VONAPANITASE (PRT-201, RECOMBINANT HUMAN TYPE I PANCREATIC ELASTASE)
IMPROVED LONG-TERM RADIOCEPHALIC ARTERIOVENOUS FISTULA (RC AVF) PATENCY

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Background

High Rates of AVF Maturaton Failure and Patency Loss

- While radiocephalic AVFs (RC AVFs) are the preferred form of vascular access, most will fail within one year of placement.
- Approximately 80% fail to be adequately (reach a certain diameter and flow rate [mature])
- Approximately 70% become inadequate or require intervention (primary unsuccessful patency loss) over 1 year.
- Approximately 35% will be abandoned

- Patients frequently require repeated procedures and/or surgeries that also have a negative impact on procedures

One-Year RC AVF Primary Patency

(Originally Published Data)

Primary Unassisted Patency Over 3+ Years

NCT02110901).

Procedure to Restore/Maintain Patency Over 3+ Years

AVF Use for Hemodialysis Over 3+ Years

Summary

- Results reported here are based on an extension of a preclinical study; a preliminary published study of one year results (Hye 2014; Journal of Vascular Surgery).

- In arthritis, a clinical trial using vonapanitase and placebo was completed in patients over 65 years of age and a clinical trial related specifically to the AVF were completed over 3 years.

- Current studies are evaluating subjects in a randomized, double-blind, placebo-controlled 3 phase study in the United States (NCT01791681).

Demographics

All Subjects

Among the 120 enrolled, 30 mcg vs. placebo

48% 44%

60% 64%

77% 72%

30 mcg

56% 55%

82%

30 mcg

Excluding Central Stenosis

RC AVFs (n=12) (n=8) (n=12)

BC AVFs (n=12) (n=8) (n=12

Primary Unassisted and Secondary Patency

Percentage of Subjects Who Maintained Patency Over 3+ Years

Placebo

30 mcg

Placebo

30 mcg


Chiulli 2011

Ladenheim 2014

White, % 63 78 74

CKD due to diabetes, % 39 43 55

RC AVF, % 47 45 41

AVF type (RC AVF and BC AVF) and analyses excluding central stenosis were not pre-specified in the original study protocol.

No meaningful changes in safety laboratories (chemistry, hematology, coagulation) at 6 weeks

Average duration of follow-up at the time of this analysis is 21 to 23 months in the three groups

Safety results at one-year available in Hye 2014

• For vonapanitase and placebo groups, AEs were comparable over 1 year and AEs related specifically to the AVF

• No meaningful changes in safety laboratories (chemistry, hematology, coagulation) at 6 weeks

• Unassisted maturation defined as average cephalic vein lumen diameter > 4 mm and blood flow > 500 mL/min at 12 weeks without prior patency

• Secondary: unassisted maturation at 12 weeks, secondary patency, and AVF usability

• Primary unassisted patency defined as the time from AVF creation until the first occurrence of either access thrombosis or a procedure to restore or maintain patency.

• Secondary patency defined as the time from AVF creation until AVF abandonment.

• Follow-up at 6, 12, and 24, and 3 and 5 years thereafter.

• Results of one-year analysis previously published (Hye 2014; Journal of Vascular Surgery)

• Current analysis report here occurred after last subject treated completed

• Analysis of patency and the rate of procedures to maintain patency by AVF type using intention-to-treat analysis excluding central stenosis and prior procedures to maintain patency.

6% reductions in the risk of primary patency loss for all subjects (30 mcg)

5% reductions in the risk of primary patency loss for all subjects (30 mcg)