PRESS RELEASE

New Long-Term Data in Adult Patients with Hypoparathyroidism Treated with Ascendis Pharma's TransCon™ PTH through Week 110 in the PaTH Forward Trial Presented at ASBMR 2022

- *Durability of response to TransCon PTH therapy through Week 110 demonstrated by continued normalization of serum calcium and 93% achieving independence from conventional therapy*

- *Participants with more years of disease duration had higher baseline bone mineral density (BMD) Z-scores and larger decreases in BMD Z-scores following treatment, trending toward age- and sex-matched norms through Week 110*

- *Replacement therapy with TransCon PTH was well tolerated through Week 110, with continued normalization of 24-hour urine calcium and no discontinuations due to treatment-emergent adverse events*

COPENHAGEN, Denmark, September 12, 2022 (GLOBE NEWSWIRE) – Ascendis Pharma A/S (Nasdaq: ASND) today announced new Week 110 data from the Phase 2 PaTH Forward Trial showing that long-term therapy with TransCon PTH, an investigational prodrug designed to provide sustained release of active parathyroid hormone (PTH) at stable levels in the physiological range for 24 hours/day, provided a durable response in adults with hypoparathyroidism, as seen in continued normalization of mean serum calcium levels and 93% of patients achieving independence from conventional therapy with active vitamin D and therapeutic levels of calcium. Data on the skeletal effects of TransCon PTH were presented by Mishaela Rubin, M.D., Associate Professor of Medicine, Columbia University, at ASBMR 2022, the annual meeting of the American Society for Bone and Mineral Research, held September 9-12 in Austin, Texas.

The data also showed continued restoration of skeletal bone mineral density (BMD) toward sex- and age-expected norms for study participants treated with TransCon PTH, which augments turnover of stagnant bone. Participants with more years of hypoparathyroidism duration had higher mean baseline bone mineral density (BMD) Z-scores and larger decreases in BMD Z-scores through Week 110, trending toward age- and sex-matched norms. PTH replacement therapy with TransCon PTH was well-tolerated through Week 110, with continued normalization of mean urine calcium and no discontinuations from the trial due to adverse events.

"Our primary goal is to treat the underlying cause of hypoparathyroidism, and we now have clinical trial data showing that patients treated with TransCon PTH over two years had durable response, with normalization of serum calcium and independence from conventional therapy. In addition, TransCon

PTH-treated participants showed restoration of mean BMD toward age- and sex-matched norms, with a greater treatment effect observed in patients with a higher baseline mean BMD Z-score, which correlated with a longer duration of disease," said Aimee Shu, M.D. Vice President of Clinical Development, Endocrine Medical Sciences at Ascendis Pharma. "These and our Phase 3 data, which demonstrated improvements in health and quality of life, with well-tolerated safety profile, point to the importance of TransCon PTH as a potential new treatment option for hypoparathyroidism regardless of disease etiologies studied, and we will continue our work to deliver it to patients facing an urgent unmet need."

The abstract associated with Dr. Rubin's oral presentation, **TransCon PTH for Hypoparathyroidism: Skeletal Dynamics Through Week 58 of the Phase 2 PaTH Forward Trial** (#1080), is available to ASBMR members and ASBMR 2022 meeting attendees at https://asbmr.org.

Highlights from this ASBMR oral presentation are available on the Investor & News section of the Ascendis Pharma website at https://investors.ascendispharma.com.

On August 31, 2022, Ascendis Pharma submitted a New Drug Application for TransCon PTH in adult hypoparathyroidism to the U.S. Food & Drug Administration (FDA). During the fourth quarter of this year, the Company plans to submit a Marketing Authorisation Application (MAA) for TransCon PTH in hypoparathyroidism to the European Medicines Agency. Also, during the fourth quarter, Ascendis expects to announce topline results for PaTHway Japan, the Phase 3 trial of TransCon PTH in adult hypoparathyroidism in Japan. A separate Phase 3 trial of TransCon PTH in hypoparathyroidism is ongoing in Greater China through VISEN Pharmaceuticals.

About Hypoparathyroidism [1, 2, 3, 4, 5, 6]

Hypoparathyroidism is a rare endocrine disorder characterized by insufficient levels of parathyroid hormone (PTH), resulting in low calcium and elevated phosphate levels in the blood. Hypoparathyroidism affects approximately 200,000 patients in the United States, Europe, and Japan, most of whom develop the condition following damage to or accidental removal of the parathyroid glands during thyroid surgery. Conventional treatment with calcium supplements and active vitamin D (also called calcitriol) does not effectively address the short-term symptoms, long-term complications, or quality-of-life impacts of hypoparathyroidism.

Short-term symptoms include weakness, severe muscle cramps (tetany), abnormal sensations such as tingling, burning and numbness (paresthesia), memory loss, impaired judgment, and headache. Patients often experience decreased quality of life, and, over the long term, this complex disorder can increase risk of major complications, such as calcium deposits in the brain, blood vessels, eye, and other soft tissues – including the kidneys, which can lead to impaired renal function.

Hypoparathyroidism remains among the few hormonal insufficiency states without a replacement therapy that restores the missing hormone at physiologic levels. Current standard of care with high doses of calcium and active vitamin D does not fully control the disease or address its underlying cause and may contribute to risk of renal disease. Patients with hypoparathyroidism have an estimated 4- to 8-fold greater risk of renal disease compared to healthy populations. Hypoparathyroidism is also associated with a 2-fold increased risk of depression or bipolar disorder compared to healthy populations.

About Ascendis Pharma A/S

Ascendis Pharma is applying its innovative platform technology to build a leading, fully integrated, global biopharmaceutical company focused on making a meaningful difference in patients' lives. Guided by its core values of patients, science and passion, the company uses its TransCon technologies to create new and potentially best-in-class therapies. Ascendis is headquartered in Copenhagen, Denmark, and has additional facilities in Heidelberg and Berlin, Germany; Palo Alto and Redwood City, California; and Princeton, New Jersey. Please visit www.ascendispharma.com to learn more.

Forward-Looking Statements

This press release contains forward-looking statements that involve substantial risks and uncertainties. All statements, other than statements of historical facts, included in this press release regarding Ascendis' future operations, plans and objectives of management are forward-looking statements. Examples of such statements include, but are not limited to, statements relating to (i) the timing of topline results from PaTHway Japan, (ii) TransCon PTH's ability to provide sustained release of active parathyroid hormone at stable physiological levels over 24 hours in adult patients with hypoparathyroidism, (iii) the potential for TransCon PTH to address the underlying cause of hypoparathyroidism, (iv) Ascendis' plan to submit a Marketing Authorisation Application for TransCon PTH in hypoparathyroidism to the European Medicines Agency in the fourth quarter of 2022, (v) Ascendis' ability to apply its platform technology to build a leading, fully integrated global biopharmaceutical company, and (vi) Ascendis' use of its TransCon technologies to create new and potentially best-in-class therapies. Ascendis may not actually achieve the plans, carry out the intentions or meet the expectations or projections disclosed in the forward-looking statements and you should not place undue reliance on these forward-looking statements. Actual results or events could differ materially from the plans, intentions, expectations and projections disclosed in the forward-looking statements. Various important factors could cause actual results or events to differ materially from the forward-looking statements that Ascendis makes, including the following: dependence on third party manufacturers, distributors, and service providers for Ascendis products and product candidates; unforeseen safety or efficacy results in its development programs or on-market products; unforeseen expenses related to commercialization of any approved Ascendis products; expenses related to Ascendis' of its development programs; unforeseen selling, general and administrative expenses, other research and development expenses and Ascendis' business generally; delays in the development of its development programs related to manufacturing, regulatory requirements, speed of patient recruitment or other unforeseen delays; Ascendis' ability to obtain additional funding, if needed, to support its business activities and the effects on its business from the worldwide COVID-19 pandemic and the ongoing conflict in the region surrounding Ukraine and Russia. For a further description of the risks and uncertainties that could cause actual results to differ from those expressed in these forward-looking statements, as well as risks relating to Ascendis' business in general, see Ascendis' Annual Report on Form 20-F filed with the U.S. Securities and Exchange Commission (SEC) on March 2, 2022 and Ascendis' other future reports filed with, or submitted to, the SEC. Forward-looking statements do not reflect the potential impact of any future licensing, collaborations, acquisitions, mergers, dispositions, joint ventures, or investments that Ascendis may enter into or make. Ascendis does not assume any obligation to update any forward-looking statements, except as required by law.

Investor Contacts:
Tim Lee
Ascendis Pharma
+1 (650) 374-6343
tle@ascendispharma.com

Patti Bank
ICR Westwicke
+1 (415) 513-1284
patti.bank@westwicke.com
ir@ascendispharma.com

Media Contact:
Melinda Baker
Ascendis Pharma
+1 (650) 709-8875
media@ascendispharma.com

---

[1] Mannstadt M, et al. *Nature Reviews* 2017, 3: 17055
[2] Ascendis Pharma HP Patient Experience Research.
[3] Hadker N, et al. *Endo Pract.* 2014, 20(7);671-679
[4] Powers J, et al. *J Bone Miner Res* 2013, 28: 2570-2576.
[5] Mitchell DM, et al. *J Clin Endocrinol Metab* 2012, 97(12): 4507-4514
[6] Underbjerg L, et al. *J Bone Miner Res* 2013, 28: 2277-2285