

SUPPLEMENTAL MATERIAL

Table S1. Intraobserver and interobserver intraclass correlations for echocardiographic measurements.

Echocardiographic Measurement	Intraclass Correlation	
	Intraobserver (n=15)	Interobserver (n=15)
Lateral E', m/s	0.96	0.96
Septal E', m/s	0.94	0.49
E/lateral e'	0.99	0.97
E/septal e'	0.99	0.99
Left atrial volume, mL	0.49	0.90
LVEDV, mL	0.94	0.94
LVESV, mL	0.87	0.86
LV ejection fraction, %	0.42	0.63
Lateral S', m/s	0.93	0.83
Septal S', m/s	0.47	0.16

Two-way mixed-effects model with 2 raters and 15 targets.

Table S2. Change in rest and exercise hemodynamics, and cardiac workload achieved with exercise after treatment with placebo and ranolazine

	Baseline [IQI]	Ranolazine % Change [IQI]	Placebo % Change [IQI]	Treatment Effect*
Rest Hemodynamics				
Rest heart rate (bpm)	69 [61,77]	0 [-8,5]	0 [-11,6]	p=0.59
Rest systolic BP (mm Hg)	128 [116,137]	-4 [-8,8]	-1 [-10,12]	p=0.77
Rest MAP (mm Hg)	87 [80,92]	-3 [-10,7]	0 [-10,11]	p=0.60
Rest rate-pressure product	8806 [7442,10488]	0 [-9, 13]	-2 [-11,11]	p=0.97
Peak Exercise Hemodynamics				
Peak heart rate (bpm)	126 [118,136]	-4 [-7,0]	-2 [-7,2]	p=0.47
Peak systolic BP (mm Hg)	174 [164,186]	-3 [-8,0]	-5 [-11,3]	p=0.97
Peak MAP (mm Hg)	109 [103,121]	-3 [-8,6]	-1 [-8,5]	p=0.81
Peak rate-pressure product	22304 [20160,25944]	-6 [-14,-2]	-7 [-17,2]	p=0.51
Cardiac Workload Achieved With Exercise				
METS	5.0 [4.0,5.9]	0 [0,0]	0 [0,0]	p=0.60
Peak:rest rate-pressure product	2.6 [2.2,2.9]	-8 [-16,7]	-7 [-18,15]	p=0.74

*Treatment effect p value based on mixed linear regression model with % change from baseline as the outcome variable and fixed variables of treatment phase (ranolazine vs. placebo), treatment order, and per-patient average daily ranolazine and placebo dose. A per-patient random effect was also included to account for any within-patient correlation of repeated measures. BP, blood pressure; IQI, interquartile interval, MAP, mean arterial pressure; METS, metabolic equivalents.

Table S3. Peak exercise vs. immediate post-peak hemodynamics for all PET studies.

	Peak Exercise [IQI]	Immediate Post-Peak [IQI]
Heart rate (bpm)	126 [113,136]	113 [100,126]
Systolic BP (mm Hg)	172 [160,184]	173 [153,185]
MAP (mm Hg)	109 [101,118]	107 [97,117]
Rate-pressure product	21360 [18984,23944]	19379 [15714,22684]

BP, blood pressure; IQI, interquartile interval; MAP, mean arterial pressure.