# Tenaya Therapeutics Secures $106 Million in Series C Funding to Accelerate Pipeline of Potentially Curative Therapies for Heart Disease

March 1, 2021

- Series C round led by RTW Investments, LP; RA Capital Management; Fidelity Management & Research Company; and funds and accounts advised by T. Rowe Price Associates, Inc.; and joined by existing investors including The Column Group, Casdin Capital and GV.
- Funds will help advance lead gene therapy program in hypertrophic cardiomyopathy (HCM) as well as multiple programs across three therapeutic platforms: Gene Therapy, Cellular Regeneration and Precision Medicine.
- Company will establish dedicated cGMP facility for AAV manufacturing in the San Francisco Bay Area in 2021.

**SOUTH SAN FRANCISCO, Calif. — March 1, 2021 —** Tenaya Therapeutics, a biotechnology company whose mission is to discover, develop and deliver curative therapies that address the underlying causes of heart disease, today announced that it has secured $106 million in Series C funding. Founded by leading cardiovascular scientists from the Gladstone Institutes and UT Southwestern (UTSW), Tenaya is advancing programs across three therapeutic platforms to address heart disease: Gene Therapy, Cellular Regeneration and Precision Medicine.

The Series C financing was led by RTW Investments, LP and adds new investors RA Capital Management, Fidelity Management & Research Company and funds and accounts advised by T. Rowe Price Associates, Inc. with additional participation from all existing investors including The Column Group, Casdin Capital, GV and others.

The new funding will allow Tenaya to advance its lead gene therapy program towards clinical studies; progress new programs towards IND-enabling studies; build on existing drug discovery and development capabilities across its three platforms; and invest in cGMP manufacturing capabilities.

“Heart disease remains the leading cause of death in the world despite improvements in standards of care,” said Faraz Ali, Chief Executive Officer of Tenaya. “There is tremendous promise in the use of vastly more sophisticated tools for drug discovery available today to pioneer new classes of targeted treatments for heart failure, including potentially one-time curative gene therapies for genetic cardiomyopathies. We appreciate the strong support of new and existing investors who are helping us advance therapies to improve and extend the lives of patients.”

**Emerging Portfolio**

Tenaya is advancing diverse and differentiated therapeutic approaches to gene therapy and small molecules for both prevalent and rare forms of heart disease:

- **Gene Therapy:**
  - **MYBPC3:** Tenaya’s lead program is an adeno-associated virus (AAV) gene therapy targeting genetic hypertrophic cardiomyopathy (HCM) in adults and children due to mutations in the *MYBPC3* gene. Tenaya’s product candidate uses a proprietary, best-in-class approach with significant and durable disease reversal demonstrated in a relevant murine model. The program is currently in IND-enabling studies.
  - **DWORF:** Tenaya is developing a first-in-class AAV gene therapy involving DWORF, a muscle-specific micro-peptide acting on the SERCA pathway first discovered by Tenaya co-founder Eric Olson, Ph.D. Tenaya and its academic collaborators have accumulated significant preclinical proof-of-concept evidence for the efficacy and safety of DWORF over-expression in multiple models. These findings support the broad utility of this approach for patients with genetic cardiomyopathies due to specific mutations as well as more prevalent heart failure populations.
- **Cellular Regeneration:** Tenaya has made significant advances in its unique approach to cellular regeneration using a single AAV vector to deliver proprietary combinations of multiple genes that drive *in vivo* reprogramming of resident cardiac fibroblasts to create new cardiomyocytes. Results of this approach in a chronic post-myocardial infarction (MI) pig model were first presented at scientific conferences in 2020 and represent the first-ever successful demonstration of the efficacy and safety of this approach in a large animal model with a human-sized heart.
- **Precision Medicine:** Tenaya is developing a small molecule therapy against an unnamed target and has demonstrated compelling *in vivo* efficacy in a model for genetic dilated cardiomyopathy as well as in additional models that support its use in more prevalent heart failure populations. Medicinal chemistry for a best-in-class molecule has been completed and IP has been filed for multiple chemical series.

**Drug Development Capabilities**

Since its Series B funding round announced in 2019, Tenaya has added to the depth and breadth of its drug discovery capabilities to support the efficacy, safety and differentiation of current and future products:

- **Disease Modeling:** Tenaya has made significant advancements to its Precision Medicine platform to identify and validate targets for heart disease for modality-agnostic drug discovery. The company has successfully demonstrated the feasibility of phenotypic screening of human induced pluripotent stem cell-derived cardiomyocyte (iPSC-CM) disease models using proprietary imaging and machine learning algorithms. The target for the company's first small molecule project was identified through such screening and provides important proof-of-concept for the utility of this novel approach.
- **AAV Capsids:** Tenaya has established in-house AAV capsid engineering capabilities and has successfully screened hundreds of millions of variants from diverse, proprietary libraries to discover novel AAV capsids with higher tropism for the heart vs. other organs, as well as capsids that can more specifically target cardiomyocytes vs. cardiac fibroblasts in the heart. The company has filed IP on several variants that out-perform parental capsids in multiple models including non-human primate (NHP) models.
- **Regulatory Elements:** Tenaya has developed and filed IP on proprietary regulatory elements, including novel cardiac-specific promoters, to more selectively target gene expression in cardiomyocytes or cardiac fibroblasts and to significantly increase gene expression over what can be achieved with traditional promoters.

**AAV Manufacturing**

Tenaya also announced important steps towards internalizing its AAV manufacturing capabilities, expertise and IP to support its emerging portfolio of gene therapy products:

- **Pilot Plant Operation:** Tenaya has established an in-house Pilot Plant Operation at the 200L scale with the key Process Development (PD), Analytical Development (AD) and Quality Control (QC) personnel to support all non-clinical studies including those involving large animal models under Good Laboratory Practice regulations.
- **cGMP Facility:** Tenaya will establish a dedicated cGMP facility in 2021 for drug product manufacturing and has leased space for this new site in the San Francisco Bay Area. The facility will produce drug product at the 1000L scale to support first-in-human studies for the company's lead gene therapy program and has a modular design that will support scale-out and scale-up of manufacturing capacity in response to evolving needs.
- **Platform Comparability:** Tenaya has established necessary PD expertise to ensure comparable product efficacy using different capsids – including novel capsids developed in-house at Tenaya – in both HEK293 and Sf9/rBV manufacturing platforms.
- **Intellectual Property:** Tenaya has filed IP on process improvements that will support scale-up of AAV manufacturing to larger bioreactors necessary for product supply of therapies intended for more prevalent heart disease populations. The company has also in-licensed foundational manufacturing IP necessary to support current and future programs.

"Tenaya has successfully built on its distinguished scientific heritage to advance a bold research strategy and differentiated drug discovery capabilities uniquely focused on heart disease," said Roderick Wong, M.D., Managing Partner and Chief Investment Officer at RTW Investments, LP. "We are strong believers in the potential for new approaches in this area of high unmet need and are encouraged by early results we are seeing in the industry with the use of AAV to treat genetic forms of heart disease. We are excited to partner with Tenaya to accelerate their leadership position in this exciting field and to advance novel therapies that can benefit individuals and families fighting heart disease."

**About Tenaya Therapeutics**

Tenaya Therapeutics is shaping the future of heart disease treatment driven by a bold mission: to discover, develop and deliver curative therapies that address the underlying drivers of heart disease. Tenaya is developing therapies for rare genetic disorders as well as for more prevalent heart conditions through three platforms: Gene Therapy, Cellular Regeneration and Precision Medicine. Founded by leading cardiology researchers at the Gladstone Institutes and UT Southwestern, Tenaya is backed by a top-tier syndicate of investors. For more information, please visit www.TenayaTherapeutics.com and follow us on LinkedIn.

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