

October 24, 2011

Arrowhead Research Corporation Acquires Roche RNA Assets and Site

Three New Delivery Technologies, Broad RNAi IP, and Advanced Operations to Drive Clinical Development, Partnerships, and Revenue Roche Takes Equity Stake in Arrowhead and Rights to Negotiate Future RNAi Candidates Conference Call Scheduled for Today at 4:30 PM ET

PASADENA, Calif. – October 24, 2011 – Arrowhead Research Corporation (NASDAQ: ARWR), today announced that it has acquired RNA therapeutics assets from Roche (SIX: RO, ROG; OTCQX: RHHBY) including the state-of-the-art research site in Madison, WI.

"This acquisition is transformational for us and important to the broader RNAi field," said Dr. Christopher Anzalone, President and CEO of Arrowhead. "The combination of these assets and Arrowhead's existing RNAi technologies results in what we believe to be the broadest RNAi therapeutics company in the world, with unparalleled delivery solutions and licenses granting broad freedom to operate within the three primary siRNA formats."

The Roche assets and IP acquired by Arrowhead include:

- Roche Madison Inc. (formerly Mirus Bio Corporation,), providing an advanced proprietary RNAi delivery platform known as Dynamic PolyCunjugates™ (DPCs);
- License from Tekmira Pharmaceuticals Corp. for proprietary SNALP RNAi delivery:
- Proprietary Liposomal Nanoparticle (LNP) RNAi delivery system developed by Roche;
- License from Alnylam providing access to Alnylam's RNAi IP and Canonical siRNA structures;
- License from City of Hope providing access to Dicer substrate siRNA structures;
- License from MDRNA (now Marina Biotech) providing access to Meroduplex siRNA structures;
- A team of over 40 leading scientists in the RNAi field and state-of-the-art facilities and infrastructure in Madison, WI.

As a result of the transaction, Arrowhead now has an array of additional delivery technologies that complement its existing delivery platforms, access to the three primary siRNA formats, and the infrastructure and team necessary to create new RNAi therapeutics and drive large industry partnerships.

Under the terms of the agreement, Roche transferred to Arrowhead all of its existing RNAi operations and research facilities in Madison, Wisconsin along with its employees, equipment, related technology licenses and intellectual property covering current and planned development programs. Roche obtained a minority stake in Arrowhead as well as rights to negotiate for certain future products, milestone payments and royalties on sales.

Dr. Anzalone continued; "Together with our technologies from Calando and Leonardo, we now have five RNAi delivery systems. We believe this transaction positions Arrowhead as the leader in delivery, which remains the limiting factor of therapeutic RNAi. We have the platforms to optimize delivery based on tissue type, disease state, target, and siRNA chemistry. In addition, we now have broad access to use the three primary siRNA structures: Canonical, Dicer, and Meroduplex. No other company has the ability to optimize efficiency by optimizing the type of siRNA format in this way, and this is extremely powerful."

Arrowhead also closed on \$4 million of new funding in addition to the \$6 million financing that was recently announced, providing approximately \$10 million of capital. In addition, the Company entered into an agreement with Lincoln Park Capital (LPC) to provide up to \$15 million to support the new operations. Under the LPC agreement, Arrowhead may, subject to customary conditions, draw all or part of the \$15 million commitment at its sole discretion over a three-year period. There are no warrants associated with the facility and pricing is based on closing market prices. "This provides Arrowhead with an efficient means to minimize dilution to shareholders by bringing in equity capital in a relatively inexpensive way and only if/when necessary," said Dr. Anzalone.

"Ever since starting Calando, we have been committed to making gene silencing via RNAi a real and powerful new modality in medicine," Dr. Anzalone continued. "Acquiring three new delivery technologies gives us even greater flexibility and substantially more power across multiple disease areas. For instance, the Madison team has developed multiple generations of the DPC technology and generated large amounts of small animal and non-human primate data. We have not seen any RNAi delivery

technology with better efficiency or tolerability. The Madison team is second to none and we are thrilled to welcome them to Arrowhead. In addition, the new RNAi chemistry IP moves Arrowhead from being a force in delivery to being a complete RNAi drug developer and partner. Together, these factors put our business on stronger and broader footing than ever before. We have the ability and plan to develop our own pipeline of RNAi drugs and to become financially self-sufficient by entering into multiple partnerships. As large pharmaceutical companies are increasingly choosing to outsource RNAi development because of the delivery challenge, we are uniquely positioned to compete for partnerships that could bring substantial non-dilutive capital. Our model is to use this revenue to finance operations and the development of our own portfolio of RNAi drugs. These collaborations are also intended to drive longer-term value as partners' drug candidates trigger milestone payments and royalties. This acquisition is truly transformational."

Transaction Highlights:

- Strategic Acquisition. This establishes Arrowhead as a fully integrated RNAi therapeutics developer.
- <u>Delivery Leadership</u>. Arrowhead acquired three advanced siRNA delivery technologies with substantial animal data.
- **Broad Access to RNAi IP.** Arrowhead now has a comprehensive portfolio of RNAi IP, providing broad freedom to operate and, therefore, flexibility in designing therapeutics.
- World-Class Team and Facilities. Experienced team in Madison that works in state-of-the-art facilities.
- <u>Partnership/Revenue Opportunities</u>. The combination of technologies, IP, and capabilities enable earlier-stage and larger partnership opportunities with biotech and pharmaceutical companies, providing a path towards profitability.
- <u>Integration into Arrowhead.</u> This acquisition serves as the cornerstone of Arrowhead's transition over the last year from a diversified nanotechnology company to a pure-play, fully enabled nanomedicine company.

Over the coming weeks and months, Arrowhead will be providing additional information on the new technologies. In addition, as the operations are integrated, Arrowhead will provide guidance on clinical timelines, partnering plans, and budgets.

Conference Call Details

Arrowhead Research will conduct a conference call on Monday, October 24, 2011 at 1:30 p.m. Pacific time to discuss the acquisition. To participate in the conference call, please dial 1-877-317-6789 toll free from the US our Canada, or 1-412-317-6789 from outside the US. Investors may also access a live audio web cast of this conference call on the Company's website at www.arrowheadresearch.com.

An audio replay will also be available approximately two hours after the conclusion of the call and will be made available until Monday, October 31, 2011. The audio replay can be accessed by dialing 1-877-344-7529 toll free from the US or Canada, or 1-412-317-0088 internationally, and entering encore passcode number 10005953. A replay of the webcast will be available approximately two hours after the conclusion of the call. The webcast replay will remain available for 90 days.

About Arrowhead Research Corporation

Arrowhead Research Corporation (NASDAQ: ARWR) is a nanomedicine company developing innovative therapies at the interface of biology and nanoengineering to cure disease and improve human health. Arrowhead addresses its target markets through focused subsidiaries, which include: Calando Pharmaceuticals, a leader in delivering small RNAs for gene silencing; Ablaris Therapeutics, an anti-obesity therapeutics company; and Nanotope, a regenerative medicine company. For more information please visit http://www.arrowheadresearch.com, or follow us on Twitter @ArrowRes.

Safe Harbor Statement under the Private Securities Litigation Reform Act of 1995:

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 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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