

Supplemental Table 1

Primary Event Rates by TS grouping, TOPCAT Americas

	Placebo			Spironolactone			p
	Events	Total	Rate (%)	Events	Total	Rate (%)	
TS < 1.14	48	198	24.2	47	182	25.8	NS
TS 1.14-2.63	223	663	33.6	180	678	26.5	0.006
TS > 2.63	9	19	47.4	15	26	57.7	NS

NS = non-significant ($p > 0.05$)

Supplemental Table 2

Primary Event Rates by Zone, TOPCAT participants with Echocardiographic Data

	Placebo			Spironolactone		
	Event	Total	Rate (%)	Event	Total	Rate (%)
Zone 1	18	80	22.5	12	78	15.4
Zone 2	21	100	21.0	24	86	27.9
Zone 3	85	273	31.1*	81	307	26.4
Zone 4	1	5	20.0	2	6	33.3

* compared to non-zone-3, $p = 0.03$.

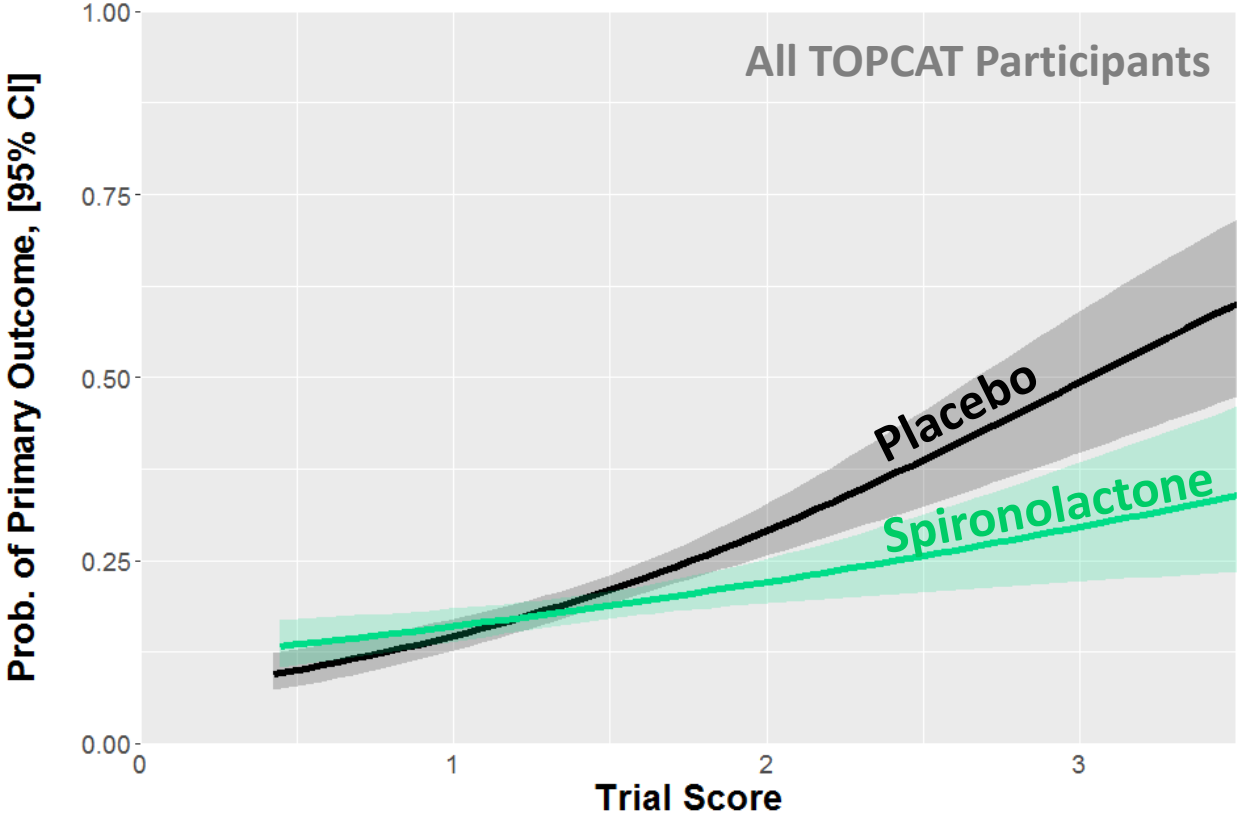
For all other comparisons, $p > 0.05$

Zone 3 pts have elevated risk on placebo but not on spironolactone

Zone 1: HFpEF is unlikely (H2FPEF score ≤ 2). **Zone 2:** HFpEF is likely (H2FPEF score ≥ 3), and the patient is well represented in TOPCAT but unlikely benefit from spironolactone ($TS < 1.14$). **Zone 3:** HFpEF is likely (H2FPEF score ≥ 3), and the patient is well represented in TOPCAT and likely benefit from spironolactone ($1.14 \leq TS < 2.63$). **Zone 4:** HFpEF is likely (H2FPEF score ≥ 3), but the patient is not well represented in TOPCAT, so there is unclear benefit from spironolactone ($TS \geq 2.63$)

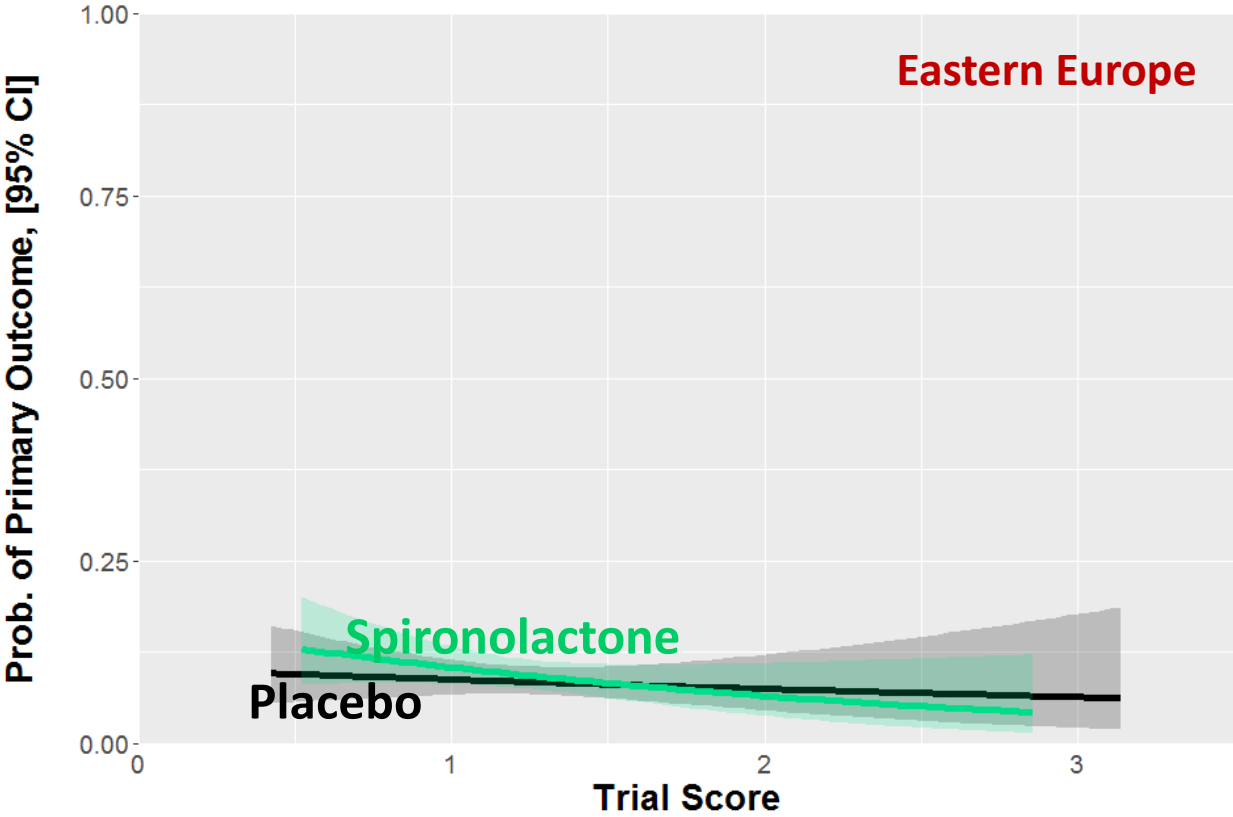
Supplemental Figure 1

TOPCAT primary event rate—cardiovascular mortality, aborted cardiac arrest, or heart failure hospitalization—as a function of treatment arm and TS for all TOPCAT participants (Americas and Eastern Europe combined).



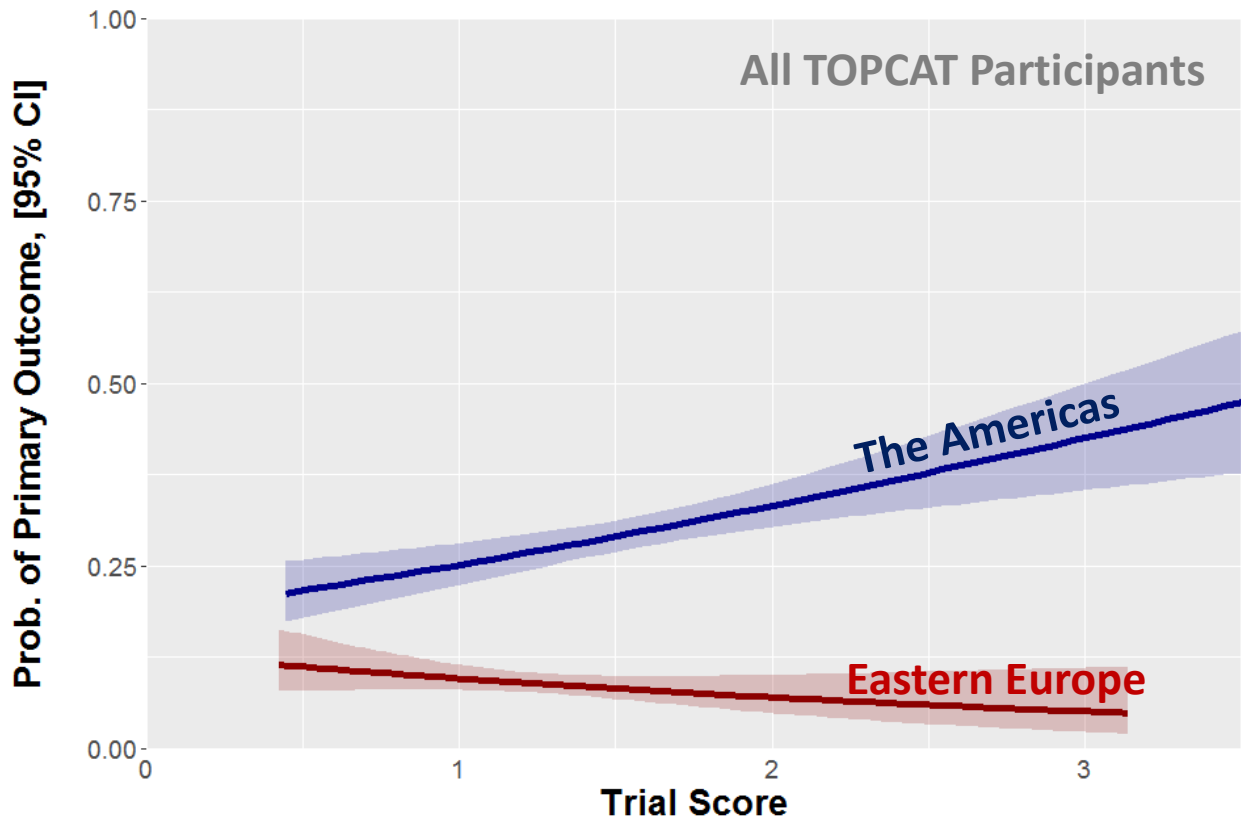
Supplemental Figure 2

TOPCAT primary event rate—cardiovascular mortality, aborted cardiac arrest, or heart failure hospitalization—as a function of treatment arm and TS for Eastern European TOPCAT participants. Event rates among the Eastern European participants did not correlate with spironolactone treatment or TS, but were also quite low.



Supplemental Figure 3

TOPCAT primary event rate—cardiovascular mortality, aborted cardiac arrest, or heart failure hospitalization—as a function of geographic location and TS. Event rates among the Eastern European participants were quite low compared to participants in the Americas.



Supplemental Figure 4 - Example screenshots of the TOPCAT Trial Score calculator. The calculator will accept input for each of the 9 component baseline characteristics of the score. If a characteristic is not available, it can be left blank. The score, text guidance, and plots will auto-refresh with any change in the characteristics. If a $K \geq 5$ mEq/L or $Cr \geq 2.5$ mg/dL are entered, the score will not be provided, and a notice will specify that these are generally contraindications to spironolactone.

	Age (y)	BMI	Creatinine (mg/dL)	K (mEq/L)	Glucose (mg/dL)	HR	SBP	LVEF (%)	LA Vol (ml)	TS
→	65	22	2	4.5	100	75	190	65	60	
example 1	73	33	1.3	4.4	125	61	116			0.64
example 2	82	32	1.5	3.8		95	135	60	70	1.59
example 3	50	25	2	4.8	100	55	120	75	50	2.88

The trial score is: **2.40**

If you deem that HFpEF is likely, the patient is in Zone 3, meaning the patient is well represented by TOPCAT-Americas, AND spironolactone is associated with benefit.

The TOPCAT Trial Score Calculator

Instructions:
Insert your patient's characteristics into row 2 above. If a characteristic is not available, leave the cell blank.

	Age (y)	BMI	Creatinine (mg/dL)	K (mEq/L)	Glucose (mg/dL)	HR	SBP	LVEF (%)	LA Vol (ml)	TS
→	65	22	2	5.2	100	75	190	65	60	
example 1	73	33	1.3	4.4	125	61	116			0.64
example 2	82	32	1.5	3.8		95	135	60	70	1.59
example 3	50	25	2	4.8	100	55	120	75	50	2.88

The trial score is: **not calculated - K at this level is generally considered a contraindication to spironolactone**

If you deem that HFpEF is likely, the patient's K or Cr is generally considered a contraindication to spironolactone.

The TOPCAT Trial Score Calculator

Instructions:
Insert your patient's characteristics into row 2 above. If a characteristic is not available, leave the cell blank.