

Title: Post-diagnosis adiposity and survival among breast cancer patients: Influence of breast cancer subtype

Journal: Cancer Causes and Control

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Supplementary Table 1. Characteristics of study population by BMI group, in the CBCS Phases I and II ^a.

Characteristics	Overall (n=1109)	<25 kg/m ² (n=395)	25-<30 kg/m ² (n=308)	30+ kg/m ² (n=411)	P-value
Age (years)					
Mean (SD)	50.60 (11.45)	48.64 (11.72)	51.47 (11.15)	51.82 (11.19)	<0.01
<40	188 (17)	90 (23)	42 (14)	56 (14)	<0.01
40-49	427 (39)	163 (41)	116 (38)	148 (36)	
50-59	220 (20)	56 (14)	68 (22)	96 (23)	
≥60	274 (25)	84 (21)	80 (26)	110 (27)	
Menopausal status					
Premenopausal	541 (49)	209 (53)	138 (45)	194 (47)	0.08
Postmenopausal	568 (51)	184 (47)	168 (55)	216 (53)	
Race					
White	612 (55)	301 (77)	173 (57)	138 (34)	<0.01
African American	497 (45)	92 (23)	133 (43)	272 (66)	
Number of full-term pregnancy					
Nulliparous	168 (15)	73 (18)	44 (14)	51 (12)	<0.01
1-2	541 (49)	214 (54)	158 (52)	169 (41)	
≥3	400 (36)	106 (27)	104 (34)	190 (46)	
Years since last full-term pregnancy among parous women					
<5	72 (8)	38 (12)	15 (6)	19 (5)	<0.01
5-<10	86 (9)	35 (11)	29 (11)	22 (6)	
≥10	783 (83)	249 (77)	218 (83)	318 (89)	
Family history of breast cancer ^b					
Yes	176 (16)	57 (15)	50 (17)	69 (17)	0.66
No	901 (84)	326 (85)	246 (83)	331 (83)	
Education					
Lower than high school	187 (17)	41 (10)	42 (14)	104 (25)	<0.01
High school/post high school	616 (56)	197 (50)	184 (60)	235 (57)	

College and above	306 (28)	155 (39)	80 (26)	71 (17)	
Family income (thousand US dollar)					
<15	235 (23)	65 (18)	56 (20)	114 (29)	<0.01
15-<30	253 (25)	61 (17)	70 (25)	122 (31)	
30-<50	250 (24)	86 (24)	77 (28)	87 (22)	
≥50	291 (28)	152 (42)	73 (26)	66 (17)	
Smoking					
Never	585 (53)	205 (52)	147 (48)	233 (57)	0.11
Former	345 (31)	117 (30)	107 (35)	121 (29)	
current	184 (17)	73 (18)	54 (18)	57 (14)	
Physical activity					
yes	566 (51)	213 (54)	159 (52)	194 (47)	0.14
no	543 (49)	180 (46)	147 (48)	216 (53)	
Alcohol consumption					
No	344 (31)	79 (20)	99 (32)	166 (40)	<0.01
Yes	764 (69)	313 (80)	207 (68)	244 (60)	
HRT					
Never	794 (72)	276 (70)	210 (69)	308 (75)	0.06
Former	218 (20)	87 (22)	69 (23)	62 (15)	
Current	95 (9)	29 (7)	27 (9)	39 (10)	
OC					
Never	368 (33)	104 (27)	110 (36)	154 (38)	<0.01
Ever	737 (67)	287 (73)	194 (64)	256 (62)	
Lymph node status					
Positive	439 (40)	144 (37)	130 (43)	165 (41)	0.27
Negative	665 (60)	248 (63)	175 (57)	242 (59)	
Intrinsic subtype					
Luminal	714 (64)	266 (68)	197 (64)	251 (61)	0.02
Basal-like	197 (18)	53 (13)	61 (20)	83 (20)	

	Her2-positive	72 (6)	23 (6)	25 (8)	24 (6)	
	Normal-like	126 (11)	51 (13)	23 (8)	52 (13)	
Tumor size (cm)						
	≤2	526 (49)	205 (54)	141 (47)	180 (45)	0.09
	>2-5	455 (42)	151 (39)	127 (43)	177 (44)	
	>5	102 (9)	27 (7)	30 (10)	45 (11)	
Tumor stage (AJCC/UICC Stage Grouping)						
	I	403 (37)	157 (41)	116 (39)	130 (33)	0.09
	II	543 (50)	189 (49)	141 (47)	213 (53)	
	III+IV	133 (12)	38 (10)	40 (13)	55 (14)	
Histology group						
	Ductal	911 (82)	312 (79)	256 (84)	343 (84)	0.21
	Others	198 (18)	81 (21)	50 (16)	67 (16)	
Nuclear grade ^c						
	Pleomorphism	204 (43)	79 (42)	57 (43)	68 (44)	0.93
	Slight/moderate	275 (57)	111 (58)	76 (57)	88 (56)	
Histologic grade ^c						
	Well/moderate	309 (65)	125 (66)	85 (64)	99 (63)	0.89
	Poor	170 (35)	65 (34)	48 (36)	57 (37)	
Mitotic index ^c						
	Low	259 (54)	115 (61)	58 (44)	86 (55)	0.02
	High	218 (46)	75 (39)	73 (56)	70 (45)	

^a P values for the comparisons across intrinsic subtypes were calculated by t test for continuous variables and x2 test for categorical variables except that when expected cell count was less than 5, they were calculated by Fisher exact test. Missing values were excluded from percentage calculations.

^b First degree

^c Only available in Phase I.

Supplementary Table 2. Characteristics of study population by WHR tertiles, in the CBCS Phases I and II ^a.

Characteristics	Overall (n=1109)	<0.77 (n=282)	0.77-<0.84 (n=382)	0.84+ (n=445)	P-value
Age (years)					
Mean (SD)	50.60 (11.45)	46.99 (10.46)	50.33 (11.50)	53.75 (11.01)	<0.01
<40	188 (17)	83 (29)	62 (16)	43 (10)	<0.01
40-49	427 (39)	124 (44)	159 (42)	144 (32)	
50-59	220 (20)	36 (13)	70 (18)	114 (26)	
≥60	274 (25)	39 (14)	91 (24)	144 (32)	
Menopausal status					
Premenopausal	541 (49)	180 (64)	197 (52)	164 (37)	<0.01
Postmenopausal	568 (51)	102 (36)	185 (48)	281 (63)	
Race					
White	612 (55)	222 (79)	228 (60)	162 (36)	<0.01
African American	497 (45)	60 (21)	154 (40)	283 (64)	
Number of full-term pregnancy					
Nulliparous	168 (15)	53 (19)	52 (14)	63 (14)	<0.01
1-2	541 (49)	160 (57)	204 (53)	177 (40)	
≥3	400 (36)	69 (24)	126 (33)	205 (46)	
Years since last full-term pregnancy among parous women					
<5	72 (8)	30 (13)	27 (8)	15 (4)	<0.01
5-<10	86 (9)	31 (14)	32 (10)	23 (6)	
≥10	783 (83)	168 (73)	271 (82)	345 (90)	
Family history of breast cancer ^b					
Yes	176 (16)	239 (86)	318 (83)	356 (82)	0.52
No	901 (84)	40 (14)	63 (17)	76 (18)	
Education					
Lower than high school	187 (17)	12 (4)	52 (14)	123 (28)	<0.01
High school/post high school	616 (56)	145 (51)	213 (56)	258 (58)	
College and above	306 (28)	125 (44)	117 (31)	64 (14)	

Family income (thousand US dollar)						
	<15	235 (23)	29 (11)	69 (19)	137 (34)	<0.01
	15-<30	253 (25)	46 (17)	85 (24)	122 (30)	
	30-<50	250 (24)	62 (23)	90 (25)	98 (24)	
	≥50	291 (28)	128 (48)	116 (32)	47 (12)	
Smoking						
	Never	585 (53)	166 (58)	211 (54)	215 (48)	<0.01
	Former	345 (31)	92 (32)	120 (31)	135 (30)	
	current	184 (17)	26 (9)	58 (15)	101 (22)	
Alcohol consumption						
	No	344 (31)	52 (18)	123 (32)	169 (38)	<0.01
	Yes	764 (69)	230 (82)	258 (68)	276 (62)	
Physical activity						
	no	566 (51)	130 (46)	182 (48)	231 (52)	0.25
	yes	543 (49)	152 (54)	200 (52)	214 (48)	
HRT						
	Never	794 (72)	208 (74)	267 (70)	319 (72)	0.35
	Former	218 (20)	58 (21)	77 (20)	83 (19)	
	Current	95 (9)	16 (6)	37 (10)	42 (9)	
OC						
	Never	368 (33)	54 (19)	115 (30)	199 (45)	<0.01
	Ever	737 (67)	226 (81)	266 (70)	245 (55)	
Lymph node status		Lymph node status				
	Positive	439 (40)	103 (36)	153 (40)	183 (41)	0.45
	Negative	665 (60)	178 (64)	227 (60)	260 (59)	
Intrinsic subtype						
	Luminal	714 (64)	199 (71)	236 (62)	279 (63)	0.01
	Basal-like	197 (18)	36 (13)	80 (21)	81 (18)	
	Her2-positive	72 (6)	20 (7)	30 (8)	22 (5)	
	Normal-like	126 (11)	27 (10)	36 (9)	63 (14)	

Tumor size (cm)						
	≤2	526 (49)	154 (56)	179 (48)	193 (44)	<0.01
	>2-5	455 (42)	107 (39)	158 (42)	190 (44)	
	>5	102 (9)	13 (5)	38 (10)	51 (12)	
Tumor stage (AJCC/UICC Stage Grouping)						
	I	403 (37)	115 (42)	142 (38)	146 (34)	0.01
	II	543 (50)	139 (51)	188 (50)	216 (50)	
	III+IV	133 (12)	20 (7)	45 (12)	68 (16)	
Histology group						
	Ductal	911 (82)	224 (79)	307 (80)	380 (85)	0.07
	Others	198 (18)	58 (21)	75 (20)	65 (15)	
Nuclear grade [°]						
	Pleomorphism	204 (43)	59 (44)	92 (56)	76 (57)	0.72
	Slight/moderate	275 (57)	76 (56)	73 (44)	59 (44)	
Histologic grade [°]						
	Well/moderate	170 (35)	47 (35)	53 (32)	70 (39)	0.39
	Poor	309 (65)	88 (65)	112 (68)	109 (61)	
Mitotic index [°]						
	Low	259 (54)	79 (59)	84 (51)	96 (54)	0.38
	High	218 (46)	55 (41)	81 (49)	82 (46)	

^a The cutoff points of tertiles were 0.77 and 0.84 based on WHR distribution of controls of CBCS Phase I&II. P-values for the comparisons across intrinsic subtypes were calculated by t test for continuous variables and x2 test for categorical variables except that when expected cell count was less than 5, they were calculated by Fisher exact test. Missing values were excluded from percentage calculations.

^b First degree.

^c Only available in Phase I.