UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 8-K

CURRENT REPORT
PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934
Date of Report (Date of earliest event reported): October 7, 2020

Arrowhead Pharmaceuticals, Inc.
(Exact name of registrant as specified in its charter)

Delaware	001-38042	46-0408024
(State or other jurisdiction of incorporation)	(Commission File Number)	(IRS Employer Identification No.)

177 E. Colorado Blvd, Suite 700, Pasadena, CA 91105
(Address of principal executive offices) (Zip Code)
Registrant's telephone number, including area code (626) 304-3400

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:
☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b)
☐ Pre-commencement communications pursuant to Rule 13e-4 (c) under the Exchange Act (17 CFR 240.13e-4(c)

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which register
Common Stock, Par Value $0.001 per share	ARWR	The Nasdaq Global Select Market

Item 1.01 Entry into a Material Definitive Agreement.

Exclusive License and Co-Funding Agreement

On October 7, 2020, Arrowhead Pharmaceuticals, Inc., a Delaware corporation (the "Company"), entered into an Exclusive License and Co-Funding Agreement (the "Agreement") with Takeda Pharmaceuticals U.S.A, Inc., a Delaware corporation ("Takeda").

Under the Agreement, Takeda and the Company will co-develop the Company's ARO-AAT program, the Company's second-generation subcutaneously administered RNAi therapeutic candidate being developed as a treatment for liver disease associated with alpha-1 antitrypsin deficiency (AATD), which is a rare genetic disorder that severely damages the liver and lungs of affected individual. Within the United States, ARO-AAT, if approved, will be co-commercialized under a 50/50 profit sharing structure. Outside the United States, Takeda will lead the global commercialization strategy and receive an exclusive license to commercialize ARO-AAT with the Company eligible to receive tiered royalties of 20 to 25% on net sales. The Company will receive $300 million as an upfront payment and is eligible to receive potential development, regulatory and commercial milestones of up to $740 million.

The transactions contemplated under the Agreement are subject to customary closing conditions, including the expiration of the waiting period under the Hart-Scott-Rodino Antitrust Improvements Act.

The description of the Agreement contained herein does not purport to be complete and is qualified in its entirety by reference to the complete text of the Agreement which will be filed as an exhibit to the Company's Quarterly Report on Form 10-Q for the quarter ending December 31, 2020.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits

Exhibit No.	Description
99.1	Press Release, dated October 8, 2020.
104	Cover Page Interactive File (the cover page tags are embedded within the Inline XBRL document).

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Date: October 9, 2020

ARROWHEAD PHARMACEUTICALS, INC.

By: /s/ Kenneth Myszkowski
Kenneth Myszkowski
Chief Financial Officer

Exhibit 99.1

News Release

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Takeda and Arrowhead Collaborate to Co-Develop and Co-Commercialize ARO-AAT for Alpha-1 Antitrypsin-Associated Liver Disease

- ***Potential first-in-class therapy designed to treat the underlying cause of liver disease associated with AATD***
- ***Arrowhead is eligible to receive up to $1.04B including an upfront payment of $300M and potential development, regulatory and commercial milestones up to $740M***
- ***Investigational medicine ARO-AAT to be co-developed and co-commercialized in the United States by Takeda and Arrowhead under a 50/50 profit-sharing structure***
- ***Takeda receives exclusive license to commercialize ARO-AAT outside the U.S.***
- ***Arrowhead will hold a conference call and webcast today, Oct. 8, at 8:30 a.m. ET***

Osaka, JAPAN, and Pasadena, CALIF., October 08, 2020 – Takeda Pharmaceutical Company Limited (TSE:4502/NYSE:TAK) ("Takeda") and Arrowhead Pharmaceuticals Inc. (NASDAQ: ARWR) today announced a collaboration and licensing agreement to develop ARO-AAT, a Phase 2 investigational RNA interference (RNAi) therapy in development to treat alpha-1 antitrypsin-associated liver disease (AATLD). ARO-AAT is a potential first-in-class therapy designed to reduce the production of mutant alpha-1 antitrypsin protein, the cause of AATLD progression.

Under the terms of the agreement, Takeda and Arrowhead will co-develop ARO-AAT which, if approved, will be co-commercialized in the United States under a 50/50 profit-sharing structure. Outside the U.S., Takeda will lead the global commercialization strategy and receive an exclusive license to commercialize ARO-AAT with Arrowhead eligible to receive tiered royalties of 20-25% on net sales. Arrowhead will receive an upfront payment of $300 million and is eligible to receive potential development, regulatory and commercial milestones up to $740 million. Closing of the transaction is contingent on completion of review under antitrust laws, including the Hart-Scott-Rodino (HSR) Antitrust Improvements Act of 1976 in the U.S.

"AAT-associated liver disease is a devastating condition for which there are no approved therapies. With its RNAi-based mechanism of action, ARO-AAT has the potential to treat the underlying cause of AATLD, thereby helping patients avoid the need for liver transplantation and associated co-morbidities," said Asit Parikh, M.D., Ph.D., Head, Gastroenterology Therapeutic Area Unit at Takeda. "We are excited to collaborate with Arrowhead to bring forward this exciting late-stage liver asset for the Alpha-1 community as part of our growing GI portfolio."

“Takeda’s global presence and experience with payers and regulators in the rare disease and GI therapy space, combined with its long history serving the Alpha-1 community make it the ideal partner for ARO-AAT. It is well-positioned to work with the patient and medical community to help meet the severe unmet need of patients with Alpha-1 liver disease,” said Christopher Anzalone, Ph.D., President and CEO at Arrowhead. “This agreement also supports our strategy of using partnering selectively to continue to invest in our Targeted RNAi Molecule (TRiM™) platform and the growing pipeline of RNAi therapeutics targeting diverse tissue types, while focusing our commercial organization on opportunities in two key areas of cardiometabolic and pulmonary.”

About Alpha-1 Antitrypsin-Associated Liver Disease
Alpha-1 Antitrypsin-Associated Deficiency (AATD) is a rare genetic disorder associated with liver disease in children and adults and pulmonary disease in adults. AATD is estimated to affect 1 per 3,000-5,000 people in the United States and 1 per 2,500 in Europe. The protein AAT is primarily synthesized and secreted by liver hepatocytes. Its function is to inhibit enzymes that can break down normal connective tissue. The most common disease variant, the Z mutant, has a single amino acid substitution that results in improper folding of the protein. The mutant protein cannot be effectively secreted and accumulates in globules inside the hepatocytes. This triggers continuous hepatocyte injury, leading to fibrosis, cirrhosis, and increased risk of hepatocellular carcinoma.

Individuals with the homozygous PiZZ genotype have severe deficiency of functional AAT leading to pulmonary disease and liver disease. Lung disease is frequently treated with AAT augmentation therapy. However, augmentation therapy does nothing to treat liver disease, and there is no specific therapy for hepatic manifestations. There is a significant unmet need as liver transplant, with its attendant morbidity and mortality, is currently the only available cure.

About ARO-AAT
ARO-AAT is designed to knock down the hepatic production of the mutant alpha-1 antitrypsin (Z-AAT) protein, the cause of progressive liver disease in AATD patients. Reducing production of the inflammatory Z-AAT protein is expected to halt the progression of liver disease and potentially allow it to regenerate and repair.

Takeda in Gastroenterology
We believe that GI and liver diseases are not just life disrupting conditions, but diseases that can impact a patient’s quality of life.[1,2] Beyond a fundamental need for effective treatment options, we understand that improving patients’ lives also depends on their needs being recognized. With nearly 30 years of experience in gastroenterology, Takeda has made significant strides in addressing GI patient needs with treatments for inflammatory bowel disease (IBD), acid-related diseases, short bowel syndrome (SBS), and motility disorders. We are making significant strides toward closing the gap on new areas of unmet needs for patients who have celiac disease, eosinophilic esophagitis, alpha-1 antitrypsin-associated liver disease, Crohn’s disease, and acute pancreatitis, among others. Together with researchers, patient groups and more, we are working to advance scientific research and clinical medicine in GI.

Arrowhead Conference Call and Webcast Information

Investors may access a live audio webcast on the Company's website at http://ir.arrowheadpharma.com/events.cfm. For analysts that wish to participate in the conference call, please dial 855-215-6159 or 315-625-6887 and provide Conference ID 1790033.

A replay of the webcast will be available on the company's website approximately two hours after the conclusion of the call and will remain available for 90 days. An audio replay will also be available approximately two hours after the conclusion of the call and will be available for 3 days. To access the audio replay, dial 855-859-2056 or 404-537-3406 and provide Conference ID 1790033.

About Takeda Pharmaceutical Company Limited

Takeda Pharmaceutical Company Limited (TSE:4502/NYSE:TAK) is a global, values-based, R&D-driven biopharmaceutical leader headquartered in Japan, committed to bringing Better Health and a Brighter Future to patients by translating science into highly-innovative medicines. Takeda focuses its R&D efforts on four therapeutic areas: Oncology, Rare Diseases, Neuroscience, and Gastroenterology (GI). We also make targeted R&D investments in Plasma-Derived Therapies and Vaccines. We are focusing on developing highly innovative medicines that contribute to making a difference in people's lives by advancing the frontier of new treatment options and leveraging our enhanced collaborative R&D engine and capabilities to create a robust, modality-diverse pipeline. Our employees are committed to improving quality of life for patients and to working with our partners in health care in approximately 80 countries.

For more information, visit https://www.takeda.com.

Important Notice

For the purposes of this notice, "press release" means this document, any oral presentation, any question and answer session and any written or oral material discussed or distributed by Takeda Pharmaceutical Company Limited ("Takeda") regarding this release. This press release (including any oral briefing and any question-and-answer in connection with it) is not intended to, and does not constitute, represent or form part of any offer, invitation or solicitation of any offer to purchase, otherwise acquire, subscribe for, exchange, sell or otherwise dispose of, any securities or the solicitation of any vote or approval in any jurisdiction. No shares or other securities are being offered to the public by means of this press release. No offering of securities shall be made in the United States except pursuant to registration under the U.S. Securities Act of 1933, as amended, or an exemption therefrom. This press release is being given (together with any further information which may be provided to the recipient) on the condition that it is for use by the recipient for information purposes only (and not for the evaluation of any investment, acquisition, disposal or any other transaction). Any failure to comply with these restrictions may constitute a violation of applicable securities laws.

The companies in which Takeda directly and indirectly owns investments are separate entities. In this press release, "Takeda" is sometimes used for convenience where references are made to Takeda and its subsidiaries in general. Likewise, the words "we", "us" and "our" are also used to refer to subsidiaries in general or to those

who work for them. These expressions are also used where no useful purpose is served by identifying the particular company or companies.

Takeda Forward-Looking Statements
This press release and any materials distributed in connection with this press release may contain forward-looking statements, beliefs or opinions regarding Takeda's future business, future position and results of operations, including estimates, forecasts, targets and plans for Takeda. Without limitation, forward-looking statements often include words such as "targets", "plans", "believes", "hopes", "continues", "expects", "aims", "intends", "ensures", "will", "may", "should", "would", "could" "anticipates", "estimates", "projects" or similar expressions or the negative thereof. These forward-looking statements are based on assumptions about many important factors, including the following, which could cause actual results to differ materially from those expressed or implied by the forward-looking statements: the economic circumstances surrounding Takeda's global business, including general economic conditions in Japan and the United States; competitive pressures and developments; changes to applicable laws and regulations; the success of or failure of product development programs; decisions of regulatory authorities and the timing thereof; fluctuations in interest and currency exchange rates; claims or concerns regarding the safety or efficacy of marketed products or product candidates; the impact of health crises, like the novel coronavirus pandemic, on Takeda and its customers and suppliers, including foreign governments in countries in which Takeda operates, or on other facets of its business; the timing and impact of post-merger integration efforts with acquired companies; the ability to divest assets that are not core to Takeda's operations and the timing of any such divestment(s); and other factors identified in Takeda's most recent Annual Report on Form 20-F and Takeda's other reports filed with the U.S. Securities and Exchange Commission, available on Takeda's website at: https://www.takeda.com/investors/reports/sec-filings/ or at www.sec.gov. Takeda does not undertake to update any of the forward-looking statements contained in this press release or any other forward-looking statements it may make, except as required by law or stock exchange rule. Past performance is not an indicator of future results and the results or statements of Takeda in this press release may not be indicative of, and are not an estimate, forecast, guarantee or projection of Takeda's future results.

About Arrowhead Pharmaceuticals
Arrowhead Pharmaceuticals develops medicines that treat intractable diseases by silencing the genes that cause them. Using a broad portfolio of RNA chemistries and efficient modes of delivery, Arrowhead therapies trigger the RNA interference mechanism to induce rapid, deep, and durable knockdown of target genes. RNA interference, or RNAi, is a mechanism present in living cells that inhibits the expression of a specific gene, thereby affecting the production of a specific protein. Arrowhead's RNAi-based therapeutics leverage this natural pathway of gene silencing. For more information, please visit www.arrowheadpharma.com, or follow us on Twitter @ArrowheadPharma. To be added to the Company's email list and receive news directly, please visit http://ir.arrowheadpharma.com/email-alerts.

Arrowhead 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 the safety and efficacy of our product candidates, the duration and impact of regulatory delays in our clinical programs, our ability to finance our operations, the likelihood and timing of the receipt of future milestone and licensing fees, the future success of our scientific studies, our ability to successfully develop and commercialize drug candidates, the timing for starting and completing clinical trials, rapid technological change in our markets,
and the enforcement of our intellectual property rights. Our 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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References:

1 Center for Drug Evaluation and Research (CDER) & the FDA. The Voice of the Patient/Functional Gastrointestinal Disorder; 2016. https://www.fda.gov/media/95140/download

2 Jones R, et al. Management of common gastrointestinal disorders: quality criteria based on patients' views and practice guidelines. Br J Gen Pract. 2009; 59(563):e199-208.