

# Trevena Secures \$35 Million in Series B Funding to Progress Portfolio of GPCR Biased Ligands and to Complete Phase 2 Study of TRV120027 for Acute Heart Failure

KING OF PRUSSIA, Pa.--(BUSINESS WIRE)-- Trevena, Inc., the leader in discovery and development of G-protein coupled receptor (GPCR) biased ligands, announced today that it has completed a \$35 million Series B financing. Existing investors Polaris Venture Partners and New Enterprise Associates led the round, with all other existing Trevena investors - Alta Partners, Healthcare Ventures and Yasuda Enterprise Development Company - also participating in the financing. Proceeds will be used to complete a Phase 2 study of Trevena's lead molecule, TRV120027, an angiotensin II type I receptor (AT1R) beta-arrestin biased ligand for treatment of acute heart failure, and to continue advancing Trevena's portfolio of GPCR biased ligands.

Trevena's novel drug discovery approach deploys a proprietary platform to uncover downstream biological pathways eliciting beneficial and deleterious effects of a target GPCR. Trevena then uses its platform to discover "biased ligands" that activate only the pathways associated with the beneficial effects, allowing them to unlock new biology and avoid drug side effects. The company's drug discovery technology is based on extensive research from the laboratories of leading scientists in the GPCR field - Robert J. Lefkowitz, M.D. and Howard A. Rockman, M.D. of Duke University Medical Center. Trevena's primary therapeutic areas of interest are cardiovascular disease, pain and inflammation.

"Despite the success of GPCR targeted drugs to date, there is huge scope to enhance the therapeutic properties of these molecules through more targeted signaling," said Maxine Gowen, Ph.D., president and chief executive officer of Trevena. "We share with our investors a belief in the potential of biased ligands to define the next generation of GPCR medicines. This financing will allow us to demonstrate clinical proof of concept for TRV120027, the first biased ligand dosed in human clinical trials, and to advance our pain and inflammation programs through discovery and into the clinic."

Terrance G. McGuire, co-founder and managing general partner of Polaris Venture Partners, added, "We are delighted with the progress that Trevena has made, and their ability to translate the founding research into a growing pipeline of differentiated drugs. Data that Trevena have generated showing the unique biological properties of their biased ligands are compelling, and continue to excite our syndicate."

About Biased Ligands and TRV120027

With approximately 40% of modern medicinal products targeting GPCRs and GPCRs remaining the largest class of targets currently under clinical evaluation, this group comprises the most successful drug target class. However, traditional ligands either turn on or turn off all of the signaling pathways engaged by a particular receptor, which can result in limited efficacy and undesirable adverse effects. In contrast, Trevena's novel drug discovery approach is focused on discovering and developing a linked portfolio of GPCR ligands that are "biased" toward either activating or blocking specific signaling pathways mediated through individual GPCRs. These biased ligands selectively turn on or off individual pathways, and in so doing provide an enhanced level of drug specificity. This specificity allows enhanced efficacy or decreased side effects to be designed into the drug candidate.

TRV120027 is a first-in-class agent that, due to its unique spectrum of biological effects, could provide a major advance in the treatment of acute heart failure. It targets AT1R, which plays a central role in the pathophysiology of heart failure. In a preclinical disease model of heart failure TRV120027 improves several of the key pathologies that are seen in heart failure in humans. Based on its profile in animals, TRV120027 is expected to rapidly provide symptomatic benefit while promoting an improvement in target organ function in patients suffering from acute heart failure.

### About Trevena

Trevena, Inc. is a leader in the discovery and development of GPCR biased ligand drugs. Trevena combines a powerful and efficient drug discovery platform with extensive development experience to yield a rich linked portfolio of novel medicines. Trevena's proprietary Advanced Biased Ligand Explorer, or ABLE(TM), platform includes customized assays, proprietary software, animal models and unique biological signaling information across multiple GPCRs that allow for the discovery, optimization and development of unique biased ligands into differentiated new medicines. The company's drug discovery technology is based on extensive research from the laboratories of leading scientists in the GPCR field -Robert J. Lefkowitz, M.D. and Howard A. Rockman, M.D. of Duke University Medical Center. Trevena's pipeline is currently focused on programs for cardiovascular and CNS indications with significant unmet medical needs. Founded in 2008, Trevena is based in King of Prussia, Pennsylvania and is a privately held company backed by leading investors including Alta Partners, Healthcare Ventures, NEA, Polaris and Yasuda Enterprise Development Company. For more information about the company, please visit <a href="https://www.trevenainc.com">www.trevenainc.com</a>.

### **About Polaris**

Polaris Venture Partners is a partnership of experienced venture capital investors and technology executives, whose mission is to identify and invest in early stage information technology and life science businesses with exceptional promise and help them grow into sustainable, market-leading companies. Polaris is committed to providing growth equity and shareholder liquidity to established companies in the technology, healthcare, manufacturing, media, communications, and business services sectors. The firm has over \$3 billion under management and current investments in more than 100 companies. For information on Polaris Venture Partners, visit www.polarisventures.com.

## About NEA

New Enterprise Associates (NEA) is a leading venture capital firm focused on helping

entrepreneurs create and build major new enterprises that use technology to improve the way we live, work and play. With approximately \$8.5 billion in committed capital, NEA's experienced management team has invested in over 550 companies, of which more than 160 have gone public and more than 230 have been acquired. For additional information, visit www.nea.com.

# About Alta

Alta Partners is a San Francisco-based venture capital firm focused on life sciences investing. Founded in 1996, the firm currently manages \$2 billion in committed capital through seven venture fund programs. Alta invests in life sciences companies across the development continuum, from company formation to later-stage opportunities, and has funded more than 120 companies in the sector to date. For more information, visit <a href="https://www.altapartners.com">www.altapartners.com</a>.

### About HCV

HealthCare Ventures is a leading life science venture capital firm investing in pre-clinical or early clinical stage, project-focused companies with potential to transform patient care. Since its founding in 1985, HealthCare Ventures has raised \$1.6 billion in nine funds, and invested in 97 companies, 61 as startup ventures. For more information, visit <a href="https://www.hcven.com">www.hcven.com</a>.

# About YEDC

Yasuda Enterprise Development Company is one of the largest and most experienced venture capital firms in Japan, with over 200 portfolio IPOs since fund inception. <a href="https://www.yedvc.co.jp">www.yedvc.co.jp</a>

Source: Trevena, Inc.