

October 16, 2012

## Arrowhead Research Receives Notice of Patent Allowance for New Formulation of DPC siRNA Delivery System Showing 500-Fold Increase in Potency

PASADENA, Calif. — October 16, 2012 — Arrowhead Research Corporation (NASDAQ: ARWR), a targeted therapeutics company, today announced that it received a Notice of Allowance from the U.S. Patent and Trademark Office (USPTO) for patent application U.S. 13/032,029 entitled, "Compositions for Targeted Delivery of siRNA." The patent broadly covers compositions, methods, and uses for a new formulation of Arrowhead's Dynamic Polyconjugate (DPC) siRNA delivery platform, where attachment of siRNA and delivery vehicle is not required to produce high-level, efficient knockdown of target genes. The new IP expands the DPC platform and is used in Arrowhead's ARC-520 candidate in development for chronic hepatitis B virus (HBV) infection.

"This patent is critical to the commercialization of ARC-520," said Dr. Chris Anzalone, President and CEO of Arrowhead. "The underlying technology enables us to create candidates with highly potent silencing activity and attractive manufacturing qualities. We continue to work towards a planned phase 1 trial of ARC-520, and are pleased to announce that we had a very productive pre-IND meeting with the FDA, which allows us to maintain our timeline to file an IND in Q2 2013."

The allowed claims protect an RNAi delivery system consisting of a liver-targeted, endosomolytic polymer synthesized using Arrowhead's proprietary masking technology co-administered with an RNAi polynucleotide (siRNA) conjugated to a lipophilic or carbohydrate targeting moiety. With this DPC formulation, neither covalent attachment of the siRNA to the endosomolytic polymer nor siRNA/polymer complex formation is required.

Pre-clinical studies have shown co-injection of liver-targeted polymer together with siRNA conjugated to a lipophilic moiety, such as cholesterol, results in a >500-fold increase in the potency when compared to the siRNA-cholesterol alone. This formulation retains the potent endosomal escape capabilities of Arrowhead's DPC platform while facilitating drug production and opening up new targeting opportunities. Additional details and data from pre-clinical studies will be available in upcoming publications in scientific journals.

## **About Arrowhead Research Corporation**

Arrowhead Research Corporation is a clinical stage targeted therapeutics company with development programs in oncology, obesity, and infectious disease. The company leverages its platform technologies to design and develop peptide-drug conjugates (PDCs) which specifically home to cell types of interest while sparing off-target tissues, creates targeted drugs based on the gene silencing RNA interference (RNAi) mechanism, and works with partners to create improved versions of traditional small molecule drugs.

For more information please visit <a href="http://www.arrowheadresearch.com">http://www.arrowheadresearch.com</a>, or follow us on Twitter <a href="mailto:@ArrowRes">@ArrowRes</a>. To be added to the Company's email list to receive news directly, please send an email to ir@arrowres.com

## Safe Harbor Statement under the Private Securities Litigation Reform Act:

This news release contains forward-looking statements within the meaning of the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995. These statements are based upon our current expectations and speak only as of the date hereof. Our actual results may differ materially and adversely from those expressed in any forward-looking statements as a result of various factors and uncertainties, including our ability to finance our operations, the future success of our scientific studies, our ability to successfully develop drug candidates, the timing for starting and completing clinical trials, rapid technological change in our markets, and the enforcement of our intellectual property rights. Arrowhead Research Corporation's most recent Annual Report on Form 10-K and subsequent Quarterly Reports on Form 10-Q discuss some of the important risk factors that may affect our business, results of operations and financial condition. We assume no obligation to update or revise forward-looking statements to reflect new events or circumstances.

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