

Supplementary Online Content

Gaziano TA, Fonarow GC, Velazquez EJ, Morrow DA, Braunwald E, Solomon SD. Cost-effectiveness analysis of sacubitri-valsartan in hospitalized patients who have heart failure with reduced ejection fraction. *JAMA Cardiol*. Published online August 12, 2020. doi:10.1001/jamacardio.2020.2822

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eReferences

This supplementary material has been provided by the authors to give readers additional information about their work

eTable 1. Comparison of Model Results With Trial and Community-Based Estimates.

	2-months		27-months		5-year	
	Model	PIONEER-HF	Model	PARADIGM-HF	Model	Community Cohorts ^(1, 2)
HF hospitalizations	14.20%	13.80%	62%	57.42%	NA	NA
Mortality	3.40%	3.00%	21.28%	19.80%	43%	42%-54%

1. Benjamin et al 2019 AHA Stats, Circ. 2. Roger, VL Epidemiology of Heart Failure, Circ Research

eTable 2. Derivation of Number of Persons per Year Eligible for Heart Failure Treatment

Derivation of number of persons per year eligible				Source
New HF diagnosis per year		1,000,000		AHA Stats
New HF _{rEF} Annual Diagnosis	50%	500,000		AHA Stats
Admit rate	75%			
Newly Diagnosed HF _{rEF} with inpatient admission		375,000		
Total HF Admissions		900,000		AHA Stats
HF Admissions for HF _{rEF}	50%	450,000		AHA Stats
Newly Diagnosed HF _{rEF} with inpatient admission		-375,000		
HF Admissions for HF _{rEF} prior diagnosis		75,000		
% not on S/V	90%			
Previously Diagnosed HF _{rEF} admission not on S/V		67,500		
Total of Newly and Previously Diagnosed HF_{rEF} admission not on S/V		442,500		
Exclusions				Source
Hospice	4%	-17700		PARADIGM
Inotropes/VAD	1%	-4425		
ACEI/ARB CI	7%	-30975		
Low BP	5%	-22125		
Total persons per year eligible		367,275		

Table 3. Annual Budget Impact at the Individual and National Levels

Individual Level				
Strategy	Survival Rate	Cost	Costs/Month Alive	Annual Savings*
Enalapril indefinitely	0.9253	\$17,390	\$1,566	
Enalapril 2 months, S/V outpatient	0.9316	\$17,893	\$1,601	-\$420
S/V inpatient initiation	0.9332	\$17,118	\$1,529	\$449
National Level				
100% Uptake				
Strategy	Hospital Costs** (Millions)	Medication Costs (Millions)	Total Costs (Millions)	Annual Savings† (Millions)
Enalapril indefinitely	\$3,456	\$33	\$3,489	
Enalapril 2 months, S/V outpatient	\$2,525	\$1,195	\$3,720	-\$231
S/V inpatient initiation	\$1,967	\$1,427	\$3,396	\$92
50% Uptake				
Enalapril indefinitely	\$3,456	\$33	\$3,489	
Enalapril 2 months, S/V outpatient	\$2,990	\$614	\$3,604	-\$115
S/V inpatient initiation	\$2,712	\$730	\$3,442	\$47

* Per year alive compared to Enalapril indefinitely.

** Hospital costs includes both HF and non-HF admissions. Costs for hospitalizations include both reimbursement rate

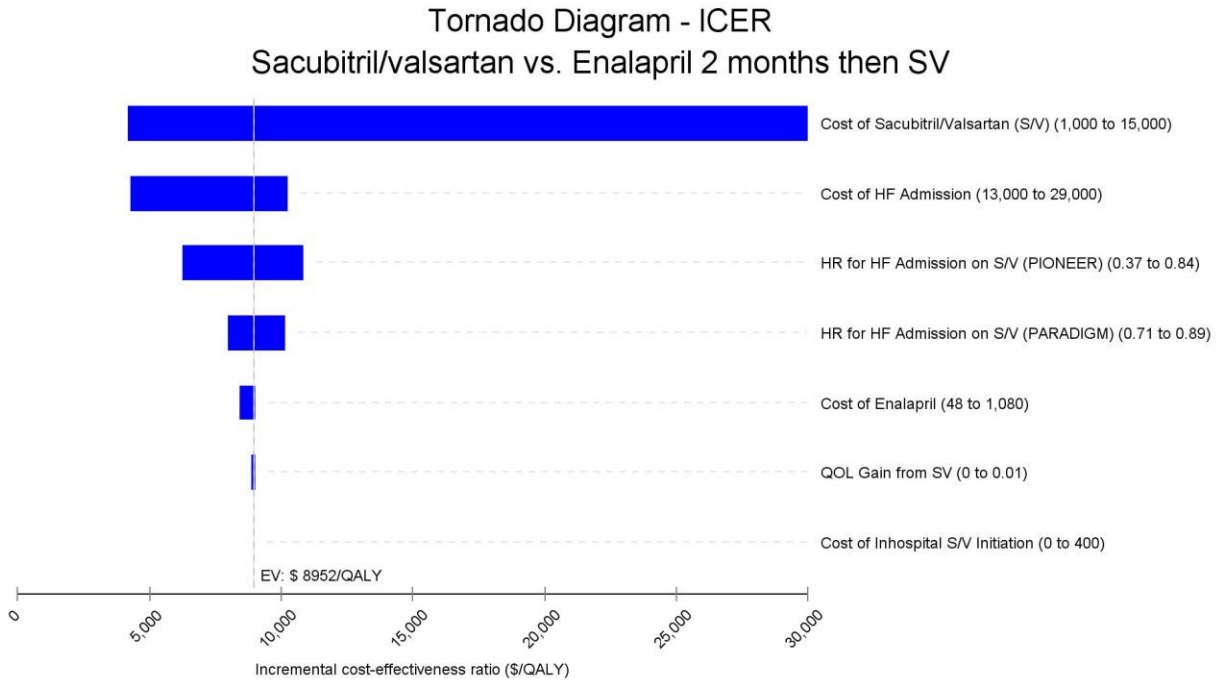
† Compared to Enalapril indefinitely.

* Per year alive compared to Enalapril indefinitely.

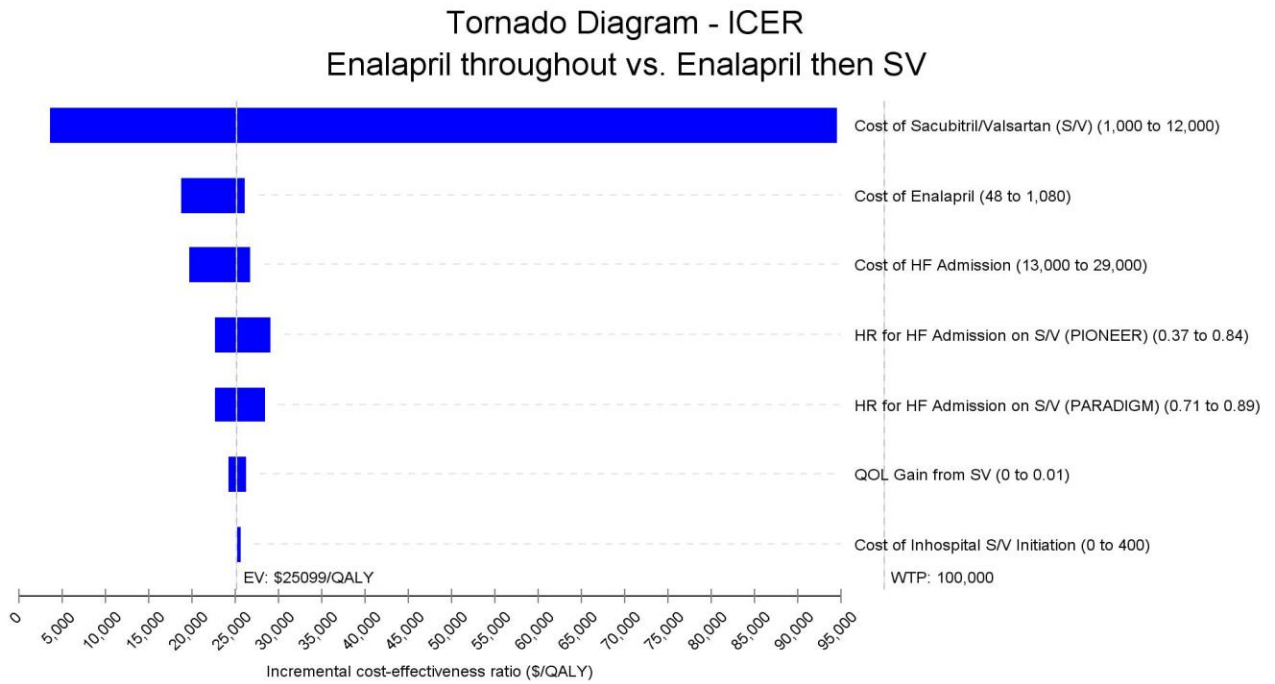
** Hospital costs includes both HF and nonHF admissions. Costs for hospitalizations include both reimbursement rates of Medicare and private insurance in proportion to the population.

†Compared to Enalapril indefinitely.

eFigure 1. One-Way Sensitivity Analyses Comparing Sacubitril/Valsartan Inpatient Versus Enalapril Inpatient Then Sacubitril/Valsartan as an Outpatient



eFigure 2. One-Way Sensitivity Analyses Comparing Enalapril Throughout Versus Enalapril Inpatient Then Sacubitril/Valsartan as an Outpatient



eReferences

1. Benjamin JE, Muntner SP, Alonso WA, Bittencourt PM, Callaway MC, Carson RA, et al. Heart Disease and Stroke Statistics—2019 Update: A Report From the American Heart Association. *Circulation*. 2019;139(10):e56-e66.
2. Roger LV. Epidemiology of Heart Failure. *Circulation research*. 2013;113(6):646-59.