

# MannKind Presents Positive Afrezza® Clinical Data from Type 1 Diabetes Study at 55th Annual Meeting of the EASD

September 19, 2019

WESTLAKE VILLAGE, Calif., Sept. 19, 2019 (GLOBE NEWSWIRE) -- MannKind Corporation (NASDAQ: MNKD) announced that data from a one-year study of Afrezza® (insulin human) Inhalation Powder was presented at the 55<sup>th</sup> Annual Meeting of the European Association for the Study of Diabetes (EASD) in Barcelona, Spain.

#### Oral Abstract 183: Technosphere Insulin Provides Better Early Postprandial Glucose Control than Subcutaneous Rapid-Acting Analog

MannKind investigators reported data<sup>1</sup> from more than 500 patients with type 1 diabetes comparing Afrezza to rapid-acting injected insulin analog (insulin aspart) therapy to assess glucose control, mealtime glucose changes, Afrezza dosing, and rates of hypoglycemia over a one-year period.

## **Oral Abstract Presentation Highlights:**

- When compared to injected insulin aspart, Afrezza provided significantly better glucose control in the first two hours following a standardized meal.
- Titration of Afrezza to approximately 1.5 to 2 times the unit dose of injected insulin aspart resulted in significantly lower post-meal glucose excursions and was associated with lower rates of overall and level 2 hypoglycemia—an observation that was particularly evident in the late (>2 hour) post-meal period.

Dr. Anne Peters, Clinical Professor of Medicine at the Keck School of Medicine at USC and Director of the USC Westside Center for Diabetes Care noted that "the improved post-meal glucose levels and lower rates of low blood sugars seen in this study of individuals with type 1 diabetes support my growing clinical experience. The presentation of these data provides further evidence that proper dosing of Afrezza has the potential to safely and effectively keep more patients within the target glucose range at meal times."

These data provide additional evidence supporting the safe and effective use of Afrezza in type 1 diabetes patients and offer insight into the dosing of this ultra rapid-acting insulin as compared to a traditional rapid-acting injected insulin analog.

#### About Afrezza®

Available by prescription, Afrezza® (insulin human) Inhalation Powder is a rapid-acting inhaled insulin indicated to improve glycemic control in adult patients with diabetes mellitus. Afrezza consists of a dry powder formulation of human insulin delivered from a small and portable inhaler. Administered at the beginning of a meal, Afrezza dissolves rapidly upon inhalation to the lung and passes quickly into the bloodstream (in less than one minute). This rapid absorption allows Afrezza to begin reducing blood sugar levels within minutes of administration. Afrezza is available in 4-unit, 8-unit and 12-unit single-dose cartridges of insulin powder that can be used, as prescribed by a health care professional, in combination with other diabetes medications to achieve target blood sugar levels. For Afrezza doses exceeding 12 units, patients may use a combination of existing cartridge strengths. For more information about Afrezza, please visit <a href="https://www.afrezza.com">www.afrezza.com</a>.

## **About MannKind Corporation**

MannKind Corporation (NASDAQ:MNKD) focuses on the development and commercialization of inhaled therapeutic products for patients with diseases such as diabetes and pulmonary arterial hypertension. MannKind is currently commercializing Afrezza® (insulin human) Inhalation Powder, the Company's first FDA-approved product and the only orally inhaled ultra rapid-acting mealtime insulin in the United States, where it is available by prescription from pharmacies nationwide. MannKind is headquartered in Westlake Village, California, and has a state-of-the art manufacturing facility in Danbury, Connecticut. The Company also employs field sales and medical representatives across the U.S. For further information, visit <a href="https://www.mannkindcorp.com">www.mannkindcorp.com</a>.

## Forward-Looking Statements

This press release contains forward-looking statements that involve risks and uncertainties. Words such as "believes," "anticipates," "plans," "expects," "intends," "will," "goal," "potential" and similar expressions are intended to identify forward-looking statements. These forward-looking statements are based upon MannKind's current expectations. Actual results and the timing of events could differ materially from those anticipated in such forward-looking statements as a result of various risks and uncertainties detailed in MannKind's filings with the SEC. For a discussion of these and other factors, please refer to MannKind's quarterly report on Form 10-Q for the quarter ended June 30, 2019 as well as MannKind's other filings with the SEC. You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date of this press release. All forward-looking statements are qualified in their entirety by this cautionary statement, and MannKind undertakes no obligation to revise or update any forward-looking statements to reflect events or circumstances after the date of this press release.

### **MannKind Contact:**

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# Appendix - Presentation Information

(1) Oral Presentation: Technosphere Insulin Provides Better Early Postprandial Glucose Control than Subcutaneous Rapid-Acting Analog Presenter: David M. Kendall, M.D.

Presentation No: 183

Date/Time: Thursday, September 19, 2019; 2:30 PM



Source: MannKind