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## **Arrowhead Research Advances ARC-520 into IND-Enabling Studies for the Treatment of Hepatitis B and Provides Guidance on Development Timeline**

**PASADENA, Calif. — June 6, 2012 — Arrowhead Research Corporation (NASDAQ: ARWR)**, a targeted therapeutics company, today announced that its hepatitis B virus (HBV) program has completed all internal preclinical requirements and has named a clinical candidate. As such, the Company has initiated the final IND-enabling steps, including GMP manufacturing, GLP toxicology, and preparation of a pre-IND data package for the US FDA and foreign counterparts. The candidate, named ARC-520, is an RNAi therapeutic actively targeted to the liver using the company's Dynamic Polyconjugate (DPC) delivery system and includes two siRNA sequences targeting two different regions of the HBV genome.

"Chronic HBV infection is a serious global health problem with no cure, and we believe ARC-520 can potentially have a substantial impact on patient care worldwide," said Dr. Bruce Given, Arrowhead's Chief Operating Officer and head of R&D. "We will continue to take an aggressive stance on development timelines for ARC-520. We anticipate filing an IND in Q2 of 2013 and our plan is to conduct a phase 1 clinical trial in chronic HBV carriers to provide early proof of concept."

The RNA sequences used in the clinical candidate were part of a large-scale screening program initiated by Roche prior to the acquisition by Arrowhead. The RNAs target regions highly conserved across the major HBV genotypes and ARC-520 contains two distinct RNAs as a strategy to minimize the potential development of resistance in individual patients. Consistent with the company's overarching strategy, the DPCs used in ARC-520 employ active ligand-mediated targeting specific to a receptor on hepatocytes. This approach results in high-potency knockdown of a target gene, validated in mice, rats, and non-human primates and it has demonstrated a low toxicity profile in primates enabling long term dosing.

"The promotion of ARC-520 as a clinical candidate, so soon after acquiring the Roche RNAi assets, represents an important milestone for Arrowhead," said Dr. Chris Anzalone, President and Chief Executive Officer of Arrowhead. "This program follows in the footsteps of our clinical stage targeted delivery programs in obesity with Adipotide® and in cancer with RONDEL™ and further validates our commitment to ligand-mediated delivery in fields where most delivery is untargeted. We believe that targeting holds great promise in allowing delivery of currently undeliverable agents, such as many RNAs, and may also dramatically improve the balance of safety and effectiveness for many types of small molecule drugs."

Highlights from the preclinical development program for ARC-520 have been presented at recent scientific conferences and publication of additional data is anticipated over the coming months in peer-reviewed 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 <http://www.arrowheadresearch.com>, or follow us on Twitter [@ArrowRes](https://twitter.com/ArrowRes). To be added to the Company's email list to receive news directly, please send an email to [ir@arrowres.com](mailto: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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