



Altamira Therapeutics Announces Collaboration with Heqet Therapeutics on Nanoparticle-Delivered Non-Coding RNAs for Cardiac Regeneration

July 5, 2023 12:47 PM EDT

HAMILTON, BERMUDA, July 05, 2023 (GLOBE NEWSWIRE) -- *Heqet will test nanoparticles based on Altamira's OligoPhore delivery platform in the regeneration of damaged heart tissue*

Altamira Therapeutics Ltd. ("Altamira" or the "Company") (Nasdaq:CYTO), a company dedicated to developing and commercializing RNA delivery technology for targets beyond the liver, today announced that it has entered into a collaboration and option agreement with Heqet Therapeutics s.r.l. ("Heqet") utilizing the Company's proprietary OligoPhore™ delivery platform. Based in Turin, Italy, Heqet is a biotech spin-out from King's College London. It is **developing groundbreaking genetic medicines to reverse the damage of ischemic heart disease.**

Under the terms of the agreement, Heqet will test nanoparticles based on Altamira's OligoPhore delivery platform and comprising certain non-coding RNAs (ncRNAs) in the regeneration of damaged heart tissue following myocardial infarction in animal models. Upon successful conclusion of the experiments, Heqet will, under certain conditions, have the option to negotiate with Altamira for a license to use the Company's technology and intellectual property to translate its findings into the development of therapeutics for cardiac regeneration.

Myocardial infarction (commonly called "heart attack") may cause irreversible death (necrosis) of heart muscle cells (cardiomyocytes) due to prolonged lack of oxygen supply (ischemia). According to the American Heart Association, in the US alone there are 605,000 new cases of myocardial infarction and 200,000 recurrent attacks every year.¹ The adult human heart has very limited ability to replace damaged cardiomyocytes, and heart failure is a common sequela of myocardial infarction. Heart failure mortality has been estimated at 50 percent of patients at only five years from diagnosis.²

Heqet was founded by Professor Mauro Giacca, MD, Ph.D., who serves as Head, School of Cardiovascular Medicine & Sciences, King's College London. His previous work showed the feasibility of regeneration of damaged heart tissue by stimulating the proliferation of cardiomyocytes in animal models of myocardial infarction through upregulation of certain ncRNAs.³ However, delivery of the ncRNAs with viral vector technology turned out to be challenging, not the least since proliferation must be only temporary.

"We are thrilled to combine Altamira's peptide-based delivery technology with our non-coding RNAs, to further optimize our unique therapeutic approach and improve the available treatment options for myocardial infarction," said Anja Hög, Chief Development Officer at Heqet Therapeutics.

"The promise of regenerating cardiac muscle continues to intrigue scientists and clinicians worldwide given the significant complications and high mortality associated with myocardial infarction," said Samuel A. Wickline, MD, Altamira's Chief Scientific Adviser. "Application of molecular factors that can stimulate resident myocardial cells to start dividing again appears to be a very promising novel approach, yet it requires timely and targeted delivery to cardiomyocytes. We believe that our peptide-based OligoPhore platform for RNA delivery has the potential to serve as a safe and effective vehicle for engineering controlled local cardiac regeneration."

About OligoPhore

OligoPhore is a versatile platform designed to enable safe and effective delivery of oligonucleotides such as siRNA, miRNA or antisense RNA into target cells, using systemic or local administration. It is based on a proprietary 21 amino acid peptide that can engage any type of RNA in rapid self-assembly into a polyplex. The polyplex has a size, charge, and other physical features that allow it to escape hepatic clearance and thus to reach target tissues other than the liver. OligoPhore protects the RNA payload from degradation in the circulation and allows for rapid cellular uptake, while enabling pH-dependent nucleotide full endosomal escape and cytoplasmic delivery. Effective delivery and positive treatment outcomes have been demonstrated in more than 10 diverse murine models of disease so far.

About Altamira Therapeutics

Altamira Therapeutics (Nasdaq:CYTO) is dedicated to developing and commercializing RNA delivery technology for extrahepatic targets (OligoPhore™ / SemaPhore™ platforms). The Company currently has two flagship siRNA programs in preclinical development beyond *in vivo* proof of concept: AM-401 for KRAS driven cancer and AM-411 for rheumatoid arthritis. The versatile delivery platform is also suited for mRNA and other types of RNA therapeutics and is planned to be leveraged via out-licensing to pharma or biotech companies. In addition, Altamira is in the process of divesting and/or out-licensing its legacy assets in allergology and viral infection (Bentrio® OTC nasal spray; commercial) and inner ear therapeutics (AM-125 nasal spray for vertigo; post Phase 2; Keyzilen® and Sonsuvi® for tinnitus and hearing loss; Phase 3). Founded in 2003, Altamira is headquartered in Hamilton, Bermuda, with its main operations in Basel, Switzerland. For more information, visit: <https://altamiratherapeutics.com/>

About Heqet Therapeutics

Heqet Therapeutics, Turin, Italy, is a spin-out company from King's College London founded in 2022. It was founded on ground-breaking research in cardiac regeneration conducted by Professor Mauro Giacca. The company is currently advancing its ncRNA-based compounds into preclinical development. At its inception, Heqet Therapeutics raised GBP 6.6 million (about \$8.5 million) in a Series A financing round led by Claris Ventures and 2Invest. <https://www.heqettherapeutics.com/>

Forward-Looking Statements

This press release may contain statements that constitute "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. Forward-looking statements are statements other than historical facts and may include statements that address future operating, financial or business performance or Altamira's strategies or expectations. In some cases, you can identify these statements by forward-looking words such as "may", "might", "will", "should", "expects", "plans", "anticipates", "believes", "estimates", "predicts", "projects", "potential", "outlook" or "continue", or the negative of these terms or other comparable terminology. Forward-looking statements are based on management's current expectations and beliefs and involve significant risks and uncertainties that could cause actual results, developments and

business decisions to differ materially from those contemplated by these statements. These risks and uncertainties include, but are not limited to, the success of the continued commercialization of Bentrío and success of strategic transactions, including licensing or partnering, with respect to Bentrío or any other legacy assets, Altamira's need for and ability to raise substantial additional funding to continue the development of its product candidates, the timing and conduct of clinical trials of Altamira's product candidates, the clinical utility of Altamira's product candidates, the timing or likelihood of regulatory filings and approvals, Altamira's intellectual property position and Altamira's financial position, including the impact of any future acquisitions, dispositions, partnerships, license transactions or changes to Altamira's capital structure, including future securities offerings. These risks and uncertainties also include, but are not limited to, those described under the caption "Risk Factors" in Altamira's Annual Report on Form 20-F for the year ended December 31, 2022, and in Altamira's other filings with the SEC, which are available free of charge on the Securities Exchange Commission's website at: www.sec.gov. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those indicated. All forward-looking statements and all subsequent written and oral forward-looking statements attributable to Altamira or to persons acting on behalf of Altamira are expressly qualified in their entirety by reference to these risks and uncertainties. You should not place undue reliance on forward-looking statements. Forward-looking statements speak only as of the date they are made, and Altamira does not undertake any obligation to update them in light of new information, future developments or otherwise, except as may be required under applicable law.

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