single administration of etranacogene dezaparvovec continues to be well tolerated by these patients through two years of follow-up with the potential to achieve durable increases of FIX activity within the normal range," stated Annette von Drygalski, M.D., PharmD, director of the Hemophilia and Thrombosis Treatment Center at the University of California San Diego and a principal investigator in the study. "The data offer encouraging support for the potential long-term benefits of etranacogene dezaparvovec, which are being further characterized in the ongoing Phase 3 HOPE-B study."

"We are very pleased with these latest results demonstrating long-term clinical benefits of etranacogene dezaparvovec in these patients," stated Ricardo Dolmetsch, president of research and development at uniQure. "These data will be included in regulatory submissions to the FDA and EMA, which we anticipate will begin in the second half of 2021, along with FIX activity and bleeding rates from the ongoing HOPE-B Phase III pivotal trial."

Stable FIX Expression and Durable Reductions in Bleeding and FIX Consumption for up to 5 Years Following AMT-060 Gene Therapy

In the ongoing Phase I/II study of AMT-060, all 10 patients continue to show long-term clinical benefit, including sustained increases in FIX activity, reduced usage of FIX replacement therapy, and decreased bleeding frequency. At up to 5 years of follow-up, AMT-060 continues to be well-tolerated, with no new treatment-related adverse events since the last reported data and no development of inhibitors during the study. This represents the second-longest follow-up ever reported in a successful hemophilia gene therapy trial.

"In up to 5 years after a single administration, the Phase I/II study of AMT-060 has now demonstrated clear evidence of long-term clinical benefits in these patients, including sustained increases in FIX activity, improved disease phenotype and substantial reductions in bleeding," stated Professor Frank W.G. Leebeek, M.D. Ph.D. of the Erasmus University Medical Center in Rotterdam, the Netherlands. "In addition, the AAV5-based AMT-060 continues to demonstrate positive long-term data in this trial that appear to be meaningful for the long-term outlook for hemophilia gene therapy and, in particular, etranacogene dezaparvovec."

All five patients in the second dose cohort of 2×10^{13} gc/kg (the same dose being studied in the Phase III HOPE-B study of etranacogene dezaparvovec) continue to be free of routine FIX replacement therapy at four-and-a-half years after treatment. Based on the six months of data collected during the fifth year of follow-up, the mean annualized bleeding rate was zero compared to an average of 4 bleeds during the year prior to treatment, representing a 100% reduction. During this same period, the usage of FIX replacement therapy declined to zero compared to 354,800 IU in the year prior to treatment, representing a 100% reduction. Mean FIX activity over 4.5 years was 7.4%, while in the lower dose cohort, mean FIX activity was 5.2% over 5 years since treatment.

AMT-060 is uniQure's first-generation gene therapy, consisting of an AAV5 vector carrying a gene cassette with the wild-type FIX gene. Data from this Phase I/II trial of AMT-060 also will be part of the regulatory submissions for marketing approval of etranacogene dezaparvovec.

About Etranacogene Dezaparvovec

Etranacogene dezaparvovec consists of an AAV5 viral vector carrying a gene cassette with the patent-protected Padua variant of Factor IX (FIX-Padua). uniQure holds multiple issued patents in the United States and Canada broadly covering methods of treating bleeding disorders, including hemophilia B, using AAV gene therapy with the FIX-Padua variant. Etranacogene dezaparvovec has been granted Breakthrough Therapy Designation by the United States Food and Drug Administration and access to Priority Medicine (PRIME) regulatory initiative by the European Medicines Agency. In June 2020, the Company and CSL Behring entered into a licensing agreement providing CSL Behring with exclusive global rights to etranacogene dezaparvovec. This licensing agreement is subject to antitrust regulatory review in the United States, Australia and the United Kingdom that is currently ongoing.

AAV5-based gene therapies have been demonstrated to be safe and well tolerated in a multitude of clinical trials, including being well tolerated in five uniQure trials conducted in nearly 80 patients in hemophilia B and other indications. No patient treated in clinical trials with the uniQure's AAV5 gene therapies has experienced any confirmed cytotoxic T-cell-mediated immune response to the capsid. Additionally, pre-clinical and clinical data show that AAV5-based gene therapies may be viable treatments in patients with pre-existing antibodies to AAV5, thereby potentially increasing patient eligibility for treatment compared to other gene therapy product candidates.

¹ Epidemiological data indicate that factor activity above 12% of normal is associated with substantial reduction or elimination of spontaneous bleeds and factor usage. Den Uijl IE et al Haemophilia 2011; 17(6):849-53

About uniQure

uniQure is delivering on the promise of gene therapy – single treatments with potentially curative results. We are leveraging our modular and validated technology platform to rapidly advance a [pipeline](#) of proprietary gene therapies to treat patients with hemophilia B, Huntington's disease, Fabry disease, spinocerebellar ataxia Type 3 and other diseases. www.uniQure.com

uniQure Forward-Looking Statements

This press release contains forward-looking statements. All statements other than statements of historical fact are forward-looking statements, which are often indicated by terms such as "anticipate," "believe," "could," "estimate," "expect," "goal," "intend," "look forward to," "may," "plan," "potential," "predict," "project," "should," "will," "would" and similar expressions. Forward-looking statements are based on management's beliefs and assumptions and on information available to management only as of the date of this press release. These forward-looking statements include, but are not limited to, whether clinical data from the HOPE-B Phase III pivotal trial will be included in regulatory submissions to the FDA and EMA in the second half of 2021 or ever, whether the clinical data proves to be meaningful for the long-term outlook for hemophilia gene therapy or etranacogene dezaparvovec, whether etranacogene dezaparvovec has the potential to lead to increases in FIX activity in the normal range and provide well-tolerated, long-term clinical benefits, whether AAV5-based gene therapies can provide clinical benefit to patients with pre-existing neutralizing antibodies, and whether we will obtain regulatory approval of our agreement with CSL Behring or otherwise close the transaction. Our actual results could differ materially from those anticipated in these forward-looking statements for many reasons, including, without limitation, risks associated with our and our collaborators' clinical development activities, clinical results, collaboration arrangements, corporate reorganizations and strategic shifts, regulatory oversight, product commercialization and intellectual property claims, as well as the risks, uncertainties and other factors described under the heading "Risk Factors" in uniQure's Quarterly Report on Form 10-Q filed on October 27, 2020. Given these risks, uncertainties and other factors, you should not place undue reliance on these forward-looking statements, and we assume no obligation to update these forward-looking statements, even if new information becomes available in the future.

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