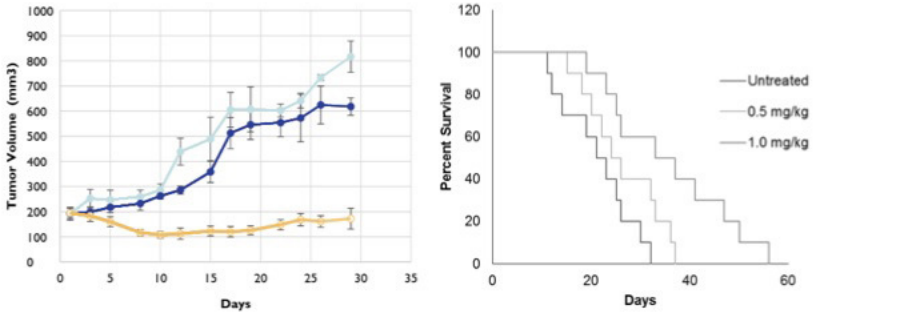
Microlin Bio, Inc. Announces Positive Results From Preclinical Lung Cancer Study Using Lead Anti-microRNA Candidate

NEW YORK, September 24, 2015 /BUSINESS WIRE/ — Microlin Bio, Inc., a development stage biotechnology company focused on microRNA based therapeutics for the treatment of cancer, announced today positive results from preclinical studies using their lead anti-microRNA candidate in a murine lung cancer model. For these preclinical studies, anti-miR-21 (AM-21) was delivered using the company's novel QTsome® (QT) delivery platform, which is composed of a combination of two cationic lipids with tertiary and quaternary amine head groups, respectively. The animals were treated three times in the first week and then once a week thereafter. The company said that animals in the 1 mg/kg IV QT/AM-21 treated group displayed significant tumor regression or no tumor growth while untreated animals exhibited rapid tumor growth. Median survival was prolonged following treatment with QT/AM-21 from 21 days in the untreated group to 33 days in the 1 mg/kg QT/AM-21 treatment group. Moreover, there were no obvious signs of treatment-based toxicity.

QT/AM-21 Treatment Induced Tumor Regression in A549 Subcutaneous A549 Murine Xenograft Lung Cancer



- Mice were randomized into three groups (N=7) when tumor volume reached > 100 mm^3
- Drug was administered at 0.5 and 1 mg/kg anti-miR-21 in QTsome IV three times in the first week (days 1, 3, 5) and then once a week thereafter
- Animals in the QTsome™/antimiR-21 (QT/AM-21) 1mg/kg IV treated group displayed no tumor growth or even tumor regression, while untreated animals showed rapid tumor growth. Kaplan-Meier plot showed extension of survival
- No visible signs of treatment toxicity including body weight loss

Robert Lee, Ph.D., Professor of Pharmaceutics and Pharmaceutical Chemistry at the Ohio State University College of Pharmacy, who is heading the preclinical studies and presented these results at the 10th International Congress of Pharmaceutical Sciences in Brazil, said, "microRNAs hold tremendous potential in the treatment of diseases such as cancer. However, the real challenge is efficiently delivering them. Our in vivo results using our QTsome delivery platform are very exciting and represent a step in the right direction towards achieving the maximum potential that microRNA holds for cancer therapy".

Joseph Hernandez, CEO and Executive Chairman of Microlin Bio, said in a statement. "MicroRNAs will change the way we treat disease and I believe that we will be able to build a strong position in the field given our excellent preclinical data, our very large intellectual property portfolio and our accomplished team".

The company is currently raising funds and seeking partners for human clinical trials.

About microRNA

MicroRNAs are recently discovered naturally occurring RNA molecules (composed of 19 to 25 nucleotides) that do not encode proteins but instead regulate gene expression and various biological pathways. The improper balance of microRNAs are linked to many diseases, including cancer. As such, replacement or inhibition of deregulated microRNAs may act as a potent means to treat cancers.

About Microlin Bio, Inc.

Microlin Bio, Inc. is a development stage biotechnology company focused primarily on the development of microRNA based therapeutics to treat cancer from technologies licensed from Ohio State University. This includes over 138 pending patent applications and 132 granted patents covering numerous microRNAs. For more information, please visit www.microlinbio.com.

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