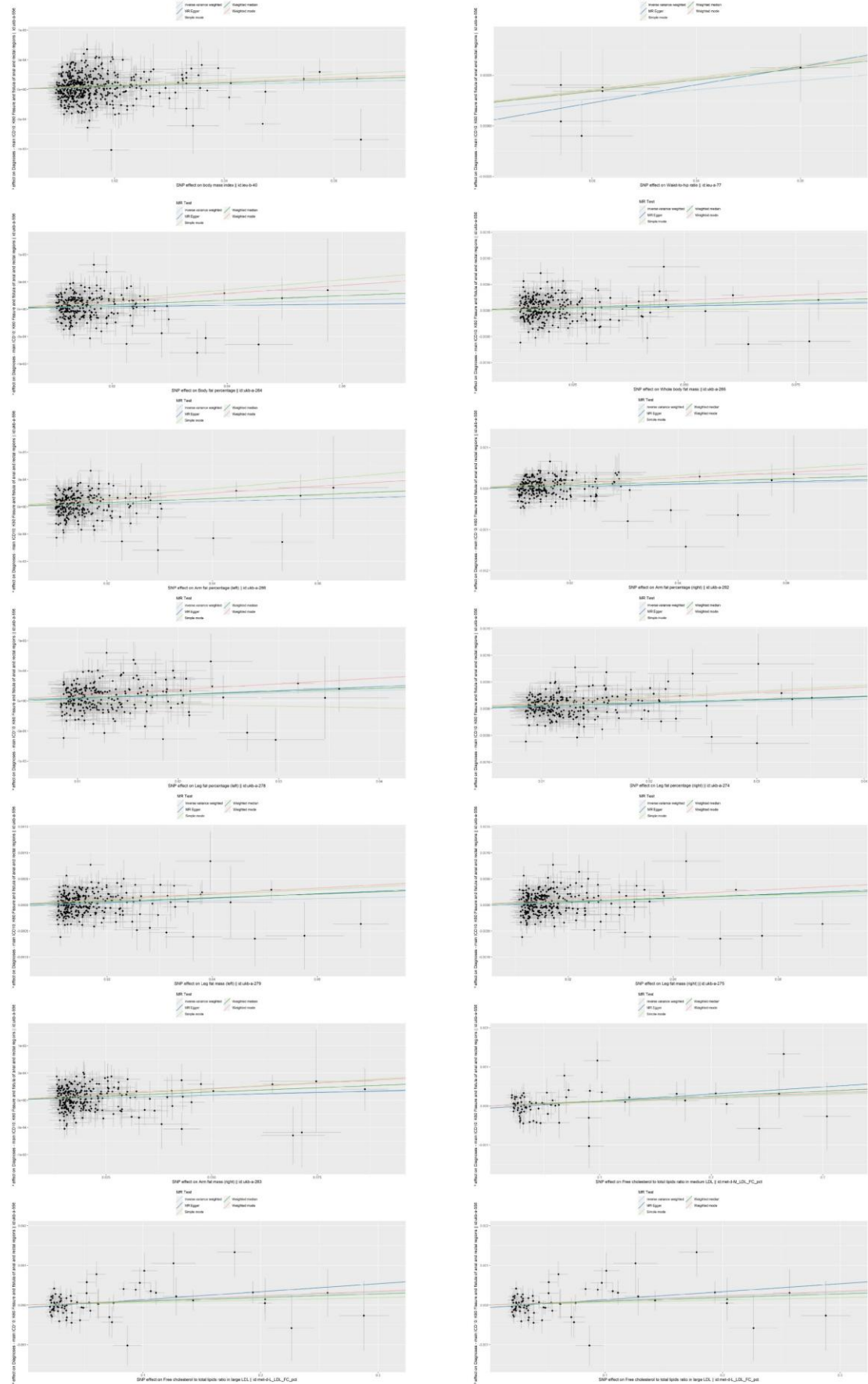




**Supplementary Table 1 Diagnosis standards for perianal abscesses,
incorporation standards and exclusion standards**

Diagnostic criteria ICD-10: K61[1]	Inclusion criteria	Exclusion criteria
Anal burning pain or jumping pain, worsening when defecation or walking, a few patients are accompanied by difficulty in urination;	The diagnostic criteria that meet the above - mentioned perianal abscess	Those with long -term fat reduction, sugar reduction, uric acid reduction drugs
Swell and pain around the rectum of the anal canal, there are hard constraints or lumps, the local temperature increases, tears or volatility;	Age over 18 years old	Accompanied by abdominal infection or pelvic organs infection
It can be accompanied by symptoms such as cold, fever, and general discomfort;	Knowing consent and willingness to participate in the investigation	Combat liver, kidney, cardiovascular and cerebrovascular and other serious primary diseases
Periodontal ultrasound examination can be tested and pus cavity. If necessary, you need to use a diagnosis or anal mirror to confirm the diagnosis;	/	Mentally ill
Blood white cells and neutral granulocyte counts can increase to varying degrees;	/	Patients with specific infections such as tuberculosis
If necessary, auxiliary fistula angiography, ultrasound examination in the rectal cavity, CT or MRI examinations find that the lesion can be diagnosed	/	Inflammatory bowel patients
/	/	Women of pregnancy or lactation
/	/	A subject who is participating in other clinical trials

Supplementary Table 2 The detection method of obesity indicators and metabolites indicators in the body

Terms	Method
Height	Standing foot to the highest point of the head to the highest point of vertical distance
Weight	The total weight of the human body
Body mass index	The ratio of weight (kg) and height (m)
Waist and hip ratio	The ratio of waist circumference (cm) to hip (cm)
Waist	The ratio of waist circumference (cm) to height (m)
Metabolic indicators	Collect venous blood (08: 00-10: 00 am), and 5ml of yellow tubes, for metabolic indicators and routine blood testing. The anorectist or medical intern guides participants to complete information and specimens, and is responsible for explaining related issues to the participants

Sample size calculation:

We calculated the sample size for this case-control study using the following equation[2].

$$n = \frac{r+1}{r} \frac{\bar{p}(1-\bar{p})(Z_{\beta} + Z_{\alpha/2})^2}{(p_1 - p_2)^2}$$

where r is the ratio of control to cases set as 1, p_1 is proportion of cases, and p_2 is proportion of controls. According to prior experience we assumed the proportions are 43% and 30% in the case and control groups[3,4], respectively.

$\bar{p}$ is the average proportion exposed equal to the mean value of p_1 and p_2 , Z_{β} is the standard normal variate for power, where the power is 80% and Z_{β} is 0.84; $Z_{\alpha/2}$ is the standard normal variate for level of significance, which is set as 1.96. The minimum sample size required for the study was estimated at 217.

References

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Supplementary Table 3 Details of the GWASs included in the Mendelian randomization

GWAS ID	Trait	Category	Sample size	NSNPs	Consortium	Web source
ieu-b-40	body mass index	Continuous	681,275	2,336,260	GIANT	Browse the IEU OpenGWAS project (mrcieu.ac.uk)
ieu-a-77	Waist-to-hip ratio	Continuous	94,429	2,207,530	GIANT	Browse the IEU OpenGWAS project (mrcieu.ac.uk)
ukb-a-283	Arm fat mass (right)	Continuous	331,226	10,894,596	Neale Lab	Browse the IEU OpenGWAS project (mrcieu.ac.uk)
ukb-a-286	Arm fat percentage (left)	Continuous	331,198	10,894,596	Neale Lab	Browse the IEU OpenGWAS

ukb-a-282	Arm fat percentage (right)	Continuous	331,249	10,894,596	Neale Lab	project (mrcieu.ac.uk) Browse the IEU OpenGWAS project (mrcieu.ac.uk)
ukb-a-264	Body fat percentage	Continuous	331,117	10,894,596	Neale Lab	Browse the IEU OpenGWAS project (mrcieu.ac.uk)
ukb-a-279	Leg fat mass (left)	Continuous	331,275	10,894,596	Neale Lab	Browse the IEU OpenGWAS project (mrcieu.ac.uk)
ukb-a-275	Leg fat mass (right)	Continuous	331,293	10,894,596	Neale Lab	Browse the IEU OpenGWAS project (mrcieu.ac.uk)
ukb-a-278	Leg fat percentage (left)	Continuous	331,278	10,894,596	Neale Lab	Browse the IEU OpenGWAS project (mrcieu.ac.uk)
ukb-a-274	Leg fat percentage (right)	Continuous	331,296	10,894,596	Neale Lab	Browse the IEU

ukb-a-265	Whole body fat mass	Continuous	330,762	10,894,596	Neale Lab	OpenGWAS project (mrcieu.ac.uk) Browse the IEU OpenGWAS project (mrcieu.ac.uk)
ebi-a-GCST90025986	Blood glucose levels	Continuous	400,458	4,218,897	/	Browse the IEU OpenGWAS project (mrcieu.ac.uk)
ebi-a-GCST90013998	Urea levels	Continuous	389,608	10,783,689	/	Browse the IEU OpenGWAS project (mrcieu.ac.uk)
ebi-a-GCST90018977	Serum uric acid levels	Continuous	343,836	19,041,286	/	Browse the IEU OpenGWAS project (mrcieu.ac.uk)
ebi-a-GCST90025953	Total cholesterol levels	Continuous	437,878	4,232,052	/	Browse the IEU OpenGWAS project (mrcieu.ac.uk)
met-d-Total_TG	Total triglycerides	Continuous	115,078	12,321,875	/	Browse the

							IEU
							OpenGWAS
							project
							(mrcieu.ac.uk)
ebi-a-	HDL cholesterol	Continuous	400,754	4,218,934	/		Browse the
GCST90025956	levels						IEU
							OpenGWAS
							project
							(mrcieu.ac.uk)
ieu-b-110	LDL cholesterol	Continuous	440,546	12,321,875	UK Biobank		Browse the
							IEU
							OpenGWAS
							project
							(mrcieu.ac.uk)
met-d-	Free cholesterol to	Continuous	115,078	12,321,875	/		Browse the
L_LDL_FC_pct	total lipids ratio in						IEU
	large LDL						OpenGWAS
							project
							(mrcieu.ac.uk)
met-d-	Free cholesterol to	Continuous	115,078	12,321,875	/		Browse the
M_LDL_FC_pct	total lipids ratio in						IEU
	medium LDL						OpenGWAS
							project
							(mrcieu.ac.uk)
met-d-	Free cholesterol to	Continuous	114,155	12,321,875	/		Browse the
XL_VLDL_FC_pct	total lipids ratio in						IEU
	very large VLDL						OpenGWAS
							project
							(mrcieu.ac.uk)

Supplementary Table 4 Analysis of the correlation between the exposure factors and the perianal abscess, the number of the lesion and the location of the lesion

Outcome	Variable	<i>r</i>	<i>P</i> value	rd	pd
Outcome diagnosis	BMI	0.083514	< 0.001	< 0.2	b
Outcome diagnosis	WHR	0.296755	< 0.001	0.2 - 0.4	b
Outcome diagnosis	WHtR	0.254025	< 0.001	0.2 - 0.4	b
Outcome diagnosis	GLU	0.021276	< 0.001	< 0.2	b
Outcome diagnosis	GA	0.014879	< 0.001	< 0.2	b
Outcome diagnosis	Urea	< 0.001660268	0.282	< 0.2	NS
Outcome diagnosis	UA	0.114121	< 0.001	< 0.2	b
Outcome diagnosis	CHO	0.026816	< 0.001	< 0.2	b
Outcome diagnosis	TG	0.05035	< 0.001	< 0.2	b
Outcome diagnosis	HDL-C	0.064343	< 0.001	< 0.2	b
Outcome diagnosis	LDL-C	0.065191	< 0.001	< 0.2	b
Outcome number	BMI	0.04669	0.048	< 0.2	a
Outcome number	WHR	0.116782	< 0.001	< 0.2	b
Outcome number	WHtR	0.138207	< 0.001	< 0.2	b
Outcome number	GLU	0.03002	0.102	< 0.2	NS
Outcome number	GA	0.011747	0.163	< 0.2	NS
Outcome number	Urea	0.020142	0.135	< 0.2	NS
Outcome number	UA	0.091452	< 0.001	< 0.2	b
Outcome number	CHO	0.013586	0.16	< 0.2	NS
Outcome number	TG	0.069703	0.02	< 0.2	a

Outcome number	HDL-C	0.011378	0.269	< 0.2	NS
Outcome number	LDL-C	0.043679	0.031	< 0.2	^a
Outcome location	BMI	0.087463	< 0.001	< 0.2	^b
Outcome location	WHR	0.281959	< 0.001	0.2 - 0.4	^b
Outcome location	WHtR	0.248307	< 0.001	0.2 - 0.4	^b
Outcome location	GLU	0.027782	< 0.001	< 0.2	^b
Outcome location	GA	0.018156	0.005	< 0.2	^b
Outcome location	Urea	0.002709	0.294	< 0.2	NS
Outcome location	UA	0.11108	< 0.001	< 0.2	^b
Outcome location	CHO	0.024064	< 0.001	< 0.2	^b
Outcome location	TG	0.053229	< 0.001	< 0.2	^b
Outcome location	HDL-C	0.052991	< 0.001	< 0.2	^b
Outcome location	LDL-C	0.071165	< 0.001	< 0.2	^b

r: The correlation between the two distance matrices of the variable and the outcome; *P* value of *r*. ^a*P* < 0.05; ^b*P* < 0.01.

Supplementary Table 5 Linear regression model of obesity, metabolic indexes and PA

Variable	Crude Beta (95%CI)	Crude <i>P</i>	Adjusted Beta (95%CI)	Adjusted <i>P</i>
BMI (kg/m ²)	-0.01(-0.02~0.01)	0.493	-0.01(-0.02~0.01)	0.413
WHR	-0.01(-0.18~0.16)	0.917	-0.06(-0.25~0.13)	0.522
WHtR	0.01(-0.16~0.18)	0.917	-0.01(-0.18~0.17)	0.954
GLU (mmol/L)	0.01(-0.10~0.11)	0.908	0.00(-0.11~0.11)	0.972
GA (%)	0.00(-0.04~0.05)	0.840	0.01(-0.04~0.05)	0.697
Urea (mmol/L)	-0.08(-0.18~0.01)	0.091	-0.10(-0.20~-0.00)	0.048
UA (μmol/L)	0.00(-0.00~0.00)	0.832	-0.00(-0.00~0.00)	0.583

CHO (mmol/L)	-0.07(-0.18~0.05)	0.264	-0.07(-0.19~0.05)	0.242
TG (mmol/L)	0.01(-0.06~0.08)	0.785	0.01(-0.07~0.08)	0.888
HDL-C (mmol/L)	-0.16(-0.58~0.26)	0.446	-0.07(-0.52~0.37)	0.744
LDL-C (mmol/L)	-0.12(-0.27~0.03)	0.123	-0.14(-0.30~0.01)	0.069

Adujsted Beta: β value of the linear regression model with gender and age.

Adujsted *P*: *P* value of the linear regression model with gender and age. Crude

β : β value of the linear regression model without gender and age. Crude *P*: *P*

value of the linear regression model without gender and age.

Supplementary Table 6 Unordered logistic regression model of obesity, metabolic indexes and PA

Variable	Crude OR (95% CI)	Crude P	Adjusted OR (95% CI)	Adjusted P
BMI (kg/m ²) (Ref=LA)				
HA	0.94(0.88~0.99)	0.032	0.92(0.86~0.98)	0.010
ISA	0.95(0.90~1.00)	0.034	0.93(0.89~0.98)	0.010
WHR (Ref=LA)				
HA	1.41(0.67~2.99)	0.37	0.50(0.21~1.19)	0.115
ISA	1.26(0.63~2.51)	0.507	0.46(0.21~1.04)	0.061
WHtR (Ref=LA)				
HA	0.77(0.35~1.66)	0.502	0.49(0.22~1.07)	0.072
ISA	0.68(0.34~1.40)	0.297	0.44(0.21~0.91)	0.027
GLU(mmol/L) (Ref=LA)				
HA	1.04(0.80~1.36)	0.750	1.00(0.74~1.35)	0.995
ISA	1.04(0.80~1.35)	0.769	1.00(0.74~1.33)	0.974
GA (%) (Ref=LA)				
HA	1.11(0.63~1.98)	0.718	0.82(0.50~1.36)	0.445
ISA	1.17(0.68~2.00)	0.575	0.88(0.56~1.38)	0.579
Urea(mmol/L) (Ref=LA)				
HA	1.58(0.97~2.59)	0.067	1.26(0.77~2.08)	0.354

ISA	1.67(1.05~2.66)	0.029	1.36(0.86~2.17)	0.191
UA(μ mol/L) (Ref=LA)				
HA	1.00(1.00~1.01)	0.405	1.00(1.00~1.00)	0.548
ISA	1.00(1.00~1.01)	0.785	1.00(0.99~1.00)	0.147
CHO(mmol/L) (Ref=LA)				
HA	1.07(0.64~1.81)	0.79	0.83(0.47~1.48)	0.537
ISA	1.02(0.63~1.66)	0.926	0.80(0.47~1.37)	0.415
TG(mmol/L) (Ref=LA)				
HA	1.57(0.85~2.92)	0.148	1.14(0.70~1.87)	0.589
ISA	1.43(0.78~2.63)	0.246	1.04(0.65~1.69)	0.858
HDL-C(mmol/L) (Ref=LA)				
HA	0.25(0.04~1.38)	0.112	0.77(0.11~5.20)	0.791
ISA	0.34(0.07~1.59)	0.173	0.99(0.18~5.53)	0.988
LDL-C(mmol/L) (Ref=LA)				
HA	1.32(0.66~2.66)	0.432	0.79(0.37~1.67)	0.536
ISA	1.36(0.71~2.60)	0.352	0.83(0.41~1.68)	0.606

Adujsted OR: OR value of the unordered logistic regression model with gender and age. Adujsted *P*: *P* value of the unordered logistic regression model with gender and age. Crude OR: OR value of the unordered logistic regression model without gender and age. Crude *P*: *P* value of the unordered logistic regression model without gender and age.

Supplementary Table 7 Subgroup analysis of obesity, metabolic indexes and PA lesion number outcomes based on age

Variable	Crude Beta (95%CI)	Crude <i>P</i>	Adjusted Beta (95%CI)	Adjusted <i>P</i>
Age $\leq$ 36				
BMI	-0.01(-0.03~0.02)	0.561	-0.01(-0.03~0.02)	0.524
WHR	0.04(-0.20~0.28)	0.743	0.03(-0.25~0.31)	0.832
WHtR	0.08(-0.15~0.31)	0.493	0.08(-0.16~0.31)	0.522

GLU	-0.06(-0.23~0.11)	0.477	-0.06(-0.23~0.10)	0.463
GA	-0.02(-0.13~0.09)	0.749	-0.02(-0.13~0.10)	0.783
Urea	-0.16(-0.29~-0.02)	0.021	-0.17(-0.31~-0.03)	0.016
UA	-0.00(-0.00~0.00)	0.672	-0.00(-0.00~0.00)	0.532
CHO	-0.10(-0.26~0.06)	0.214	-0.11(-0.27~0.06)	0.195
TG	0.02(-0.07~0.10)	0.714	0.01(-0.07~0.10)	0.742
HDL-C	-0.22(-0.80~0.37)	0.465	-0.21(-0.84~0.41)	0.502
LDL-C	-0.18(-0.39~0.03)	0.090	-0.21(-0.43~0.01)	0.062
Age > 36				
BMI	-0.00(-0.03~0.02)	0.723	-0.00(-0.03~0.02)	0.693
WHR	-0.08(-0.32~0.16)	0.514	-0.17(-0.42~0.08)	0.183
WHtR	-0.14(-0.41~0.14)	0.323	-0.17(-0.44~0.11)	0.235
GLU	0.07(-0.07~0.22)	0.297	0.05(-0.09~0.19)	0.490
GA	0.01(-0.03~0.05)	0.673	0.01(-0.03~0.05)	0.691
Urea	0.02(-0.11~0.16)	0.759	-0.01(-0.15~0.13)	0.884
UA	0.00(-0.00~0.00)	0.292	0.00(-0.00~0.00)	0.771
CHO	-0.01(-0.18~0.15)	0.869	-0.01(-0.18~0.15)	0.886
TG	-0.02(-0.18~0.14)	0.807	-0.04(-0.20~0.12)	0.654
HDL-C	-0.09(-0.67~0.50)	0.774	0.10(-0.53~0.72)	0.762
LDL-C	-0.03(-0.24~0.18)	0.787	-0.05(-0.26~0.16)	0.651

Supplementary Table 8 Subgroup analysis of obesity, metabolic indexes and PA lesion number outcomes based on gender

Variable	Crude Beta (95% CI)	Crude P	Adjusted Beta (95% CI)	Adjusted P
Gender=Female				
BMI	0.00(-0.03~0.04)	0.854	0.01(-0.03~0.04)	0.767
WHR	0.22(-0.18~0.61)	0.274	0.35(-0.07~0.78)	0.104
WHtR	0.46(0.02~0.91)	0.042	0.58(0.11~1.04)	0.015
GLU	-0.14(-0.49~0.21)	0.429	-0.12(-0.47~0.24)	0.508

GA	0.01(-0.20~0.22)	0.959	0.04(-0.18~0.25)	0.748
Urea	-0.09(-0.33~0.16)	0.485	-0.09(-0.33~0.16)	0.495
UA	-0.00(-0.01~0.00)	0.057	-0.00(-0.01~0.00)	0.034
CHO	-0.25(-0.57~0.08)	0.135	-0.22(-0.57~0.13)	0.210
TG	-0.19(-0.46~0.08)	0.162	-0.18(-0.45~0.10)	0.207
HDL-C	-0.60(-1.46~0.27)	0.172	-0.59(-1.46~0.27)	0.174
LDL-C	-0.29(-0.68~0.10)	0.148	-0.26(-0.70~0.18)	0.248
Gender=Male				
BMI	-0.01(-0.03~0.01)	0.311	-0.01(-0.03~0.01)	0.312
WHR	-0.15(-0.36~0.07)	0.181	-0.15(-0.36~0.07)	0.177
WHtR	-0.09(-0.28~0.11)	0.380	-0.09(-0.28~0.11)	0.378
GLU	0.01(-0.10~0.13)	0.850	0.01(-0.11~0.13)	0.852
GA	0.01(-0.04~0.05)	0.796	0.01(-0.04~0.05)	0.795
Urea	-0.10(-0.21~0.00)	0.059	-0.11(-0.21~0.00)	0.056
UA	0.00(-0.00~0.00)	0.866	0.00(-0.00~0.00)	0.850
CHO	-0.05(-0.17~0.08)	0.453	-0.05(-0.18~0.08)	0.450
TG	0.02(-0.06~0.09)	0.634	0.02(-0.06~0.09)	0.635
HDL-C	0.09(-0.43~0.61)	0.722	0.09(-0.43~0.62)	0.723
LDL-C	-0.12(-0.29~0.05)	0.157	-0.12(-0.29~0.05)	0.157

Supplementary Table 9 Subgroup analysis of obesity, metabolic indexes and PA lesion location outcomes based on age

Variable	Crude OR (95%CI)	Crude P	Adjusted OR (95%CI)	Adjusted P
Age ≤ 36				
BMI (kg/m ²) (Ref=LA)				
HA	0.95(0.88~1.02)	0.140	0.92(0.86~1.00)	0.041
ISA	0.95(0.90~1.01)	0.117	0.93(0.88~0.99)	0.022
WHR (Ref=LA)				
HA	1.63(0.66~3.99)	0.288	0.63(0.23~1.73)	0.370

ISA	1.14(0.52~2.53)	0.738	0.38(0.15~0.96)	0.041
WHtR (Ref=LA)				
HA	0.84(0.36~1.94)	0.679	0.48(0.19~1.23)	0.126
ISA	0.59(0.27~1.25)	0.166	0.33(0.14~0.77)	0.011
GLU(mmol/L) (Ref=LA)				
HA	1.22(0.52~2.84)	0.646	1.07(0.49~2.31)	0.870
ISA	1.38(0.63~3.02)	0.421	1.21(0.60~2.43)	0.600
GA (%) (Ref=LA)				
HA	0.98(0.61~1.58)	0.941	1.27(0.74~2.18)	0.379
ISA	1.16(0.76~1.77)	0.499	1.52(0.93~2.49)	0.097
Urea(mmol/L) (Ref=LA)				
HA	1.36(0.76~2.43)	0.305	1.09(0.61~1.95)	0.767
ISA	1.66(0.97~2.83)	0.062	1.34(0.79~2.27)	0.274
UA(μmol/L) (Ref=LA)				
HA	1.00(1.00~1.01)	0.541	1.00(0.99~1.00)	0.149
ISA	1.00(1.00~1.01)	0.869	0.99(0.99~1.00)	0.026
CHO(mmol/L) (Ref=LA)				
HA	1.06(0.58~1.92)	0.850	0.84(0.43~1.61)	0.593
ISA	0.90(0.52~1.53)	0.687	0.70(0.38~1.29)	0.252
TG(mmol/L) (Ref=LA)				
HA	1.36(0.76~2.42)	0.303	1.09(0.72~1.65)	0.677
ISA	1.19(0.68~2.09)	0.549	0.95(0.63~1.44)	0.807
HDL-C(mmol/L) (Ref=LA)				
HA	0.23(0.03~1.73)	0.152	0.87(0.09~8.24)	0.902
ISA	0.33(0.06~1.90)	0.214	1.38(0.19~10.00)	0.751
LDL-C(mmol/L) (Ref=LA)				
HA	1.16(0.53~2.56)	0.709	0.67(0.28~1.61)	0.367
ISA	1.15(0.56~2.33)	0.707	0.65(0.29~1.45)	0.292
Age > 36				

BMI (kg/m ²) (Ref=LA)				
HA	0.91(0.82~1.02)	0.098	0.91(0.82~1.02)	0.100
ISA	0.93(0.85~1.02)	0.126	0.93(0.85~1.02)	0.134
WHR (Ref=LA)				
HA	0.95(0.20~4.60)	0.949	0.75(0.14~4.10)	0.742
ISA	1.16(0.25~5.27)	0.851	1.08(0.21~5.48)	0.928
WHtR (Ref=LA)				
HA	0.70(0.11~4.38)	0.703	0.65(0.10~4.08)	0.642
ISA	1.00(0.17~5.80)	0.999	0.97(0.17~5.66)	0.974
GLU(mmol/L) (Ref=LA)				
HA	0.77(0.40~1.49)	0.440	0.71(0.37~1.39)	0.324
ISA	0.77(0.43~1.41)	0.400	0.75(0.41~1.37)	0.348
GA (%) (Ref=LA)				
HA	0.98(0.85~1.13)	0.758	0.97(0.84~1.13)	0.725
ISA	0.95(0.83~1.10)	0.497	0.95(0.83~1.09)	0.483
Urea(mmol/L) (Ref=LA)				
HA	1.70(0.63~4.58)	0.295	1.62(0.58~4.55)	0.362
ISA	1.51(0.58~3.95)	0.397	1.51(0.55~4.09)	0.422
UA(μmol/L) (Ref=LA)				
HA	1.01(1.01~1.01)	<0.001	1.01(1.00~1.02)	0.003
ISA	1.01(1.00~1.01)	<0.001	1.01(1.00~1.02)	0.009
CHO(mmol/L) (Ref=LA)				
HA	1.15(0.37~3.59)	0.804	1.17(0.37~3.66)	0.793
ISA	1.31(0.44~3.91)	0.624	1.32(0.44~3.97)	0.620
TG(mmol/L) (Ref=LA)				
HA	3.67(0.41~32.65)	0.244	3.54(0.38~33.38)	0.270
ISA	4.15(0.48~36.06)	0.197	4.18(0.46~38.41)	0.206
HDL-C(mmol/L) (Ref=LA)				
HA	0.20(0.01~5.83)	0.350	0.26(0.01~10.31)	0.477

ISA	0.27(0.01~6.32)	0.413	0.27(0.01~8.38)	0.451
LDL-C(mmol/L) (Ref=LA)				
HA	1.92(0.40~9.23)	0.414	1.81(0.38~8.73)	0.459
ISA	2.11(0.46~9.64)	0.333	2.06(0.45~9.40)	0.351

Supplementary Table 10 Subgroup analysis of obesity, metabolic indexes and PA lesion location outcomes based on gender

Variable	Crude OR (95%CI)	Crude P	Adjusted OR (95%CI)	Adjusted P
Gender=Female				
BMI (kg/m ²) (Ref=LA)				
HA	0.95(0.87~1.05)	0.325	0.91(0.81~1.03)	0.137
ISA	0.90(0.84~0.98)	0.015	0.85(0.76~0.95)	0.006
WHR (Ref=LA)				
HA	1.60(0.44~5.88)	0.477	1.08(0.27~4.40)	0.912
ISA	0.74(0.26~2.06)	0.561	0.32(0.10~1.08)	0.067
WHtR (Ref=LA)				
HA	1.34(0.30~6.05)	0.706	0.73(0.13~4.20)	0.725
ISA	0.45(0.14~1.50)	0.194	0.18(0.04~0.81)	0.025
GLU(mmol/L) (Ref=LA)				
HA	0.75(0.21~2.74)	0.666	0.65(0.19~2.27)	0.5
ISA	0.99(0.41~2.38)	0.982	0.81(0.36~1.81)	0.61
GA (%) (Ref=LA)				
HA	1.15(0.55~2.39)	0.715	1.09(0.49~2.40)	0.833
ISA	1.39(0.78~2.49)	0.264	1.27(0.66~2.43)	0.477
Urea(mmol/L) (Ref=LA)				
HA	0.90(0.37~2.18)	0.809	0.95(0.38~2.34)	0.904
ISA	1.21(0.62~2.39)	0.574	1.28(0.63~2.60)	0.492
UA(μmol/L) (Ref=LA)				
HA	0.99(0.98~1.00)	0.082	0.99(0.98~1.00)	0.12

ISA	0.99(0.99~1.00)	0.18	1.00(0.99~1.01)	0.37
CHO (mmol/L) (Ref=LA)				
HA	0.71(0.22~2.22)	0.551	0.46(0.13~1.61)	0.223
ISA	1.11(0.47~2.62)	0.817	0.67(0.25~1.76)	0.413
TG(mmol/L) (Ref=LA)				
HA	0.88(0.22~3.54)	0.861	0.73(0.20~2.71)	0.643
ISA	1.36(0.50~3.68)	0.542	1.07(0.44~2.58)	0.881
HDL-C(mmol/L) (Ref=LA)				
HA	0.46(0.02~10.46)	0.627	0.58(0.03~13.16)	0.736
ISA	1.96(0.19~20.37)	0.575	2.44(0.22~26.95)	0.466
LDL-C(mmol/L) (Ref=LA)				
HA	0.75(0.20~2.88)	0.68	0.35(0.07~1.80)	0.209
ISA	1.18(0.42~3.32)	0.757	0.49(0.13~1.86)	0.295
Gender=Male				
BMI (kg/m ²) (Ref=LA)				
HA	0.94(0.86~1.03)	0.164	0.94(0.86~1.03)	0.182
ISA	0.97(0.90~1.05)	0.412	0.97(0.90~1.05)	0.441
WHR (Ref=LA)				
HA	0.54(0.17~1.71)	0.292	0.43(0.13~1.46)	0.177
ISA	0.58(0.19~1.76)	0.337	0.48(0.15~1.52)	0.21
WHtR (Ref=LA)				
HA	0.51(0.19~1.40)	0.19	0.51(0.19~1.34)	0.174
ISA	0.52(0.20~1.36)	0.185	0.53(0.21~1.31)	0.17
GLU (mmol/L) (Ref=LA)				
HA	0.99(0.52~1.91)	0.986	0.87(0.47~1.61)	0.664
ISA	1.04(0.56~1.94)	0.897	0.93(0.53~1.65)	0.808
GA (%) (Ref=LA)				
HA	1.04(0.75~1.45)	0.808	0.98(0.78~1.23)	0.845
ISA	1.03(0.75~1.42)	0.858	0.97(0.78~1.21)	0.792

Urea(mmol/L) (Ref=LA)				
HA	1.55(0.80~3.01)	0.192	1.46(0.75~2.83)	0.268
ISA	1.62(0.86~3.07)	0.136	1.53(0.81~2.90)	0.189
UA(μmol/L) (Ref=LA)				
HA	1.00(1.00~1.00)	0.126	1.00(1.00~1.00)	0.943
ISA	1.00(0.99~1.00)	0.001	1.00(0.99~1.00)	0.292
CHO(mmol/L) (Ref=LA)				
HA	0.99(0.51~1.94)	0.978	0.94(0.47~1.85)	0.854
ISA	0.91(0.48~1.71)	0.76	0.86(0.45~1.65)	0.651
TG(mmol/L) (Ref=LA)				
HA	1.24(0.63~2.44)	0.536	1.17(0.64~2.16)	0.608
ISA	1.11(0.57~2.17)	0.755	1.05(0.58~1.93)	0.863
HDL-C(mmol/L) (Ref=LA)				
HA	0.45(0.03~6.11)	0.549	0.43(0.03~5.88)	0.523
ISA	0.43(0.04~5.05)	0.503	0.41(0.03~4.94)	0.486
LDL-C(mmol/L) (Ref=LA)				
HA	1.01(0.41~2.48)	0.99	0.98(0.39~2.42)	0.958
ISA	1.01(0.43~2.38)	0.983	0.98(0.41~2.33)	0.966

Supplementary Table 11 Logistic regression model of obesity, metabolic indexes and PA corrected by inverse probability weighting method

Variable	Crude model						Adjusted model					
	Estimation			IPW Estimation			Estimation			IPW Estimation		
	Crude (95%CI)	OR	Crude P	Crude (95%CI)	OR	Crude P	Adjusted (95%CI)	OR	Adjusted d P	Adjusted (95%CI)	OR	Adjusted P
BMI (kg/m2)	1.19(1.15~1.23)		<0.001	1.15(1.11~1.19)		<0.001	1.16(1.12~1.20)		<0.001	1.16(1.12~1.20)		<0.001
WHR	9.26(7.16~12.16)		<0.001	5.08(4.07~6.40)		<0.001	8.43(6.36~11.35)		<0.001	7.29(5.63~9.55)		<0.001
WHtR	10.95(8.11~15.06)		<0.001	9.13(6.80~12.46)		<0.001	10.10(7.32~14.18)		<0.001	10.60(7.76~14.74)		<0.001
GLU (mmol/L)	1.43(1.24~1.66)		<0.001	1.42(1.22~1.66)		<0.001	1.44(1.23~1.69)		<0.001	1.46(1.25~1.72)		<0.001
GA (%)	0.91(0.84~0.98)		0.017	1.00(0.94~1.07)		0.906	1.01(0.94~1.08)		0.830	1.01(0.95~1.08)		0.724
Urea (mmol/L)	1.12(1.01~1.24)		0.033	0.97(0.87~1.08)		0.546	0.97(0.86~1.09)		0.598	0.95(0.85~1.07)		0.425
UA (μmol/L)	1.01(1.01~1.01)		<0.001	1.00(1.00~1.00)		<0.001	1.00(1.00~1.01)		<0.001	1.00(1.00~1.01)		<0.001
CHO (mmol/L)	1.61(1.40~1.85)		<0.001	1.57(1.37~1.81)		<0.001	1.81(1.56~2.13)		<0.001	1.61(1.40~1.86)		<0.001
TG (mmol/L)	2.09(1.77~2.49)		<0.001	1.73(1.48~2.03)		<0.001	1.82(1.52~2.20)		<0.001	1.78(1.52~2.11)		<0.001
HDL-C (mmol/L)	0.07(0.04~0.12)		<0.001	0.22(0.14~0.34)		<0.001	0.17(0.10~0.28)		<0.001	0.20(0.12~0.31)		<0.001
LDL-C (mmol/L)	2.47(2.03~3.03)		<0.001	2.00(1.65~2.44)		<0.001	2.20(1.78~2.75)		<0.001	2.07(1.70~2.55)		<0.001

Adjusted model: Regression model with age and gender. Crude model: Regression model without age and gender.

Supplementary Table 12 Linear regression model of obesity, metabolic indexes and PA corrected by inverse probability weighting method

Variable	Crude model					Adjusted model						
	Estimation		IPW Estimation			Estimation		IPW Estimation				
	Crude	Beta	Crude	Crude	Beta	Crude	Adjusted	Beta	Adjusted	Adjusted	Beta	Adjusted
	(95%CI)	P	(95%CI)	(95%CI)	P	(95%CI)	(95%CI)	P	(95%CI)	(95%CI)	P	(95%CI)
BMI (kg/m ²)	-0.01(-0.02~0.01)	0.493	-0.00(-0.02~0.01)	-0.00(-0.02~0.01)	0.573	-0.01(-0.02~0.01)	-0.01(-0.02~0.01)	0.413	-0.01(-0.02~0.01)	-0.01(-0.02~0.01)	0.448	-0.01(-0.02~0.01)
WHR	-0.01(-0.18~0.16)	0.917	0.08(-0.07~0.23)	0.08(-0.07~0.23)	0.318	-0.06(-0.25~0.13)	-0.06(-0.25~0.13)	0.522	0.01(-0.16~0.19)	0.01(-0.16~0.19)	0.871	0.01(-0.16~0.19)
WHtR	0.01(-0.16~0.18)	0.917	0.09(-0.08~0.26)	0.09(-0.08~0.26)	0.303	-0.01(-0.18~0.17)	-0.01(-0.18~0.17)	0.954	0.06(-0.11~0.24)	0.06(-0.11~0.24)	0.468	0.06(-0.11~0.24)
GLU (mmol/L)	0.01(-0.10~0.11)	0.908	0.02(-0.09~0.13)	0.02(-0.09~0.13)	0.695	0.00(-0.11~0.11)	0.00(-0.11~0.11)	0.972	0.01(-0.10~0.12)	0.01(-0.10~0.12)	0.904	0.01(-0.10~0.12)
GA (%)	0.00(-0.04~0.05)	0.84	0.00(-0.04~0.04)	0.00(-0.04~0.04)	0.896	0.01(-0.04~0.05)	0.01(-0.04~0.05)	0.697	0.01(-0.03~0.05)	0.01(-0.03~0.05)	0.733	0.01(-0.03~0.05)
Urea	-0.08(-0.19~0.03)	0.091	-0.05(-0.19~0.03)	-0.05(-0.19~0.03)	0.244	-0.10(-0.20~-0.00)	-0.10(-0.20~-0.00)	0.048	-0.09(-0.19~0.01)	-0.09(-0.19~0.01)	0.072	-0.09(-0.19~0.01)

(mmol/L)	0.18~0.01)		0.15~0.04)						
UA (μmol/L)	0.00(-0.00~0.00)	0.832	0.00(-0.00~0.00)	0.742	-0.00(-0.00~0.00)	0.583	-0.00(-0.00~0.00)	0.274	
CHO	-0.07(-	0.264	-0.07(-	0.256	-0.07(-0.19~0.05)	0.242	-0.08(-0.20~0.04)	0.205	
(mmol/L)	0.18~0.05)		0.19~0.05)						
TG (mmol/L)	0.01(-0.06~0.08)	0.785	0.01(-0.06~0.08)	0.804	0.01(-0.07~0.08)	0.888	-0.00(-0.08~0.07)	0.954	
HDL-C	-0.16(-	0.446	-0.24(-	0.201	-0.07(-0.52~0.37)	0.744	-0.11(-0.51~0.30)	0.598	
(mmol/L)	0.58~0.26)		0.61~0.13)						
LDL-C	-0.12(-	0.123	-0.11(-	0.154	-0.14(-0.30~0.01)	0.069	-0.15(-0.31~-0.00)	0.050	
(mmol/L)	0.27~0.03)		0.25~0.04)						

Supplementary Table 13 Unordered logistic regression model of obesity, metabolic indexes and PA corrected by inverse probability weighting method

Variable	Crude model					Adjusted model						
	Estimation		IPW Estimation			Estimation		IPW Estimation				
	Crude (95% CI)	OR P	Crude CI)	Crude OR (95% CI)	Crude OR (95% P	Crude (95% CI)	Adjusted (95% CI)	OR d P	Adjusted (95% CI)	OR d P	Adjusted (95% CI)	OR d P

BMI (kg/ m2) (Ref=LA)

HA	0.94(0.88~0.99)	0.032	0.93(0.88~0.98)	0.005	0.92(0.86~0.98)	0.010	0.91(0.86~0.96)	0.001
ISA	0.95(0.90~1.00)	0.034	0.93(0.89~0.97)	<0.001	0.93(0.89~0.98)	0.010	0.92(0.88~0.96)	<0.001
WHR (Ref=LA)								
HA	1.41(0.67~2.99)	0.370	1.48(0.78~2.82)	0.229	0.50(0.21~1.19)	0.115	0.65(0.31~1.39)	0.266
ISA	1.26(0.63~2.51)	0.507	1.12(0.63~1.98)	0.693	0.46(0.21~1.04)	0.061	0.53(0.27~1.04)	0.064
WHtR (Ref=LA)								
HA	0.77(0.35~1.66)	0.502	0.85(0.41~1.74)	0.648	0.49(0.22~1.07)	0.072	0.55(0.26~1.17)	0.120
ISA	0.68(0.34~1.40)	0.297	0.65(0.34~1.24)	0.191	0.44(0.21~0.91)	0.027	0.44(0.23~0.87)	0.019
GLU(mmol/L) (Ref=LA)								
HA	1.11(0.63~1.98)	0.718	1.20(0.70~2.08)	0.509	0.82(0.50~1.36)	0.445	0.92(0.55~1.52)	0.736
ISA	1.17(0.68~2.00)	0.575	1.22(0.73~2.03)	0.450	0.88(0.56~1.38)	0.579	0.97(0.62~1.52)	0.885
GA (%) (Ref=LA)								
HA	1.04(0.80~1.36)	0.75	1.04(0.82~1.31)	0.760	1.00(0.74~1.35)	0.995	1.02(0.77~1.37)	0.871
ISA	1.04(0.80~1.35)	0.769	1.04(0.83~1.29)	0.757	1.00(0.74~1.33)	0.974	1.02(0.77~1.35)	0.876
Urea(mmol/L) (Ref=LA)								
HA	1.58(0.97~2.59)	0.067	1.64(1.05~2.58)	0.031	1.26(0.77~2.08)	0.354	1.29(0.81~2.06)	0.275
ISA	1.67(1.05~2.66)	0.029	1.75(1.16~2.66)	0.008	1.36(0.86~2.17)	0.191	1.46(0.96~2.23)	0.078

UA($\mu\text{mol/L}$) (Ref=LA)								
HA	1.00(1.00~1.01)	0.405	1.00(1.00~1.01)	0.382	1.00(1.00~1.00)	0.548	1.00(0.99~1.00)	0.107
ISA	1.00(1.00~1.01)	0.785	1.00(1.00~1.00)	0.708	1.00(0.99~1.00)	0.147	1.00(0.99~1.00)	0.037
CHO(mmol/L) (Ref=LA)								
HA	1.07(0.64~1.81)	0.79	0.99(0.60~1.62)	0.966	0.83(0.47~1.48)	0.537	0.79(0.46~1.35)	0.386
ISA	1.02(0.63~1.66)	0.926	0.96(0.61~1.49)	0.844	0.80(0.47~1.37)	0.415	0.78(0.48~1.27)	0.314
TG(mmol/L) (Ref=LA)								
HA	1.57(0.85~2.92)	0.148	1.88(1.00~3.54)	0.049	1.14(0.70~1.87)	0.589	1.36(0.77~2.38)	0.287
ISA	1.43(0.78~2.63)	0.246	1.72(0.92~3.19)	0.087	1.04(0.65~1.69)	0.858	1.25(0.72~2.18)	0.419
HDL-C(mmol/L) (Ref=LA)								
HA	0.25(0.04~1.38)	0.112	0.25(0.06~1.12)	0.070	0.77(0.11~5.20)	0.791	0.64(0.12~3.33)	0.595
ISA	0.34(0.07~1.59)	0.173	0.42(0.12~1.49)	0.178	0.99(0.18~5.53)	0.988	0.87(0.21~3.64)	0.850
LDL-C(mmol/L) (Ref=LA)								
HA	1.32(0.66~2.66)	0.432	1.21(0.64~2.28)	0.555	0.79(0.37~1.67)	0.536	0.74(0.37~1.48)	0.394
ISA	1.36(0.71~2.60)	0.352	1.22(0.69~2.16)	0.492	0.83(0.41~1.68)	0.606	0.80(0.42~1.50)	0.486

Supplementary Table 14 Logistic regression model of obesity, metabolic indexes and PA without missing values

Variable	Crude OR (95%CI)	Crude P	Adjusted OR (95%CI)	Adjusted P
BMI (kg/m ²)	1.19(1.15~1.24)	<0.001	1.15(1.11~1.20)	<0.001
WHR	9.23(7.00~12.41)	<0.001	8.29(6.12~11.44)	<0.001
WHtR	10.91(7.90~15.37)	<0.001	9.98(7.06~14.42)	<0.001
GLU (mmol/L)	1.34(1.15~1.57)	<0.001	1.36(1.16~1.61)	<0.001
GA (%)	0.91(0.83~0.99)	0.034	1.00(0.93~1.07)	0.952
Urea (mmol/L)	1.16(1.04~1.30)	0.010	0.98(0.86~1.12)	0.765
UA (μmol/L)	1.01(1.01~1.01)	<0.001	1.00(1.00~1.01)	<0.001
CHO (mmol/L)	1.64(1.41~1.92)	<0.001	1.84(1.55~2.19)	<0.001
TG (mmol/L)	1.98(1.66~2.38)	<0.001	1.69(1.41~2.05)	<0.001
HDL-C (mmol/L)	0.05(0.03~0.09)	<0.001	0.12(0.07~0.22)	<0.001
LDL-C (mmol/L)	2.43(1.96~3.03)	<0.001	2.14(1.69~2.72)	<0.001

Supplementary Table 15 Linear regression model of obesity, metabolic indexes and PA without missing values

Variable	Crude Beta (95% CI)	Crude P	Adjusted Beta (95% CI)	Adjusted P
BMI (kg/m ²)	-0.00(-0.02~0.02)	0.871	-0.00(-0.02~0.02)	0.813
WHR	-0.02(-0.21~0.17)	0.853	-0.05(-0.26~0.17)	0.666
WHtR	0.03(-0.16~0.23)	0.727	0.03(-0.17~0.23)	0.771
GLU (mmol/L)	0.02(-0.10~0.15)	0.720	0.03(-0.10~0.16)	0.692
GA (%)	-0.00(-0.05~0.04)	0.923	0.00(-0.05~0.05)	0.986
Urea (mmol/L)	-0.08(-0.19~0.03)	0.143	-0.09(-0.21~0.02)	0.100
UA (μmol/L)	0.00(-0.00~0.00)	0.947	-0.00(-0.00~0.00)	0.707
CHO (mmol/L)	-0.04(-0.18~0.09)	0.542	-0.05(-0.18~0.09)	0.517
TG (mmol/L)	0.02(-0.06~0.09)	0.647	0.02(-0.06~0.09)	0.687
HDL-C (mmol/L)	0.05(-0.45~0.55)	0.841	0.13(-0.40~0.67)	0.627
LDL-C (mmol/L)	-0.06(-0.23~0.11)	0.471	-0.08(-0.25~0.10)	0.389

Supplementary Table 16 Unordered logistic regression model of obesity, metabolic indexes and PA without missing values

Variable	Crude (95% CI)	OR Crude P	Adjusted (95% CI)	OR Adjusted P
BMI (kg/m ²) (Ref=LA)				
HA	0.92(0.85~1.00)	0.041	0.90(0.83~0.97)	0.009
ISA	0.95(0.89~1.01)	0.101	0.93(0.87~0.99)	0.024
WHR (Ref=LA)				
HA	1.92(0.83~4.43)	0.125	0.86(0.32~2.36)	0.777
ISA	1.90(0.88~4.07)	0.100	0.91(0.36~2.31)	0.844
WHtR (Ref=LA)				
HA	1.05(0.45~2.46)	0.917	0.70(0.29~1.73)	0.443
ISA	1.07(0.49~2.34)	0.875	0.73(0.32~1.67)	0.454
GLU(mmol/L) (Ref=LA)				
HA	1.03(0.56~1.89)	0.923	0.83(0.47~1.45)	0.506
ISA	1.08(0.62~1.89)	0.790	0.86(0.52~1.44)	0.574
GA (%) (Ref=LA)				
HA	0.98(0.84~1.14)	0.817	0.95(0.82~1.11)	0.538
ISA	0.98(0.86~1.12)	0.766	0.94(0.82~1.08)	0.409
Urea(mmol/L) (Ref=LA)				
HA	1.40(0.81~2.41)	0.225	1.13(0.66~1.95)	0.649
ISA	1.56(0.94~2.60)	0.084	1.30(0.79~2.15)	0.299
UA(μmol/L) (Ref=LA)				
HA	1.01(1.00~1.01)	0.088	1.00(1.00~1.01)	0.422
ISA	1.00(1.00~1.01)	0.284	1.00(1.00~1.00)	0.975
CHO(mmol/L) (Ref=LA)				
HA	1.41(0.75~2.64)	0.287	1.18(0.59~2.35)	0.639

ISA	1.33(0.74~2.39)	0.337	1.12(0.59~2.14)	0.729
TG(mmol/L) (Ref=LA)				
HA	1.78(0.85~3.74)	0.126	1.29(0.68~2.42)	0.436
ISA	1.62(0.78~3.36)	0.199	1.17(0.63~2.18)	0.623
HDL-C(mmol/L) (Ref=LA)				
HA	0.15(0.02~1.07)	0.059	0.47(0.05~4.21)	0.501
ISA	0.13(0.02~0.74)	0.021	0.32(0.04~2.29)	0.255
LDL-C(mmol/L) (Ref=LA)				
HA	2.31(0.98~5.48)	0.056	1.59(0.63~4.01)	0.322
ISA	2.37(1.05~5.32)	0.037	1.68(0.70~4.01)	0.242

Supplementary Table 17 Mendelian randomization results of obesity, metabolic indexes and PA													
id.exposure	id.outcome	outcome	exposure	method	nSNP	Beta	se	pval	lo_ci	up_ci	or	or_lci95	or_uci95
ieu-b-40	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	body mass index	MR Egger	492	0.002111543	0.001461523	0.149165887	-0.000753043	0.004976128	1.002113773	0.999247241	1.004988529
ieu-b-40	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	body mass index	Weighted median	492	0.002809537	0.000918396	0.00221945	0.001009481	0.004609594	1.002813488	1.001009991	1.004620234
ieu-b-40	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	body mass index	Inverse variance weighted	492	0.002092405	0.000550302	0.000143369	0.001013812	0.003170997	1.002094595	1.001014326	1.00317603
ieu-b-40	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	body mass index	Simple mode	492	0.004232809	0.00256203	0.099147178	-0.00078877	0.009254387	1.00424178	0.999211541	1.009297342
ieu-b-40	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	body mass index	Weighted mode	492	0.003315683	0.001380265	0.016666853	0.000610363	0.006021003	1.003321186	1.00061055	1.006039166
ieu-a-77	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Waist-to-hip ratio	MR Egger	6	0.008914142	0.008651494	0.361064224	-0.008042786	0.02587107	1.008953991	0.991989471	1.026208631
ieu-a-77	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Waist-to-hip ratio	Weighted median	6	0.005686079	0.002561113	0.026407965	0.000666297	0.010705862	1.005702276	1.000666519	1.010763375
ieu-a-77	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Waist-to-hip ratio	Inverse variance weighted	6	0.004478966	0.002096199	0.032621755	0.000370415	0.008587516	1.004489011	1.000370484	1.008624495
ieu-a-77	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Waist-to-hip ratio	Simple mode	6	0.006020956	0.003613379	0.156532784	-0.001061267	0.013103178	1.006039118	0.998939296	1.013189401
ieu-a-77	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Waist-to-hip ratio	Weighted mode	6	0.005867246	0.003172133	0.123608876	-0.000350136	0.012084627	1.005884492	0.999649926	1.012157941

ukb-a-283	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Arm (right)	fat	mass	MR Egger	270	0.001848357	0.001690785	0.275289925	-0.001462296	0.0051650067	1.001835492	0.9985	1.005175644
ukb-a-283	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Arm (right)	fat	mass	Weighted median	270	0.003052194	0.000885063	0.000563582	0.00131747	0.004786918	1.003056857	1.001318339	1.004798393
ukb-a-283	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Arm (right)	fat	mass	Inverse variance weighted	270	0.001986549	0.000573535	0.00053282	0.000862419	0.003110678	1.001988523	1.000862791	1.003115521
ukb-a-283	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Arm (right)	fat	mass	Simple mode	270	0.004346242	0.00271739	0.110901578	-0.000972326	0.0096755701	1.004320638	0.9990	1.009719254
ukb-a-283	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Arm (right)	fat	mass	Weighted mode	270	0.004177669	0.001768035	0.018844993	0.00071232	0.007643019	1.004186408	1.000712574	1.007672301
ukb-a-286	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Arm fat percentage (left)			MR Egger	253	0.002399168	0.002557749	0.34914634	-0.002612357	0.0074102048	1.002489393	0.9973	1.007439896
ukb-a-286	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Arm fat percentage (left)			Weighted median	253	0.00374407	0.001177072	0.001468518	0.001437009	0.00605113	1.003751088	1.001438042	1.006069476
ukb-a-286	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Arm fat percentage (left)			Inverse variance weighted	253	0.002463843	0.000789595	0.001806123	0.000916237	0.004011448	1.00246688	1.000916657	1.004019505
ukb-a-286	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Arm fat percentage (left)			Simple mode	253	0.008324025	0.00366693	0.024051102	0.001136842	0.015511208	1.008358766	1.001137488	1.015632132
ukb-a-286	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Arm fat percentage (left)			Weighted mode	253	0.006273117	0.002627373	0.01769635	0.001123467	0.011422768	1.006292835	1.001124098	1.011488257
ukb-a-282	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Arm fat percentage (right)			MR Egger	234	0.002960425	0.002624352	0.260460075	-0.002184156	0.0081064812	1.002919076	0.9978	1.008137084
ukb-a-282	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Arm fat percentage (right)			Weighted median	234	0.004043759	0.001237123	0.001080509	0.001618997	0.006468521	1.004051946	1.001620308	1.006489487

ukb-a-282	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Arm fat percentage (right)	Inverse variance weighted	234	0.00239054	0.00081309	0.003281395	0.000796884	0.003984197	1.0023934	1.000797202	1.003992144
ukb-a-282	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Arm fat percentage (right)	Simple mode	234	0.007996768	0.003448398	0.021262149	0.001237908	0.014755628	1.008028828	1.001238675	1.01486503
ukb-a-282	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Arm fat percentage (right)	Weighted mode	234	0.006556697	0.002714367	0.016482031	0.001236538	0.011876855	1.006578239	1.001237303	1.011947665
ukb-a-264	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Body fat percentage	MR Egger	253	0.001137283	0.002882172	0.693478934	-0.00451	0.00678634	1.00113793	0.995498388	1.00680942
ukb-a-264	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Body fat percentage	Weighted median	253	0.004116155	0.001181567	0.000494643	0.001800284	0.006432026	1.004124638	1.001801905	1.006452756
ukb-a-264	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Body fat percentage	Inverse variance weighted	253	0.002726206	0.000806221	0.000721008	0.001146014	0.004306399	1.002729926	1.001146671	1.004315685
ukb-a-264	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Body fat percentage	Simple mode	253	0.008916049	0.003575839	0.013294352	0.001907404	0.015924694	1.008955915	1.001909224	1.016052168
ukb-a-264	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Body fat percentage	Weighted mode	253	0.007261838	0.003004343	0.016354871	0.001373326	0.01315035	1.007288269	1.001374269	1.013237196
ukb-a-279	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Leg fat mass (left)	MR Egger	281	0.004209852	0.002167374	0.053097907	-3.82E-05	0.008457905	1.004218726	0.9999618	1.008493774
ukb-a-279	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Leg fat mass (left)	Weighted median	281	0.003488889	0.001082553	0.00126929	0.001367085	0.005610693	1.003494982	1.00136802	1.005626463
ukb-a-279	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Leg fat mass (left)	Inverse variance weighted	281	0.002027325	0.000712152	0.004416675	0.000631507	0.003423143	1.002029382	1.000631707	1.003429009
ukb-a-279	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Leg fat mass (left)	Simple mode	281	0.004903123	0.003520824	0.164843556	-0.00199	0.011803938	1.004915163	0.998004303	1.01187388
ukb-a-279	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Leg fat mass (left)	Weighted mode	281	0.005389867	0.002221981	0.015910909	0.001034784	0.00974495	1.005404419	1.00103532	1.009792587

ukb-a-275	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Leg fat mass (right)	MR Egger	282	0.004066258	0.002187	0.0640	-	0.00835	1.0040	0.9997	1.008388169
							207	60502	0.00022	3184	74537	79357	0667
ukb-a-275	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Leg fat mass (right)	Weighted median	282	0.003412179	0.001125	0.0024	0.00120	0.00561	1.0034	1.0012	1.00563371
							368	28929	6459	79	18007	07187	
ukb-a-275	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Leg fat mass (right)	Inverse variance weighted	282	0.002333723	0.000701	0.0008	0.00095	0.00370	1.0023	1.0009	1.003715631
							542	79236	8702	8745	36449	59162	
ukb-a-275	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Leg fat mass (right)	Simple mode	282	0.003083386	0.003393	0.3643	-	0.00973	1.0030	0.9964	1.009782775
							8	74192	0.00356	5234	88144	37897	8462
ukb-a-275	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Leg fat mass (right)	Weighted mode	282	0.00505049	0.002348	0.0323	0.00044	0.00965	1.0050	1.0004	1.009700324
							514	68358	7401	3578	63265	47502	
ukb-a-278	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Leg fat percentage (left)	MR Egger	248	0.00667468	0.003763	0.0773	-	0.01405	1.0066	0.9992	1.01415082
							751	97734	0.00070	1632	97005	97974	2272
ukb-a-278	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Leg fat percentage (left)	Weighted median	248	0.00523726	0.001508	0.0005	0.00228	0.00819	1.0052	1.0022	1.008227936
							679	17713	0248	4271	50998	8285	
ukb-a-278	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Leg fat percentage (left)	Inverse variance weighted	248	0.004415767	0.001025	1.68E-	0.00240	0.00642	1.0044	1.0024	1.006447301
							939	05	4927	6606	2553	07821	
ukb-a-278	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Leg fat percentage (left)	Simple mode	248	-0.002912625	0.004854	0.5490	-	0.00660	0.9970	0.9876	1.006624832
							903	99652	0.01242	2984	91612	48677	8234
ukb-a-278	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Leg fat percentage (left)	Weighted mode	248	0.009459961	0.003654	0.0102	0.00229	0.01662	1.0095	1.0022	1.016762345
							819	15171	6515	3407	04848	99155	
ukb-a-274	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Leg fat percentage (right)	MR Egger	246	0.00617585	0.003666	0.0933	-	0.01336	1.0061	0.9989	1.01345105
							091	46863	0.00100	1388	9496	90821	9688
ukb-a-274	ukb-a-556	Diagnoses - main ICD10: K60 Fissure	Leg fat percentage	Weighted median	246	0.005832645	0.001455	6.13E-	0.00298	0.00868	1.0058	1.0029	1.008722895

		and fistula of anal and rectal regions (right)						319	05	0219	507	49688	84665	
ukb-a-274	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions (right)	Leg fat percentage	Inverse variance	246	0.004476671	0.000976	4.58E-	0.00256	0.00639	1.0044	1.0025	1.006411691	
				weighted			812	06	2118	1223	86706	65403		
ukb-a-274	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions (right)	Leg fat percentage	Simple mode	246	0.01101716	0.004503	0.0151	0.00219	0.01984	1.0110	1.0021	1.02004155	
							164	27414	0959	3362	78072	9336		
ukb-a-274	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions (right)	Leg fat percentage	Weighted mode	246	0.010101452	0.003876	0.0097	0.00250	0.01769	1.0101	1.0025	1.017856168	
							105	19428	4286	8619	52644	07424		
ukb-a-265	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Whole body fat	MR Egger	280	0.001566975	0.001809	0.3871	-	0.00511	1.0015	0.9980	1.005126155	
			mass				228	81264	0.00197	3061	68203	22846		
									9111					
ukb-a-265	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Whole body fat	Weighted median	280	0.002486575	0.000883	0.0048	0.00075	0.00421	1.0024	1.0007	1.004226612	
			mass				23	72847	5445	7705	89669	55731		
ukb-a-265	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Whole body fat	Inverse variance	280	0.001911835	0.000590	0.0012	0.00075	0.00306	1.0019	1.0007	1.003074341	
			mass	weighted			709	10011	4046	9625	13664	5433		
ukb-a-265	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Whole body fat	Simple mode	280	0.000413881	0.002730	0.8796	-	0.00576	1.0004	0.9950	1.005782613	
			mass				652	36826	0.00493	5958	13966	73976		
									8196					
ukb-a-265	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Whole body fat	Weighted mode	280	0.003928314	0.001979	0.0482	4.80E-	0.00780	1.0039	1.0000	1.007839202	
			mass				755	08457	05	8635	3604	47995		
ebi-a-GCST90025986	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Blood levels	glucose	MR Egger	110	-0.000499007	0.000995	0.6172	-	0.00145	0.9995	0.9975	1.001453603
							691	73614	0.00245	2547	01117	52438		
									0562					
ebi-a-GCST90025986	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Blood levels	glucose	Weighted median	110	0.000455537	0.001040	0.6614	-	0.00249	1.0004	0.9984	1.002497364
							16	22892	0.00158	4251	55641	18077		
									3176					
ebi-a-GCST90025986	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Blood levels	glucose	Inverse variance	110	-0.000201344	0.000614	0.7431	-	0.00100	0.9997	0.9985	1.001003246
					weighted		33	03943	0.00140	2743	98676	95556		
									5431					

ebi-a- GCST90025986	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Blood levels	glucose	Simple mode	110	-5.54E-05	0.002118	0.9791	-	0.00409	0.9999	0.9958	1.004104466
								112	68868	0.00420	6066	44569	01905	
										6931				
ebi-a- GCST90025986	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Blood levels	glucose	Weighted mode	110	-0.000202716	0.000961	0.8333	-	0.00168	0.9997	0.9979	1.00168263
								19	58008	0.00208	1216	97304	15527	
										6649				
ebi-a- GCST90013998	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Urea levels	(UKB data field 30670)	MR Egger	162	0.000168695	0.002117	0.9366	-	0.00431	1.0001	0.9960	1.004328828
								75	09205	0.00398	9485	68709	25822	
										2096				
ebi-a- GCST90013998	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Urea levels	(UKB data field 30670)	Weighted median	162	-0.000820683	0.001123	0.4650	-	0.00138	0.9991	0.9969	1.001381826
								242	00571	0.00302	0872	79654	82324	
										2238				
ebi-a- GCST90013998	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Urea levels	(UKB data field 30670)	Inverse variance weighted	162	-0.00086581	0.000823	0.2931	-	0.00074	0.9991	0.9975	1.000748703
								588	36842	0.00248	8423	34565	2303	
										0043				
ebi-a- GCST90013998	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Urea levels	(UKB data field 30670)	Simple mode	162	-0.004543436	0.002762	0.1019	-	0.00087	0.9954	0.9900	1.000870815
								18	46972	0.00995	0436	6687	92101	
										7309				
ebi-a- GCST90013998	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Urea levels	(UKB data field 30670)	Weighted mode	162	-0.002038245	0.001802	0.2598	-	0.00149	0.9979	0.9944	1.001495955
								593	50557	0.00557	4837	63831	44164	
										1327				
ebi-a- GCST90018977	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Serum uric acid levels		MR Egger	236	-0.00011419	0.000602	0.8498	-	0.00106	0.9998	0.9987	1.00106699
								353	07525	0.00129	6422	85816	06036	
										4802				
ebi-a- GCST90018977	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Serum uric acid levels		Weighted median	236	-9.29E-05	0.000619	0.8808	-	0.00112	0.9999	0.9986	1.001122541
								792	74927	0.00130	1911	07122	93179	
										7675				
ebi-a- GCST90018977	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Serum uric acid levels		Inverse variance	236	-0.000311737	0.000449	0.4876	-	0.00056	0.9996	0.9988	1.000568752

GCST90018977		and fistula of anal and rectal regions	levels		weighted			147	41491	0.00119	859	88312	08646	
										2064				
ebi-a- GCST90018977	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Serum levels	uric acid	Simple mode	236	-0.002938409	0.002300	0.2027	-	0.00157	0.9970	0.9925	1.001571793
								494	58631	0.00744	0559	65904	80287	
										7376				
ebi-a- GCST90018977	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Serum levels	uric acid	Weighted mode	236	-0.00044267	0.000543	0.4164	-	0.00062	0.9995	0.9984	1.000623275
								75	09145	0.00150	3081	57428	92717	
										842				
ebi-a- GCST90025953	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Total levels	cholesterol	Simple mode	186	0.000385543	0.001701	0.8209	-	0.00372	1.0003	0.9970	1.003726985
								283	7029	0.00294	0057	85617	55372	
										8972				
ebi-a- GCST90025953	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Total levels	cholesterol	Weighted mode	186	1.69E-05	0.000599	0.9774	-	0.00119	1.0000	0.9988	1.001192461
								398	97437	0.00115	1751	1693	42779	
										7891				
ebi-a- GCST90025953	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Total levels	cholesterol	MR Egger	186	6.13E-05	0.000613	0.9204	-	0.00126	1.0000	0.9988	1.001263786
								109	7583	0.00114	2988	61295	60249	
										0401				
ebi-a- GCST90025953	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Total levels	cholesterol	Weighted median	186	-9.40E-05	0.000765	0.9023	-	0.00140	0.9999	0.9984	1.001408059
								83	53106	0.00159	7068	06045	06285	
										4987				
ebi-a- GCST90025953	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Total levels	cholesterol	Inverse variance weighted	186	0.000250472	0.000439	0.5686	-	0.00111	1.0002	0.9993	1.001112238
								361	21858	0.00061	162	50503	89511	
										0676				
met-d-Total_TG	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Total triglycerides		MR Egger	66	-0.001761141	0.000762	0.0241	-	-	0.9982	0.9967	0.999733985
								801	96183	0.00325	0.00026	40409	49065	
										6231	6051			
met-d-Total_TG	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Total triglycerides		Weighted median	66	-0.001407598	0.000664	0.0341	-	-	0.9985	0.9972	0.999894764
								468	42537	0.00270	0.00010	93393	93714	

met-d-Total_TG	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Total triglycerides	Inverse variance weighted	66	-0.001033938	0.000496	0.0371	-	9954	5241	0.9989	0.9979	0.999938596
							19	82557	0.00200	05	66596	95541		
									6471					
met-d-Total_TG	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Total triglycerides	Simple mode	66	-0.001609663	0.001303	0.2214	-	0.00094	0.9983	0.9958	1.000946144	
							755	10713	0.00416	5697	91632	43639		
									5023					
met-d-Total_TG	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Total triglycerides	Weighted mode	66	-0.001433072	0.000706	0.0465	-	-4.90E-	0.9985	0.9971	0.999950953	
							134	09689	0.00281	05	67955	86869		
									7095					
ebi-a-GCST90025956	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	HDL cholesterol levels	MR Egger	337	0.000460918	0.000431	0.2863	-	0.00130	1.0004	0.9996	1.001307736	
							614	36675	0.00038	6882	61025	15029		
									5045					
ebi-a-GCST90025956	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	HDL cholesterol levels	Weighted median	337	0.000517806	0.000573	0.3661	-	0.00164	1.0005	0.9993	1.001642302	
							035	96715	0.00060	0954	1794	94841		
									5342					
ebi-a-GCST90025956	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	HDL cholesterol levels	Inverse variance weighted	337	0.000461151	0.000310	0.1379	-	0.00107	1.0004	0.9998	1.00107104	
							876	70355	0.00014	0467	61257	51845		
									8166					
ebi-a-GCST90025956	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	HDL cholesterol levels	Simple mode	337	5.83E-05	0.001144	0.9593	-	0.00230	1.0000	0.9978	1.00230364	
							23	95037	0.00218	0991	58301	17992		
									4392					
ebi-a-GCST90025956	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	HDL cholesterol levels	Weighted mode	337	0.000556252	0.000434	0.2009	-	0.00140	1.0005	0.9997	1.001408168	
							146	87179	0.00029	7177	56407	0537		
									4674					
ieu-b-110	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	LDL cholesterol	MR Egger	151	0.000672056	0.000857	0.4344	-	0.00235	1.0006	0.9989	1.002355719	
							598	89863	0.00100	2949	72282	91672		
									8836					

ieu-b-110	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	LDL cholesterol	Weighted median	151	0.000683589	0.000828022	0.409049151	-0.0000939335	0.002306512	1.000683822	0.999061106	1.002309174
ieu-b-110	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	LDL cholesterol	Inverse variance weighted	151	0.000200762	0.000563716	0.721735631	-0.0000904122	0.001305646	1.000200782	0.999096287	1.001306499
ieu-b-110	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	LDL cholesterol	Simple mode	151	0.000781541	0.001868239	0.676303874	-0.002880207	0.00444329	1.000781847	0.997123936	1.004453176
ieu-b-110	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	LDL cholesterol	Weighted mode	151	0.000290446	0.000767062	0.705485303	-0.001212996	0.001793888	1.000290488	0.99878774	1.001795498
met-d-L_LDL_FC_pct	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Free cholesterol to total lipids ratio in large LDL	MR Egger	77	0.00200669	0.00075439	0.009550103	0.000528086	0.003485293	1.002008704	1.000528225	1.003491374
met-d-L_LDL_FC_pct	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Free cholesterol to total lipids ratio in large LDL	Weighted median	77	0.000942006	0.000685077	0.169120094	-0.000400745	0.002284758	1.00094245	0.999599335	1.00228737
met-d-L_LDL_FC_pct	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Free cholesterol to total lipids ratio in large LDL	Inverse variance weighted	77	0.001080035	0.000482748	0.025269012	0.000133849	0.00202622	1.001080618	1.000133858	1.002028274
met-d-L_LDL_FC_pct	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Free cholesterol to total lipids ratio in large LDL	Simple mode	77	0.000633615	0.001314567	0.631194354	-0.001942936	0.003210167	1.000633816	0.99805895	1.003215325
met-d-L_LDL_FC_pct	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Free cholesterol to total lipids ratio in large LDL	Weighted mode	77	0.001165788	0.000716774	0.107996255	-0.000239089	0.002570666	1.001166468	0.999760939	1.002573973
met-d-	ukb-a-556	Diagnoses - main ICD10: K60 Fissure	Free cholesterol to	MR Egger	72	0.001819146	0.000738	0.0162	0.00037	0.00326	1.0018	1.0003	1.003271638

M_LDL_FC_pct		and fistula of anal and rectal regions	total lipids ratio in medium LDL				343	06248	1994	6297	20801	72063	
met-d-M_LDL_FC_pct	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Free cholesterol to total lipids ratio in medium LDL	Weighted median	72	0.001269614	0.000696	0.0683	-9.55E-05	0.00263	1.0012	0.9999	1.0026382
							486	20893		4726	7042	04505	
met-d-M_LDL_FC_pct	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Free cholesterol to total lipids ratio in medium LDL	Inverse variance weighted	72	0.001040289	0.000476	0.0290	0.00010	0.00197	1.0010	1.0001	1.001976138
							479	14867	639	4188	40831	06396	
met-d-M_LDL_FC_pct	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Free cholesterol to total lipids ratio in medium LDL	Simple mode	72	0.000967104	0.001299	0.4593	-	0.00351	1.0009	0.9984	1.003521031
							868	30624	0.00158	4846	67572	20611	
									0638				
met-d-M_LDL_FC_pct	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Free cholesterol to total lipids ratio in medium LDL	Weighted mode	72	0.001115845	0.000704	0.1178	-	0.00249	1.0011	0.9997	1.0025004
							813	25454	0.00026	7279	16468	34446	
									5589				
met-d-XL_VLDL_FC_pct	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Free cholesterol to total lipids ratio in very large VLDL	MR Egger	56	0.002557507	0.001007	0.0140	0.00058	0.00453	1.0025	1.0005	1.00454153
							011	05872	3765	1249	6078	83935	
met-d-XL_VLDL_FC_pct	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Free cholesterol to total lipids ratio in very large VLDL	Weighted median	56	0.000903089	0.000801	0.2596	-	0.00247	1.0009	0.9993	1.002476319
							107	14878	0.00066	3258	03497	33142	
									708				
met-d-XL_VLDL_FC_pct	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Free cholesterol to total lipids ratio in very large VLDL	Inverse variance weighted	56	0.001206193	0.000525	0.0217	0.00017	0.00223	1.0012	1.0001	1.002238743
							535	23155	6145	6241	06921	76161	
met-d-XL_VLDL_FC_pct	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Free cholesterol to total lipids ratio in very large VLDL	Simple mode	56	0.000315419	0.001505	0.8348	-	0.00326	1.0003	0.9973	1.00327145
							455	18736	0.00263	6111	15468	68196	
									5273				
met-d-XL_VLDL_FC_pct	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Free cholesterol to total lipids ratio in	Weighted mode	56	0.000951382	0.000994	0.3427	-	0.00289	1.0009	0.9990	1.002903942
							057	20374	0.00099	9733	51834	03527	

Supplementary Table 18 MR Egger pleiotropy test of obesity, metabolic indexes and PA

id.exposure	id.outcome	outcome	exposure	egger_intercept	se	pval
ieu-b-40	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	body mass index	-3.35E-07	2.37E-05	0.988726346
ieu-a-77	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Waist-to-hip ratio	-0.000153226	0.000289985	0.625184398
ukb-a-283	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Arm fat mass (right)	2.97E-06	3.42E-05	0.930812455
ukb-a-286	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Arm fat percentage (left)	1.03E-06	3.88E-05	0.978807974
ukb-a-282	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Arm fat percentage (right)	-9.34E-06	4.09E-05	0.819505125
ukb-a-264	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Body fat percentage	2.54E-05	4.42E-05	0.566291483
ukb-a-279	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Leg fat mass (left)	-3.74E-05	3.51E-05	0.287273904
ukb-a-275	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Leg fat mass (right)	-2.99E-05	3.58E-05	0.403665507
ukb-a-278	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Leg fat percentage (left)	-2.87E-05	4.59E-05	0.533297529
ukb-a-274	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Leg fat percentage (right)	-2.18E-05	4.53E-05	0.631040772
ukb-a-265	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Whole body fat mass	7.34E-06	3.64E-05	0.840294788
ebi-a-GCST90025986	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Blood glucose levels	1.20E-05	3.14E-05	0.704098128
ebi-a-GCST90013998	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Urea levels (UKB data field 30670)	-2.40E-05	4.52E-05	0.596540021
ebi-a-GCST90018977	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Serum uric acid levels	-8.96E-06	1.82E-05	0.622346747
ebi-a-GCST90025953	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Total cholesterol levels	1.01E-05	2.27E-05	0.657987715
met-d-Total_TG	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Total triglycerides	5.68E-05	4.54E-05	0.21540662
ebi-a-GCST90025956	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	HDL cholesterol levels	1.19E-08	1.54E-05	0.999380874
ieu-b-110	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	LDL cholesterol	-2.13E-05	2.91E-05	0.466480788
met-d-L_LDL_FC_pct	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Free cholesterol to total lipids ratio in large LDL	-6.33E-05	3.99E-05	0.116555012
met-d-M_LDL_FC_pct	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Free cholesterol to total lipids ratio in medium LDL	-5.77E-05	4.20E-05	0.173565135
met-d-XL_VLDL_FC_pct	ukb-a-556	Diagnoses - main ICD10: K60 Fissure and fistula of anal and rectal regions	Free cholesterol to total lipids ratio in very large VLDL	-8.71E-05	5.54E-05	0.121532491