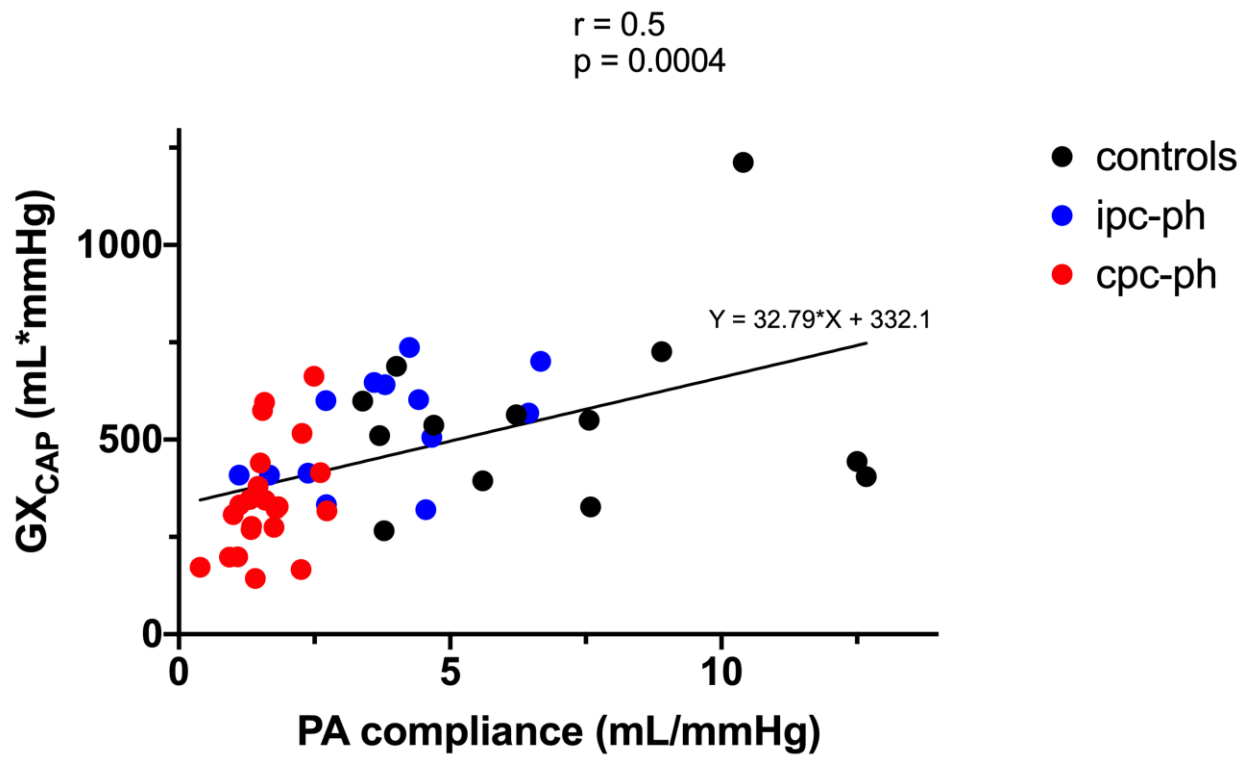Figure S1:

Figure S1: A scatter plot of gas exchange derived estimate of pulmonary vascular capacitance, GX_{CAP} and right heart catheterization study derived pulmonary artery (PA) compliance is shown.

Table S1: Diagnosis of control subjects

Control subject	Diagnosis
1	Systemic sclerosis associated dysautonomia
2	Dysautonomia
3	History of inflammatory arthritis
4	History of systemic sclerosis
5	Hereditary hemorrhagic telangiectasia
6	History of Raynaud's
7	History of rheumatoid arthritis
8	Lyme disease associated dysautonomia
9	Dysautonomia
10	Dysautonomia
11	History of systemic sclerosis
12	History of systemic sclerosis
13	History of inflammatory arthritis
14	History of systemic sclerosis
15	History of systemic sclerosis
16	History of recurrent thrombo-embolism with negative VQ scan
17	History of multiple myeloma
18	Dysautonomia

VQ – ventilation perfusion
Dysautonomia includes clinically suspected postural orthostatic hypotension (POTS), dysautonomia and/or orthostatic hypotension, with or without confirmative skin biopsy.

Table S2: Univariate model for predicting extrapolated VO_2 (%predicted) in HFpEF using sub-maximum CPET derived variables

Variable	ß-coefficient	p-value	95% confidence interval
Delta $ETCO_2$ (mmHg)	8.01	0.01	1.96 – 14.05
Rest $ETCO_2$ (mmHg)	1.64	0.62	-5.03 – 8.31
GX_{CAP} (mL*mmHg)	8.78	0.01	2.26 – 15.29
VE/VCO_2	-7.32	0.01	-13.3 - -1.32

Abbreviations are: CPET – cardiopulmonary exercise test; VO_2 – oxygen consumption; $ETCO_2$ – end tidal carbon dioxide; GX_{CAP} – gas exchange derived pulmonary vascular capacitance; VE/VCO_2 - ventilatory efficiency.