

## Supplementary Online Content

Gheorghiade M, Böhm M, Greene SJ, et al. Effect of aliskiren on postdischarge mortality and heart failure readmissions among patients hospitalized for heart failure: the ASTRONAUT randomized trial. *JAMA*. doi:10.1001/jama.2013.1954.

eTable 1. Change from Baseline in Log-transformed NT-proBNP

eTable 2. Most Common Adverse Events ( $\geq 5\%$  in any group), by Treatment Group

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

**eTable 1. Change from Baseline in Log-transformed NT-proBNP (pg/mL)**

<b>Time Point</b>	<b>Treatment</b>	<b>N</b>	<b>Median NT-proBNP (IQR)</b>	<b>Ratio: End Point/ Baseline  Adjusted Geometric Mean (95% CI)</b>	<b>Ratio: Aliskiren/ Placebo (95% CI)</b>	<b>P-value (Two-Sided)</b>
Month 1	Aliskiren	669	2433 (1275-4387)	0.86 (0.81-0.91)		
	Placebo	675	2522 (1455-4625)	0.95 (0.90-1.00)	0.90 (0.84-0.97)	.01
Month 6	Aliskiren	569	1754 (864-3641)	0.64 (0.59-0.70)		
	Placebo	556	1879 (1015-3781)	0.76 (0.70- 0.82)	0.85 (0.76-0.95)	<.01
Month 12	Aliskiren	447	1576 (681-3156)	0.62 (0.57-0.69)		
	Placebo	425	1792 (887-3518)	0.74 (0.67-0.82)	0.84 (0.73-0.96)	<.01

Abbreviations: CI, confidence interval; IQR, interquartile range; NT-proBNP, N-terminal pro- brain natriuretic peptide.

**eTable 2. Most Common Adverse Events (≥ 5% in any group), by Treatment Group**

	<b>Aliskiren N = 808 n (%)</b>	<b>Placebo N = 810 n (%)</b>	<b>Total N = 1618 n (%)</b>
Number of patients with at least one AE <sup>a</sup>	670 (82.9)	667 (82.3)	1337 (82.6)
Hyperkalemia	163 (20.2)	138 (17.0)	301 (18.6)
Hypotension	135 (16.7)	95 (11.7)	230 (14.2)
Cough	61 (7.5)	54 (6.7)	115 (7.1)
Renal impairment	52 (6.4)	36 (4.4)	88 (5.4)
Diarrhea	51 (6.3)	39 (4.8)	90 (5.6)
Hypokalemia	46 (5.7)	56 (6.9)	102 (6.3)
Dyspnea	45 (5.6)	45 (5.6)	90 (5.6)
Nausea	43 (5.3)	37 (4.6)	80 (4.9)
Pneumonia	43 (5.3)	40 (4.9)	83 (5.1)
Dizziness	37 (4.6)	43 (5.3)	80 (4.9)
Edema peripheral	37 (4.6)	42 (5.2)	79 (4.9)

<sup>a</sup> A patient with multiple occurrences of an AE under one treatment is counted only once in the AE category for that treatment.

Abbreviations: AE, adverse event.

Note that the definitions of hyperkalemia and hypotension used here differ slightly from the more expansive definitions used in Table 3 of the main text (defined in the Table 3 footnote).

**eTable 3. Maximum Post-baseline Potassium and Minimum Post-baseline eGFR (Safety Set)**

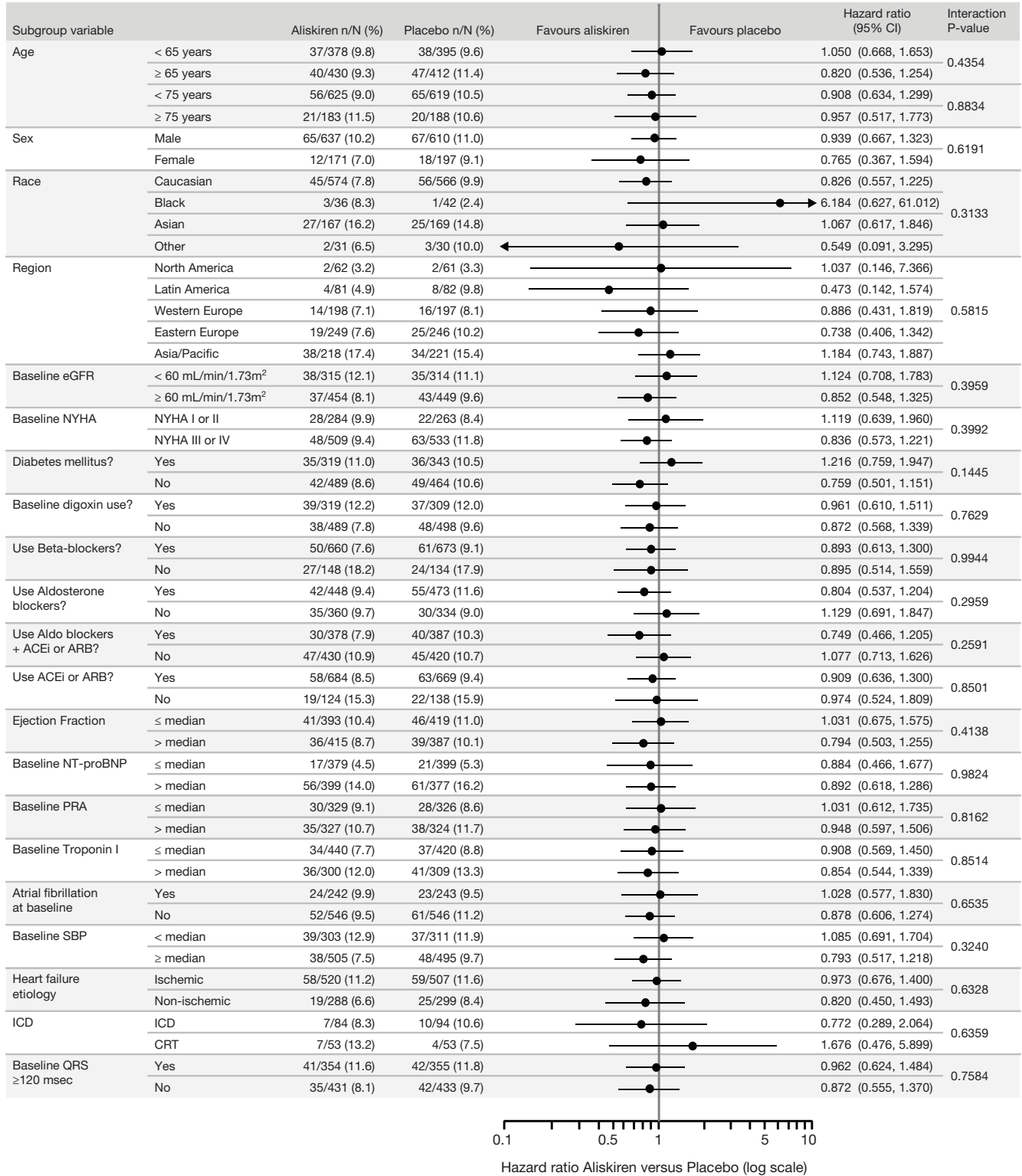
<b>Parameters</b>	<b>Criterion</b>	<b>Aliskiren N = 808 n/Total (%)</b>	<b>Placebo N = 810 n/Total (%)</b>
Potassium (mmol/L)	<3.5	1/774 (0.1)	0
	≥3.5 and <5.0	353/774 (45.6)	408/778 (52.4)
	≥5.0 and <5.5	246/774 (31.8)	230/778 (29.6)
	≥5.5 and <6.0	111/774 (14.3)	100/778 (12.9)
	≥6.0	63/774 (8.1)	40/778 (5.1)
eGFR (mL/min/1.73 m <sup>2</sup> )	<30.0	84/774 (10.9)	71/779 (9.1)
	≥30.0 and <45.0	209/774 (27.0)	181/779 (23.2)
	≥45.0 and <60.0	224/774 (28.9)	236/779 (30.3)
	≥60.0	257/774 (33.2)	291/779 (37.4)

eGFR was calculated based on the abbreviated MDRD formula.

Abbreviations: eGFR, estimated glomerular filtration rate; MDRD, modification of diet in renal disease.

eFigure. Prespecified Subgroup Analyses Related to Cardiovascular Death at 6 months

CV death – 6 months



Error bars indicate 95% confidence intervals for the hazard ratios. Median values for variables dichotomized at the median: ejection fraction 29%; NT-proBNP 2718 pg/mL; PRA 3.0 ng/mL/h; troponin 0 ng/mL; SBP 120 mmHg. Abbreviations: ACEi, angiotensin converting enzyme inhibitor; ARB, angiotensin II receptor blocker; CI, confidence interval; CRT, cardiac resynchronization therapy; eGFR, estimated glomerular filtration rate; ICD, implantable cardioverter defibrillator; NT-proBNP, N-terminal pro-brain natriuretic peptide; NYHA, New York Heart Association; PRA, plasma renin activity; SBP, systolic blood pressure