



Blood Pressure and Symptomatic Hypotension with Dapagliflozin vs. Placebo in Patients Hospitalized for Heart Failure

An Analysis of DAPA ACT HF-TIMI 68

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# **Background**



The totality of randomized trial data support early initiation of SGLT2i in patients hospitalized for HF to reduce the risk of adverse outcomes in the early post-discharge period

#### Cardiovascular Death or Worsening HF Event **All-Cause Mortality** Study HR (95%CI) Study HR (95%CI) **EMPULSE** 0.69 (0.45-1.08) **EMPULSE** 0.50 (0.24-1.03) SOLOIST-WHF (in-hospital) 0.54 (0.35-0.82) SOLOIST-WHF (in-hospital) 0.39 (0.17-0.88) 0.84 (0.66-1.07) DAPA ACT HF-TIMI 68 DAPA ACT HF-TIMI 68 0.66 (0.43-1.00) Overall 0.71 (0.54-0.93) Overall 0.57 (0.41-0.80) 0.10 0.25 0.50 1.0 1.5 0.25 0.50 0.10





# **Background**



SGLT2i have a mild BP-lowering effect in ambulatory patients with HF

Patients hospitalized for HF may be more prone to symptomatic hypotension and more susceptible to the hemodynamic effects of SGLT2i initiation

# **Objective**

To examine the effect of in-hospital initiation of dapagliflozin on:

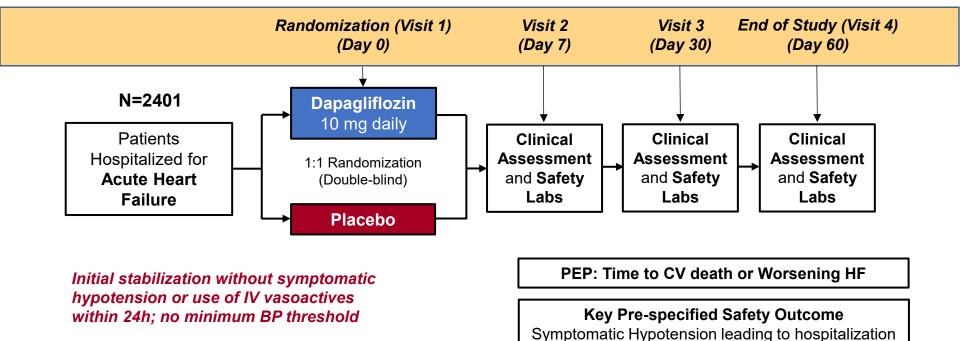
- Blood pressure and symptomatic hypotension
- Efficacy outcomes as a function of baseline BP



## **Trial Design**



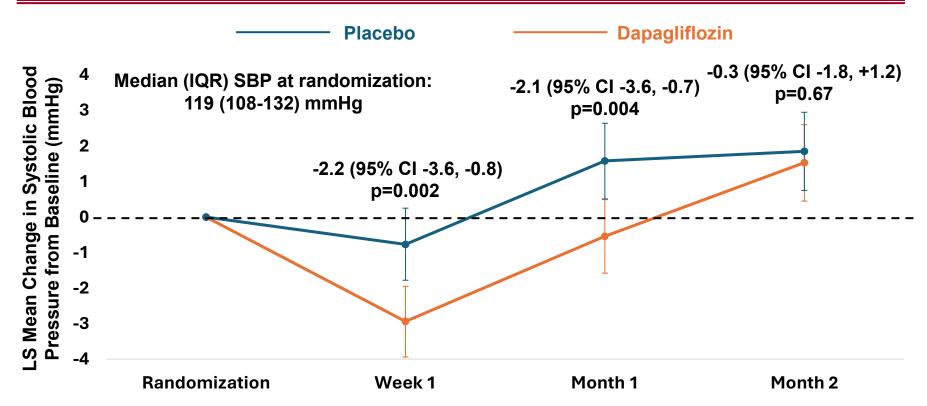
or study drug discontinuation





#### Effect of Dapagliflozin on Systolic BP





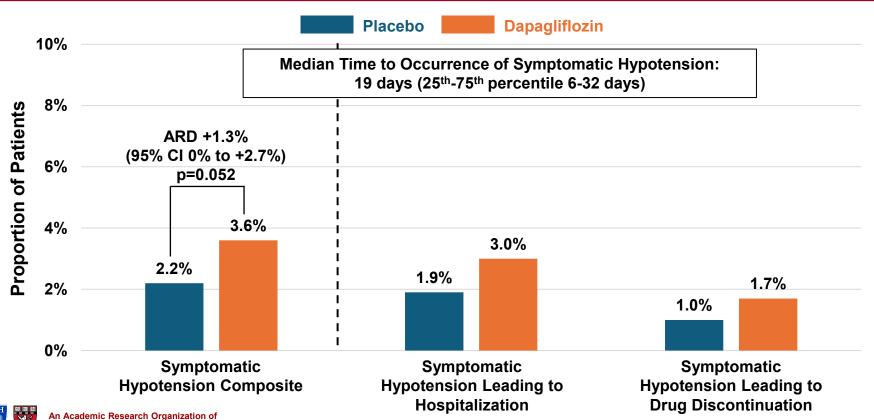






### **Symptomatic Hypotension**

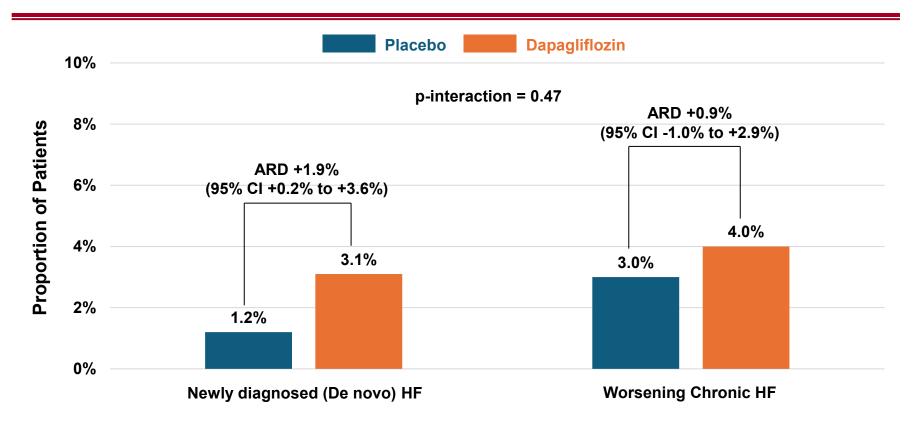






### **Symptomatic Hypotension by HF Chronicity**

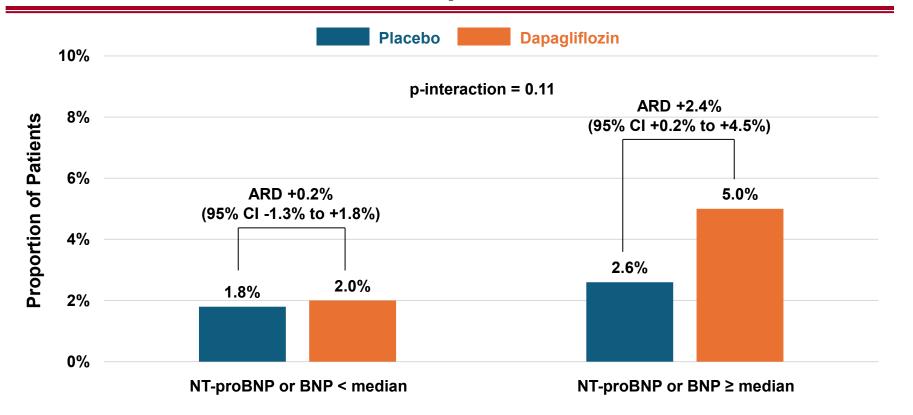






# Symptomatic Hypotension by Natriuretic Peptides

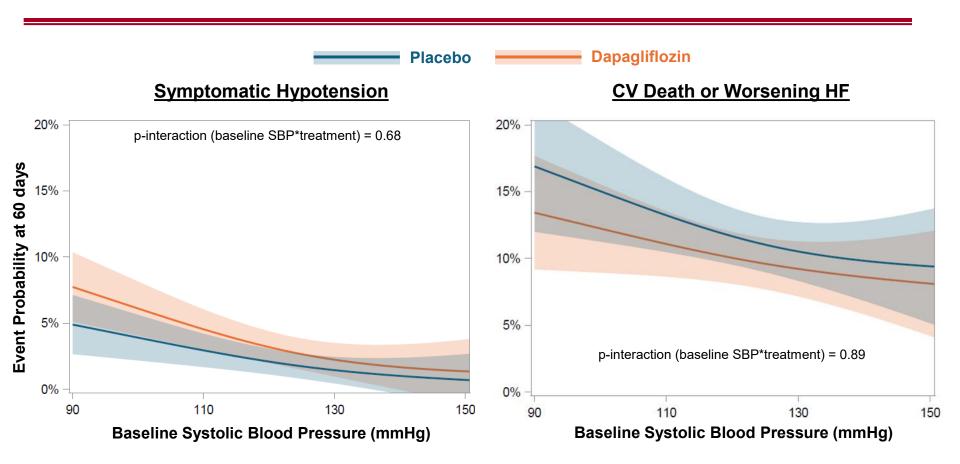






#### **Symptomatic Hypotension and PEP across SBP**

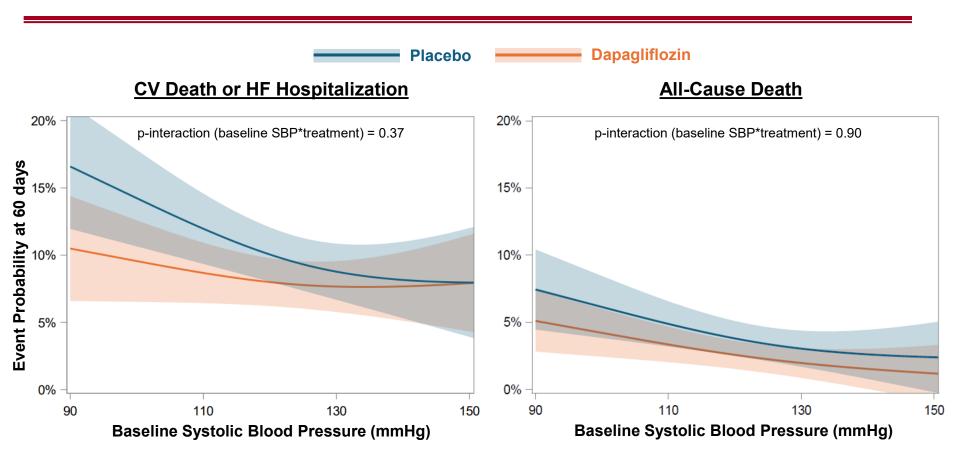






#### CV death or HHF and All-Cause Death across SBP







# Summary



- In-hospital initiation of dapagliflozin led to early modest reduction in SBP (~2 mmHg), but resolved by 2 months
- Rate of symptomatic hypotension ~1% higher with dapagliflozin vs placebo and occurred primarily in 1<sup>st</sup> month
- Patients with lower baseline BP:
  - At higher risk of symptomatic hypotension in general
  - ➤ Non-significant trend towards greater absolute risk ↑ in HoTN with dapa
  - ➤ But also trend towards greater potential absolute risk ↓ in CVD/WHF with dapa
- Risk-benefit tradeoff favors in-hospital initiation of SGLT2i in hospitalized HF patients with low baseline BP following initial clinical stabilization
  - Care should be taken to minimize other potential drivers of symptomatic HoTN