Supplemental Material

Study Inclusion and Exclusion Criteria

Inclusion Criteria

Each potential participant must satisfy all of the following criteria to be enrolled in the study at enrollment (consent date):

1. any gender

2. 18 (or the legal age of consent in the jurisdiction in which the study is taking place) years of age or older

3. Clinically stable symptomatic HF (HFrEF or HFpEF)

   For HFrEF:

   a) EF ≤40% AND

   b) a primary diagnosis of HF OR 2 medical visits (including virtual) with a HF diagnosis code in any position in the past 18 months.

   For HFpEF:

   a) EF >40% AND

   b) a primary diagnosis of HF OR 2 medical visits (including virtual) with a HF diagnosis code in any position in the past 18 months, AND

   c) on a loop diuretic or spironolactone or eplerenone (mineralocorticoid receptor antagonists)[1,3] in the past 18 months.

4. Have a KCCQ baseline overall summary score of ≤80 prior to randomization

5. Be able to read and understand English

6, Possess and have sole use (i.e., not shared with other users) of smartphone compatible with the Fitbit device and mobile application (Apple iPhone 6 or later, Samsung Galaxy)

7. Willing/able to wear the Fitbit device on a regular basis for the 9-month study period

8. Sign an electronic informed consent form (eICF) indicating that he or she understands the purpose of, and procedures required for, the study and is willing to participate in the study, including follow-up.

Exclusion Criteria

Any potential participant who meets any of the following criteria prior to enrollment (consent date) will be excluded from participating in the study:

1. Currently taking an SGLT2i or within the last 3 months
2. A history of diabetic ketoacidosis or Type 1 diabetes mellitus (T1DM)
3. Acute decompensated HF (exacerbation of symptomatic HF) requiring intravenous diuretics, inotropes, or vasodilators within the last 4 weeks
4. Stage 4 or 5 Chronic Kidney Disease (i.e., eGFR <30ml/min on dialysis) from the most recent assessment
5. A history of atraumatic amputation within past 12 months of screening, or an active skin ulcer, osteomyelitis, gangrene, or critical ischemia of the lower extremity within 6 months
6. A diagnosis of hypotension within 30 days
7. Major surgery within 3 months or have any surgery, i.e., cardiac surgery, planned during the 3-month treatment (except for minor surgery, i.e., outpatient surgery under local anesthesia)
8. Any condition for which, in the opinion of the investigator, participation would not be in the best interest of the participant (eg, compromise the well-being) or that could prevent, limit, or confound the protocol-specified assessments or have a life expectancy of <6 months or current immobility
9. Known allergies, hypersensitivity, or intolerance to JNJ-28431754 (canagliflozin) or its excipients (refer to Investigator's Brochure, Canagliflozin[5])
10. A woman who is pregnant, or breastfeeding, or planning to become pregnant while enrolled in this study
11. Legally incompetent
12. Currently enrolled in an investigational study receiving an investigational study medication
13. Has a left ventricular assist device
14. Patient identity or association with enrolling network cannot be verified