Bremelanotide is Safe and Well-Tolerated in Premenopausal Women With Hypoactive Sexual Desire Disorder (HSDD): Safety Results From the RECONNECT Studies

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Background

• Female sexual dysfunctions (FSD) includes a range of distressing, multicausal conditions for which few treatment options exist

• Up to 43% of women aged ≥18 years report having or having had a sexual problem.12 Also, report distress associated with their sexual problem (score ≥15 on the Female Sexual Distress Scale [FSDS])

• The most common sexual concern expressed by women is diminished or lack of desire for sexual activity. When accompanied by distress this may be diagnosed as hypoactive sexual desire disorder (HSDD) if it is not a result of another medical condition, drug or medication, or relationship issue

• The overall prevalence of HSDD in the US has been estimated as 41%, HSDD is slightly more common among pre-vs postmenopausal women (Figure 1)17

• In the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (DSM-IV-TR), FSD is classified into dysfunctions (eg, HSDD), arousal (eg, female sexual arousal disorder), delay or absence of orgasm, or sexual pain (dyspareunia or vaginismus)

• In the DSM-5, HSDD is included within the diagnostic category of sexual interest/lovability disorder

Figure 1. Prevalence of HSDD

Objective

• Here we present the results of the safety evaluation of BMT from the double-blind phase of the 2 RECONNECT studies

Methods

Participants

• Healthy, premenopausal, nonpregnant women, ≥18 years of age, currently in a stable (≥6 months) relationship

• Diagnosed with HSDD (without decreased arousal) for ≥6 months

• Experienced “normal” sexual function in the past ≥6 years

• Willing to engage in sexual activities ≥1/month during the study

• Had AEs of the following at screening:
  – Patient Health Questionnaire-9 total score <10 and score 0 on anxiety 9
  – Female Sexual Function Index (FSFI) total score ≥26 if diagnosed with HSDD without symptoms of decreased desire (score <26)

• FSFI desire domain (FSFI-D) score ≥5 (diagnosed with HSDD without decreased arousal); regardless of total FSFI score

• Female Sexual Distress Scale–Desire/Arousal/Orgasm (FSDS-D/AO) total score ≥18

Study Design

• The RECONNECT studies comprise 2, identical, Phase 3, placebo-controlled, multinational trials (NCT02330071 [Study 301] and NCT02338983 [Study 302])

• The Core phase of the trials included a 1-month, double-blind placebo treatment period (to establish baseline), and a 24-week, double-blind treatment period. Both trials also have an ongoing 52-week open-label Extension phase

• Participants were randomized (1:1) to either placebo or BMT 1.75 mg, self-administered via an auto-injector device, desired prior to sexual activity (Figure 2)

• The Core phase of the study is complete; the open-label Extension phase is ongoing

Figure 2. Auto-Injector

Safety Assessments

• Safety Assessments included:
  – Adverse events (AEs)
  – Vital signs
  – Laboratory tests
  – Female Sexual Distress Scale–Desire/Arousal/Orgasm (FSDS-D/AO) total score

Results

Primary Efficacy

• Both studies met the prespecified co-primary efficacy endpoints, ie, among women who completed the study:

  – The BMT groups had significantly increased scores on the FSFI-D indicating an increase in desire compared with placebo (Study 301 mean change ≥0.69 vs ≥0.24; Study 302: ≥0.80 vs ≥0.16; p<0.01 vs placebo)

  – Scores for Item 3 of the FSDDS-D/AO showed a significant reduction in distress related to low sexual desire for women using BMT compared with placebo (Study 301 Mean change ≥–0.91 vs ≥–0.34; Study 302: ≥–0.86 vs ≥–0.28 (p<0.001)

Safety

• The safety population (N=1247) includes randomized subjects who had used ≥1 dose of the study drug

• The most frequent treatment-emergent AEs (TEAEs) in the BMT groups were nausea (250 events [25.1%]; facial flushing (128/627, 20.4%); and headache (69/627, 11.0%) (Table 2)

• Safety profiles of BMT were consistent with prior clinical experience and no new or unusual safety issues were identified

Figure 3. AEs During the Double-Blind Phase With Occurrence of ≥5% in Either Treatment Group forEither Study

Conclusions

Bremelanotide is a safe, well-tolerated, potential treatment for premenopausal women with HSDD that can be taken ‘as desired’ BMT has no known alcohol interactions.

References

3. Clayton AH, Lucas J, DeRogatis LR, Jordan R. Phase I Randomized Placebo-Controlled, Double-Blind Study of the Safety and Tolerability of BMT (1.75 mg) for the treatment of HSDD (with or without decreased arousal)
8. Clayton AH, Lucchesi LR, Voeller GM. Bremelanotide (BMT) is safe and well-tolerated in women with hypoactive sexual desire disorder. Presented at the 25th Anniversary Congress on Women’s Health; April 28–30, 2017; Washington, DC

Figure 4. Overview of TEAEs by Study, Treatment, and Severity

Table 2. Severe AEs with ≥1 Occurrence in Either Group

Table 3. Baseline Demographics

Figure 5. Most Frequent BMT-Related AEs (≥1%) Leading to Discontinuation

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Acknowledgments


Safety

• Safety population (N=1247) includes randomized subjects who had used ≥1 dose of the study drug

• The most frequent treatment-emergent AEs (TEAEs) in the BMT groups were nausea (250 events [25.0%]; vomiting (126/627, 20.4%); and headache (69/627, 11.0%) (Figure 3)

• Safety profiles of BMT were consistent with prior clinical experience and no new or unusual safety issues were identified

Figure 5. Most Frequent BMT-Related AEs (≥1%) Leading to Discontinuation of Untreated Women

• There were 2 serious AEs (SAEs) considered related to treatment with BMT in Study 302: 1 episode of nausea/vomiting and 1 episode of headache in the same participant; there were no SAEs in Study 301

• There were no clinically significant changes in vital signs, clinical laboratory data, or electrocardiograms in either study

• The safety profile of BMT was consistent with prior clinical experience and no new or unusual safety issues were identified

Conclusion

Bremelanotide is a safe, well-tolerated, potential treatment for premenopausal women with HSDD that can be taken ‘as desired’ BMT has no known alcohol interactions.