Supplementary table 1. Subject characteristics for patients with available follow-up data for the respective cardiac or aortic measures. RA = right atrial, RV = right ventricular, RVOT = right ventricular outflow tract, LA = left atrial, LV = left ventricular, IVS = interventricular septum.

	RA area						
	BMI <18.5 kg/m²	**BMI 18.5-25 kg/m²**	**BMI 25-30 kg/m²**	**BMI 30-35 kg/m²**	**BMI 35-40 kg/m²**	**BMI ≥40 kg/m²**	**All**
Subjects, n (%)	1413 (2)	18200 (31)	20080 (34)	11973 (20)	4784 (8)	3066 (5)	59516 (100)
Events, n (%)	186 (13.2)	1656 (9.1)	1481 (7.4)	777 (6.5)	330 (6.9)	183 (6.0)	4613 (7.8)
Female sex, n (%)	1012 (72)	9714 (53)	8250 (41)	5367 (45)	2535 (53)	1865 (61)	28743 (48)
Age, years	68 [39-81]	66 [47-78]	66 [53-76]	65 [54-74]	63 [52-71]	59 [49-68]	65 [52-76]
Follow-up, years	5.6 [2-8.2]	7 [4.7-11.2]	7.3 [5.3-11.3]	7.2 [5.4-10.9]	7.2 [5.4-10.3]	6.9 [5.3-9.5]	7.1 [5.2-11]
	RV diameter						
	BMI <18.5 kg/m²	**BMI 18.5-25 kg/m²**	**BMI 25-30 kg/m²**	**BMI 30-35 kg/m²**	**BMI 35-40 kg/m²**	**BMI ≥40 kg/m²**	**All**
Subjects, n (%)	93 (3)	1062 (32)	1148 (35)	624 (19)	226 (7)	125 (4)	3278 (100)
Events, n (%)	15 (16.1)	114 (10.7)	97 (8.4)	54 (8.7)	20 (8.8)	8 (6.4)	308 (9.4)
Female sex, n (%)	46 (50)	416 (39)	335 (29)	220 (35)	92 (41)	62 (50)	1171 (36)
Age, years	60 [39-79]	62 [43-76]	63 [49-74]	62 [49-71]	59 [47-68]	55 [46-65]	62 [47-74]
Follow-up, years	6.6 [3.2-9.4]	6.8 [3.6-9.5]	7 [5.4-9.6]	7.1 [5.5-9.8]	7.3 [5.5-9.7]	7 [5.8-9.2]	7 [5.1-9.6]
	LA area						
	BMI <18.5 kg/m²	**BMI 18.5-25 kg/m²**	**BMI 25-30 kg/m²**	**BMI 30-35 kg/m²**	**BMI 35-40 kg/m²**	**BMI ≥40 kg/m²**	**All**
Subjects, n (%)	2259 (2)	28224 (31)	30373 (34)	17697 (20)	7236 (8)	4807 (5)	90596 (100)
Events, n (%)	302 (13.4)	2634 (9.3)	2267 (7.5)	1182 (6.7)	498 (6.9)	316 (6.6)	7199 (7.9)
Female sex, n (%)	1573 (70)	14468 (51)	11922 (39)	7678 (43)	3692 (51)	2899 (60)	42232 (47)
Age, years	67 [39-81]	66 [47-78]	66 [53-76]	65 [53-74]	63 [52-71]	59 [49-68]	65 [51-76]
Follow-up, years	5.4 [1.7-9]	7.1 [4.2-10.6]	7.7 [5.2-10.9]	7.7 [5.3-10.7]	7.6 [5.3-10.5]	7.3 [5.2-10]	7.4 [5.1-10.6]
	LA diameter						
	BMI <18.5 kg/m²	**BMI 18.5-25 kg/m²**	**BMI 25-30 kg/m²**	**BMI 30-35 kg/m²**	**BMI 35-40 kg/m²**	**BMI ≥40 kg/m²**	**All**
Subjects, n (%)	2315 (3)	29002 (32)	30423 (34)	16880 (19)	6634 (7)	4199 (5)	89453 (100)
Events, n (%)	227 (9.8)	2254 (7.8)	1883 (6.2)	949 (5.6)	382 (5.8)	211 (5.0)	5906 (6.6)
Female sex, n (%)	1572 (68)	15935 (55)	12745 (42)	8006 (47)	3665 (55)	2713 (65)	44636 (50)
Age, years	63 [35-78]	62 [43-76]	64 [51-74]	63 [52-73]	61 [50-70]	58 [47-66]	63 [49-74]
Follow-up, years	6.6 [2.6-11]	8.3 [5.2-12.8]	8.5 [5.6-12.5]	8.3 [5.7-12.1]	8.1 [5.6-11.6]	7.7 [5.5-11.1]	8.3 [5.5-12.4]

Supplementary table 1. Subject characteristics for patients with available follow-up data for the respective cardiac or aortic measures. RA = right atrial, RV = right ventricular, RVOT = right ventricular outflow tract, LA = left atrial, LV = left ventricular, IVS = interventricular septum.

	LA volume						
	BMI <18.5 kg/m^2	**BMI 18.5-25 kg/m^2**	**BMI 25-30 kg/m^2**	**BMI 30-35 kg/m^2**	**BMI 35-40 kg/m^2**	**BMI ≥40 kg/m^2**	**All**
Subjects, n (%)	3314 (2)	48955 (33)	52965 (35)	28382 (19)	10633 (7)	6291 (4)	150540 (100)
Events, n (%)	455 (13.7)	3913 (8.0)	3011 (5.7)	1384 (4.9)	519 (4.9)	311 (4.9)	9593 (6.4)
Female sex, n (%)	2410 (73)	26652 (54)	21113 (40)	12887 (45)	5708 (54)	3909 (62)	72679 (48)
Age, years	71 [45-83]	66 [49-79]	65 [53-76]	64 [53-73]	62 [51-71]	58 [48-67]	64 [51-76]
Follow-up, years	5.7 [2-8.8]	7.4 [5.1-10.2]	7.8 [5.6-10.5]	7.9 [5.7-10.5]	7.8 [5.8-10.4]	7.8 [5.7-10.2]	7.7 [5.5-10.3]
	LV end-diastolic diameter						
	BMI <18.5 kg/m^2	**BMI 18.5-25 kg/m^2**	**BMI 25-30 kg/m^2**	**BMI 30-35 kg/m^2**	**BMI 35-40 kg/m^2**	**BMI ≥40 kg/m^2**	**All**
Subjects, n (%)	6375 (3)	75797 (33)	79414 (35)	42274 (18)	16191 (7)	10058 (4)	230109 (100)
Events, n (%)	673 (10.6)	6186 (8.2)	4752 (6.0)	2296 (5.4)	849 (5.2)	539 (5.4)	15295 (6.6)
Female sex, n (%)	4287 (67)	40620 (54)	31613 (40)	19151 (45)	8699 (54)	6181 (62)	110551 (48)
Age, years	66 [42-80]	64 [46-78]	64 [52-75]	63 [52-73]	61 [50-70]	58 [48-67]	63 [50-75]
Follow-up, years	6.1 [2.1-9.8]	7.2 [5-10.5]	7.5 [5.4-10.6]	7.5 [5.5-10.5]	7.4 [5.5-10.3]	7.1 [5.4-9.9]	7.3 [5.3-10.5]
	LV end-diastolic volume						
	BMI <18.5 kg/m^2	**BMI 18.5-25 kg/m^2**	**BMI 25-30 kg/m^2**	**BMI 30-35 kg/m^2**	**BMI 35-40 kg/m^2**	**BMI ≥40 kg/m^2**	**All**
Subjects, n (%)	1385 (2)	22609 (35)	23721 (37)	11135 (17)	3633 (6)	1537 (2)	64020 (100)
Events, n (%)	177 (12.8)	1707 (7.6)	1182 (5.0)	475 (4.3)	135 (3.7)	58 (3.8)	3734 (5.8)
Female sex, n (%)	1037 (75)	12430 (55)	9261 (39)	5161 (46)	2059 (57)	1048 (68)	30996 (48)
Age, years	73 [47-84]	66 [48-79]	64 [52-75]	63 [52-73]	60 [50-70]	59 [48-68]	64 [50-76]
Follow-up, years	5.6 [2.1-8.2]	6.9 [5.2-9.2]	7.2 [5.5-9.4]	7.2 [5.6-9.4]	7.2 [5.7-9.4]	7 [5.5-8.9]	7 [5.4-9.3]
	IVS thickness						
	BMI <18.5 kg/m^2	**BMI 18.5-25 kg/m^2**	**BMI 25-30 kg/m^2**	**BMI 30-35 kg/m^2**	**BMI 35-40 kg/m^2**	**BMI ≥40 kg/m^2**	**All**
Subjects, n (%)	6468 (3)	76878 (33)	80629 (35)	42795 (18)	16345 (7)	10130 (4)	233245 (100)
Events, n (%)	677 (10.5)	6305 (8.2)	4855 (6.0)	2331 (5.4)	852 (5.2)	539 (5.3)	15559 (6.7)
Female sex, n (%)	4361 (67)	41092 (54)	32034 (40)	19358 (45)	8796 (54)	6244 (62)	111885 (48)
Age, years	66 [42-80]	64 [46-78]	64 [52-75]	63 [52-73]	61 [50-70]	58 [47-67]	63 [50-75]
Follow-up, years	6.1 [2.1-9.8]	7.1 [5-10.5]	7.4 [5.4-10.6]	7.5 [5.5-10.5]	7.4 [5.5-10.2]	7.1 [5.4-9.8]	7.3 [5.3-10.4]

Supplementary table 1. Subject characteristics for patients with available follow-up data for the respective cardiac or aortic measures. RA = right atrial, RV = right ventricular, RVOT = right ventricular outflow tract, LA = left atrial, LV = left ventricular, IVS = interventricular septum.

	LV mass						
	BMI <18.5 kg/m²	**BMI 18.5-25 kg/m²**	**BMI 25-30 kg/m²**	**BMI 30-35 kg/m²**	**BMI 35-40 kg/m²**	**BMI ≥40 kg/m²**	**All**
Subjects, n (%)	6229 (3)	74029 (33)	77534 (35)	41112 (18)	15681 (7)	9659 (4)	224244 (100)
Events, n (%)	650 (10.4)	6000 (8.1)	4583 (5.9)	2204 (5.4)	805 (5.1)	512 (5.3)	14754 (6.6)
Female sex, n (%)	4205 (68)	39815 (54)	30997 (40)	18715 (46)	8506 (54)	5989 (62)	108227 (48)
Age, years	66 [42-80]	64 [46-78]	64 [52-75]	63 [52-73]	61 [50-70]	58 [48-67]	63 [50-75]
Follow-up, years	6.1 [2.1-9.9]	7.1 [5-10.5]	7.5 [5.4-10.6]	7.5 [5.5-10.5]	7.4 [5.5-10.3]	7.1 [5.4-9.8]	7.3 [5.3-10.5]
	Aortic sinus diameter						
	BMI <18.5 kg/m²	**BMI 18.5-25 kg/m²**	**BMI 25-30 kg/m²**	**BMI 30-35 kg/m²**	**BMI 35-40 kg/m²**	**BMI ≥40 kg/m²**	**All**
Subjects, n (%)	2157 (2)	30172 (33)	32361 (36)	16629 (18)	6032 (7)	3454 (4)	90805 (100)
Events, n (%)	284 (13.2)	2470 (8.2)	1767 (5.5)	793 (4.8)	277 (4.6)	174 (5.0)	5765 (6.3)
Female sex, n (%)	1551 (72)	16252 (54)	12411 (38)	7364 (44)	3181 (53)	2054 (60)	42813 (47)
Age, years	72 [45-83]	66 [49-80]	65 [53-76]	64 [53-73]	61 [51-70]	58 [49-67]	64 [51-76]
Follow-up, years	5.7 [1.8-8.4]	7.3 [5.1-9.6]	7.6 [5.6-9.8]	7.6 [5.7-9.7]	7.7 [5.8-9.6]	7.4 [5.6-9.3]	7.5 [5.4-9.7]
	Aorta at sinotubular diameter						
	BMI <18.5 kg/m²	**BMI 18.5-25 kg/m²**	**BMI 25-30 kg/m²**	**BMI 30-35 kg/m²**	**BMI 35-40 kg/m²**	**BMI ≥40 kg/m²**	**All**
Subjects, n (%)	1334 (2)	18454 (30)	21422 (35)	12233 (20)	4563 (8)	2607 (4)	60613 (100)
Events, n (%)	199 (14.9)	1757 (9.5)	1432 (6.7)	711 (5.8)	274 (6.0)	143 (5.5)	4516 (7.5)
Female sex, n (%)	922 (69)	9072 (49)	7552 (35)	4963 (41)	2219 (49)	1491 (57)	26219 (43)
Age, years	72 [45-83]	69 [52-80]	67 [56-77]	66 [55-75]	63 [53-72]	60 [50-68]	67 [54-77]
Follow-up, years	5.5 [1.6-8.6]	7.4 [4.7-10.4]	7.9 [5.5-10.8]	7.9 [5.7-10.6]	7.8 [5.7-10.4]	7.7 [5.6-10.1]	7.7 [5.3-10.5]
	Aortic root diameter						
	BMI <18.5 kg/m²	**BMI 18.5-25 kg/m²**	**BMI 25-30 kg/m²**	**BMI 30-35 kg/m²**	**BMI 35-40 kg/m²**	**BMI ≥40 kg/m²**	**All**
Subjects, n (%)	4773 (2)	64890 (33)	68263 (35)	35731 (18)	13498 (7)	7983 (4)	195138 (100)
Events, n (%)	541 (11.3)	5104 (7.9)	3867 (5.7)	1788 (5.0)	673 (5.0)	383 (4.8)	12356 (6.3)
Female sex, n (%)	3272 (69)	35236 (54)	27404 (40)	16425 (46)	7352 (55)	5029 (63)	94718 (49)
Age, years	68 [41-81]	64 [46-78]	64 [52-75]	63 [52-73]	61 [51-70]	58 [48-67]	63 [50-75]
Follow-up, years	5.9 [2.1-9.6]	7.4 [5.1-10.9]	7.7 [5.6-11]	7.8 [5.7-10.9]	7.7 [5.7-10.7]	7.4 [5.5-10.3]	7.6 [5.4-10.9]

Supplementary table 1. Subject characteristics for patients with available follow-up data for the respective cardiac or aortic measures. RA = right atrial, RV = right ventricular, RVOT = right ventricular outflow tract, LA = left atrial, LV = left ventricular, IVS = interventricular septum.

	Ascending aorta diameter						
	BMI <18.5 kg/m²	**BMI 18.5-25 kg/m²**	**BMI 25-30 kg/m²**	**BMI 30-35 kg/m²**	**BMI 35-40 kg/m²**	**BMI ≥40 kg/m²**	**All**
Subjects, n (%)	2693 (3)	30316 (30)	34761 (34)	20283 (20)	8117 (8)	5219 (5)	101389 (100)
Events, n (%)	295 (11.0)	2977 (9.8)	2610 (7.5)	1355 (6.7)	539 (6.6)	358 (6.9)	8134 (8.0)
Female sex, n (%)	1770 (66)	15311 (51)	13455 (39)	8743 (43)	4033 (50)	3101 (59)	46413 (46)
Age, years	66 [43-80]	67 [49-79]	66 [54-77]	65 [54-74]	62 [52-71]	59 [49-68]	65 [52-76]
Follow-up, years	5.9 [1.9-9.6]	6.5 [3.6-9.3]	6.9 [5.1-9.8]	7 [5.2-9.7]	6.9 [5.2-9.6]	6.7 [5.2-9.2]	6.8 [4.9-9.6]
	Aortic arch diameter						
	BMI <18.5 kg/m²	**BMI 18.5-25 kg/m²**	**BMI 25-30 kg/m²**	**BMI 30-35 kg/m²**	**BMI 35-40 kg/m²**	**BMI ≥40 kg/m²**	**All**
Subjects, n (%)	454 (3)	5127 (30)	5861 (35)	3324 (20)	1318 (8)	763 (5)	16847 (100)
Events, n (%)	43 (9.5)	440 (8.6)	363 (6.2)	183 (5.5)	77 (5.8)	52 (6.8)	1158 (6.9)
Female sex, n (%)	303 (67)	2532 (49)	2135 (36)	1303 (39)	638 (48)	452 (59)	7363 (44)
Age, years	52 [26-77]	63 [42-77]	64 [51-75]	62 [50-72]	61 [50-69]	57 [47-66]	63 [48-74]
Follow-up, years	5.8 [2.1-8.7]	6.6 [4.8-9]	6.7 [5.3-9.1]	6.9 [5.4-9.1]	6.7 [5.3-8.9]	6.6 [5.2-8.5]	6.7 [5.2-9]

Supplementary Table 2. Statistical analyses for 5-year cardiovascular mortality for aorta at sinotubular diameter indexed by different metrics.

BSA = body surface area, [M] = Mosteller, [DB] = Du Bois, LBM = lean body mass, [H] = Hume, [B] = Boer, [J] = James, BMI = body mass index.

	C statistic			Hazard Ratio per 1 SD increment			p value		
	BMI <18.5 kg/m^2	**BMI 18.5-30 kg/m^2**	**BMI ≥30 kg/m^2**	**BMI <18.5 kg/m^2**	**BMI 18.5-30 kg/m^2**	**BMI ≥30 kg/m^2**	**BMI <18.5 kg/m^2**	**BMI 18.5-30 kg/m^2**	**BMI ≥30 kg/m^2**
Weight	0.573 [0.532-0.613]	0.554 [0.544-0.565]	0.498 [0.480-0.516]	1.23 [1.11-1.35]	1.28 [1.23-1.32]	1.02 [0.94-1.11]	<0.0001	<0.0001	0.63
Weight^1.5	0.589 [0.549-0.628]	0.570 [0.560-0.580]	0.508 [0.491-0.526]	1.21 [1.11-1.32]	1.33 [1.29-1.38]	1.10 [0.98-1.22]	<0.0001	<0.0001	0.10
Height*Weight	0.585 [0.546-0.625]	0.562 [0.551-0.572]	0.508 [0.491-0.526]	1.24 [1.12-1.36]	1.28 [1.24-1.33]	1.07 [0.99-1.17]	<0.0001	<0.0001	0.10
BSA[M]^1.5	0.574 [0.534-0.614]	0.550 [0.539-0.560]	0.500 [0.482-0.518]	1.23 [1.12-1.37]	1.24 [1.20-1.29]	1.03 [0.96-1.11]	<0.0001	<0.0001	0.44
BSA[DB]^1.5	0.574 [0.534-0.614]	0.547 [0.537-0.558]	0.501 [0.484-0.519]	1.24 [1.12-1.37]	1.23 [1.19-1.27]	1.03 [0.96-1.11]	<0.0001	<0.0001	0.37
BSA[M]	0.558 [0.517-0.598]	0.532 [0.522-0.543]	0.509 [0.490-0.527]	1.21 [1.09-1.35]	1.17 [1.13-1.21]	0.98 [0.92-1.05]	0.0004	<0.0001	0.66
BSA[DB]	0.558 [0.517-0.599]	0.530 [0.520-0.541]	0.508 [0.489-0.526]	1.22 [1.09-1.36]	1.16 [1.12-1.20]	0.99 [0.93-1.06]	0.0004	<0.0001	0.73
LBM[H]	0.569 [0.529-0.609]	0.535 [0.525-0.545]	0.495 [0.478-0.513]	1.25 [1.12-1.39]	1.17 [1.14-1.21]	1.00 [0.94-1.07]	<0.0001	<0.0001	0.89
LBM[B]	0.569 [0.529-0.609]	0.532 [0.521-0.542]	0.511 [0.493-0.528]	1.27 [1.13-1.42]	1.16 [1.12-1.20]	0.98 [0.92-1.04]	<0.0001	<0.0001	0.54
LBM[J]	0.566 [0.526-0.606]	0.533 [0.523-0.543]	0.487 [0.469-0.504]	1.24 [1.11-1.39]	1.18 [1.13-1.22]	1.00 [0.95-1.06]	0.0001	<0.0001	0.89
BMI	0.526 [0.484-0.568]	0.525 [0.514-0.536]	0.525 [0.507-0.543]	1.13 [1.01-1.26]	1.15 [1.11-1.20]	0.90 [0.82-0.98]	0.028	<0.0001	0.016
Height^2.7	0.569 [0.530-0.609]	0.528 [0.518-0.538]	0.504 [0.486-0.522]	1.29 [1.14-1.47]	1.15 [1.11-1.19]	1.03 [0.98-1.09]	<0.0001	<0.0001	0.25
Height^2.13	0.561 [0.521-0.601]	0.520 [0.510-0.531]	0.498 [0.480-0.516]	1.27 [1.12-1.45]	1.12 [1.09-1.17]	1.01 [0.96-1.07]	0.0002	<0.0001	0.69
Height^2	0.560 [0.520-0.600]	0.518 [0.508-0.529]	0.497 [0.479-0.514]	1.27 [1.11-1.44]	1.12 [1.08-1.16]	1.01 [0.95-1.07]	0.0003	<0.0001	0.84
Height^1.5	0.551 [0.510-0.591]	0.511 [0.500-0.522]	0.508 [0.490-0.526]	1.24 [1.09-1.41]	1.08 [1.05-1.12]	0.98 [0.93-1.04]	0.0012	<0.0001	0.54
Height	0.539 [0.498-0.581]	0.503 [0.492-0.514]	0.513 [0.495-0.531]	1.21 [1.06-1.37]	1.05 [1.01-1.08]	0.96 [0.90-1.01]	0.0055	0.012	0.13
Unindexed	*0.514 [0.472-0.556]*	*0.514 [0.503-0.525]*	*0.526 [0.507-0.544]*	*1.12 [0.97-1.28]*	*0.97 [0.93-1.00]*	*0.91 [0.86-0.96]*	*0.12*	*0.077*	*0.0012*

Supplementary Table 3. Statistical analyses for 5-year cardiovascular mortality for aortic sinus diameter indexed by different metrics.

BSA = body surface area, [M] = Mosteller, [DB] = Du Bois, LBM = lean body mass, [H] = Hume, [B] = Boer, [J] = James, BMI = body mass index.

	C statistic			Hazard Ratio per 1 SD increment			p value		
	BMI <18.5 kg/m^2	BMI 18.5-30 kg/m^2	BMI ≥30 kg/m^2	BMI <18.5 kg/m^2	BMI 18.5-30 kg/m^2	BMI ≥30 kg/m^2	BMI <18.5 kg/m^2	BMI 18.5-30 kg/m^2	BMI ≥30 kg/m^2
Weight	0.640 [0.610-0.670]	0.645 [0.636-0.653]	0.562 [0.546-0.578]	1.36 [1.26-1.47]	1.76 [1.70-1.81]	1.47 [1.34-1.61]	<0.0001	<0.0001	<0.0001
Weight^1.5	0.629 [0.598-0.659]	0.634 [0.625-0.642]	0.553 [0.537-0.570]	1.26 [1.18-1.34]	1.69 [1.64-1.74]	1.54 [1.38-1.72]	<0.0001	<0.0001	<0.0001
Height*Weight	0.627 [0.597-0.658]	0.637 [0.629-0.645]	0.564 [0.547-0.580]	1.32 [1.22-1.42]	1.64 [1.60-1.69]	1.45 [1.34-1.57]	<0.0001	<0.0001	<0.0001
BSA[M]^1.5	0.635 [0.605-0.665]	0.645 [0.637-0.653]	0.571 [0.554-0.587]	1.38 [1.27-1.49]	1.68 [1.63-1.73]	1.44 [1.34-1.56]	<0.0001	<0.0001	<0.0001
BSA[DB]^1.5	0.633 [0.603-0.663]	0.644 [0.635-0.652]	0.574 [0.557-0.590]	1.37 [1.27-1.49]	1.64 [1.59-1.68]	1.42 [1.33-1.52]	<0.0001	<0.0001	<0.0001
BSA[M]	0.642 [0.613-0.672]	0.646 [0.638-0.654]	0.576 [0.560-0.593]	1.40 [1.29-1.53]	1.63 [1.59-1.68]	1.39 [1.30-1.48]	<0.0001	<0.0001	<0.0001
BSA[DB]	0.641 [0.611-0.671]	0.645 [0.637-0.653]	0.579 [0.563-0.596]	1.40 [1.29-1.53]	1.60 [1.56-1.64]	1.38 [1.30-1.47]	<0.0001	<0.0001	<0.0001
LBM[H]	0.624 [0.594-0.654]	0.628 [0.620-0.636]	0.564 [0.548-0.580]	1.36 [1.25-1.48]	1.52 [1.48-1.56]	1.32 [1.24-1.40]	<0.0001	<0.0001	<0.0001
LBM[B]	0.626 [0.596-0.656]	0.617 [0.608-0.625]	0.543 [0.527-0.559]	1.39 [1.27-1.52]	1.48 [1.44-1.52]	1.22 [1.15-1.29]	<0.0001	<0.0001	<0.0001
LBM[J]	0.626 [0.595-0.657]	0.619 [0.610-0.627]	0.546 [0.530-0.562]	1.38 [1.26-1.50]	1.57 [1.52-1.62]	1.07 [1.05-1.08]	<0.0001	<0.0001	<0.0001
BMI	0.624 [0.592-0.655]	0.615 [0.607-0.624]	0.533 [0.517-0.549]	1.28 [1.18-1.37]	1.61 [1.56-1.67]	1.20 [1.10-1.31]	<0.0001	<0.0001	<0.0001
Height^2.7	0.620 [0.590-0.650]	0.618 [0.610-0.626]	0.580 [0.564-0.596]	1.42 [1.29-1.57]	1.46 [1.42-1.50]	1.27 [1.22-1.32]	<0.0001	<0.0001	<0.0001
Height^2.13	0.628 [0.598-0.658]	0.621 [0.613-0.629]	0.584 [0.568-0.601]	1.44 [1.31-1.59]	1.47 [1.43-1.51]	1.32 [1.26-1.37]	<0.0001	<0.0001	<0.0001
Height^2	0.630 [0.600-0.659]	0.621 [0.613-0.630]	0.585 [0.569-0.601]	1.44 [1.31-1.59]	1.47 [1.43-1.51]	1.32 [1.27-1.39]	<0.0001	<0.0001	<0.0001
Height^1.5	0.635 [0.605-0.664]	0.618 [0.610-0.626]	0.585 [0.569-0.601]	1.45 [1.32-1.60]	1.45 [1.41-1.49]	1.34 [1.28-1.41]	<0.0001	<0.0001	<0.0001
Height	0.635 [0.606-0.665]	0.607 [0.599-0.616]	0.579 [0.563-0.596]	1.44 [1.31-1.59]	1.40 [1.37-1.44]	1.32 [1.25-1.39]	<0.0001	<0.0001	<0.0001
Unindexed	*0.613 [0.582-0.644]*	*0.568 [0.560-0.577]*	*0.552 [0.536-0.568]*	*1.36 [1.22-1.51]*	*1.26 [1.22-1.29]*	*1.20 [1.14-1.26]*	*<0.0001*	*<0.0001*	*<0.0001*

Supplementary Table 4. Statistical analyses for 5-year cardiovascular mortality for aortic arch diameter indexed by different metrics.

BSA = body surface area, [M] = Mosteller, [DB] = Du Bois, LBM = lean body mass, [H] = Hume, [B] = Boer, [J] = James, BMI = body mass index.

	C statistic			Hazard Ratio per 1 SD increment			p value		
	BMI <18.5 kg/m^2	**BMI 18.5-30 kg/m^2**	**BMI ≥30 kg/m^2**	**BMI <18.5 kg/m^2**	**BMI 18.5-30 kg/m^2**	**BMI ≥30 kg/m^2**	**BMI <18.5 kg/m^2**	**BMI 18.5-30 kg/m^2**	**BMI ≥30 kg/m^2**
Weight	0.685 [0.613-0.757]	0.620 [0.601-0.640]	0.516 [0.483-0.549]	1.29 [1.12-1.49]	1.56 [1.46-1.66]	1.19 [1.01-1.40]	0.0006	<0.0001	0.037
Weight^1.5	0.679 [0.607-0.750]	0.625 [0.605-0.644]	0.521 [0.488-0.554]	1.21 [1.07-1.37]	1.59 [1.49-1.69]	1.26 [1.02-1.54]	0.0021	<0.0001	0.030
Height*Weight	0.679 [0.608-0.749]	0.627 [0.608-0.646]	0.527 [0.494-0.561]	1.25 [1.09-1.44]	1.54 [1.45-1.63]	1.27 [1.09-1.48]	0.0011	<0.0001	0.0024
BSA[M]^1.5	0.682 [0.611-0.754]	0.622 [0.602-0.641]	0.523 [0.490-0.556]	1.30 [1.12-1.51]	1.52 [1.43-1.61]	1.23 [1.07-1.41]	0.0005	<0.0001	0.0042
BSA[DB]^1.5	0.682 [0.611-0.753]	0.622 [0.602-0.641]	0.526 [0.493-0.559]	1.31 [1.12-1.52]	1.50 [1.41-1.59]	1.24 [1.09-1.41]	0.0005	<0.0001	0.0012
BSA[M]	0.678 [0.605-0.751]	0.608 [0.588-0.628]	0.516 [0.482-0.549]	1.35 [1.15-1.60]	1.46 [1.37-1.55]	1.18 [1.04-1.34]	0.0003	<0.0001	0.011
BSA[DB]	0.677 [0.604-0.750]	0.608 [0.588-0.627]	0.518 [0.485-0.552]	1.36 [1.15-1.61]	1.45 [1.37-1.54]	1.19 [1.05-1.35]	0.0003	<0.0001	0.0049
LBM[H]	0.676 [0.603-0.749]	0.612 [0.592-0.631]	0.523 [0.490-0.557]	1.32 [1.12-1.54]	1.44 [1.36-1.52]	1.22 [1.08-1.38]	0.0007	<0.0001	0.001
LBM[B]	0.680 [0.607-0.752]	0.606 [0.586-0.626]	0.521 [0.488-0.555]	1.34 [1.13-1.59]	1.42 [1.34-1.50]	1.20 [1.07-1.34]	0.0006	<0.0001	0.0019
LBM[J]	0.676 [0.603-0.749]	0.606 [0.586-0.626]	0.531 [0.497-0.564]	1.37 [1.14-1.64]	1.53 [1.43-1.64]	1.09 [1.06-1.11]	0.0006	<0.0001	<0.0001
BMI	0.641 [0.558-0.723]	0.575 [0.555-0.596]	0.517 [0.484-0.550]	1.33 [1.12-1.58]	1.43 [1.33-1.53]	0.98 [0.83-1.15]	0.001	<0.0001	0.77
Height^2.7	0.671 [0.598-0.743]	0.608 [0.589-0.628]	0.538 [0.505-0.571]	1.42 [1.16-1.74]	1.44 [1.35-1.53]	1.26 [1.15-1.38]	0.0008	<0.0001	<0.0001
Height^2.13	0.670 [0.598-0.743]	0.602 [0.583-0.622]	0.532 [0.499-0.566]	1.44 [1.17-1.76]	1.42 [1.34-1.51]	1.26 [1.14-1.39]	0.0005	<0.0001	<0.0001
Height^2	0.671 [0.598-0.744]	0.601 [0.581-0.620]	0.531 [0.498-0.564]	1.44 [1.17-1.77]	1.42 [1.33-1.51]	1.26 [1.13-1.39]	0.0005	<0.0001	<0.0001
Height^1.5	0.669 [0.595-0.743]	0.591 [0.572-0.611]	0.525 [0.491-0.558]	1.47 [1.19-1.81]	1.39 [1.31-1.48]	1.23 [1.10-1.37]	0.0004	<0.0001	0.0002
Height	0.661 [0.585-0.737]	0.579 [0.559-0.599]	0.517 [0.484-0.550]	1.49 [1.20-1.86]	1.35 [1.27-1.44]	1.18 [1.06-1.32]	0.0003	<0.0001	0.0032
Unindexed	*0.630 [0.549-0.712]*	*0.548 [0.528-0.569]*	*0.502 [0.469-0.535]*	*1.55 [1.20-2.00]*	*1.24 [1.16-1.32]*	*1.07 [0.96-1.20]*	*0.0007*	*<0.0001*	*0.22*

Supplementary Table 5. Statistical analyses for 5-year cardiovascular mortality for aortic root diameter indexed by different metrics.

BSA = body surface area, [M] = Mosteller, [DB] = Du Bois, LBM = lean body mass, [H] = Hume, [B] = Boer, [J] = James, BMI = body mass index.

	C statistic			Hazard Ratio per 1 SD increment			p value		
	BMI <18.5 kg/m^2	**BMI 18.5-30 kg/m^2**	**BMI ≥30 kg/m^2**	**BMI <18.5 kg/m^2**	**BMI 18.5-30 kg/m^2**	**BMI ≥30 kg/m^2**	**BMI <18.5 kg/m^2**	**BMI 18.5-30 kg/m^2**	**BMI ≥30 kg/m^2**
Weight	0.631 [0.609-0.653]	0.626 [0.620-0.632]	0.568 [0.557-0.579]	1.23 [1.17-1.29]	1.65 [1.61-1.68]	1.50 [1.41-1.59]	<0.0001	<0.0001	<0.0001
Weight^1.5	0.623 [0.601-0.646]	0.617 [0.611-0.623]	0.562 [0.551-0.573]	1.14 [1.10-1.19]	1.60 [1.57-1.64]	1.57 [1.47-1.67]	<0.0001	<0.0001	<0.0001
Height*Weight	0.626 [0.603-0.648]	0.622 [0.616-0.627]	0.570 [0.559-0.580]	1.24 [1.18-1.30]	1.56 [1.53-1.60]	1.42 [1.36-1.48]	<0.0001	<0.0001	<0.0001
BSA[M]^1.5	0.632 [0.610-0.655]	0.627 [0.622-0.633]	0.574 [0.563-0.584]	1.30 [1.23-1.37]	1.59 [1.56-1.62]	1.43 [1.37-1.50]	<0.0001	<0.0001	<0.0001
BSA[DB]^1.5	0.632 [0.610-0.655]	0.627 [0.621-0.632]	0.575 [0.565-0.586]	1.33 [1.25-1.40]	1.56 [1.53-1.59]	1.39 [1.34-1.45]	<0.0001	<0.0001	<0.0001
BSA[M]	0.634 [0.612-0.656]	0.626 [0.620-0.632]	0.575 [0.564-0.586]	1.35 [1.28-1.44]	1.54 [1.51-1.57]	1.38 [1.33-1.44]	<0.0001	<0.0001	<0.0001
BSA[DB]	0.635 [0.613-0.657]	0.625 [0.620-0.631]	0.577 [0.566-0.588]	1.37 [1.29-1.46]	1.52 [1.49-1.55]	1.37 [1.32-1.43]	<0.0001	<0.0001	<0.0001
LBM[H]	0.626 [0.603-0.649]	0.612 [0.606-0.617]	0.565 [0.554-0.576]	1.38 [1.29-1.46]	1.43 [1.41-1.45]	1.29 [1.24-1.33]	<0.0001	<0.0001	<0.0001
LBM[B]	0.627 [0.605-0.650]	0.600 [0.594-0.606]	0.546 [0.535-0.556]	1.41 [1.32-1.50]	1.39 [1.37-1.42]	1.21 [1.16-1.25]	<0.0001	<0.0001	<0.0001
LBM[J]	0.617 [0.594-0.640]	0.601 [0.595-0.607]	0.544 [0.533-0.555]	1.27 [1.20-1.34]	1.47 [1.44-1.50]	1.07 [1.05-1.08]	<0.0001	<0.0001	<0.0001
BMI	0.595 [0.572-0.618]	0.596 [0.590-0.602]	0.543 [0.532-0.554]	1.15 [1.09-1.22]	1.51 [1.47-1.54]	1.27 [1.20-1.34]	<0.0001	<0.0001	<0.0001
Height^2.7	0.633 [0.611-0.656]	0.608 [0.602-0.613]	0.579 [0.568-0.589]	1.50 [1.40-1.61]	1.43 [1.41-1.46]	1.25 [1.22-1.28]	<0.0001	<0.0001	<0.0001
Height^2.13	0.637 [0.614-0.660]	0.609 [0.604-0.615]	0.581 [0.570-0.591]	1.51 [1.41-1.63]	1.44 [1.41-1.46]	1.29 [1.25-1.33]	<0.0001	<0.0001	<0.0001
Height^2	0.638 [0.615-0.660]	0.609 [0.604-0.615]	0.581 [0.570-0.591]	1.52 [1.41-1.63]	1.44 [1.41-1.46]	1.30 [1.26-1.34]	<0.0001	<0.0001	<0.0001
Height^1.5	0.637 [0.615-0.659]	0.606 [0.600-0.611]	0.579 [0.568-0.589]	1.51 [1.40-1.63]	1.41 [1.39-1.44]	1.31 [1.27-1.35]	<0.0001	<0.0001	<0.0001
Height	0.631 [0.608-0.654]	0.597 [0.591-0.602]	0.573 [0.562-0.584]	1.49 [1.38-1.60]	1.37 [1.35-1.40]	1.30 [1.25-1.34]	<0.0001	<0.0001	<0.0001
Unindexed	*0.599 [0.575-0.622]*	*0.566 [0.560-0.571]*	*0.551 [0.541-0.562]*	*1.36 [1.26-1.48]*	*1.25 [1.22-1.27]*	*1.20 [1.16-1.24]*	*<0.0001*	*<0.0001*	*<0.0001*

Supplementary Table 6. Statistical analyses for 5-year cardiovascular mortality for ascending aorta diameter indexed by different metrics.

BSA = body surface area, [M] = Mosteller, [DB] = Du Bois, LBM = lean body mass, [H] = Hume, [B] = Boer, [J] = James, BMI = body mass index.

	C statistic			Hazard Ratio per 1 SD increment			p value		
	BMI <18.5 kg/m^2	**BMI 18.5-30 kg/m^2**	**BMI ≥30 kg/m^2**	**BMI <18.5 kg/m^2**	**BMI 18.5-30 kg/m^2**	**BMI ≥30 kg/m^2**	**BMI <18.5 kg/m^2**	**BMI 18.5-30 kg/m^2**	**BMI ≥30 kg/m^2**
Weight	0.559 [0.531-0.587]	0.629 [0.622-0.637]	0.583 [0.572-0.595]	1.07 [1.00-1.15]	1.64 [1.59-1.68]	1.49 [1.40-1.57]	0.044	<0.0001	<0.0001
Weight^1.5	0.555 [0.528-0.582]	0.627 [0.619-0.634]	0.578 [0.566-0.590]	1.01 [0.96-1.07]	1.64 [1.60-1.69]	1.65 [1.54-1.77]	0.57	<0.0001	<0.0001
Height*Weight	0.571 [0.543-0.598]	0.627 [0.620-0.635]	0.584 [0.572-0.595]	1.10 [1.03-1.17]	1.59 [1.55-1.63]	1.49 [1.41-1.57]	0.0061	<0.0001	<0.0001
BSA[M]^1.5	0.574 [0.545-0.602]	0.629 [0.622-0.637]	0.588 [0.576-0.599]	1.16 [1.07-1.26]	1.60 [1.56-1.64]	1.44 [1.37-1.51]	0.0004	<0.0001	<0.0001
BSA[DB]^1.5	0.582 [0.553-0.611]	0.628 [0.621-0.636]	0.589 [0.578-0.601]	1.21 [1.11-1.33]	1.59 [1.54-1.63]	1.42 [1.35-1.48]	<0.0001	<0.0001	<0.0001
BSA[M]	0.579 [0.550-0.608]	0.629 [0.621-0.636]	0.591 [0.580-0.603]	1.26 [1.14-1.40]	1.59 [1.54-1.63]	1.38 [1.32-1.45]	<0.0001	<0.0001	<0.0001
BSA[DB]	0.586 [0.557-0.616]	0.628 [0.621-0.636]	0.593 [0.581-0.604]	1.32 [1.18-1.47]	1.58 [1.54-1.62]	1.38 [1.32-1.44]	<0.0001	<0.0001	<0.0001
LBM[H]	0.608 [0.578-0.638]	0.622 [0.614-0.629]	0.584 [0.573-0.596]	1.39 [1.26-1.54]	1.52 [1.48-1.56]	1.36 [1.30-1.42]	<0.0001	<0.0001	<0.0001
LBM[B]	0.609 [0.579-0.639]	0.616 [0.609-0.624]	0.575 [0.564-0.587]	1.42 [1.28-1.58]	1.50 [1.46-1.53]	1.32 [1.26-1.37]	<0.0001	<0.0001	<0.0001
LBM[J]	0.570 [0.542-0.599]	0.617 [0.610-0.625]	0.577 [0.566-0.589]	1.16 [1.06-1.26]	1.57 [1.52-1.61]	1.14 [1.12-1.16]	0.0011	<0.0001	<0.0001
BMI	0.529 [0.501-0.558]	0.615 [0.607-0.622]	0.570 [0.559-0.582]	1.01 [0.94-1.09]	1.57 [1.53-1.62]	1.39 [1.31-1.47]	0.82	<0.0001	<0.0001
Height^2.7	0.633 [0.603-0.664]	0.619 [0.611-0.626]	0.594 [0.583-0.606]	1.68 [1.48-1.90]	1.53 [1.49-1.57]	1.32 [1.28-1.37]	<0.0001	<0.0001	<0.0001
Height^2.13	0.630 [0.600-0.660]	0.620 [0.613-0.627]	0.596 [0.585-0.608]	1.71 [1.50-1.95]	1.54 [1.50-1.59]	1.33 [1.28-1.39]	<0.0001	<0.0001	<0.0001
Height^2	0.629 [0.599-0.659]	0.620 [0.613-0.628]	0.597 [0.585-0.608]	1.71 [1.50-1.96]	1.54 [1.50-1.59]	1.33 [1.28-1.39]	<0.0001	<0.0001	<0.0001
Height^1.5	0.624 [0.593-0.654]	0.620 [0.613-0.627]	0.597 [0.586-0.609]	1.72 [1.50-1.98]	1.54 [1.49-1.58]	1.33 [1.28-1.39]	<0.0001	<0.0001	<0.0001
Height	0.616 [0.586-0.647]	0.617 [0.610-0.624]	0.596 [0.584-0.608]	1.70 [1.47-1.96]	1.52 [1.47-1.56]	1.32 [1.27-1.38]	<0.0001	<0.0001	<0.0001
Unindexed	*0.594 [0.562-0.625]*	*0.602 [0.595-0.610]*	*0.585 [0.573-0.596]*	*1.56 [1.34-1.81]*	*1.44 [1.40-1.49]*	*1.29 [1.23-1.34]*	*<0.0001*	*<0.0001*	*<0.0001*

Supplementary Table 7. Statistical analyses for 5-year cardiovascular mortality for IVS thickness indexed by different metrics.

BSA = body surface area, [M] = Mosteller, [DB] = Du Bois, LBM = lean body mass, [H] = Hume, [B] = Boer, [J] = James, BMI = body mass index.

	C statistic			Hazard Ratio per 1 SD increment			p value		
	BMI <18.5 kg/m^2	**BMI 18.5-30 kg/m^2**	**BMI ≥30 kg/m^2**	**BMI <18.5 kg/m^2**	**BMI 18.5-30 kg/m^2**	**BMI ≥30 kg/m^2**	**BMI <18.5 kg/m^2**	**BMI 18.5-30 kg/m^2**	**BMI ≥30 kg/m^2**
Weight	0.677 [0.658-0.695]	0.695 [0.690-0.700]	0.617 [0.608-0.627]	1.30 [1.26-1.35]	1.67 [1.65-1.69]	1.71 [1.65-1.78]	<0.0001	<0.0001	<0.0001
Weight^1.5	0.654 [0.635-0.672]	0.677 [0.672-0.682]	0.602 [0.593-0.612]	1.17 [1.14-1.21]	1.71 [1.69-1.73]	1.87 [1.79-1.96]	<0.0001	<0.0001	<0.0001
Height*Weight	0.671 [0.652-0.690]	0.683 [0.678-0.688]	0.611 [0.602-0.621]	1.30 [1.26-1.34]	1.64 [1.62-1.65]	1.62 [1.57-1.68]	<0.0001	<0.0001	<0.0001
BSA[M]^1.5	0.686 [0.667-0.705]	0.694 [0.689-0.699]	0.621 [0.612-0.631]	1.37 [1.32-1.42]	1.62 [1.61-1.64]	1.60 [1.55-1.66]	<0.0001	<0.0001	<0.0001
BSA[DB]^1.5	0.690 [0.671-0.709]	0.692 [0.687-0.697]	0.623 [0.613-0.632]	1.40 [1.35-1.45]	1.61 [1.59-1.63]	1.56 [1.52-1.61]	<0.0001	<0.0001	<0.0001
BSA[M]	0.701 [0.682-0.720]	0.699 [0.694-0.704]	0.630 [0.620-0.639]	1.43 [1.38-1.48]	1.60 [1.58-1.61]	1.55 [1.50-1.59]	<0.0001	<0.0001	<0.0001
BSA[DB]	0.704 [0.685-0.723]	0.698 [0.693-0.703]	0.631 [0.621-0.640]	1.45 [1.39-1.50]	1.59 [1.57-1.61]	1.53 [1.49-1.57]	<0.0001	<0.0001	<0.0001
LBM[H]	0.698 [0.679-0.717]	0.680 [0.675-0.685]	0.614 [0.604-0.623]	1.44 [1.39-1.49]	1.55 [1.54-1.57]	1.46 [1.43-1.50]	<0.0001	<0.0001	<0.0001
LBM[B]	0.700 [0.681-0.719]	0.671 [0.666-0.676]	0.595 [0.585-0.605]	1.46 [1.41-1.52]	1.54 [1.52-1.56]	1.39 [1.36-1.43]	<0.0001	<0.0001	<0.0001
LBM[J]	0.677 [0.658-0.697]	0.673 [0.668-0.678]	0.596 [0.587-0.605]	1.39 [1.33-1.44]	1.61 [1.59-1.63]	1.12 [1.11-1.13]	<0.0001	<0.0001	<0.0001
BMI	0.668 [0.649-0.687]	0.691 [0.686-0.696]	0.606 [0.597-0.616]	1.27 [1.23-1.32]	1.65 [1.63-1.67]	1.62 [1.56-1.68]	<0.0001	<0.0001	<0.0001
Height^2.7	0.708 [0.689-0.727]	0.675 [0.670-0.681]	0.622 [0.613-0.632]	1.58 [1.52-1.65]	1.59 [1.57-1.61]	1.40 [1.37-1.43]	<0.0001	<0.0001	<0.0001
Height^2.13	0.714 [0.695-0.733]	0.682 [0.676-0.687]	0.628 [0.619-0.638]	1.58 [1.52-1.65]	1.59 [1.57-1.61]	1.44 [1.41-1.48]	<0.0001	<0.0001	<0.0001
Height^2	0.715 [0.697-0.734]	0.683 [0.678-0.688]	0.629 [0.620-0.639]	1.58 [1.52-1.65]	1.59 [1.57-1.61]	1.45 [1.41-1.48]	<0.0001	<0.0001	<0.0001
Height^1.5	0.718 [0.700-0.737]	0.685 [0.680-0.690]	0.633 [0.623-0.642]	1.59 [1.52-1.65]	1.59 [1.57-1.61]	1.46 [1.43-1.50]	<0.0001	<0.0001	<0.0001
Height	0.719 [0.700-0.738]	0.685 [0.680-0.690]	0.633 [0.624-0.642]	1.59 [1.52-1.65]	1.58 [1.56-1.60]	1.46 [1.43-1.50]	<0.0001	<0.0001	<0.0001
Unindexed	*0.710 [0.690-0.729]*	*0.672 [0.666-0.677]*	*0.623 [0.614-0.632]*	*1.58 [1.52-1.65]*	*1.54 [1.52-1.56]*	*1.43 [1.39-1.46]*	*<0.0001*	*<0.0001*	*<0.0001*

Supplementary Table 8. Statistical analyses for 5-year cardiovascular mortality for LA area indexed by different metrics.

BSA = body surface area, [M] = Mosteller, [DB] = Du Bois, LBM = lean body mass, [H] = Hume, [B] = Boer, [J] = James, BMI = body mass index.

	C statistic			Hazard Ratio per 1 SD increment			p value		
	BMI <18.5 kg/m^2	**BMI 18.5-30 kg/m^2**	**BMI ≥30 kg/m^2**	**BMI <18.5 kg/m^2**	**BMI 18.5-30 kg/m^2**	**BMI ≥30 kg/m^2**	**BMI <18.5 kg/m^2**	**BMI 18.5-30 kg/m^2**	**BMI ≥30 kg/m^2**
Weight	0.734 [0.706-0.762]	0.705 [0.698-0.713]	0.626 [0.613-0.639]	1.24 [1.21-1.28]	1.43 [1.42-1.45]	1.76 [1.68-1.84]	<0.0001	<0.0001	<0.0001
Weight^1.5	0.731 [0.704-0.759]	0.697 [0.690-0.705]	0.618 [0.605-0.631]	1.22 [1.19-1.25]	1.51 [1.50-1.53]	1.96 [1.86-2.08]	<0.0001	<0.0001	<0.0001
Height*Weight	0.731 [0.703-0.758]	0.703 [0.695-0.710]	0.627 [0.614-0.640]	1.26 [1.23-1.29]	1.46 [1.45-1.48]	1.75 [1.67-1.83]	<0.0001	<0.0001	<0.0001
BSA[M]^1.5	0.732 [0.705-0.760]	0.706 [0.698-0.713]	0.631 [0.618-0.644]	1.27 [1.24-1.31]	1.41 [1.40-1.43]	1.68 [1.62-1.75]	<0.0001	<0.0001	<0.0001
BSA[DB]^1.5	0.732 [0.704-0.759]	0.706 [0.698-0.713]	0.633 [0.620-0.645]	1.29 [1.25-1.33]	1.41 [1.39-1.42]	1.65 [1.59-1.71]	<0.0001	<0.0001	<0.0001
BSA[M]	0.731 [0.703-0.759]	0.704 [0.696-0.711]	0.632 [0.619-0.645]	1.29 [1.25-1.33]	1.37 [1.36-1.38]	1.61 [1.55-1.67]	<0.0001	<0.0001	<0.0001
BSA[DB]	0.731 [0.703-0.759]	0.703 [0.696-0.711]	0.633 [0.621-0.646]	1.30 [1.27-1.34]	1.37 [1.35-1.38]	1.59 [1.54-1.65]	<0.0001	<0.0001	<0.0001
LBM[H]	0.726 [0.698-0.754]	0.699 [0.691-0.706]	0.627 [0.615-0.640]	1.34 [1.30-1.39]	1.41 [1.39-1.42]	1.59 [1.53-1.65]	<0.0001	<0.0001	<0.0001
LBM[B]	0.727 [0.699-0.755]	0.693 [0.686-0.701]	0.616 [0.603-0.628]	1.35 [1.30-1.39]	1.43 [1.41-1.44]	1.52 [1.47-1.58]	<0.0001	<0.0001	<0.0001
LBM[J]	0.726 [0.698-0.754]	0.695 [0.687-0.702]	0.615 [0.602-0.628]	1.32 [1.28-1.37]	1.46 [1.44-1.48]	1.11 [1.09-1.12]	<0.0001	<0.0001	<0.0001
BMI	0.724 [0.695-0.753]	0.690 [0.683-0.698]	0.611 [0.598-0.623]	1.23 [1.20-1.26]	1.37 [1.36-1.39]	1.64 [1.56-1.71]	<0.0001	<0.0001	<0.0001
Height^2.7	0.725 [0.697-0.753]	0.697 [0.690-0.705]	0.635 [0.623-0.648]	1.45 [1.39-1.51]	1.41 [1.39-1.42]	1.48 [1.44-1.53]	<0.0001	<0.0001	<0.0001
Height^2.13	0.727 [0.698-0.755]	0.698 [0.690-0.705]	0.636 [0.624-0.649]	1.43 [1.37-1.48]	1.39 [1.37-1.40]	1.50 [1.46-1.55]	<0.0001	<0.0001	<0.0001
Height^2	0.727 [0.699-0.755]	0.697 [0.690-0.705]	0.636 [0.624-0.649]	1.42 [1.37-1.48]	1.38 [1.37-1.39]	1.51 [1.46-1.55]	<0.0001	<0.0001	<0.0001
Height^1.5	0.727 [0.698-0.755]	0.695 [0.688-0.703]	0.635 [0.622-0.647]	1.40 [1.35-1.46]	1.37 [1.35-1.38]	1.51 [1.46-1.55]	<0.0001	<0.0001	<0.0001
Height	0.725 [0.697-0.754]	0.692 [0.684-0.699]	0.632 [0.619-0.644]	1.39 [1.33-1.44]	1.35 [1.34-1.37]	1.50 [1.46-1.55]	<0.0001	<0.0001	<0.0001
Unindexed	*0.718 [0.688-0.747]*	*0.679 [0.671-0.686]*	0.622 [0.609-0.634]	*1.36 [1.31-1.41]*	*1.34 [1.33-1.35]*	*1.47 [1.42-1.51]*	*<0.0001*	*<0.0001*	*<0.0001*

Supplementary Table 9. Statistical analyses for 5-year cardiovascular mortality for LA diameter indexed by different metrics.

BSA = body surface area, [M] = Mosteller, [DB] = Du Bois, LBM = lean body mass, [H] = Hume, [B] = Boer, [J] = James, BMI = body mass index.

	C statistic			Hazard Ratio per 1 SD increment			p value		
	BMI <18.5 kg/m²	**BMI 18.5-30 kg/m²**	**BMI ≥30 kg/m²**	**BMI <18.5 kg/m²**	**BMI 18.5-30 kg/m²**	**BMI ≥30 kg/m²**	**BMI <18.5 kg/m²**	**BMI 18.5-30 kg/m²**	**BMI ≥30 kg/m²**
Weight	0.723 [0.690-0.755]	0.704 [0.696-0.712]	0.652 [0.637-0.666]	1.40 [1.33-1.48]	1.81 [1.77-1.84]	2.20 [2.06-2.35]	<0.0001	<0.0001	<0.0001
Weight^1.5	0.714 [0.681-0.746]	0.680 [0.672-0.689]	0.628 [0.614-0.643]	1.25 [1.20-1.30]	1.73 [1.69-1.77]	2.34 [2.16-2.55]	<0.0001	<0.0001	<0.0001
Height*Weight	0.721 [0.688-0.754]	0.691 [0.683-0.699]	0.640 [0.626-0.654]	1.41 [1.33-1.48]	1.69 [1.66-1.73]	1.98 [1.86-2.10]	<0.0001	<0.0001	<0.0001
BSA[M]^1.5	0.728 [0.694-0.761]	0.705 [0.697-0.713]	0.656 [0.642-0.670]	1.49 [1.40-1.58]	1.76 [1.72-1.79]	2.00 [1.89-2.11]	<0.0001	<0.0001	<0.0001
BSA[DB]^1.5	0.729 [0.696-0.763]	0.704 [0.696-0.712]	0.657 [0.643-0.671]	1.52 [1.43-1.61]	1.74 [1.70-1.77]	1.91 [1.82-2.02]	<0.0001	<0.0001	<0.0001
BSA[M]	0.729 [0.695-0.763]	0.713 [0.705-0.721]	0.671 [0.657-0.685]	1.56 [1.47-1.67]	1.81 [1.77-1.84]	1.98 [1.88-2.08]	<0.0001	<0.0001	<0.0001
BSA[DB]	0.730 [0.697-0.764]	0.713 [0.705-0.721]	0.672 [0.658-0.686]	1.58 [1.48-1.69]	1.80 [1.76-1.84]	1.94 [1.85-2.04]	<0.0001	<0.0001	<0.0001
LBM[H]	0.727 [0.693-0.762]	0.693 [0.685-0.701]	0.646 [0.632-0.660]	1.55 [1.46-1.65]	1.66 [1.63-1.69]	1.74 [1.66-1.83]	<0.0001	<0.0001	<0.0001
LBM[B]	0.727 [0.693-0.761]	0.682 [0.674-0.690]	0.621 [0.607-0.635]	1.58 [1.49-1.68]	1.63 [1.60-1.67]	1.58 [1.51-1.66]	<0.0001	<0.0001	<0.0001
LBM[J]	0.718 [0.685-0.752]	0.683 [0.675-0.692]	0.618 [0.604-0.632]	1.53 [1.43-1.63]	1.77 [1.73-1.81]	1.11 [1.10-1.13]	<0.0001	<0.0001	<0.0001
BMI	0.696 [0.662-0.730]	0.696 [0.688-0.704]	0.644 [0.630-0.659]	1.38 [1.29-1.47]	1.89 [1.84-1.93]	2.09 [1.96-2.23]	<0.0001	<0.0001	<0.0001
Height^2.7	0.731 [0.697-0.766]	0.692 [0.684-0.700]	0.652 [0.638-0.666]	1.72 [1.60-1.85]	1.76 [1.72-1.80]	1.51 [1.46-1.56]	<0.0001	<0.0001	<0.0001
Height^2.13	0.733 [0.698-0.767]	0.699 [0.691-0.707]	0.663 [0.650-0.677]	1.74 [1.62-1.87]	1.81 [1.77-1.85]	1.66 [1.60-1.72]	<0.0001	<0.0001	<0.0001
Height^2	0.732 [0.698-0.767]	0.700 [0.692-0.708]	0.666 [0.652-0.679]	1.74 [1.62-1.87]	1.82 [1.77-1.86]	1.69 [1.63-1.76]	<0.0001	<0.0001	<0.0001
Height^1.5	0.731 [0.696-0.765]	0.703 [0.695-0.711]	0.673 [0.659-0.687]	1.76 [1.63-1.90]	1.85 [1.80-1.89]	1.81 [1.73-1.89]	<0.0001	<0.0001	<0.0001
Height	0.725 [0.690-0.760]	0.702 [0.693-0.710]	0.677 [0.663-0.690]	1.79 [1.65-1.93]	1.86 [1.81-1.90]	1.87 [1.78-1.95]	<0.0001	<0.0001	<0.0001
Unindexed	*0.704 [0.668-0.740]*	*0.686 [0.678-0.694]*	0.667 [0.653-0.681]	*1.83 [1.66-2.01]*	*1.79 [1.75-1.84]*	*1.80 [1.72-1.88]*	*<0.0001*	*<0.0001*	*<0.0001*

Supplementary Table 10. Statistical analyses for 5-year cardiovascular mortality for LA volume indexed by different metrics.

BSA = body surface area, [M] = Mosteller, [DB] = Du Bois, LBM = lean body mass, [H] = Hume, [B] = Boer, [J] = James, BMI = body mass index.

	C statistic			Hazard Ratio per 1 SD increment			p value		
	BMI <18.5 kg/m^2	**BMI 18.5-30 kg/m^2**	**BMI ≥30 kg/m^2**	**BMI <18.5 kg/m^2**	**BMI 18.5-30 kg/m^2**	**BMI ≥30 kg/m^2**	**BMI <18.5 kg/m^2**	**BMI 18.5-30 kg/m^2**	**BMI ≥30 kg/m^2**
Weight	0.725 [0.703-0.747]	0.731 [0.726-0.737]	0.670 [0.660-0.681]	1.41 [1.36-1.47]	1.57 [1.55-1.59]	1.57 [1.51-1.62]	<0.0001	<0.0001	<0.0001
Weight^1.5	0.726 [0.704-0.748]	0.733 [0.728-0.739]	0.667 [0.656-0.677]	1.33 [1.28-1.37]	1.55 [1.53-1.56]	1.69 [1.63-1.76]	<0.0001	<0.0001	<0.0001
Height*Weight	0.724 [0.702-0.746]	0.733 [0.727-0.739]	0.672 [0.662-0.683]	1.39 [1.34-1.45]	1.56 [1.54-1.58]	1.57 [1.52-1.63]	<0.0001	<0.0001	<0.0001
BSA[M]^1.5	0.724 [0.702-0.746]	0.731 [0.725-0.736]	0.673 [0.663-0.684]	1.45 [1.39-1.51]	1.58 [1.56-1.60]	1.52 [1.48-1.57]	<0.0001	<0.0001	<0.0001
BSA[DB]^1.5	0.723 [0.701-0.746]	0.730 [0.724-0.736]	0.674 [0.664-0.685]	1.47 [1.41-1.54]	1.58 [1.56-1.60]	1.51 [1.46-1.55]	<0.0001	<0.0001	<0.0001
BSA[M]	0.722 [0.700-0.744]	0.726 [0.720-0.731]	0.672 [0.662-0.683]	1.53 [1.45-1.60]	1.59 [1.57-1.61]	1.48 [1.43-1.52]	<0.0001	<0.0001	<0.0001
BSA[DB]	0.721 [0.699-0.744]	0.725 [0.719-0.731]	0.673 [0.663-0.683]	1.54 [1.47-1.62]	1.59 [1.57-1.62]	1.47 [1.43-1.51]	<0.0001	<0.0001	<0.0001
LBM[H]	0.719 [0.696-0.741]	0.726 [0.720-0.731]	0.672 [0.661-0.682]	1.51 [1.44-1.59]	1.58 [1.56-1.60]	1.48 [1.44-1.52]	<0.0001	<0.0001	<0.0001
LBM[B]	0.719 [0.697-0.742]	0.723 [0.718-0.729]	0.667 [0.656-0.677]	1.52 [1.45-1.59]	1.57 [1.55-1.59]	1.46 [1.42-1.50]	<0.0001	<0.0001	<0.0001
LBM[J]	0.719 [0.697-0.742]	0.724 [0.718-0.730]	0.666 [0.656-0.677]	1.50 [1.43-1.57]	1.61 [1.59-1.63]	1.14 [1.13-1.15]	<0.0001	<0.0001	<0.0001
BMI	0.719 [0.696-0.741]	0.719 [0.713-0.725]	0.657 [0.647-0.668]	1.44 [1.38-1.50]	1.54 [1.52-1.57]	1.51 [1.46-1.56]	<0.0001	<0.0001	<0.0001
Height^2.7	0.718 [0.696-0.741]	0.723 [0.717-0.729]	0.677 [0.666-0.687]	1.67 [1.57-1.77]	1.62 [1.60-1.64]	1.42 [1.38-1.46]	<0.0001	<0.0001	<0.0001
Height^2.13	0.719 [0.696-0.741]	0.721 [0.716-0.727]	0.676 [0.665-0.686]	1.68 [1.58-1.79]	1.62 [1.60-1.65]	1.42 [1.38-1.46]	<0.0001	<0.0001	<0.0001
Height^2	0.718 [0.696-0.741]	0.721 [0.715-0.727]	0.675 [0.665-0.686]	1.69 [1.59-1.79]	1.62 [1.60-1.65]	1.42 [1.38-1.46]	<0.0001	<0.0001	<0.0001
Height^1.5	0.718 [0.695-0.740]	0.719 [0.713-0.724]	0.673 [0.663-0.684]	1.70 [1.60-1.81]	1.62 [1.59-1.64]	1.42 [1.38-1.45]	<0.0001	<0.0001	<0.0001
Height	0.716 [0.694-0.739]	0.715 [0.710-0.721]	0.671 [0.660-0.681]	1.71 [1.61-1.82]	1.61 [1.59-1.64]	1.41 [1.37-1.45]	<0.0001	<0.0001	<0.0001
Unindexed	*0.712 [0.689-0.735]*	*0.707 [0.701-0.713]*	*0.663 [0.653-0.674]*	*1.74 [1.63-1.85]*	*1.58 [1.56-1.61]*	*1.39 [1.35-1.43]*	*<0.0001*	*<0.0001*	*<0.0001*

Supplementary Table 11. Statistical analyses for 5-year cardiovascular mortality for LV end-diastolic diameter indexed by different metrics.

BSA = body surface area, [M] = Mosteller, [DB] = Du Bois, LBM = lean body mass, [H] = Hume, [B] = Boer, [J] = James, BMI = body mass index.

	C statistic			Hazard Ratio per 1 SD increment			p value		
	BMI <18.5 kg/m^2	**BMI 18.5-30 kg/m^2**	**BMI ≥30 kg/m^2**	**BMI <18.5 kg/m^2**	**BMI 18.5-30 kg/m^2**	**BMI ≥30 kg/m^2**	**BMI <18.5 kg/m^2**	**BMI 18.5-30 kg/m^2**	**BMI ≥30 kg/m^2**
Weight	0.545 [0.523-0.568]	0.611 [0.605-0.617]	0.583 [0.573-0.593]	1.04 [1.00-1.09]	1.65 [1.62-1.68]	1.68 [1.61-1.75]	0.066	<0.0001	<0.0001
Weight^1.5	0.549 [0.528-0.569]	0.609 [0.604-0.615]	0.573 [0.563-0.583]	1.01 [0.97-1.04]	1.63 [1.59-1.66]	1.67 [1.59-1.75]	0.70	<0.0001	<0.0001
Height*Weight	0.552 [0.530-0.573]	0.611 [0.606-0.617]	0.582 [0.573-0.592]	1.07 [1.02-1.12]	1.57 [1.54-1.60]	1.41 [1.38-1.45]	0.0025	<0.0001	<0.0001
BSA[M]^1.5	0.550 [0.528-0.573]	0.611 [0.605-0.617]	0.590 [0.580-0.599]	1.10 [1.05-1.15]	1.59 [1.56-1.62]	1.48 [1.44-1.52]	0.0001	<0.0001	<0.0001
BSA[DB]^1.5	0.554 [0.531-0.576]	0.610 [0.604-0.616]	0.592 [0.582-0.602]	1.13 [1.07-1.19]	1.56 [1.53-1.58]	1.40 [1.37-1.44]	<0.0001	<0.0001	<0.0001
BSA[M]	0.547 [0.524-0.571]	0.603 [0.597-0.609]	0.593 [0.583-0.604]	1.13 [1.07-1.19]	1.55 [1.53-1.58]	1.53 [1.48-1.58]	<0.0001	<0.0001	<0.0001
BSA[DB]	0.551 [0.527-0.575]	0.602 [0.596-0.608]	0.596 [0.586-0.606]	1.16 [1.10-1.22]	1.54 [1.51-1.56]	1.49 [1.45-1.53]	<0.0001	<0.0001	<0.0001
LBM[H]	0.560 [0.537-0.584]	0.597 [0.591-0.603]	0.582 [0.573-0.592]	1.22 [1.16-1.29]	1.44 [1.42-1.46]	1.31 [1.28-1.34]	<0.0001	<0.0001	<0.0001
LBM[B]	0.561 [0.538-0.585]	0.588 [0.582-0.594]	0.562 [0.552-0.572]	1.25 [1.17-1.32]	1.40 [1.38-1.43]	1.28 [1.24-1.31]	<0.0001	<0.0001	<0.0001
LBM[J]	0.539 [0.517-0.562]	0.588 [0.582-0.594]	0.562 [0.552-0.571]	1.08 [1.02-1.14]	1.49 [1.46-1.52]	1.07 [1.06-1.08]	0.0038	<0.0001	<0.0001
BMI	0.489 [0.466-0.513]	0.581 [0.575-0.587]	0.558 [0.548-0.568]	0.98 [0.93-1.02]	1.54 [1.51-1.57]	1.54 [1.47-1.62]	0.34	<0.0001	<0.0001
Height^2.7	0.578 [0.555-0.602]	0.595 [0.589-0.600]	0.596 [0.586-0.606]	1.37 [1.28-1.47]	1.46 [1.44-1.49]	1.22 [1.20-1.24]	<0.0001	<0.0001	<0.0001
Height^2.13	0.574 [0.550-0.598]	0.593 [0.587-0.599]	0.600 [0.590-0.610]	1.35 [1.27-1.45]	1.48 [1.46-1.51]	1.29 [1.27-1.31]	<0.0001	<0.0001	<0.0001
Height^2	0.573 [0.549-0.598]	0.592 [0.586-0.598]	0.600 [0.590-0.610]	1.35 [1.26-1.44]	1.48 [1.46-1.51]	1.31 [1.29-1.33]	<0.0001	<0.0001	<0.0001
Height^1.5	0.567 [0.542-0.592]	0.586 [0.580-0.592]	0.599 [0.589-0.610]	1.32 [1.24-1.41]	1.47 [1.45-1.50]	1.39 [1.36-1.42]	<0.0001	<0.0001	<0.0001
Height	0.557 [0.532-0.583]	0.577 [0.570-0.583]	0.594 [0.583-0.604]	1.29 [1.20-1.38]	1.44 [1.41-1.46]	1.45 [1.41-1.49]	<0.0001	<0.0001	<0.0001
Unindexed	*0.533 [0.508-0.559]*	*0.553 [0.546-0.559]*	0.572 [0.561-0.582]	*1.19 [1.10-1.28]*	*1.31 [1.29-1.34]*	*1.38 [1.34-1.43]*	*<0.0001*	*<0.0001*	*<0.0001*

Supplementary Table 12. Statistical analyses for 5-year cardiovascular mortality for LV end-diastolic volume indexed by different metrics.

BSA = body surface area, [M] = Mosteller, [DB] = Du Bois, LBM = lean body mass, [H] = Hume, [B] = Boer, [J] = James, BMI = body mass index.

	C statistic			Hazard Ratio per 1 SD increment			p value		
	BMI <18.5 kg/m^2	BMI 18.5-30 kg/m^2	BMI ≥30 kg/m^2	BMI <18.5 kg/m^2	BMI 18.5-30 kg/m^2	BMI ≥30 kg/m^2	BMI <18.5 kg/m^2	BMI 18.5-30 kg/m^2	BMI ≥30 kg/m^2
Weight	0.553 [0.503-0.603]	0.598 [0.586-0.610]	0.627 [0.602-0.651]	1.22 [1.12-1.33]	1.44 [1.41-1.47]	1.78 [1.68-1.88]	<0.0001	<0.0001	<0.0001
Weight^1.5	0.575 [0.527-0.624]	0.615 [0.603-0.627]	0.634 [0.611-0.658]	1.21 [1.13-1.30]	1.49 [1.46-1.52]	2.05 [1.92-2.19]	<0.0001	<0.0001	<0.0001
Height*Weight	0.568 [0.518-0.617]	0.607 [0.595-0.619]	0.637 [0.612-0.661]	1.24 [1.14-1.35]	1.46 [1.43-1.50]	1.80 [1.70-1.90]	<0.0001	<0.0001	<0.0001
BSA[M]^1.5	0.552 [0.502-0.602]	0.595 [0.583-0.608]	0.630 [0.605-0.654]	1.24 [1.13-1.36]	1.44 [1.41-1.47]	1.70 [1.62-1.79]	<0.0001	<0.0001	<0.0001
BSA[DB]^1.5	0.552 [0.502-0.602]	0.594 [0.582-0.606]	0.631 [0.606-0.656]	1.25 [1.14-1.37]	1.43 [1.40-1.46]	1.67 [1.59-1.75]	<0.0001	<0.0001	<0.0001
BSA[M]	0.537 [0.486-0.588]	0.582 [0.570-0.594]	0.621 [0.596-0.646]	1.24 [1.12-1.37]	1.41 [1.37-1.44]	1.62 [1.54-1.70]	<0.0001	<0.0001	<0.0001
BSA[DB]	0.537 [0.486-0.588]	0.581 [0.569-0.593]	0.622 [0.597-0.647]	1.25 [1.12-1.39]	1.41 [1.37-1.44]	1.60 [1.53-1.68]	<0.0001	<0.0001	<0.0001
LBM[H]	0.548 [0.498-0.598]	0.586 [0.574-0.598]	0.629 [0.605-0.654]	1.26 [1.13-1.39]	1.42 [1.39-1.45]	1.63 [1.55-1.71]	<0.0001	<0.0001	<0.0001
LBM[B]	0.547 [0.496-0.597]	0.584 [0.572-0.596]	0.627 [0.603-0.652]	1.25 [1.13-1.39]	1.41 [1.38-1.45]	1.62 [1.54-1.70]	<0.0001	<0.0001	<0.0001
LBM[J]	0.548 [0.498-0.598]	0.585 [0.572-0.597]	0.622 [0.597-0.646]	1.23 [1.12-1.36]	1.42 [1.39-1.45]	1.47 [1.41-1.52]	<0.0001	<0.0001	<0.0001
BMI	0.526 [0.476-0.576]	0.577 [0.565-0.589]	0.603 [0.578-0.628]	1.17 [1.07-1.29]	1.38 [1.35-1.41]	1.67 [1.57-1.78]	0.0005	<0.0001	<0.0001
Height^2.7	0.548 [0.498-0.599]	0.581 [0.569-0.594]	0.632 [0.607-0.656]	1.32 [1.17-1.49]	1.43 [1.40-1.46]	1.55 [1.48-1.61]	<0.0001	<0.0001	<0.0001
Height^2.13	0.540 [0.489-0.590]	0.576 [0.564-0.588]	0.627 [0.602-0.651]	1.31 [1.15-1.48]	1.41 [1.38-1.45]	1.54 [1.48-1.61]	<0.0001	<0.0001	<0.0001
Height^2	0.538 [0.487-0.588]	0.575 [0.563-0.587]	0.625 [0.600-0.650]	1.30 [1.15-1.48]	1.41 [1.38-1.44]	1.54 [1.48-1.61]	<0.0001	<0.0001	<0.0001
Height^1.5	0.530 [0.479-0.581]	0.570 [0.558-0.582]	0.620 [0.595-0.645]	1.29 [1.13-1.46]	1.39 [1.36-1.43]	1.53 [1.47-1.60]	0.0001	<0.0001	<0.0001
Height	0.524 [0.473-0.575]	0.565 [0.553-0.577]	0.614 [0.589-0.639]	1.27 [1.11-1.45]	1.38 [1.34-1.41]	1.51 [1.45-1.58]	0.0004	<0.0001	<0.0001
Unindexed	*0.512 [0.461-0.563]*	*0.556 [0.544-0.568]*	0.601 [0.576-0.626]	*1.24 [1.07-1.42]*	*1.34 [1.30-1.37]*	*1.48 [1.41-1.55]*	*0.0033*	*<0.0001*	*<0.0001*

Supplementary Table 13. Statistical analyses for 5-year cardiovascular mortality for LV mass indexed by different metrics.

BSA = body surface area, [M] = Mosteller, [DB] = Du Bois, LBM = lean body mass, [H] = Hume, [B] = Boer, [J] = James, BMI = body mass index.

	C statistic			Hazard Ratio per 1 SD increment			p value		
	BMI <18.5 kg/m^2	**BMI 18.5-30 kg/m^2**	**BMI ≥30 kg/m^2**	**BMI <18.5 kg/m^2**	**BMI 18.5-30 kg/m^2**	**BMI ≥30 kg/m^2**	**BMI <18.5 kg/m^2**	**BMI 18.5-30 kg/m^2**	**BMI ≥30 kg/m^2**
Weight	0.697 [0.677-0.717]	0.723 [0.718-0.728]	0.664 [0.655-0.674]	1.42 [1.37-1.47]	1.77 [1.75-1.80]	1.83 [1.77-1.88]	<0.0001	<0.0001	<0.0001
Weight^1.5	0.686 [0.667-0.706]	0.728 [0.723-0.732]	0.660 [0.651-0.670]	1.25 [1.22-1.29]	1.77 [1.75-1.79]	1.97 [1.91-2.04]	<0.0001	<0.0001	<0.0001
Height*Weight	0.701 [0.682-0.721]	0.728 [0.723-0.733]	0.670 [0.661-0.679]	1.42 [1.37-1.47]	1.74 [1.72-1.76]	1.69 [1.66-1.73]	<0.0001	<0.0001	<0.0001
BSA[M]^1.5	0.707 [0.687-0.727]	0.722 [0.717-0.727]	0.670 [0.661-0.679]	1.53 [1.47-1.59]	1.77 [1.75-1.79]	1.74 [1.69-1.79]	<0.0001	<0.0001	<0.0001
BSA[DB]^1.5	0.711 [0.691-0.731]	0.721 [0.716-0.726]	0.671 [0.662-0.681]	1.58 [1.51-1.65]	1.77 [1.75-1.79]	1.70 [1.65-1.74]	<0.0001	<0.0001	<0.0001
BSA[M]	0.709 [0.689-0.730]	0.710 [0.705-0.715]	0.665 [0.655-0.674]	1.66 [1.59-1.74]	1.77 [1.75-1.80]	1.68 [1.64-1.73]	<0.0001	<0.0001	<0.0001
BSA[DB]	0.712 [0.691-0.732]	0.709 [0.704-0.714]	0.666 [0.657-0.675]	1.71 [1.63-1.79]	1.78 [1.76-1.80]	1.67 [1.63-1.72]	<0.0001	<0.0001	<0.0001
LBM[H]	0.719 [0.698-0.739]	0.715 [0.710-0.720]	0.669 [0.660-0.678]	1.67 [1.60-1.74]	1.75 [1.73-1.77]	1.63 [1.59-1.67]	<0.0001	<0.0001	<0.0001
LBM[B]	0.719 [0.698-0.739]	0.712 [0.707-0.717]	0.662 [0.653-0.671]	1.67 [1.60-1.75]	1.73 [1.71-1.75]	1.60 [1.56-1.64]	<0.0001	<0.0001	<0.0001
LBM[J]	0.703 [0.682-0.723]	0.714 [0.709-0.719]	0.659 [0.650-0.668]	1.59 [1.52-1.66]	1.82 [1.80-1.85]	1.09 [1.08-1.09]	<0.0001	<0.0001	<0.0001
BMI	0.678 [0.657-0.698]	0.693 [0.688-0.698]	0.637 [0.627-0.646]	1.38 [1.33-1.44]	1.72 [1.69-1.74]	1.68 [1.63-1.74]	<0.0001	<0.0001	<0.0001
Height^2.7	0.726 [0.706-0.747]	0.706 [0.701-0.711]	0.672 [0.663-0.681]	1.99 [1.88-2.11]	1.82 [1.80-1.85]	1.46 [1.44-1.49]	<0.0001	<0.0001	<0.0001
Height^2.13	0.724 [0.704-0.745]	0.702 [0.697-0.707]	0.669 [0.660-0.678]	2.03 [1.91-2.15]	1.83 [1.80-1.85]	1.55 [1.52-1.59]	<0.0001	<0.0001	<0.0001
Height^2	0.724 [0.703-0.744]	0.701 [0.696-0.706]	0.668 [0.659-0.677]	2.04 [1.92-2.16]	1.83 [1.80-1.85]	1.56 [1.53-1.60]	<0.0001	<0.0001	<0.0001
Height^1.5	0.720 [0.699-0.740]	0.695 [0.690-0.700]	0.663 [0.654-0.672]	2.05 [1.93-2.18]	1.81 [1.79-1.84]	1.59 [1.55-1.63]	<0.0001	<0.0001	<0.0001
Height	0.715 [0.694-0.736]	0.688 [0.683-0.693]	0.657 [0.648-0.666]	2.06 [1.93-2.19]	1.79 [1.76-1.82]	1.58 [1.54-1.62]	<0.0001	<0.0001	<0.0001
Unindexed	*0.702 [0.681-0.723]*	*0.670 [0.665-0.676]*	0.641 [0.632-0.651]	*2.02 [1.89-2.15]*	*1.72 [1.69-1.74]*	*1.52 [1.48-1.56]*	*<0.0001*	*<0.0001*	*<0.0001*

Supplementary Table 14. Statistical analyses for 5-year cardiovascular mortality for RA area indexed by different metrics.

BSA = body surface area, [M] = Mosteller, [DB] = Du Bois, LBM = lean body mass, [H] = Hume, [B] = Boer, [J] = James, BMI = body mass index.

	C statistic			Hazard Ratio per 1 SD increment			p value		
	BMI <18.5 kg/m^2	BMI 18.5-30 kg/m^2	BMI ≥30 kg/m^2	BMI <18.5 kg/m^2	BMI 18.5-30 kg/m^2	BMI ≥30 kg/m^2	BMI <18.5 kg/m^2	BMI 18.5-30 kg/m^2	BMI ≥30 kg/m^2
Weight	0.704 [0.666-0.742]	0.668 [0.658-0.679]	0.591 [0.574-0.608]	1.42 [1.33-1.50]	1.64 [1.61-1.68]	1.61 [1.52-1.71]	<0.0001	<0.0001	<0.0001
Weight^1.5	0.708 [0.671-0.746]	0.671 [0.661-0.681]	0.589 [0.573-0.606]	1.37 [1.29-1.44]	1.63 [1.60-1.67]	1.75 [1.63-1.88]	<0.0001	<0.0001	<0.0001
Height*Weight	0.705 [0.667-0.743]	0.672 [0.662-0.682]	0.593 [0.576-0.610]	1.40 [1.32-1.48]	1.63 [1.60-1.67]	1.61 [1.52-1.70]	<0.0001	<0.0001	<0.0001
BSA[M]^1.5	0.702 [0.664-0.740]	0.669 [0.659-0.679]	0.593 [0.576-0.610]	1.44 [1.35-1.53]	1.64 [1.60-1.68]	1.56 [1.48-1.65]	<0.0001	<0.0001	<0.0001
BSA[DB]^1.5	0.701 [0.662-0.739]	0.669 [0.658-0.679]	0.594 [0.577-0.610]	1.45 [1.36-1.54]	1.64 [1.60-1.67]	1.54 [1.46-1.62]	<0.0001	<0.0001	<0.0001
BSA[M]	0.695 [0.656-0.734]	0.661 [0.651-0.672]	0.591 [0.575-0.608]	1.49 [1.39-1.60]	1.63 [1.60-1.67]	1.51 [1.44-1.59]	<0.0001	<0.0001	<0.0001
BSA[DB]	0.695 [0.655-0.734]	0.661 [0.651-0.671]	0.592 [0.575-0.608]	1.50 [1.40-1.61]	1.64 [1.60-1.67]	1.50 [1.43-1.58]	<0.0001	<0.0001	<0.0001
LBM[H]	0.694 [0.655-0.733]	0.663 [0.652-0.673]	0.588 [0.572-0.605]	1.47 [1.37-1.57]	1.63 [1.59-1.66]	1.49 [1.41-1.57]	<0.0001	<0.0001	<0.0001
LBM[B]	0.695 [0.656-0.734]	0.659 [0.649-0.669]	0.579 [0.562-0.595]	1.47 [1.38-1.58]	1.62 [1.58-1.66]	1.43 [1.36-1.50]	<0.0001	<0.0001	<0.0001
LBM[J]	0.697 [0.658-0.735]	0.660 [0.649-0.670]	0.577 [0.560-0.593]	1.47 [1.37-1.57]	1.66 [1.62-1.70]	1.15 [1.12-1.17]	<0.0001	<0.0001	<0.0001
BMI	0.687 [0.647-0.727]	0.647 [0.637-0.658]	0.579 [0.563-0.596]	1.45 [1.35-1.55]	1.60 [1.57-1.64]	1.52 [1.43-1.62]	<0.0001	<0.0001	<0.0001
Height^2.7	0.692 [0.653-0.731]	0.662 [0.652-0.672]	0.594 [0.578-0.611]	1.60 [1.47-1.74]	1.67 [1.63-1.71]	1.43 [1.37-1.50]	<0.0001	<0.0001	<0.0001
Height^2.13	0.690 [0.651-0.730]	0.659 [0.648-0.669]	0.593 [0.577-0.610]	1.62 [1.48-1.76]	1.67 [1.63-1.71]	1.45 [1.38-1.52]	<0.0001	<0.0001	<0.0001
Height^2	0.690 [0.650-0.729]	0.658 [0.647-0.668]	0.593 [0.577-0.609]	1.62 [1.49-1.77]	1.66 [1.62-1.70]	1.45 [1.38-1.52]	<0.0001	<0.0001	<0.0001
Height^1.5	0.687 [0.647-0.727]	0.653 [0.643-0.664]	0.591 [0.575-0.608]	1.63 [1.50-1.79]	1.65 [1.61-1.69]	1.45 [1.38-1.52]	<0.0001	<0.0001	<0.0001
Height	0.683 [0.643-0.723]	0.648 [0.638-0.658]	0.589 [0.572-0.605]	1.65 [1.50-1.81]	1.64 [1.60-1.68]	1.44 [1.37-1.51]	<0.0001	<0.0001	<0.0001
Unindexed	*0.672 [0.630-0.713]*	*0.635 [0.625-0.645]*	0.582 [0.565-0.598]	*1.68 [1.52-1.85]*	*1.59 [1.55-1.63]*	*1.40 [1.34-1.47]*	*<0.0001*	*<0.0001*	*<0.0001*

Supplementary Table 15. Statistical analyses for 5-year cardiovascular mortality for RV diameter indexed by different metrics.

BSA = body surface area, [M] = Mosteller, [DB] = Du Bois, LBM = lean body mass, [H] = Hume, [B] = Boer, [J] = James, BMI = body mass index.

	C statistic			Hazard Ratio per 1 SD increment			p value		
	BMI <18.5 kg/m²	**BMI 18.5-30 kg/m²**	**BMI ≥30 kg/m²**	**BMI <18.5 kg/m²**	**BMI 18.5-30 kg/m²**	**BMI ≥30 kg/m²**	**BMI <18.5 kg/m²**	**BMI 18.5-30 kg/m²**	**BMI ≥30 kg/m²**
Weight	0.599 [0.481-0.717]	0.652 [0.613-0.691]	0.656 [0.597-0.714]	1.04 [0.79-1.38]	1.64 [1.49-1.82]	2.29 [1.71-3.07]	0.77	<0.0001	<0.0001
Weight^1.5	0.424 [0.310-0.539]	0.644 [0.605-0.682]	0.643 [0.584-0.703]	0.96 [0.75-1.23]	1.68 [1.50-1.88]	2.70 [1.80-4.04]	0.76	<0.0001	<0.0001
Height*Weight	0.594 [0.475-0.713]	0.650 [0.611-0.688]	0.652 [0.593-0.710]	1.05 [0.79-1.40]	1.60 [1.45-1.78]	2.11 [1.59-2.81]	0.75	<0.0001	<0.0001
BSA[M]^1.5	0.609 [0.488-0.731]	0.654 [0.615-0.693]	0.659 [0.601-0.717]	1.13 [0.82-1.54]	1.60 [1.45-1.76]	2.02 [1.58-2.59]	0.46	<0.0001	<0.0001
BSA[DB]^1.5	0.611 [0.488-0.734]	0.653 [0.614-0.692]	0.660 [0.602-0.718]	1.18 [0.84-1.64]	1.58 [1.44-1.74]	1.92 [1.53-2.42]	0.34	<0.0001	<0.0001
BSA[M]	0.613 [0.487-0.738]	0.650 [0.610-0.690]	0.666 [0.609-0.723]	1.24 [0.88-1.76]	1.58 [1.44-1.73]	1.89 [1.53-2.33]	0.23	<0.0001	<0.0001
BSA[DB]	0.617 [0.493-0.741]	0.650 [0.610-0.690]	0.668 [0.611-0.724]	1.29 [0.90-1.85]	1.57 [1.43-1.72]	1.84 [1.50-2.25]	0.17	<0.0001	<0.0001
LBM[H]	0.623 [0.496-0.751]	0.644 [0.604-0.684]	0.655 [0.597-0.712]	1.37 [0.93-2.01]	1.55 [1.41-1.71]	1.76 [1.43-2.17]	0.11	<0.0001	<0.0001
LBM[B]	0.621 [0.492-0.751]	0.636 [0.597-0.676]	0.636 [0.577-0.694]	1.40 [0.94-2.08]	1.54 [1.39-1.70]	1.61 [1.31-1.97]	0.10	<0.0001	<0.0001
LBM[J]	0.606 [0.482-0.730]	0.637 [0.597-0.677]	0.635 [0.577-0.692]	1.13 [0.83-1.54]	1.57 [1.41-1.74]	1.47 [1.22-1.78]	0.45	<0.0001	<0.0001
BMI	0.566 [0.431-0.702]	0.632 [0.592-0.673]	0.646 [0.586-0.705]	1.02 [0.77-1.36]	1.64 [1.47-1.82]	2.15 [1.62-2.85]	0.88	<0.0001	<0.0001
Height^2.7	0.657 [0.532-0.782]	0.642 [0.603-0.681]	0.662 [0.605-0.718]	1.67 [1.06-2.63]	1.57 [1.41-1.75]	1.57 [1.33-1.86]	0.028	<0.0001	<0.0001
Height^2.13	0.666 [0.542-0.791]	0.642 [0.602-0.682]	0.666 [0.609-0.722]	1.66 [1.07-2.57]	1.58 [1.42-1.75]	1.62 [1.37-1.91]	0.025	<0.0001	<0.0001
Height^2	0.668 [0.544-0.792]	0.642 [0.602-0.682]	0.667 [0.611-0.724]	1.65 [1.07-2.56]	1.58 [1.42-1.75]	1.62 [1.37-1.92]	0.024	<0.0001	<0.0001
Height^1.5	0.668 [0.544-0.792]	0.640 [0.599-0.680]	0.669 [0.612-0.727]	1.63 [1.07-2.51]	1.57 [1.42-1.74]	1.65 [1.39-1.95]	0.024	<0.0001	<0.0001
Height	0.665 [0.536-0.793]	0.634 [0.593-0.675]	0.670 [0.612-0.728]	1.62 [1.06-2.47]	1.56 [1.41-1.73]	1.65 [1.40-1.96]	0.026	<0.0001	<0.0001
Unindexed	*0.650 [0.510-0.790]*	*0.617 [0.576-0.659]*	0.666 [0.606-0.725]	*1.58 [1.02-2.43]*	*1.53 [1.37-1.70]*	*1.61 [1.36-1.89]*	*0.039*	*<0.0001*	*<0.0001*