

## Background

An 87-year-old male with NYHA Class II/III heart failure (HF) with reduced ejection fraction (35-40%), a history of hypertension, atrial fibrillation, and chronic kidney 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 134-days. The patient and investigators were blinded to the data during the observation period.

SOZO offers a marker for readmission in patients suffering from heart failure.

## Observations

- 1 HF-Dex 56.7% after hospital discharge, quickly followed by HF hospital readmission
- 2 HF-Dex remains high after readmission and skilled nursing facility (SNF) stay; bumetanide gradually increased to little effect
- 3 HF-Dex and ECF decline with metolazone therapy
- 4 SOZO data unavailable prior to 2nd HF hospital readmission
- 5 HF-Dex and ECF decline with metolazone therapy
- 6 Clinical stability achieved

## SOZO Objective Fluid Volume Outputs

Total body water (TBW)	Extracellular fluid (ECF)
Intracellular fluid (ICF)	ECF%TBW (HF-Dex)
<b>HF-Dex Reference Ranges</b>	
— 51% HF-dex	— Fluid Overload
— Elevated Fluid Volumes	— Normal Fluid Volumes

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

	HF-Dex (%)	ECF (L)	Weight (kg)
Study initiation 03-Apr-2019	56.7	19.2	71.0
Clinical stability 13-Aug-2019	50.3	16.3	67.7
Change	-6.4	-2.9	-3.3
% Change	-11.3%	-15.1%	-4.6%

## Conclusions

SOZO offers an objective measure of fluid in HF patients. In this known HF patient, a HF-Dex value over 51% was associated with two HF-related rehospitalizations. The patient stabilized following aggressive diuretic therapy and reached a HF-Dex of 50.3%, which may be a target for this patient for future management.

