

Additional file 6 The association between WHR and cancer risk in all population and adults of different BMI and sex.

WHR	Crude HR (95%CI)	Crude P value	Adjusted HR (95%CI)	Adjusted P value	P for interaction
All BMI					0.043
BMI(<18.5 kg/m ²)					
Low WHR	ref.		ref.		
Moderate WHR	1.19 (0.60-2.37)	0.62	1.44(0.71-2.92)	0.310	
High WHR	0.89(0.49-1.59)	0.683	1.27(0.66-2.43)	0.471	
P for trends		0.799		0.355	
BMI(≥18.5 and <24 kg/m ²)					
Low WHR	ref.		ref.		
Moderate WHR	1.08(0.95-1.23)	0.245	1.12(0.98-1.29)	0.097	
High WHR	0.96(0.84-1.09)	0.494	1.06(0.91-1.23)	0.453	
P for trends		0.8		0.286	
BMI(≥24 and <28 kg/m ²)					
Low WHR	ref.		ref.		
Moderate WHR	1.14(1.02-1.27)	0.023	1.08(0.96-1.21)	0.220	
High WHR	1.18(1.05-1.32)	0.006	1.12(0.96-1.29)	0.151	
P for trends		0.002		0.112	
BMI(≥28kg/m ²)					
Low WHR	ref.		ref.		
Moderate WHR	1.12 (0.96-1.30)	0.143	1.05(0.89-1.22)	0.574	
High WHR	1.21(1.04-1.41)	0.015	1.08(0.88-1.32)	0.452	
P for trends		0.010		0.418	
Female					0.534
Low WHR	ref.		ref.		
Moderate WHR	1.53(1.26-1.85)	0.001	1.31(1.08-1.59)	0.007	
High WHR	1.67 (1.4-1.98)	0.001	1.37(1.14-1.64)	0.001	
P for trends		<0.001		0.002	
BMI(<18.5 kg/m ²)					

Low WHR	ref.		ref.	
Moderate WHR	2.08(0.55-7.85)	0.278	2.53(0.59-10.80)	0.211
High WHR	0.74 (0.20-2.79)	0.656	0.46(0.11-1.93)	0.286
P for trends		0.787		0.354
BMI(≥ 18.5 and < 24 kg/m ²)				
Low WHR	ref.		ref.	
Moderate WHR	1.46 (1.12-1.90)	0.005	1.28(0.98-1.68)	0.071
High WHR	1.51(1.19-1.92)	0.001	1.30(1.01-1.68)	0.044
P for trends		0.001		0.054
BMI(≥ 24 and < 28 kg/m ²)				
Low WHR	ref.		ref.	
Moderate WHR	1.33(0.94-1.90)	0.11	1.21(0.85-1.73)	0.284
High WHR	1.50(1.08-2.10)	0.016	1.31(0.93-1.84)	0.121
P for trends		0.015		0.123
BMI(≥ 28 kg/m ²)				
Low WHR	ref.		ref.	
Moderate WHR	1.92(0.91-4.02)	0.086	1.95(0.92-4.14)	0.082
High WHR	2.08(1.02-4.23)	0.043	2.05(1.00-4.23)	0.051
P for trends		0.069		0.105
Male				0.011
Low WHR	ref.		ref.	
Moderate WHR	1.16(1.06-1.27)	0.001	1.08(0.98-1.17)	0.105
High WHR	1.15(1.02-1.29)	0.024	1.07(0.95-1.21)	0.258
P for trends		<0.001		0.084
BMI(< 18.5 kg/m ²)				
Low WHR	ref.		ref.	
Moderate WHR	1.20(0.52-2.75)	0.672	1.27(0.54-2.96)	0.587
High WHR	1.58(0.81-3.06)	0.178	1.82(0.90-3.68)	0.093
P for trends		0.171		0.093

BMI(≥ 18.5 and < 24 kg/m ²)				
Low WHR	ref.		ref.	
Moderate WHR	1.27(1.07-1.50)	0.005	1.14(0.97-1.35)	0.119
High WHR	1.06(0.86-1.30)	0.595	1.01(0.81-1.24)	0.959
P for trends		0.083		0.452
BMI(≥ 24 and < 28 kg/m ²)				
Low WHR	ref.		ref.	
Moderate WHR	1.19(1.04-1.36)	0.009	1.07(0.93-1.22)	0.348
High WHR	1.20(0.99-1.45)	0.061	1.11(0.92-1.34)	0.287
P for trends		0.004		0.179
BMI(≥ 28 kg/m ²)				
Low WHR	ref.		ref.	
Moderate WHR	1.11(0.94-1.31)	0.228	1.02 (0.86-1.2)	0.830
High WHR	1.17(0.91-1.49)	0.220	1.03(0.81-1.32)	0.787
P for trends		0.114		0.748

Notes: WHR, waist-to-hip ratio; BMI, body mass index; FBG, fasting blood glucose; hsCRP, high sensitivity C reactive protein.

Adjusted for age, smoking history, drinking status, hs-CRP, FBG, hypertension, diabetes, myocardial infarction, family income, educational background, physical exercise.