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Circulating plasma concentrations of ACE2 in men and women with heart failure and effects of renin-angiotensin-aldosterone-inhibitors

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1 **Table 1:** Baseline characteristics according to quartiles of plasma ACE concentrations (index cohort)

	Q1[2.78,4.80)	Q2[4.80,5.25)	Q3[5.25,5.76)	Q4[5.76,8.72]	p-value	N
	<i>N=506</i>	<i>N=505</i>	<i>N=506</i>	<i>N=505</i>		
Index Cohort						
ACE2 plasma concentrations (NPX)	4.49 [4.25;4.65]	5.03 [4.92;5.14]	5.48 [5.35;5.62]	6.17 [5.97;6.52]	0.000	2022
Sex:					<0.001	2022
Men	329 (65.0%)	353 (69.9%)	381 (75.3%)	422 (83.6%)		
Women	177 (35.0%)	152 (30.1%)	125 (24.7%)	83 (16.4%)		
Age (years)	69.0 [61.0;77.0]	71.0 [62.0;79.0]	71.0 [62.0;78.0]	70.0 [61.0;78.0]	0.394	2022
Body mass index (kg/m ²)	27.2 [24.5;31.1]	27.1 [24.0;30.9]	26.6 [23.8;29.8]	27.2 [24.2;31.0]	0.148	1990
Heart rate (beats/minute)	74.0 [65.0;84.0]	76.0 [68.0;90.0]	77.0 [67.0;90.0]	78.0 [69.0;90.0]	<0.001	2017

	Q1[2.78,4.80]	Q2[4.80,5.25]	Q3[5.25,5.76]	Q4[5.76,8.72]	p-value	N
	<i>N=506</i>	<i>N=505</i>	<i>N=506</i>	<i>N=505</i>		
Systolic blood pressure (mmHg)	125 [110;140]	121 [110;140]	120 [110;136]	120 [108;132]	<0.001	2018
Left ventricular ejection fraction	30.0 [25.0;38.0]	30.0 [25.0;36.0]	30.0 [24.0;37.0]	30.0 [23.0;35.0]	<0.001	1804
New York Heart Association (NYHA) class:					<0.001	1961
I	17 (3.44%)	11 (2.25%)	11 (2.23%)	3 (0.62%)		
II	216 (43.7%)	198 (40.5%)	164 (33.3%)	138 (28.5%)		
III	214 (43.3%)	230 (47.0%)	239 (48.5%)	278 (57.3%)		
IV	47 (9.51%)	50 (10.2%)	79 (16.0%)	66 (13.6%)		
History of Atrial fibrillation	196 (38.7%)	197 (39.0%)	242 (47.8%)	283 (56.0%)	<0.001	2022
Renal disease	136 (26.9%)	133 (26.3%)	145 (28.7%)	161 (31.9%)	0.199	2022
Diabetes	160 (31.6%)	169 (33.5%)	150 (29.6%)	166 (32.9%)	0.574	2022
Hypertension	330 (65.2%)	308 (61.0%)	322 (63.6%)	286 (56.6%)	0.029	2022

	Q1[2.78,4.80)	Q2[4.80,5.25)	Q3[5.25,5.76)	Q4[5.76,8.72]	p-value	N
	<i>N=506</i>	<i>N=505</i>	<i>N=506</i>	<i>N=505</i>		
Chronic obstructive pulmonary disease	99 (19.6%)	92 (18.2%)	76 (15.0%)	79 (15.6%)	0.178	2022
Myocardial infarction	184 (36.4%)	199 (39.4%)	173 (34.2%)	197 (39.0%)	0.276	2022
Ischemic HF etiology	257 (51.7%)	275 (55.6%)	260 (52.8%)	290 (58.1%)	0.175	1983
Coronary artery disease	211 (41.7%)	232 (45.9%)	205 (40.5%)	245 (48.5%)	0.037	2022
Coronary artery by-pass graft	73 (14.4%)	85 (16.8%)	73 (14.4%)	117 (23.2%)	<0.001	2022
Percutaneous coronary intervention	101 (20.0%)	110 (21.8%)	98 (19.4%)	112 (22.2%)	0.632	2022
Use of Angiotensin Converting Enzyme (ACE) inhibitor or Angiotensin Receptor Blocker (ARB)	374 (73.9%)	365 (72.3%)	351 (69.4%)	366 (72.5%)	0.434	2022
Beta-blockers	427 (84.4%)	423 (83.8%)	407 (80.4%)	423 (83.8%)	0.325	2022
ACE inhibitors	304 (60.1%)	315 (62.4%)	310 (61.3%)	315 (62.4%)	0.857	2022
ARBs	72 (14.2%)	59 (11.7%)	49 (9.68%)	56 (11.1%)	0.150	2022
Mineralocorticoid Receptor Antagonist (MRA)	256 (50.6%)	249 (49.3%)	259 (51.2%)	299 (59.2%)	0.007	2022
ACE inhibitors and MRA:					0.043	2022

	Q1[2.78,4.80)	Q2[4.80,5.25)	Q3[5.25,5.76)	Q4[5.76,8.72]	p-value	N
	<i>N=506</i>	<i>N=505</i>	<i>N=506</i>	<i>N=505</i>		
ACEi with MRA	154 (30.4%)	168 (33.3%)	172 (34.0%)	189 (37.4%)		
ACEi without MRA	150 (29.6%)	147 (29.1%)	138 (27.3%)	126 (25.0%)		
MRA without ACEi	102 (20.2%)	81 (16.0%)	87 (17.2%)	110 (21.8%)		
no ACEi and no MRA	100 (19.8%)	109 (21.6%)	109 (21.5%)	80 (15.8%)		