

**Tabla 3.** Características principales de los sujetos y factores cardiometabólicos asociados

	< 50 años		=> 50 años	
	Mujeres	Hombres	Mujeres	Hombres
	n=2136	n=1167	n=2192	n=1264
<b>VARIABLES SOCIALES</b>				
<b>Área de residencia</b>				
Rural	1087 (72.90)	404 (27.10)	1257 (68.73)	572 (31.27)
Urbano	1049 (57.89)	763 (42.11)	935 (57.47)	692 (42.53)
<b>Nivel educativo</b>				
Técnico/ Universitario	334 (68.44)	154 (31.56)	286 (61.90)	176 (38.10)
Bachiller	524 (67.53)	252 (32.47)	376 (68.61)	172 (31.39)
Ninguno/ Primaria/ Desconocido	1269 (62.54)	760 (37.46)	1528 (62.52)	916 (37.48)
<b>Ingresos mensuales (tertiles)</b>				
Bajo (<U\$ 175)	756 (67.56)	363 (32.44)	786 (63.54)	451 (36.46)
Medio (U\$ 175 - 350)	782 (61.87)	482 (38.13)	678 (61.92)	417 (38.08)
Alto (≥ U\$350)	598 (65.00)	322 (35.00)	728 (64.77)	396 (35.23)
<b>Factores modificables de riesgo cardiovascular</b>				
<b>Ingesta alcohol</b>				
No ingesta	1498 (82.53)	317 (17.47)	1624 (82.06)	355 (17.94)
Ingesta alcohol	634 (42.72)	850 (57.28)	567 (38.41)	909 (61.59)
<b>Tabaquismo</b>				
No tabaquismo	1750 (72.92)	650 (27.08)	1577 (76.29)	490 (23.71)

	< 50 años		=> 50 años	
	Mujeres	Hombres	Mujeres	Hombres
	n=2136	n=1167	n=2192	n=1264
Tabaquismo	383 (42.79)	512 (57.21)	609 (44.07)	773 (55.93)
<b>Estado del peso n (%)</b>				
Normal	866 (41.5)	595 (52.3)	722 (33.8)	621 (50.1)
Sobrepeso	793 (38.0)	404 (35.5)	905 (42.4)	479 (38.6)
Obesidad	427 (20.5)	140 (12.3)	510 (23.9)	140 (11.3)
<b>Relación cintura/cadera</b>				
Tertil 1 (<0.85)	1178 (87.58)	167 (12.42)	884 (88.76)	112 (11.24)
Tertil 2 (0.85 - 0.92)	671 (60.40)	440 (39.60)	826 (71.21)	334 (28.79)
Tertil 3 ( $\geq 0.92$ kg/m <sup>2</sup> )	270 (32.97)	549 (67.03)	468 (36.62)	810 (63.38)
<b>Actividad física</b>				
Alto	232 (60.89)	149 (39.11)	241 (60.10)	160 (39.90)
Moderado	690 (70.91)	283 (29.09)	784 (68.71)	357 (31.29)
Bajo	940 (63.47)	541 (36.53)	883 (60.52)	576 (39.48)
<b>Consumo de frutas y verduras</b>				
Nunca	124 (57.94)	90 (42.06)	128 (54.24)	108 (45.76)
Consume frutas o verduras al menos una vez al día	400 (62.40)	241 (37.60)	393 (60.74)	254 (39.26)
Consume frutas y verduras mas de una vez al día	1462 (64.92)	790 (35.92)	1550 (64.64)	254 (39.26)
<b>Factores cardiometabólicas</b>				
Hipertensión arterial	468 (63.76)	266 (36.24)	1176 (66.33)	597 (33.67)
Diabetes Mellitus 2	87 (66.92)	43 (33.08)	207 (65.92)	107 (34.08)

	< 50 años		=> 50 años	
	Mujeres	Hombres	Mujeres	Hombres
	n=2136	n=1167	n=2192	n=1264
Enfermedad cardiovascular establecida	89 (74.17)	31 (25.83)	169 (63.77)	96 (36.23)

**Tabla 4.** Medidas antropométricas

	< 50 años			=>50 años		
	Mujeres	Hombres	p	Mujeres	Hombres	p
	n=2136	n=1167		n=2192	n=1264	
Edad (años)	42.4 ± 4.33	42.4 ± 4.20	0.716	58.4 ± 5.68	59.1 ± 5.89	0.001
<b>Variable antropométrica</b>						
Altura (cm)	155.6 ± 7.01	167.4 ± 7.33	<0.001	153.3 ± 6.80	164.8 ± 7.11	<0.001
Peso (kg)	64.4 ± 13.53	71.2 ± 12.9	<0.001	64.2 ± 13.24	68.9 ± 13.4	<0.001
Índice masa corporal (kg/m <sup>2</sup> ) IMC	26,5 ± 4.89	25.3 ± 4.01	<0.001	27.2 ± 4.78	25.3 ± 4.09	<0.001
Perímetro cintura (cm)	83.2 ± 11.6	87.1 ± 10.9	<0.001	86.5 ± 11.2	89.2 ± 11.3	<0.001
Perímetro cadera (cm)	98.7 ± 10.1	94.8 ± 9.39	<0.001	99.7 ± 10.3	94.4 ± 9.28	<0.001
Relación cintura/cadera RCC	0.84 ± 0.08	0.91 ± 0.07	<0.001	0.86 ± 0.07	0.94 ± 0.07	<0.001
Relación cintura/cadera por fuerza de empuñadura	0.04 ± 0.01	0.03 ± 0.01	<0.001	0.05 ± 0.02	0.03 ± 0.01	<0.001
<b>Índice fuerza empuñadura</b>						
Fuerza empuñadura (kg)	23.2 ± 7.44	36.9 ± 9.8	<0.001	20.8 ± 7.07	31.5 ± 9.2	<0.001
FE/peso (kg)	0.37 ± 0.13	0.52 ± 0.15	<0.001	0.33 ± 0.12	0.47 ± 0.14	<0.001
FE/perímetro cintura (cm)	0.28 ± 0.10	0.42 ± 0.12	<0.001	0.24 ± 0.09	0.36 ± 0.11	<0.001
FE/perímetro cadera (cm)	0.24 ± 0.08	0.39 ± 0.10	<0.001	0.21 ± 0.07	0.34 ± 0.10	<0.001
FE/RCC	27.7 ± 9.07	40.45 ± 11.22	<0.001	24.2 ± 8.46	33.61 ± 10.27	<0.001
FE/IMC	0.91 ± 0.32	1.49 ± 0.43	<0.001	0.78 ± 0.29	1.27 ± 0.40	<0.001

Test de t de Student, p<0.05

**Tabla 5.** Relación de la fuerza de empuñadura en relación con las medidas antropométricas y la presencia de enfermedad cardiovascular.

	Fuerza empuñadura (kg)	FE/peso (kg)	FE/perímetro cintura (cm)	FE/perímetro cadera (cm)	FE/RCC	FE/IMC
<b>Hipertensión arterial</b>						
No	27.18 ± 10.75	0.42 ± 0.16	0.32 ± 0.13	0.28 ± 0.12	31.02 ± 11.82	1.09 ± 0.48
Si	25.77 ± 10.42	0.38 ± 0.15	0.29 ± 0.11	0.26 ± 0.11	28.74 ± 11.35	0.96 ± 0.42
Valor p	p<0.001	p<0.001	p<0.001	p<0.001	p<0.001	p<0.001
<b>Diabetes Mellitus tipo 2</b>						
No	26.37 ± 10.15	0.41 ± 0.15	0.31 ± 0.12	0.27 ± 0.11	29.96 ± 11.14	1.04 ± 0.44
Si	24.07 ± 9.45	0.35 ± 0.13	0.26 ± 0.11	0.24 ± 0.10	26.39 ± 10.18	0.88 ± 0.38
Valor p	p<0.001	p<0.001	p<0.001	p<0.001	p<0.001	p<0.001
<b>Enfermedad cardiovascular establecida</b>						
No	26.76 ± 10.66	0.41 ± 0.16	0.31 ± 0.12	0.27 ± 0.11	30.31 ± 11.72	1.05 ± 0.46
Si	24.81 ± 10.32	0.37 ± 0.15	0.28 ± 0.12	0.25 ± 0.11	27.80 ± 11.12	0.95 ± 0.43
Valor p	p<0.001	p<0.001	p<0.001	p<0.001	p<0.001	p<0.001

Test de t de Student, p<0.05

**Tabla 6.** Asociación cruda entre obesidad, sarcopenia, obesidad-sarcopénica y presencia de enfermedad cardiovascular

	Total		Mujeres		Hombres		Jóvenes		Mayores	
	RP	IC 95%	RP	IC 95%	RP	IC 95%	RP	IC 95%	RP	IC 95%
<b>Hipertensión arterial</b>										
PA<90 <sup>s</sup>  <94 <sup>l</sup> / FA Q4	Ref.		Ref.		Ref.		Ref.		Ref.	
PA<90 <sup>s</sup>  < 94 <sup>l</sup> / FA Q1-Q3	1.24	[1.10-1.39]	1.15	[0.90-1.47]	1.32	[1.14-1.53]	1.09	[0.90-1.32]	1.14	[0.99-1.31]
PA>=90 <sup>s</sup>  >= 94 <sup>l</sup> / FA Q4	1.66	[1.45-1.91]	1.44	[1.09-1.91]	1.72	[1.48-2.11]	1.76	[1.41-2.22]	1.45	[1.24-1.69]
PA>=90 <sup>s</sup>  >=94 <sup>l</sup> /FA Q1-Q3	1.92	[1.70-2.17]	1.79	[1.40-2.31]	1.99	[1.71-2.33]	1.64	[1.32-2.05]	1.57	[1.36-1.81]
<b>RCC</b>										
RCC<0.90/ FA Q4	Ref.		Ref.		Ref.		Ref.		Ref.	
RCC<0.90/ FA Q1-Q3	1.20	[1.06-1.37]	1.10	[0.91-1.33]	1.13	[0.91-1.39]	1.06	[0.87-1.31]	1.11	[0.96-1.29]
RCC>=0.90/ FA Q4	1.19	[1.04-1.38]	1.14	[0.84-1.54]	1.26	[1.06-1.49]	1.15	[0.92-1.44]	1.10	[0.93-1.30]
RCC>= 0.90/ FA Q1-Q3	1.56	[1.37-1.78]	1.45	[1.19-1.76]	1.58	[1.34-1.86]	1.25	[0.99-1.56]	1.24	[1.06-1.45]
<b>IMC</b>										
IMC<30 <sup>†</sup> / FA Q4	Ref.		Ref.		Ref.		Ref.		Ref.	
IMC<30 <sup>†</sup> / FA Q1-Q3	1.20	[1.10-1.31]	1.27	[1.03-1.57]	1.26	[1.12-1.42]	1.05	[0.88-1.24]	1.08	[0.98-1.20]
IMC>=30 <sup>†</sup> / FA Q4	1.64	[1.39-1.93]	1.83	[1.37-2.46]	1.59	[1.33-1.91]	2.03	[1.54-2.67]	1.31	[1.10-1.57]
IMC>=30 <sup>†</sup> / FA Q1-Q3	1.70	[1.53-1.89]	1.81	[1.46-2.27]	1.81	[1.52-2.15]	1.63	[1.33-2.02]	1.40	[1.22-1.59]
<b>Diabetes Mellitus 2</b>										
PA<90 <sup>s</sup>  <94 <sup>l</sup> / FA Q4	Ref.		Ref.		Ref.		Ref.		Ref.	
PA<90 <sup>s</sup>  < 94 <sup>l</sup> / FA Q1-Q3	1.47	[1.04-2.09]	1.57	[0.61-4.05]	1.52	[1.01-2.27]	1.04	[0.57-1.85]	1.47	[0.97-2.22]
PA>=90 <sup>s</sup>  >= 94 <sup>l</sup> / FA Q4	2.29	[1.53-3.42]	3.63	[1.27-10.4]	2.00	[1.27-3.14]	2.08	[1.06-4.04]	2.09	[1.21-3.63]

	Total		Mujeres		Hombres		Jóvenes		Mayores	
	RP	IC 95%	RP	IC 95%	RP	IC 95%	RP	IC 95%	RP	IC 95%
PA $\geq$ 90 <sup>s</sup>   $\geq$ 94 <sup>l</sup> /FA Q1-Q3	3.41	[2.41-4.81]	3.45	[1.36-8.82]	4.22	[2.72-6.56]	3.10	[1.81-5.30]	2.78	[1.84-4.23]
RCC<0.90/ FA Q4	Ref.		Ref.		Ref.		Ref.		Ref.	
RCC<0.90/ FA Q1-Q3	1.36	[0.91-2.04]	1.00	[0.52-2.07]	1.00	[0.48-2.11]	1.20	[0.64-2.23]	1.20	[0.70-2.06]
RCC $\geq$ 0.90/ FA Q4	1.48	[0.91-2.41]	1.75	[0.63-4.86]	1.69	[0.97-2.95]	1.44	[0.69-2.97]	1.32	[0.72-2.40]
RCC $\geq$ 0.90/ FA Q1-Q3	2.86	[1.89-4.33]	2.17	[1.07-4.41]	3.21	[1.94-5.32]	2.49	[1.30-4.78]	2.17	[1.30-3.65]
IMC<30 <sup>†</sup> / FA Q4	Ref.		Ref.		Ref.		Ref.		Ref.	
IMC<30 <sup>†</sup> / FA Q1-Q3	1.55	[1.12-2.14]	1.39	[0.61-3.17]	1.85	[1.30-2.63]	1.09	[0.65-1.81]	1.53	[1.07-2.18]
IMC $\geq$ 30 <sup>†</sup> / FA Q4	2.50	[1.62-3.86]	3.03	[1.07-8.61]	2.23	[1.35-3.67]	2.59	[1.36-4.93]	2.38	[1.30-4.27]
IMC $\geq$ 30 <sup>†</sup> / FA Q1-Q3	2.64	[1.95-3.57]	2.42	[1.08-5.47]	3.31	[2.00-5.49]	3.03	[1.79-5.09]	2.00	[1.41-2.84]
<b>Enfermedad cardiovascular establecida</b>										
PA<90 <sup>s</sup>  <94 <sup>l</sup> / FA Q4	Ref.		Ref.		Ref.		Ref.		Ref.	
PA<90 <sup>s</sup>  < 94 <sup>l</sup> / FA Q1-Q3	1.65	[1.19-2.28]	1.40	[0.66-2.93]	1.88	[1.18-3.01]	1.66	[0.89-3.10]	1.61	[1.05-2.46]
PA $\geq$ 90 <sup>s</sup>   $\geq$ 94 <sup>l</sup> / FA Q4	1.78	[1.14-2.79]	1.92	[0.83-4.46]	1.70	[1.02-2.86]	1.41	[0.58-3.37]	2.01	[1.07-3.80]
PA $\geq$ 90 <sup>s</sup>   $\geq$ 94 <sup>l</sup> /FA Q1-Q3	2.45	[1.71-3.51]	2.03	[0.96-4.30]	3.08	[1.83-5.20]	2.89	[1.60-5.21]	2.14	[1.30-3.52]
RCC<0.90/ FA Q4	Ref.		Ref.		Ref.		Ref.		Ref.	
RCC< 0.90/ FA Q1-Q3	1.35	[0.94-1.95]	1.17	[0.65-2.11]	1.41	[0.81-2.48]	1.26	[0.70-2.26]	1.67	[0.98-2.83]
RCC $\geq$ 0.90/ FA Q4	0.91	[0.58-1.41]	1.12	[0.44-2.89]	0.95	[0.57-1.56]	0.52	[0.23-1.18]	1.47	[0.79-2.70]

	Total		Mujeres		Hombres		Jóvenes		Mayores	
	RP	IC 95%	RP	IC 95%	RP	IC 95%	RP	IC 95%	RP	IC 95%
RCC>=0.90/FA Q1-Q3	1.54	[1.02-2.33]	1.21	[0.64-2.27]	1.90	[1.11-3.25]	1.34	[0.70-2.59]	1.63	[0.91-2.96]
IMC<30 <sup>†</sup> / FA Q4	Ref.		Ref.		Ref.		Ref.		Ref.	
IMC<30 <sup>†</sup> / FA Q1-Q3	1.43	[1.10-1.87]	1.32	[0.70-2.46]	1.68	[1.14-2.48]	1.57	[0.94-2.63]	1.22	[0.89-1.70]
IMC>=30 <sup>†</sup> / FA Q4	1.19	[0.69-2.06]	1.95	[0.81-4.72]	0.81	[0.39-1.70]	0.96	[0.31-2.91]	1.29	[0.64-2.63]
IMC>=30 <sup>†</sup> / FA Q1-Q3	1.85	[1.37-2.51]	1.70	[0.90-3.20]	2.58	[1.52-4.38]	2.52	[1.48-4.29]	1.55	[1.06-2.67]
<sup>§</sup> Punto de corte de perímetro abdominal para mujeres, <sup>¶</sup> Punto de corte de perímetro abdominal para hombres, <sup>†</sup> kg/m <sup>2</sup> , PA= perímetro abdominal, RCC= relación cintura cadera, IMC= índice de masa corporal, FA= fuerza de agarre, Q = cuartil * Ajustado										



**Tabla 7.** Análisis multivariado entre obesidad, sarcopenia, obesidad-sarcopénica y presencia de enfermedad cardiovascular

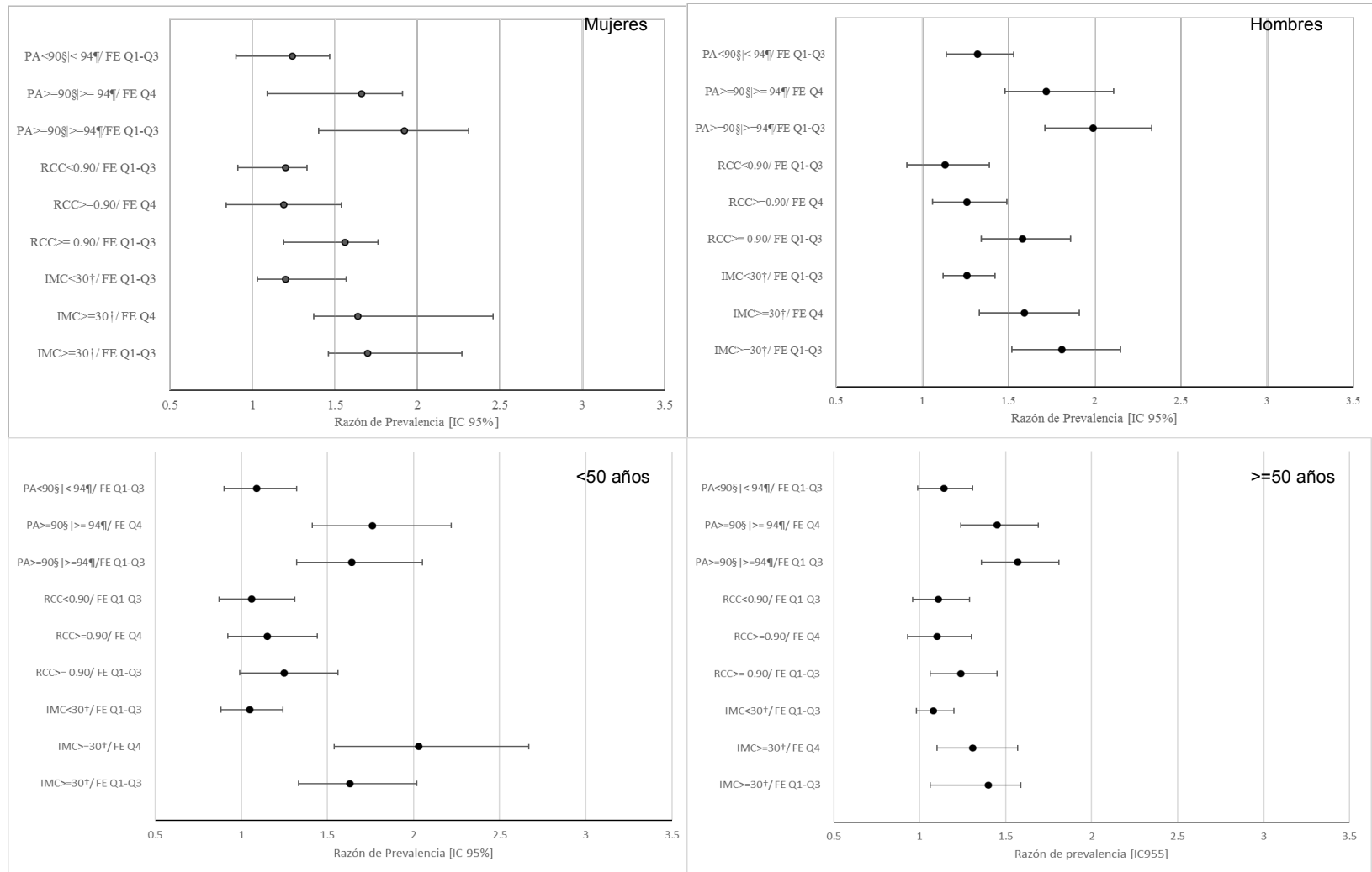
	Modelo 1		Modelo 2		
	RP	IC 95%	RP	IC 95%	Valor p
<b>Hipertensión arterial</b>					
PA<90 <sup>§</sup>  <94 <sup>¶</sup> / FA Q4	Ref.		Ref.		
PA<90 <sup>§</sup>  < 94 <sup>¶</sup> / FA Q1-Q3	1.24	[1.10-1.39]	1.00	[0.89-1.22]	0.965
PA>=90 <sup>§</sup>  >= 94 <sup>¶</sup> / FA Q4	1.66	[1.45-1.91]	1.49	[1.31-1.71]	<0.001
PA>=90 <sup>§</sup>  >=94 <sup>¶</sup> /FA Q1-Q3	1.92	[1.70-2.17]	1.38	[1.22-1.56]	<0.001
RCC<0.90/ FA Q4	Ref.		Ref.		
RCC<0.90/ FA Q1-Q3	1.20	[1.06-1.37]	0.94	[0.84-1.09]	0.373
RCC>=0.90/ FA Q4	1.19	[1.04-1.38]	1.14	[0.99-1.32]	0.058
RCC>= 0.90/ FA Q1-Q3	1.56	[1.37-1.78]	1.07	[0.95-1.20]	0.264
IMC<30 <sup>†</sup> / FA Q4	Ref.		Ref.		
IMC<30 <sup>†</sup> / FA Q1-Q3	1.20	[1.10-1.31]	0.97	[0.88-1.06]	0.556
IMC>=30 <sup>†</sup> / FA Q4	1.64	[1.39-1.93]	1.51	[1.27-1.78]	<0.001
IMC>=30 <sup>†</sup> / FA Q1-Q3	1.70	[1.53-1.89]	1.30	[1.15-1.47]	<0.001
<b>Diabetes Mellitus 2</b>					
PA<90 <sup>§</sup>  <94 <sup>¶</sup> / FA Q4	Ref.		Ref.		
PA<90 <sup>§</sup>  < 94 <sup>¶</sup> / FA Q1-Q3	1.47	[1.04-2.09]	1.21	[0.83-1.76]	0.303
PA>=90 <sup>§</sup>  >= 94 <sup>¶</sup> / FA Q4	2.29	[1.53-3.42]	1.99	[1.31-2.98]	<0.001
PA>=90 <sup>§</sup>  >=94 <sup>¶</sup> /FA Q1-Q3	3.41	[2.41-4.81]	2.55	[1.71-3.78]	<0.001
RCC<0.90/ FA Q4	Ref.		Ref.		
RCC<0.90/ FA Q1-Q3	1.36	[0.91-2.04]	0.98	[0.65-1.49]	0.945
RCC>=0.90/ FA Q4	1.48	[0.91-2.41]	1.45	[0.91-2.32]	0.114
RCC>= 0.90/ FA Q1-Q3	2.86	[1.89-4.33]	1.93	[1.28-2.92]	0.002

	Modelo 1		Modelo 2		
	RP	IC 95%	RP	IC 95%	Valor p
IMC<30 <sup>†</sup> / FA Q4	Ref.		Ref.		
IMC<30 <sup>†</sup> / FA Q1-Q3	1.55	[1.12-2.14]	1.33	[0.95-1.86]	0.090
IMC>=30 <sup>†</sup> / FA Q4	2.50	[1.62-3.86]	2.35	[1.51-3.66]	<0.001
IMC>=30 <sup>†</sup> / FA Q1-Q3	2.64	[1.95-3.57]	2.15	[1.51-3.06]	<0.001
<b>Enfermedad cardiovascular establecida</b>					
PA<90 <sup>§</sup>  <94 <sup>¶</sup> / FA Q4	Ref.		Ref.		
PA<90 <sup>§</sup>  < 94 <sup>¶</sup> / FA Q1-Q3	1.65	[1.19-2.28]	1.54	[1.03-2.31]	0.033
PA>=90 <sup>§</sup>  >= 94 <sup>¶</sup> / FA Q4	1.78	[1.14-2.79]	1.72	[1.05-2.81]	0.030
PA>=90 <sup>§</sup>  >=94 <sup>¶</sup> /FA Q1-Q3	2.45	[1.71-3.51]	2.19	[1.37-3.49]	0.001
RCC<0.90/ FA Q4	Ref.		Ref.		
RCC< 0.90/ FA Q1-Q3	1.35	[0.94-1.95]	1.35	[0.87-2.12]	0.182
RCC>=0.90/ FA Q4	0.91	[0.58-1.41]	0.99	[0.61-1.59]	0.960
RCC>=0.90/FA Q1-Q3	1.54	[1.02-2.33]	1.33	[1.83-2.13]	0.234
IMC<30 <sup>†</sup> / FA Q4	Ref.		Ref.		
IMC<30 <sup>†</sup> / FA Q1-Q3	1.43	[1.10-1.87]	1.31	[0.94-1.88]	0.107
IMC>=30 <sup>†</sup> / FA Q4	1.19	[0.69-2.06]	1.15	[0.62-2.11]	0.660
IMC>=30 <sup>†</sup> / FA Q1-Q3	1.85	[1.37-2.51]	1.80	[1.20-2.71]	0.004

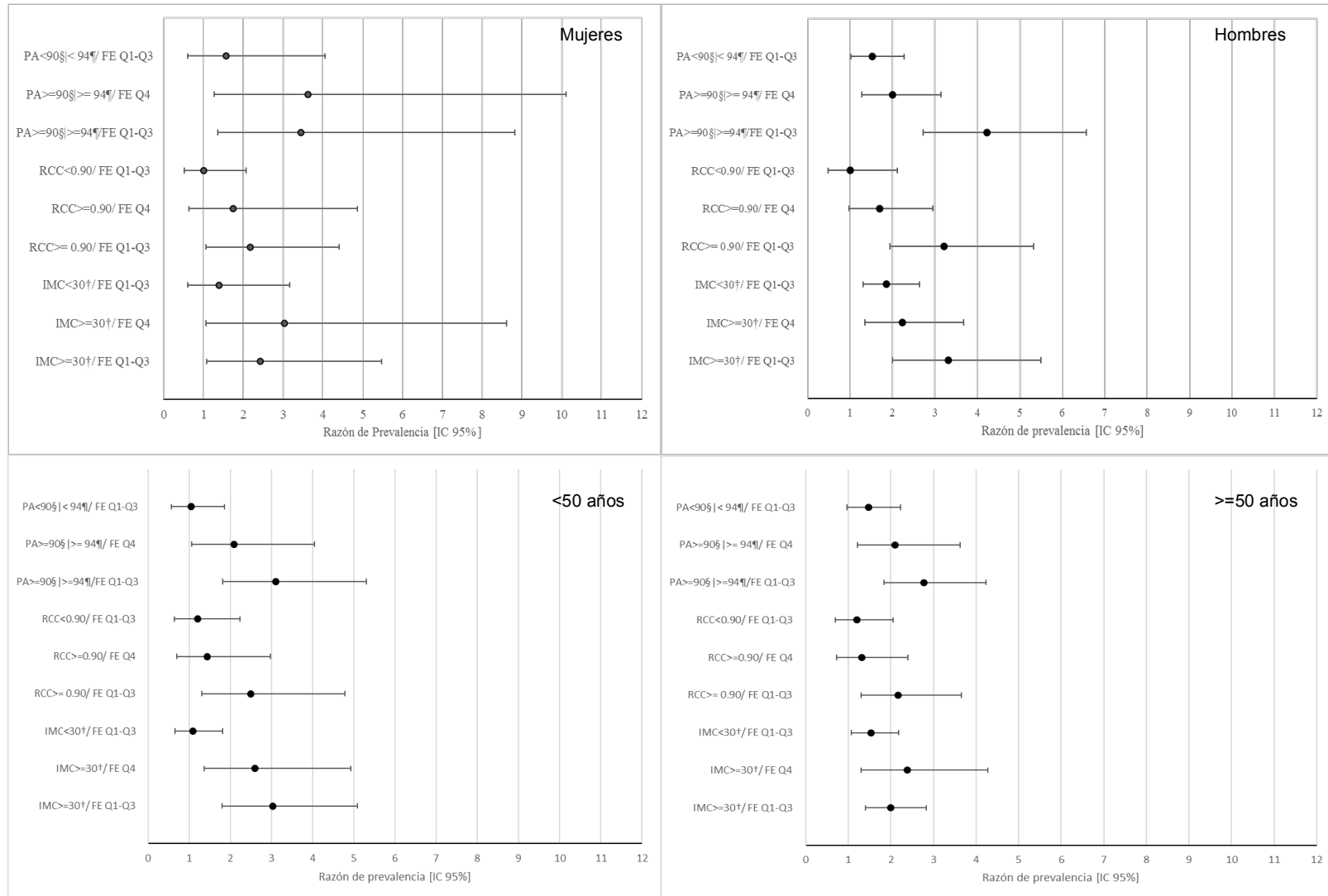
Modelo 1: crudo

Modelo 2: ajustado por sexo, edad, nivel educativo, antecedente del consumo de tabaco

**Figura 1. Asociación de sarcopenia, obesidad y obesidad-sarcopénica con hipertensión arterial.**



**Figura 2. Asociación de sarcopenia, obesidad y obesidad-sarcopénica con diabetes mellitus 2.**



**Figura 3.** Asociación de sarcopenia, obesidad y obesidad-sarcopénica con antecedente de enfermedad cardiovascular.

