Circulating sclerostin levels are positively related to coronary artery disease severity and related risk factors

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Supplementary Tables and Figures

Supplementary Table 1: Sclerostin versus clinical risk factors - additional adjustment for fasting glucose.

			LURIC N=2054		ALSPAC N=2977	
Exposure	**Outcome**	**Model**	**β (95% CI)**	**p**	**β (95% CI)**	**p**
Sclerostin	eGFR	2	-0.29 (-0.33,-0.25)	<0.001	-0.11 (-0.15,-0.08)	<0.001
Sclerostin	eGFR	3	-0.29 (-0.33,-0.25)	<0.001	-0.11 (-0.15,-0.08)	<0.001
			OR (95% CI)		**OR (95% CI)**	
Sclerostin	Hypertension	2	1.04 (0.93,1.17)	0.459	1.20 (1.03,1.41)	0.021
Sclerostin	Hypertension	3	1.03 (0.92,1.15)	0.592	1.20 (1.02,1.40)	0.025

Table shows results of linear/logistic regression analysis. Results are SD change in outcome/ odds of outcome per SD increase in sclerostin, 95% CI and p value. CI: Confidence Interval, eGFR: estimated Glomerular filtration rate. Model 2: adjusted for age and ethnic group (ALSPAC) and sex (LURIC), BMI, smoking, social deprivation. Model 3: Model 2 + fasting glucose (continuous measure).

Supplementary Table 2: Univariate associations between sclerostin and other risk factors in ALSPAC and LURIC

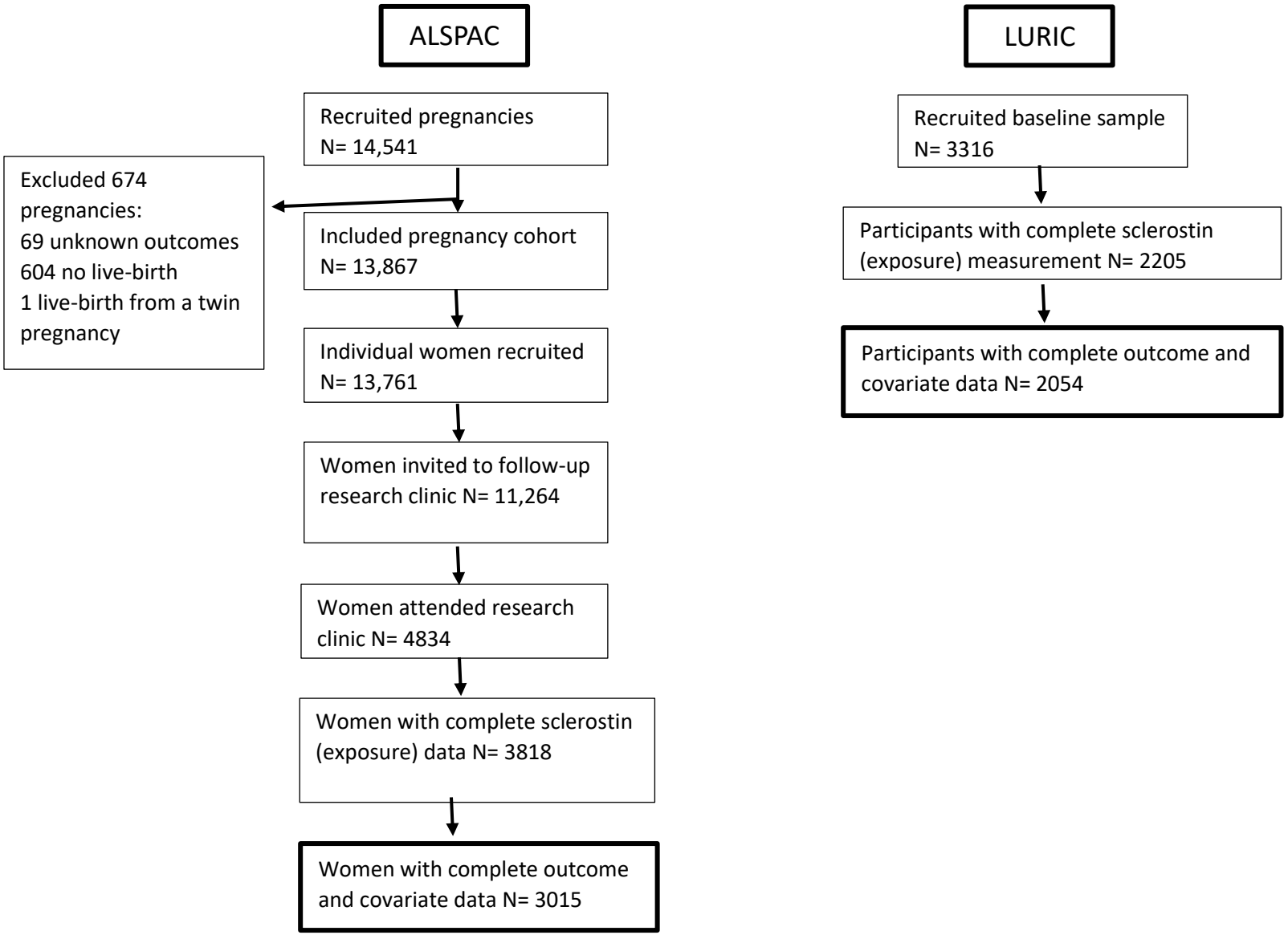
		LURIC N=2054			ALSPAC N=3015	
Exposure	**Outcome**	**β (95% CI)**	**p**		**β (95% CI)**	**p**
sex	Sclerostin	-0.38 (-0.47,-0.29)	<0.001			
Age (years)	Sclerostin	0.20 (0.16,0.24)	<0.001	**Age (years)**	0.19 (0.16,0.23)	<0.001
BMI (kg/m2)	Sclerostin	0.01 (-0.03,0.06)	0.504	**BMI (kg/m2)**	0.01 (-0.02,0.05)	0.536
ex-smoker*	Sclerostin	0.25 (0.16,0.35)	<0.001	**Smoking (no vs yes)**	0.01 (-0.06,0.08)	0.791
active smoker*	Sclerostin	-0.16 (-0.15,-0.01)	<0.001			
Regional purchasing index	Sclerostin	-0.03 (-0.07,0.04)	0.208	**Townsend score 2**	0.04 (-0.05,0.15)	0.360
				Townsend score 3	-0.06 (-1.16,0.04)	0.254
				Townsend score 4	0.06 (-0.04,0.16)	0.271
				Townsend score 5	-0.02 (-0.17,0.13)	0.818

Table shows results of linear regression analysis. Results are SD change in outcome per SD change in exposure/difference in exposure level in case of categorical exposures, 95% CI and p value.

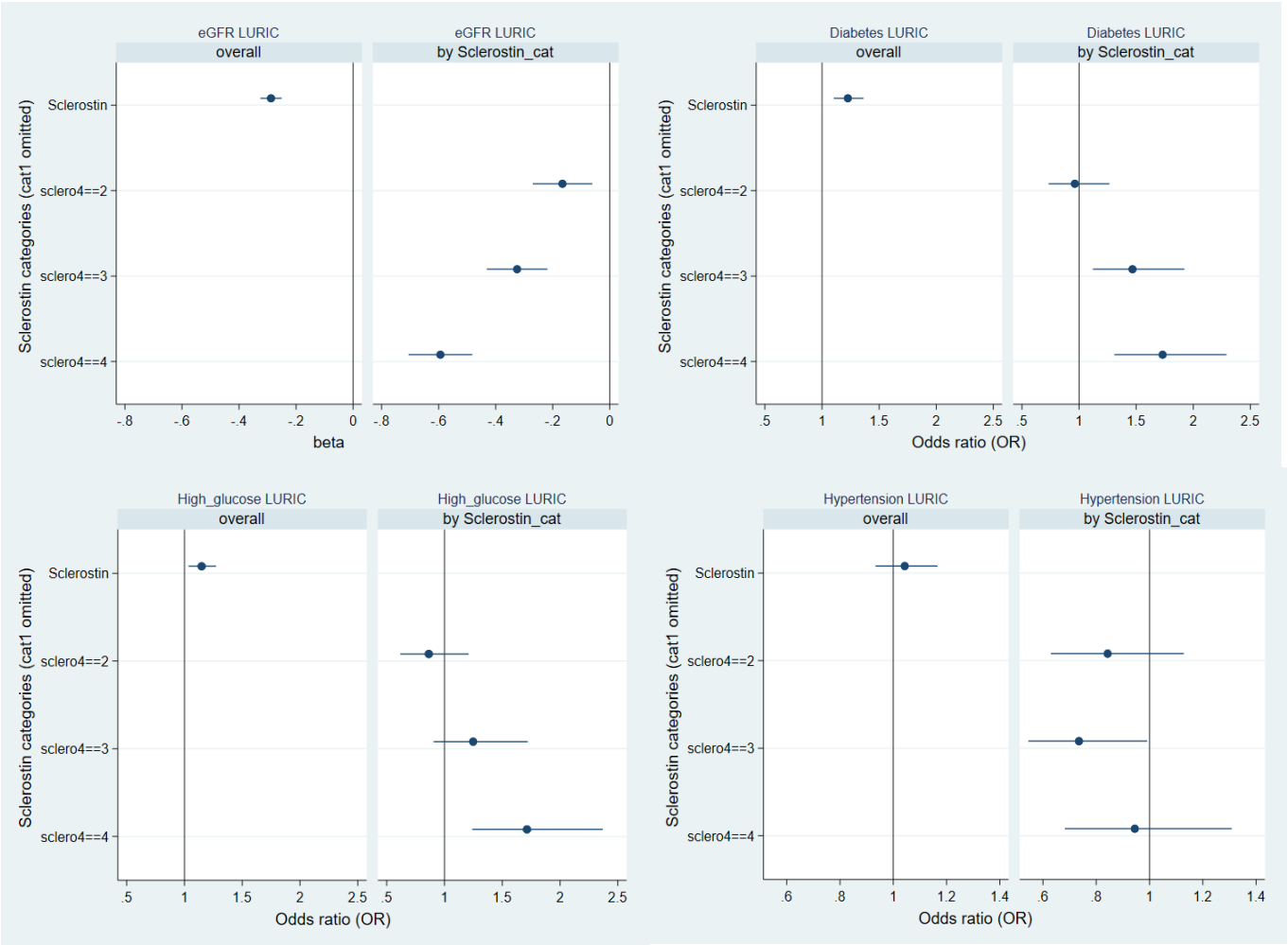
*results attenuated following adjustment for age and sex;

ex-smoker [adjusted beta 0.11, CI(0.01, 0.21) p = 0.034]

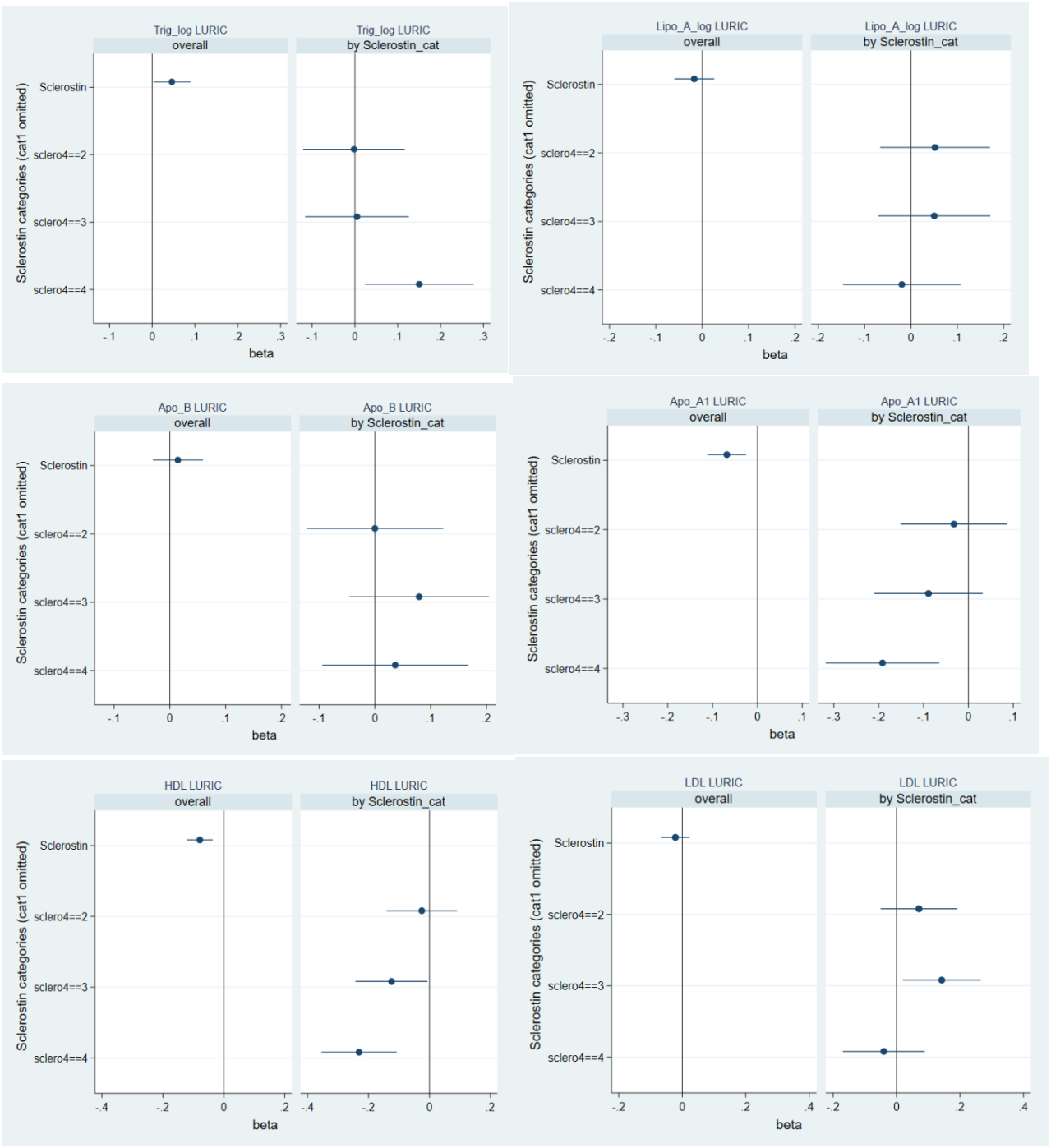
active smoker [adjusted beta -0.10, CI(-0.22, 0.02) p = 0.114]



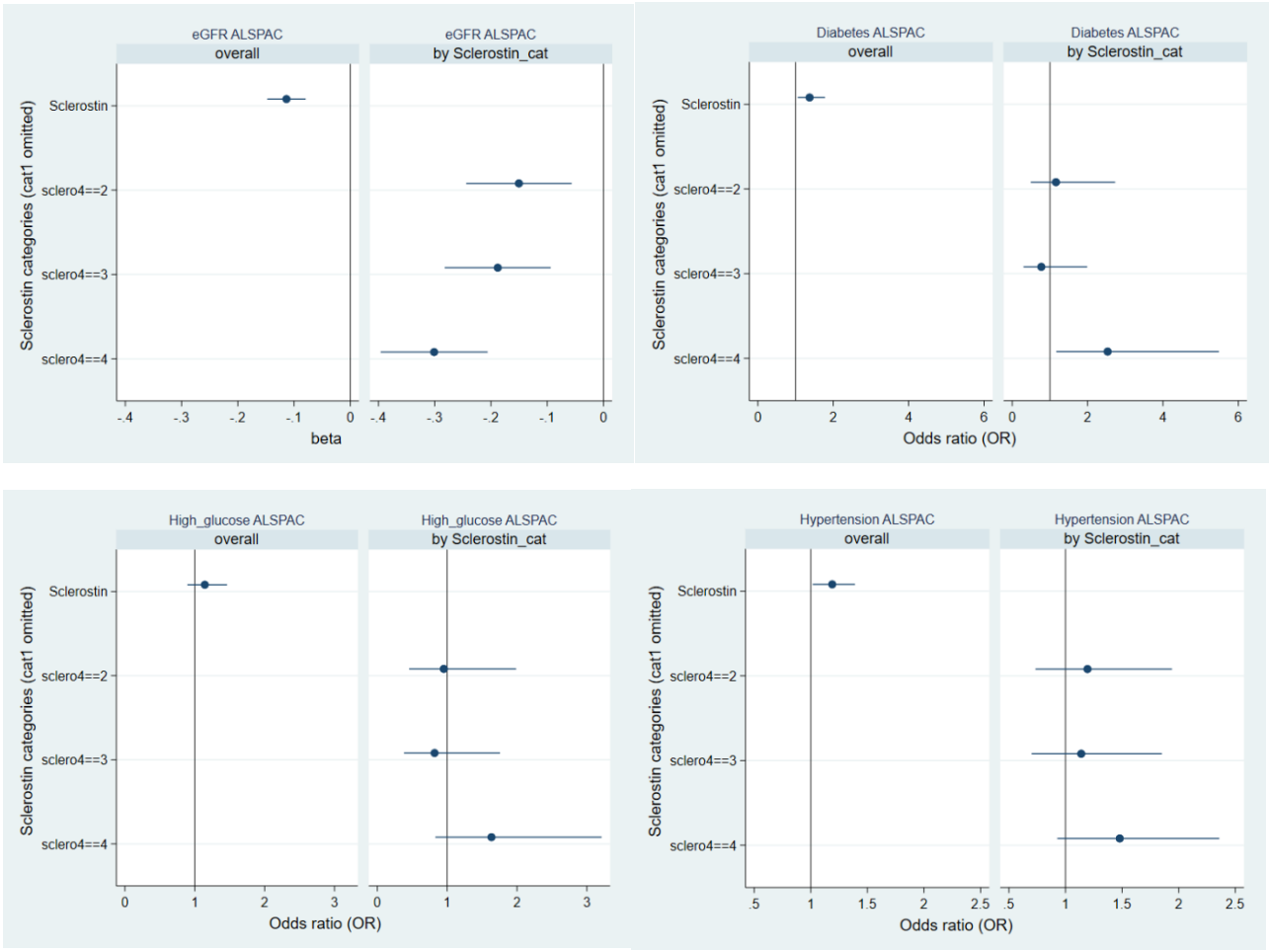
Supplementary Figure 1: Flow diagram showing the distribution of ALSPAC and LURIC participants from the recruitment to the present study population.



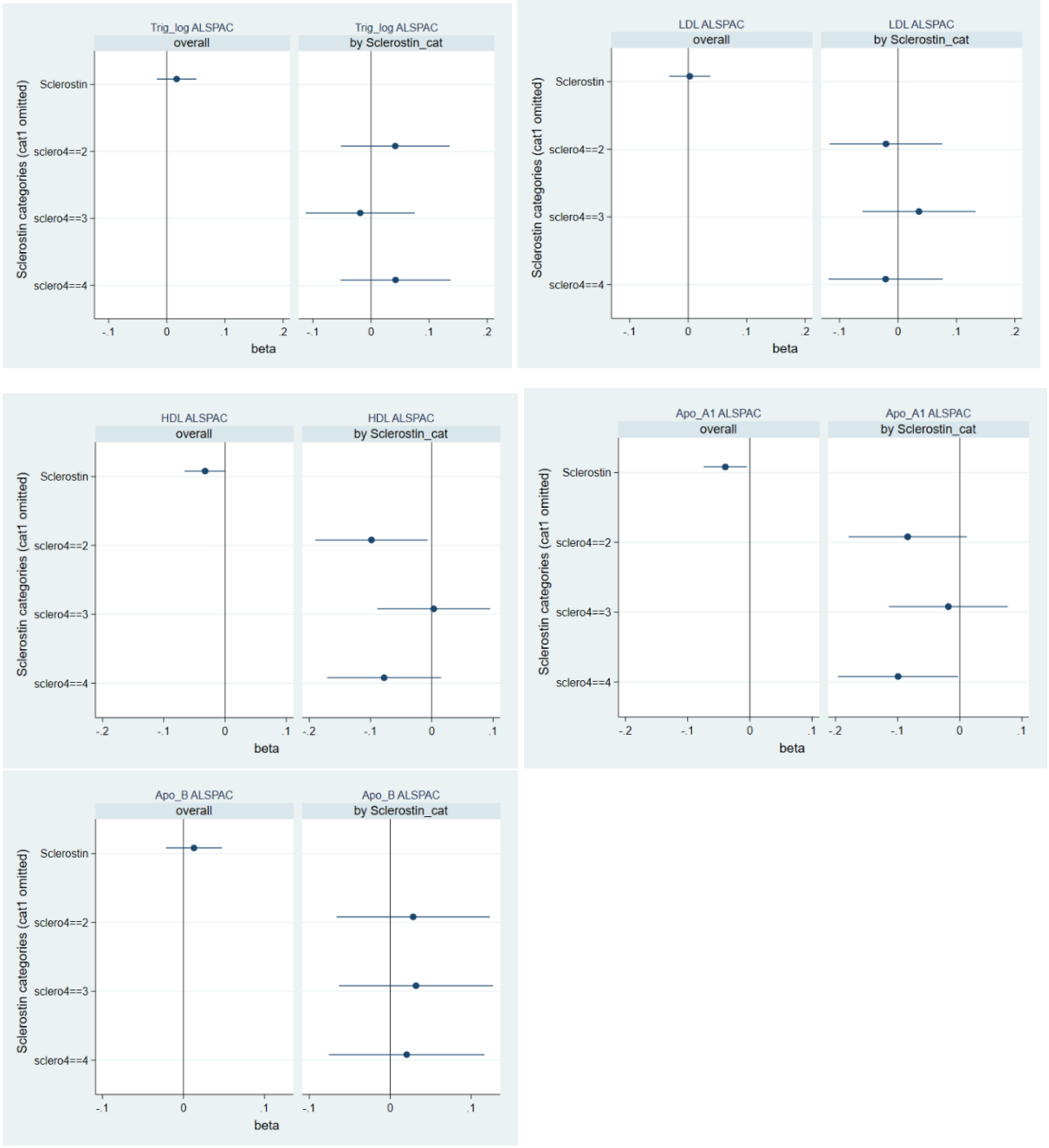
Supplementary Figure 2: Associations between sclerostin versus clinical risk factors (LURIC). Overall sclerostin (continuous measure) vs categorical sclerostin.



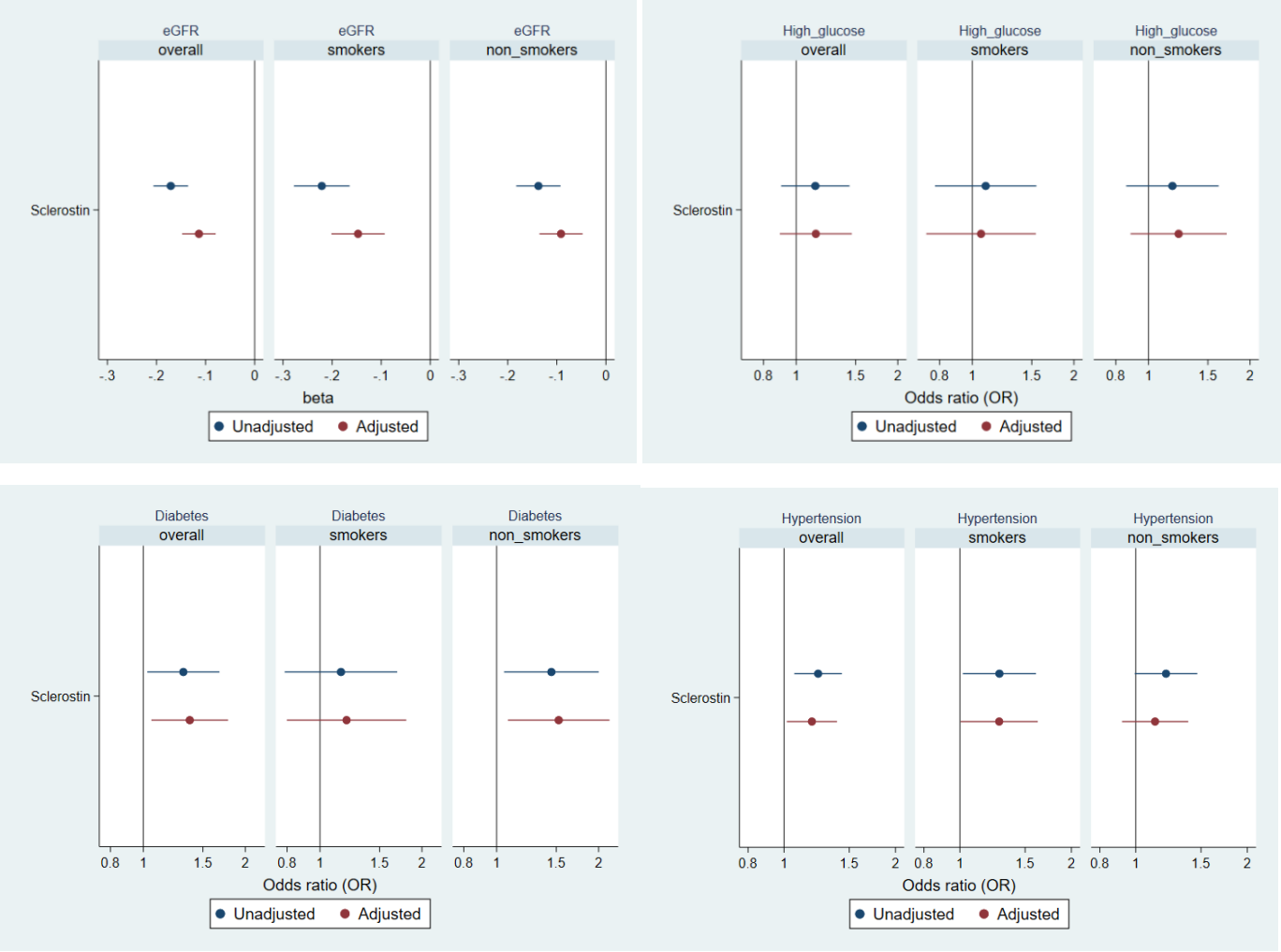
Supplementary Figure 3: Associations between sclerostin versus lipids (LURIC). Overall sclerostin (continuous measure) vs categorical sclerostin.



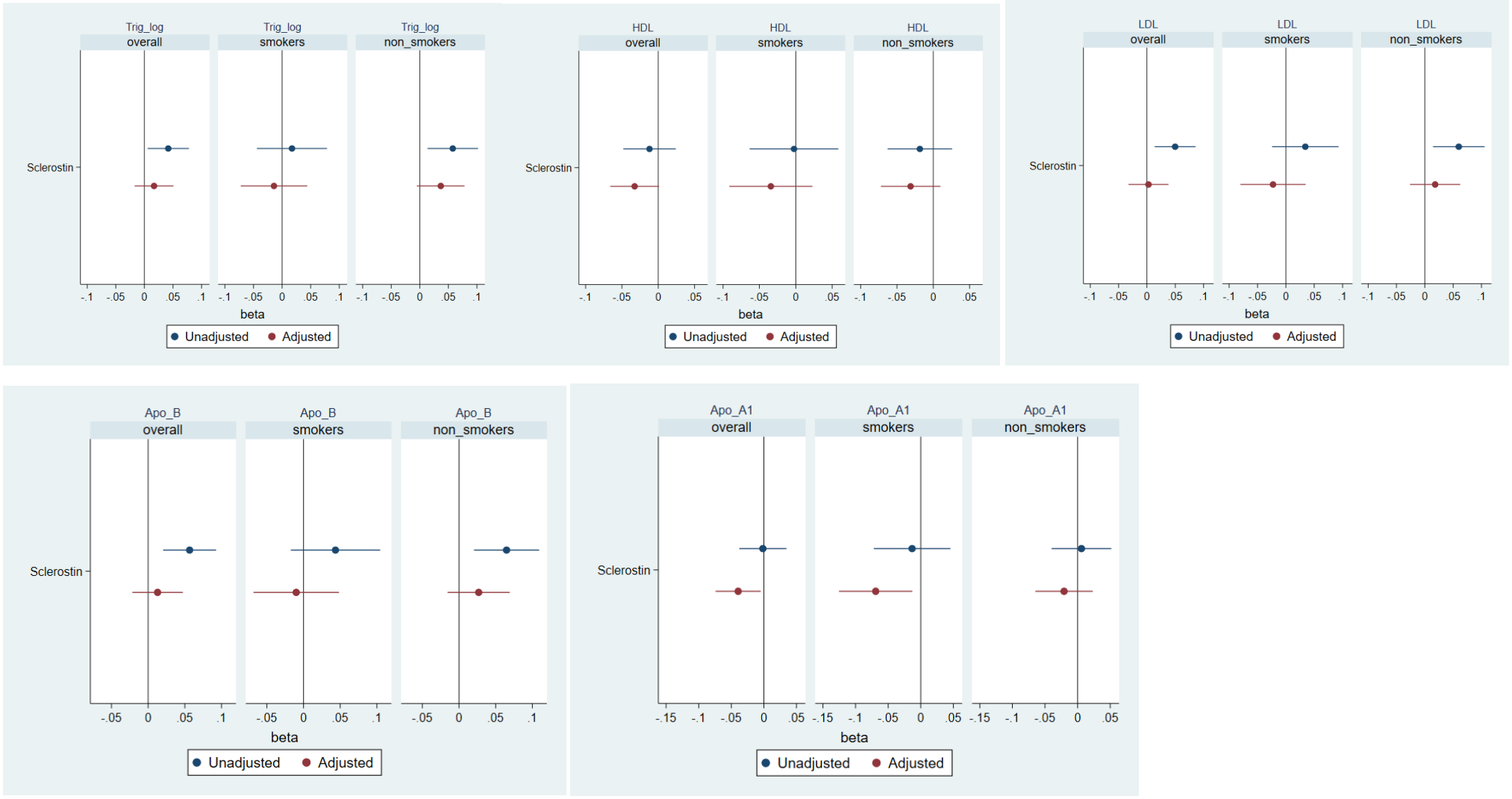
Supplementary Figure 4: Associations between sclerostin versus clinical risk factors (ALSPAC). Overall sclerostin (continuous measure) vs categorical sclerostin.



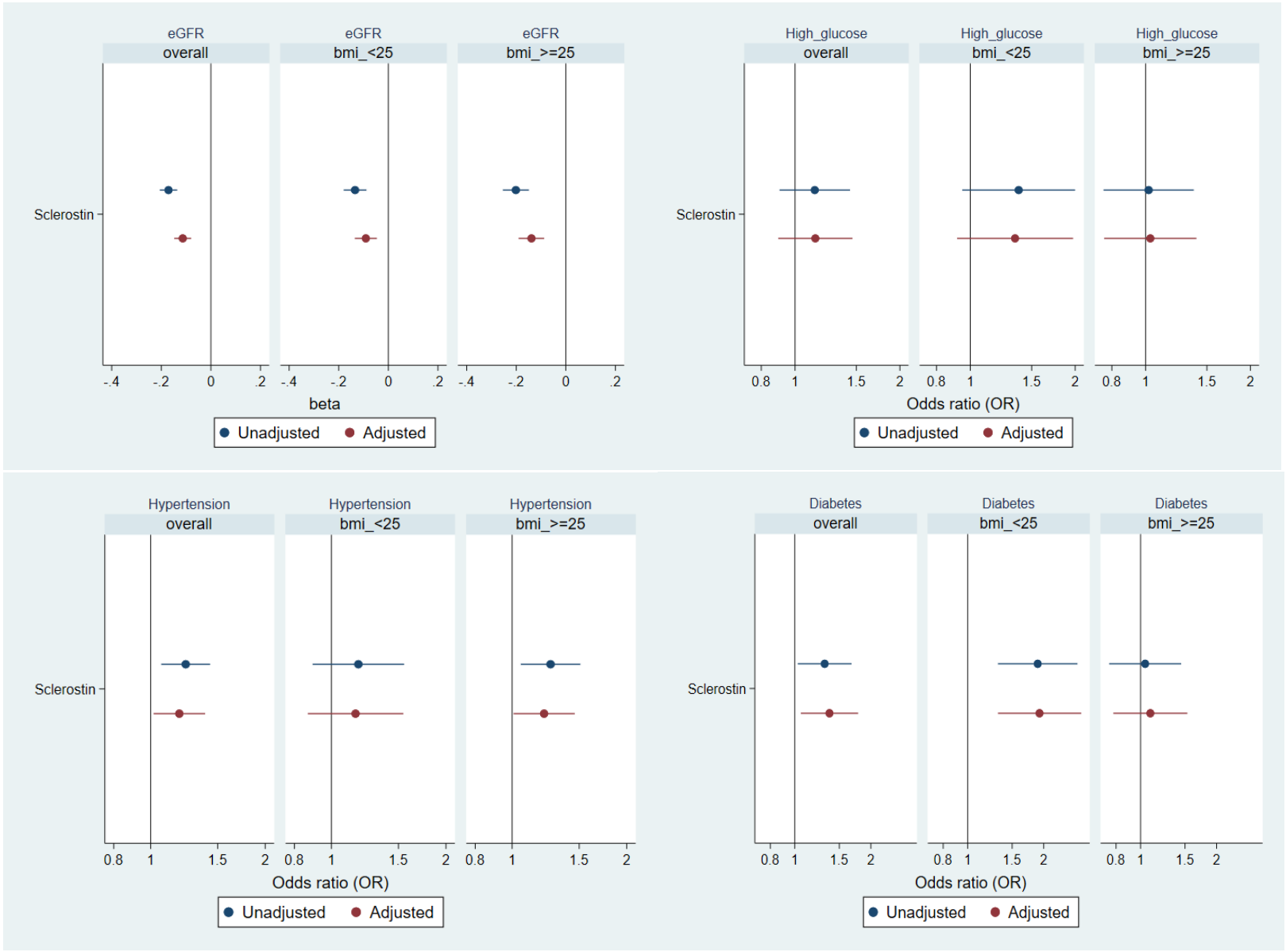
Supplementary Figure 5: Associations between sclerostin versus lipids (ALSPAC). Overall sclerostin (continuous measure) vs categorical sclerostin.



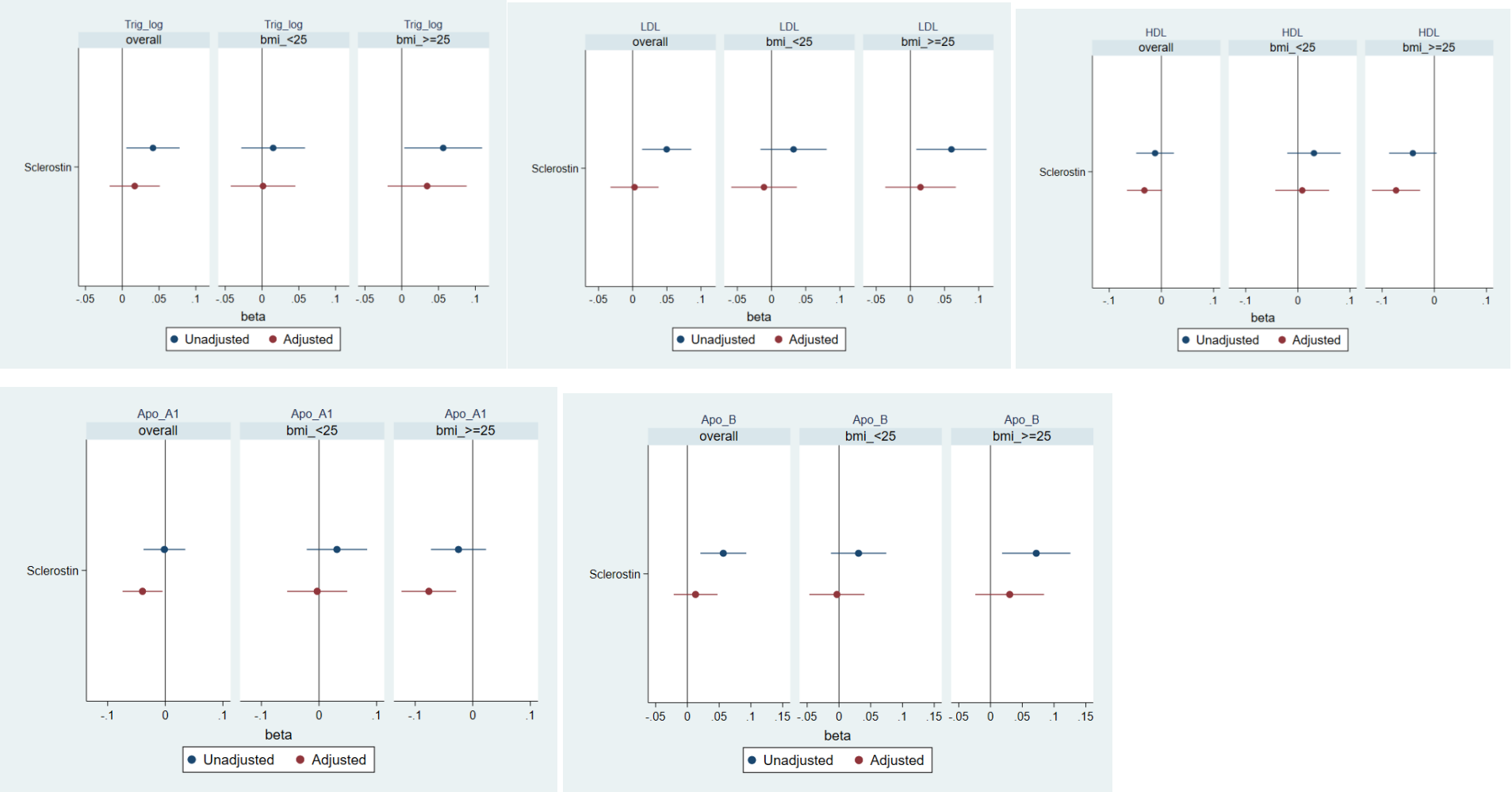
Supplementary Figure 6: Associations between sclerostin and clinical risk factors by smoking status in ALSPAC mothers.



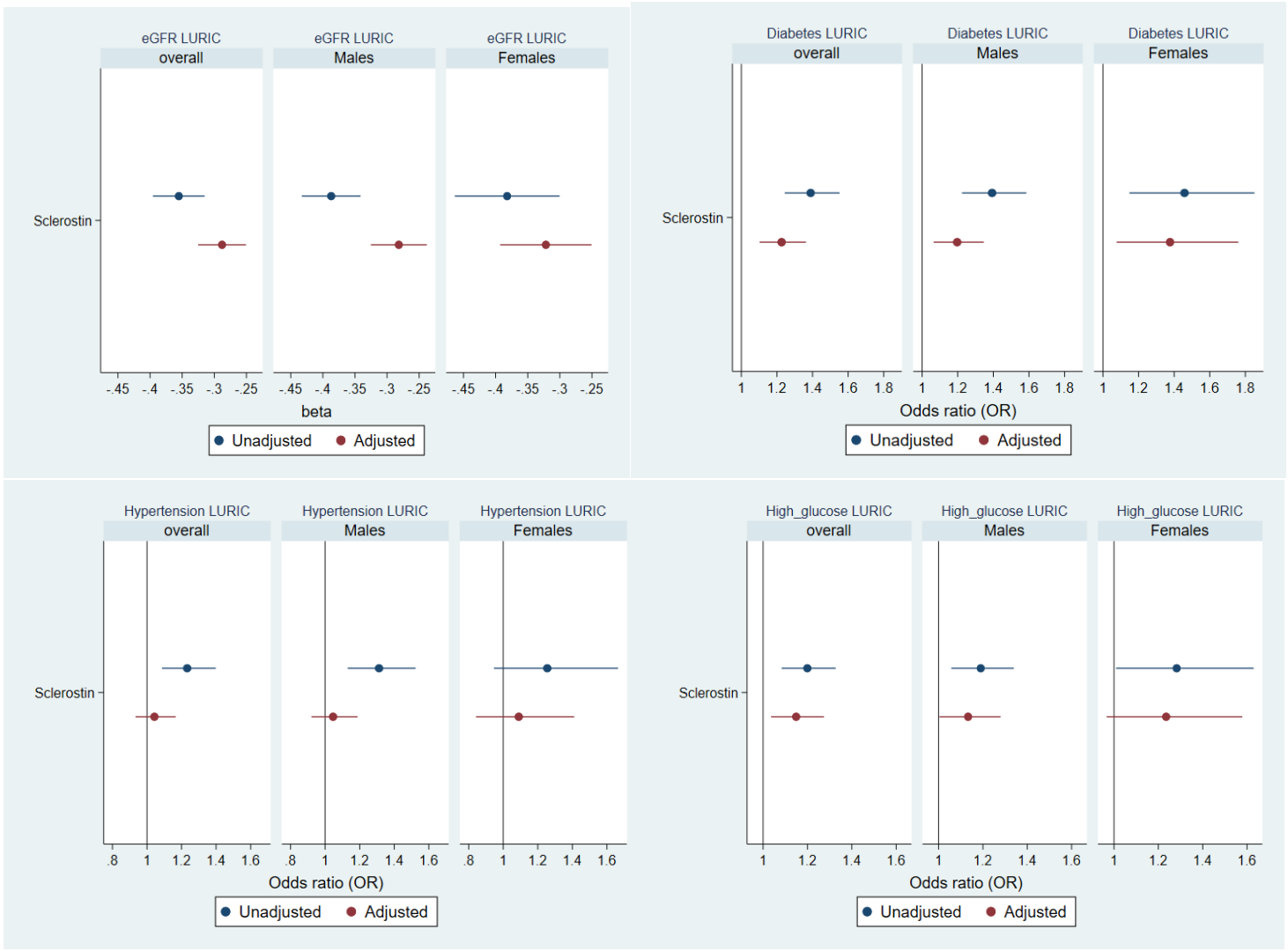
Supplementary Figure 7: Associations between sclerostin versus lipids stratified by smoking status in ALSPAC.



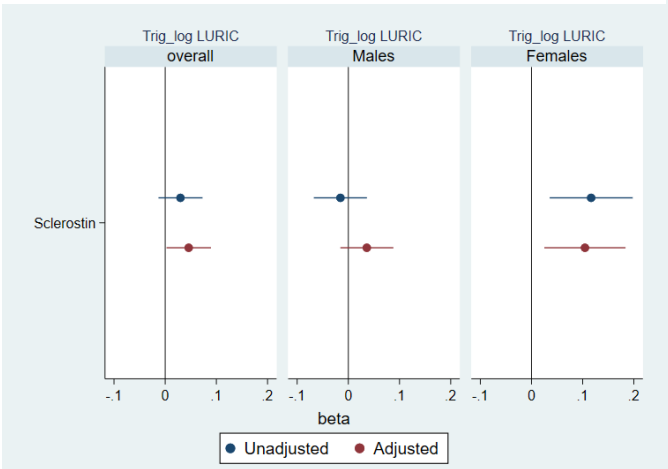
Supplementary Figure 8: Associations between sclerostin and clinical risk factors stratified by BMI category in ALSPAC.

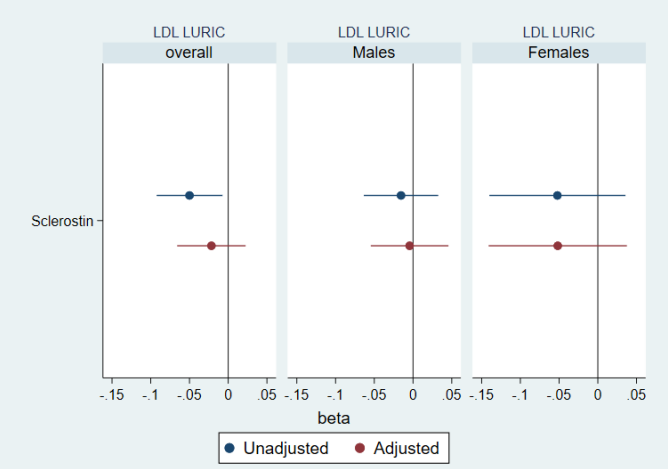


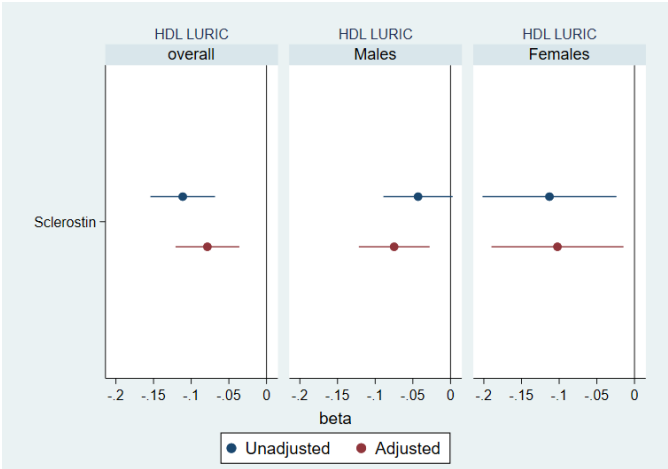
Supplementary Figure 9: Associations between sclerostin versus lipids stratified by BMI category in ALSPAC.

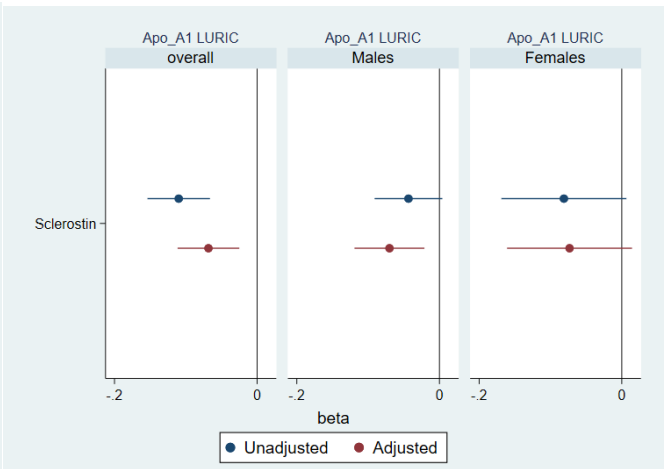


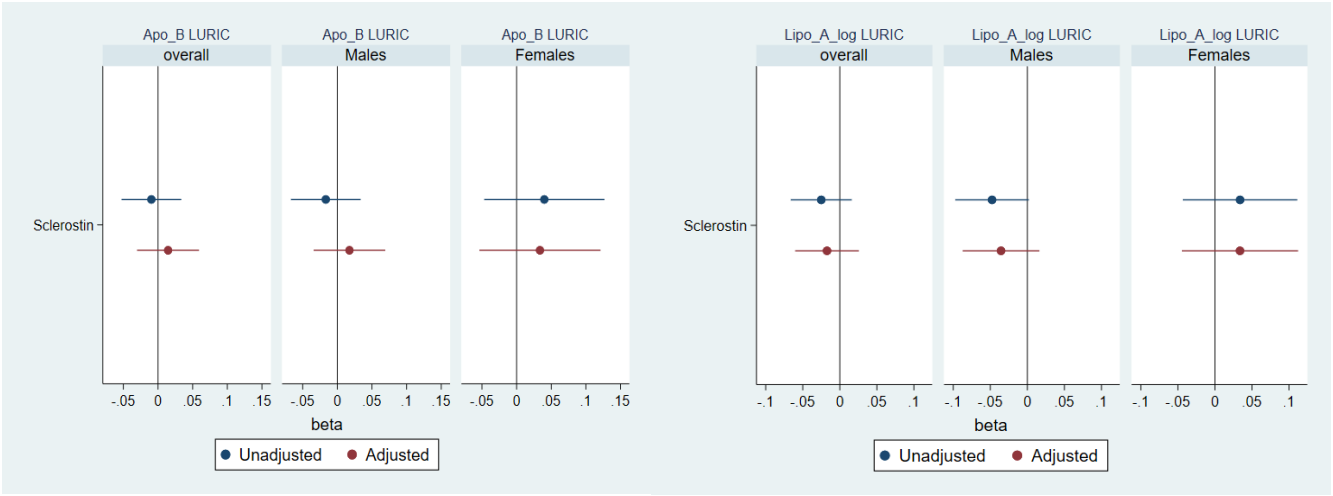
Supplementary Figure 10: Associations between sclerostin and clinical risk factors stratified by sex in LURIC.


Trig_log LURIC
overall
Trig_log LURIC
Males
Trig_log LURIC
Females
Sclerostin
-.1
0
.1
.2
beta
Unadjusted
Adjusted


LDL LURIC
overall
LDL LURIC
Males
LDL LURIC
Females
Sclerostin
-.15
-.1
-.05
0
.05
beta
Unadjusted
Adjusted


HDL LURIC
overall
HDL LURIC
Males
HDL LURIC
Females
Sclerostin
-.2
-.15
-.1
-.05
0
beta
Unadjusted
Adjusted


Apo_A1 LURIC
overall
Apo_A1 LURIC
Males
Apo_A1 LURIC
Females
Sclerostin
-.2
0
beta
Unadjusted
Adjusted



Supplementary Figure 11: Associations between sclerostin versus lipids stratified by sex in LURIC.