

Sex and Hemodynamics in Pulmonary Arterial Hypertension

Supplementary Material

Figure E1. Least square means of baseline hemodynamics by sex and age with adjustment for race, height, weight, and study in subjects connective tissue disease-associated pulmonary arterial hypertension.

Marker=point estimate; whiskers=95% confidence interval

RAP=right atrial pressure; MPAP=mean pulmonary artery pressure; CO=cardiac output;

PCWP=pulmonary capillary wedge pressure; PVR=pulmonary vascular resistance

Table E1. Baseline characteristics of the study sample with connective tissue disease associated-pulmonary arterial hypertension, by sex

Variable	Sex		P value
	Men	Women	
Number	61	428	
Age, yr	56.9 ± 10.9	54.2 ± 13.8	0.22
Race, n (%)			0.21
Caucasian	56 (91.8)	344 (80.4)	
African-American	3 (4.9)	28 (6.5)	
Asian	0 (0.0)	21 (4.9)	
Hispanic	2 (3.3)	30 (7.0)	
Other	0 (0.0)	5 (1.2)	
Height, cm	175.4 ± 7.4	159.8 ± 7.2	<0.001
Weight, kg	80.9 ± 13.4	67.2 ± 16.6	<0.001
BMI, kg/m ²	26.3 ± 4.0	26.3 ± 6.0	0.27
Warfarin use, n (%)	24 (42.9)	227 (57.5)	0.04
Study, n (%)			0.68
AIR	5 (8.2)	24 (5.6)	
AIR-II	0 (0.0)	4 (0.9)	
ARIES-1	5 (8.2)	51 (11.9)	
ARIES-2	9 (14.8)	48 (11.2)	
Bosentan 351	0 (0.0)	5 (1.2)	
BREATHE-1	8 (13.1)	38 (8.9)	
STRIDE-1	3 (4.9)	39 (9.1)	
STRIDE-2	8 (13.1)	63 (14.7)	
STRIDE-4	1 (1.6)	13 (3.0)	
SUPER	13 (21.3)	64 (15.0)	
Treprostinil	9 (14.8)	79 (18.5)	
NYHA functional class, n (%)			0.58
I	1 (1.7)	8 (1.9)	
II	23 (38.3)	171 (40.4)	
III	35 (58.3)	221 (52.2)	
IV	1 (1.7)	23 (5.4)	
Baseline 6MWD, m	348.0 ± 89.0	320.6 ± 87.0	0.02
Baseline hemodynamics*			
Right atrial pressure, mm Hg	9.5 ± 5.5	8.0 ± 5.1	0.03
Mean pulmonary artery pressure, mm Hg	45.9 ± 10.9	46.0 ± 12.5	0.80
Cardiac output, L/min	4.7 ± 1.4	4.2 ± 1.5	0.01
Cardiac index, L/min/m ²	2.4 ± 0.6	2.5 ± 0.8	0.39
Pulmonary capillary wedge pressure, mm Hg	9.1 ± 3.0	9.0 ± 3.6	0.67
Pulmonary vascular resistance, Wood units	9.3 ± 5.5	10.7 ± 6.7	0.29
Pulmonary vascular resistance index, Wood units•m ²	18.4 ± 11.7	18.1 ± 11.2	0.43

Data are shown as mean \pm standard deviation or percentage. *Unadjusted values. BMI=body mass index; AIR=Aerosolized Iloprost Randomized; ARIES=Ambrisentan in Pulmonary Arterial Hypertension, Randomized, Double-Blind, Placebo-Controlled, Multicenter Efficacy Studies; BREATHE=Bosentan: Randomized Trial of Endothelin receptor Antagonist Therapy; STRIDE=Sitaxsentan To Relieve Impaired Exercise; SUPER=Sildenafil Use in Pulmonary Hypertension; NYHA=New York Heart Association; 6MWD=six-minute walk distance.

Table E2. Associations between sex and baseline hemodynamics in subjects with connective tissue disease-associated pulmonary arterial hypertension

Variable	Age	Difference between men and women	95% CI	P value
Right atrial pressure, mm Hg	.	1.60	-0.04 – 3.25	0.06
Mean pulmonary artery pressure, mm Hg*	.	1.09	-2.84 – 5.02	0.56
Cardiac output, L/min	.	-0.19	-0.63 – 0.25	0.40
Cardiac index, L/min/m ² *	.	-0.11	-0.31 – 0.10	0.29
Pulmonary capillary wedge pressure, mm Hg	.	-0.60	-1.75 – 0.56	0.31
Pulmonary vascular resistance, Wood units	.	0.45	-1.62 – 2.53	0.67
Pulmonary vascular resistance index, Wood units•m ² *	.	0.60	-2.31 – 3.52	0.68

All models adjusted for age, race, height, weight, study except for cardiac index and pulmonary vascular resistance index. *Adjusted for age, race, study.