AMGEN AND ARRAKIS THERAPEUTICS ANNOUNCE MULTI-TARGET COLLABORATION TO IDENTIFY NOVEL RNA DEGRADER SMALL MOLECULE THERAPEUTICS

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Collaboration Creates "Targeted RNA Degraders" by Bringing Together Amgen's Induced Proximity Platform Discovery Expertise and Arrakis' Leading-edge RNA-targeted Drug Discovery Platform

THOUSAND OAKS, Calif. and WALTHAM, Mass., Jan. 11, 2022 /PRNewswire/ -- Amgen (NASDAQ:AMGN) and Arrakis Therapeutics today announced a research collaboration focused on the discovery and development of RNA degrader therapeutics against a range of difficult-to-drug targets in multiple therapeutic areas. This new class of "targeted RNA degraders" consists of small molecule drugs that selectively destroy RNAs encoding disease-causing proteins by inducing their proximity to nucleases.

Under the terms of the agreement, Arrakis will lead research activities for the identification of RNA-targeted small molecule (rSM) binders against a broad set of targets nominated by Amgen. Both parties will collaboratively design and functionalize these molecules to specifically degrade targeted RNAs, and Amgen will lead further preclinical and clinical development activities. Amgen will pay $75 million upfront to Arrakis for five initial programs and will have the option to nominate additional programs. For each program, Arrakis will be eligible for additional payments from Amgen for preclinical, clinical, regulatory and sales milestones, and royalties up to low double digits. Arrakis could potentially receive several billion dollars in future payments if all milestones are met and future program options are exercised.

"Targeted RNA degradation is an exciting area that is pushing the boundaries of drug discovery and design," said Raymond Deshaies, Ph.D., senior vice president of Global Research at Amgen. "The collaboration with Arrakis combines Amgen's induced proximity expertise in discovering multispecific molecules to target the biologic mechanisms of disease and Arrakis' pioneering discovery platform to predict RNA structures and identify small molecules that bind to them, significantly broadening the possibilities of addressing difficult protein targets considered undruggable because they may not have binding sites needed for conventional medicines. Combining this approach with Amgen's targeted protein degradation induced proximity research already underway has the potential to significantly expand the druggable genome."

By integrating the capabilities of the two innovative discovery platforms from Amgen and Arrakis, the collaboration creates an opportunity to design and engineer targeted RNA degraders. Amgen has built its Induced Proximity Platform to identify multispecific molecules that harness the power of cell biology by forming novel connections between natural effectors and targets. One end of the molecule binds to the target to be altered (inhibited, activated or destroyed) and the other end binds to a cellular effector that acts on the target, offering the potential to engage a broad range of cellular mechanisms to treat disease. With targeted RNA degraders, the effector, such as a ribonuclease or other RNA modulator, is brought into proximity of the RNA to degrade or otherwise modify the disease-causing RNA of interest. This complements Amgen's existing efforts to target RNA with siRNA. In this collaboration, Arrakis' rSM platform will be applied as a drug discovery engine to identify small molecules that bind target RNA. These rSMs will then be functionalized with nuclease recruiters to create heterobifunctional molecules that trigger degradation of disease-relevant RNA targets.

"We are excited to partner with Amgen's strong research team to pursue a shared goal of creating a new class of medicines that induce degradation of disease-causing RNAs. This collaboration further demonstrates the utility of our proprietary rSM discovery platform for targeting RNA with small molecules and paves the way for creating powerful new treatments for patients," said Michael Gilman, Ph.D., chief executive officer of Arrakis. "Based on our long-term goal to build a broad and industry-leading platform that adapts state-of-the-art drug discovery tools to target RNA biology, we have enabled a range of different applications and collaborations to leverage our science, a strong capital position and the ability to grow our business and our impact to advance RNA-targeted drug programs for diseases unaddressed by today's medicines."

About Amgen Amgen is committed to unlocking the potential of biology for patients suffering from serious illnesses by discovering, developing, manufacturing and delivering innovative human therapeutics. This approach begins by using tools like advanced human genetics to unravel the complexities of disease and understand the fundamentals of human biology.

Amgen focuses on areas of high unmet medical need and leverages its expertise to strive for solutions that improve health outcomes and dramatically improve people's lives. A biotechnology pioneer since 1980, Amgen has grown to be one of the world's leading independent biotechnology companies, has reached millions of patients around the world and is developing a pipeline of medicines with breakaway potential.

Amgen is one of the 30 companies that comprise the Dow Jones Industrial Average and is also part of the Nasdaq-100 index. In 2021, Amgen was named one of the 25 World's Best Workplaces™ by Fortune and Great Place to Work™ and one of the 100 most sustainable companies in the world by Barron's.

For more information, visit www.amgen.com and follow us on www.twitter.com/amgen.

About Arrakis Therapeutics
Arrakis Therapeutics is a biopharmaceutical company pioneering the discovery of a new class of medicines that directly target RNA. Arrakis is building a proprietary pipeline of RNA-targeted small molecule (rSM) medicines focused on cancer and genetically validated targets in other disease areas. The company brings together scientific leaders in RNA structure, chemistry and biology, along with a highly experienced management team and the backing of leading life science investors. The company is located in Waltham, Massachusetts.

For more information, please visit www.arrakistx.com and engage with us on Twitter @ArrakisTx or on LinkedIn.

Amgen Forward-Looking Statements
This news release contains forward-looking statements that are based on the current expectations and beliefs of Amgen. All statements, other than statements of historical fact, are statements that could be deemed forward-looking statements, including any statements on the outcome, benefits and synergies of collaborations, or potential collaborations, with any other company (including BeiGene, Ltd., Kyowa-Kirin Co., Ltd., Arrakis Therapeutics, Inc., or any collaboration to manufacture therapeutic antibodies against COVID-19), the performance of Otezla® (apremilast) (including anticipated

Otezla sales growth and the timing of non-GAAP EPS accretion), the Five Prime Therapeutics, Inc. acquisition, or the Teneobio, Inc. acquisition, as well as estimates of revenues, operating margins, capital expenditures, cash, other financial metrics, expected legal, arbitration, political, regulatory or clinical results or practices, customer and prescriber patterns or practices, reimbursement activities and outcomes, effects of pandemics or other widespread health problems such as the ongoing COVID-19 pandemic on our business, and other such estimates and results. Forward-looking statements involve significant risks and uncertainties, including those discussed below and more fully described in the Securities and Exchange Commission reports filed by Amgen, including our most recent annual report on Form 10-K and any subsequent periodic reports on Form 10-Q and current reports on Form 8-K. Unless otherwise noted, Amgen is providing this information as of the date of this news release and does not undertake any obligation to update any forward-looking statements contained in this document as a result of new information, future events or otherwise.

No forward-looking statement can be guaranteed and actual results may differ materially from those we project. Our results may be affected by our ability to successfully market both new and existing products domestically and internationally, clinical and regulatory developments involving current and future products, sales growth of recently launched products, competition from other products including biosimilars, difficulties or delays in manufacturing our products and global economic conditions. In addition, sales of our products are affected by pricing pressure, political and public scrutiny and reimbursement policies imposed by third-party payers, including governments, private insurance plans and managed care providers and may be affected by regulatory, clinical and guideline developments and domestic and international trends toward managed care and healthcare cost containment. Furthermore, our research, testing, pricing, marketing and other operations are subject to extensive regulation by domestic and foreign government regulatory authorities. We or others could identify safety, side effects or manufacturing problems with our products, including our devices, after they are on the market. Our business may be impacted by government investigations, litigation and product liability claims. In addition, our business may be impacted by the adoption of new tax legislation or exposure to additional tax liabilities. If we fail to meet the compliance obligations in the corporate integrity agreement between us and the U.S. government, we could become subject to significant sanctions. Further, while we routinely obtain patents for our products and technology, the protection offered by our patents and patent applications may be challenged, invalidated or circumvented by our competitors, or we may fail to prevail in present and future intellectual property litigation. We perform a substantial amount of our commercial manufacturing activities at a few key facilities, including in Puerto Rico, and also depend on third parties for a portion of our manufacturing activities, and limits on supply may constrain sales of certain of our current products and product candidate development. An outbreak of disease or similar public health threat, such as COVID-19, and the public and governmental effort to mitigate against the spread of such disease, could have a significant adverse effect on the supply of materials for our manufacturing activities, the distribution of our products, the commercialization of our product candidates, and our clinical trial operations, and any such events may have a material adverse effect on our product development, product sales, business and results of operations. We rely on collaborations with third parties for the development of some of our product candidates and for the commercialization and sales of some of our commercial products. In addition, we compete with other companies with respect to many of our marketed products as well as for the discovery and development of new products. Discovery or identification of new product candidates or development of new indications for existing products cannot be guaranteed and movement from concept to product is uncertain; consequently, there can be no guarantee that any particular product candidate or development of a new indication for an existing product will be successful and become a commercial product. Further, some raw materials, medical devices and component parts for our products are supplied by sole third-party suppliers. Certain of our distributors, customers and payers have substantial purchasing leverage in their dealings with us. The discovery of significant problems with a product similar to one of our products that implicate an entire class of products could have a material adverse effect on sales of the affected products and on our business and results of operations. Our efforts to collaborate with or acquire other companies, products or technology, and to integrate the operations of companies or to support the products or technology we have acquired, may not be successful. A breakdown, cyberattack or information security breach could compromise the confidentiality, integrity and availability of our systems and our data. Our stock price is volatile and may be affected by a number of events. Global economic conditions may magnify certain risks that affect our business. Our business performance could affect or limit the ability of our Board of Directors to declare a dividend or our ability to pay a dividend or repurchase our common stock. We may not be able to access the capital and credit markets on terms that are favorable to us, or at all.

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