

Background

A 67-year-old male with NYHA Class II/III heart failure (HF) with preserved ejection fraction (70-75%), a history of hypertension, coronary artery disease, and chronic obstructive pulmonary disease was discharged from an HF-related hospital stay. The patient was taught to take SOZO measurements at home, and data were collected on SOZO for 47-days. The patient and investigators were blinded to the data during the observation period.

Observations

- 1 HF-Dex 45.6% after hospital discharge
- 2 Bronchitis diagnosed and treated with amoxicillin
- 3 HF-Dex and ECF increase as antibiotic switched to Levofloxacin and corticosteroid (prednisone) started

Conclusions

- HF-Dex showed changes in fluid levels that were not visible with weight alone
- The weight decrease during the first month of the observation period was concurrent with a loss in TBW driven by ICF, which is associated with tissue and muscle mass
- HF-Dex rose because the ratio of ECF to TBW increased
- Once HF-Dex exceeds 50%, ECF volumes are higher than ICF volumes

SOZO Objective Fluid Volume Outputs

—●—	HF-Dex Heart Failure Index
—▲—	Total body water (TBW)
—●—	Extracellular fluid (ECF)
—■—	Intracellular fluid (ICF)
—●—	Weight

Changes in HF-Dex, ECF, and weight during observation period

	HF-Dex (%)	ECF (L)	Weight (kg)
Study initiation 23-Jan-2019	45.6	20.6	99.0
Study exit 11-Mar-2019	51.6	22.7	95.0
Change	+6.0	+2.1	-4.0
% Change	+13.2%	+10.2%	-4.0%

Baseline HF meds: furosemide 40 mg po qd, metoprolol 12.5 mg po qd, valsartan 160 mg po qd

