

**Supplementary Table 1.** Absolute values of bivariate relations (Spearman  $\rho$ ) between features where at least one correlation is equal to or greater than 0.9. Features in bold are the ones retained and fed along with other features as input to GBDT models, while features in grey colour are the ones dropped from input to GBDT models. There were two known proxy features (x34 - year of birth and x21003 - age when attended assessment centre) of age (x21022 - age at recruitment) which were not included correlation analysis.

[illegible]

**Supplementary Table 2.** List of UK Biobank baseline fields considered in the study. There were in total 257 UK Biobank fields (without considering array elements within a field to store multiple values), arranged into eight categories.

Field ID	Field Description	Hierarchical Category
<b>A - Baseline &amp; personal characteristics</b>		
31	Sex	Population characteristics > Baseline characteristics
52	Month of birth	Population characteristics > Baseline characteristics
54	UK Biobank assessment centre	UK Biobank Assessment Centre > Recruitment > Reception
129	Place of birth in UK - north co-ordinate	UK Biobank Assessment Centre > Verbal interview > Early life factors
130	Place of birth in UK - east co-ordinate	UK Biobank Assessment Centre > Verbal interview > Early life factors
1647	Country of birth (UK/elsewhere)	UK Biobank Assessment Centre > Touchscreen > Early life factors
1707	Handedness (chirality/laterality)	UK Biobank Assessment Centre > Touchscreen > Early life factors
1717	Skin colour	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Sun exposure
1727	Ease of skin tanning	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Sun exposure
1747	Hair colour (natural, before greying)	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Sun exposure
1777	Part of a multiple birth	UK Biobank Assessment Centre > Touchscreen > Early life factors
21000	Ethnic background	UK Biobank Assessment Centre > Touchscreen > Sociodemographics > Ethnicity
21022	Age at recruitment	Population characteristics > Baseline characteristics
<b>B Female-specific factors</b>		
2674	Ever had breast cancer screening / mammogram	UK Biobank Assessment Centre > Touchscreen > Sex-specific factors > Female-specific factors
2694	Ever had cervical smear test	UK Biobank Assessment Centre > Touchscreen > Sex-specific factors > Female-specific factors
2704	Years since last cervical smear test	UK Biobank Assessment Centre > Touchscreen > Sex-specific factors > Female-specific factors
2714	Age when periods started (menarche)	UK Biobank Assessment Centre > Touchscreen > Sex-specific factors > Female-specific factors
2724	Had menopause	UK Biobank Assessment Centre > Touchscreen > Sex-specific factors > Female-specific factors
2734	Number of live births	UK Biobank Assessment Centre > Touchscreen > Sex-specific factors > Female-specific factors
2744	Birth weight of first child	UK Biobank Assessment Centre > Touchscreen > Sex-specific factors > Female-specific factors
2774	Ever had stillbirth, spontaneous miscarriage or termination	UK Biobank Assessment Centre > Touchscreen > Sex-specific factors > Female-specific factors
2784	Ever taken oral contraceptive pill	UK Biobank Assessment Centre > Touchscreen > Sex-specific factors > Female-specific factors
2794	Age started oral contraceptive pill	UK Biobank Assessment Centre > Touchscreen > Sex-specific factors > Female-specific factors
2804	Age when last used oral contraceptive pill	UK Biobank Assessment Centre > Touchscreen > Sex-specific factors > Female-specific factors
2814	Ever used hormone-replacement therapy (HRT)	UK Biobank Assessment Centre > Touchscreen > Sex-specific factors > Female-specific factors
<b>C - Sociodemographics</b>		
189	Townsend deprivation index at recruitment	Population characteristics > Baseline characteristics
670	Type of accommodation lived in	UK Biobank Assessment Centre > Touchscreen > Sociodemographics > Household
680	Own or rent accommodation lived in	UK Biobank Assessment Centre > Touchscreen > Sociodemographics > Household
699	Length of time at current address	UK Biobank Assessment Centre > Touchscreen > Sociodemographics > Household
709	Number in household	UK Biobank Assessment Centre > Touchscreen > Sociodemographics > Household
728	Number of vehicles in household	UK Biobank Assessment Centre > Touchscreen > Sociodemographics > Household
738	Average total household income before tax	UK Biobank Assessment Centre > Touchscreen > Sociodemographics > Household
1767	Adopted as a child	UK Biobank Assessment Centre > Touchscreen > Early life factors
6138	Qualifications	UK Biobank Assessment Centre > Touchscreen > Sociodemographics > Education
6139	Gas or solid-fuel cooking/heating	UK Biobank Assessment Centre > Touchscreen > Sociodemographics > Household
6141	How are people in household related to participant	UK Biobank Assessment Centre > Touchscreen > Sociodemographics > Household
6142	Current employment status	UK Biobank Assessment Centre > Touchscreen > Sociodemographics > Employment
6146	Attendance/disability/mobility allowance	UK Biobank Assessment Centre > Touchscreen > Sociodemographics > Other sociodemographic factors
<b>D - Lifestyle and environment</b>		
864	Number of days/week walked 10+ minutes	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Physical activity
874	Duration of walks	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Physical activity
884	Number of days/week of moderate physical activity 10+ minutes	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Physical activity
894	Duration of moderate activity	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Physical activity
904	Number of days/week of vigorous physical activity 10+ minutes	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Physical activity
924	Usual walking pace	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Physical activity
943	Frequency of stair climbing in last 4 weeks	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Physical activity
971	Frequency of walking for pleasure in last 4 weeks	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Physical activity
981	Duration walking for pleasure	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Physical activity
1050	Time spend outdoors in summer	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Sun exposure
1060	Time spent outdoors in winter	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Sun exposure
1070	Time spent watching television (TV)	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Physical activity
1080	Time spent using computer	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Physical activity
1100	Drive faster than motorway speed limit	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Physical activity
1239	Current tobacco smoking	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Smoking
1259	Smoking/smokers in household	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Smoking
1269	Exposure to tobacco smoke at home	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Smoking
1279	Exposure to tobacco smoke outside home	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Smoking
1289	Cooked vegetable intake	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Diet
1299	Salad / raw vegetable intake	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Diet
1309	Fresh fruit intake	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Diet
1319	Dried fruit intake	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Diet
1329	Oily fish intake	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Diet
1339	Non-oily fish intake	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Diet
1349	Processed meat intake	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Diet
1359	Poultry intake	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Diet
1369	Beef intake	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Diet
1379	Lamb/mutton intake	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Diet
1389	Pork intake	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Diet
1408	Cheese intake	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Diet
1418	Milk type used	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Diet
1428	Spread type	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Diet
1438	Bread intake	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Diet
1448	Bread type	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Diet
1458	Cereal intake	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Diet
1468	Cereal type	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Diet
1478	Salt added to food	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Diet

1488	Tea intake	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Diet
1498	Coffee intake	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Diet
1508	Coffee type	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Diet
1518	Hot drink temperature	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Diet
1528	Water intake	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Diet
1538	Major dietary changes in the last 5 years	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Diet
1548	Variation in diet	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Diet
1558	Alcohol intake frequency.	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Alcohol
1628	Alcohol intake versus 10 years previously	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Alcohol
1677	Breastfed as a baby	UK Biobank Assessment Centre > Touchscreen > Early life factors
1737	Childhood sunburn occasions	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Sun exposure
1757	Facial ageing	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Sun exposure
1787	Maternal smoking around birth	UK Biobank Assessment Centre > Touchscreen > Early life factors
2267	Use of sun/uv protection	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Sun exposure
2277	Frequency of solarium/sunlamp use	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Sun exposure
6144	Never eat eggs, dairy, wheat, sugar	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Diet
6155	Vitamin and mineral supplements	UK Biobank Assessment Centre > Touchscreen > Health and medical history > Medication
6162	Types of transport used (excluding work)	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Physical activity
6164	Types of physical activity in last 4 weeks	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Physical activity
6179	Mineral and other dietary supplements	UK Biobank Assessment Centre > Touchscreen > Health and medical history > Medication
20116	Smoking status	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Smoking
20117	Alcohol drinker status	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Alcohol
20160	Ever smoked	UK Biobank Assessment Centre > Touchscreen > Lifestyle and environment > Smoking
E - Cognitive and psychosocial factors		
398	Number of correct matches in round	UK Biobank Assessment Centre > Cognitive function > Pairs matching
399	Number of incorrect matches in round	UK Biobank Assessment Centre > Cognitive function > Pairs matching
400	Time to complete round	UK Biobank Assessment Centre > Cognitive function > Pairs matching
403	Number of times snap-button pressed	UK Biobank Assessment Centre > Cognitive function > Reaction time
404	Duration to first press of snap-button in each round	UK Biobank Assessment Centre > Cognitive function > Reaction time
20023	Mean time to correctly identify matches	UK Biobank Assessment Centre > Cognitive function > Reaction time
1920	Mood swings	UK Biobank Assessment Centre > Touchscreen > Psychosocial factors > Mental health
1930	Miserableness	UK Biobank Assessment Centre > Touchscreen > Psychosocial factors > Mental health
1940	Irritability	UK Biobank Assessment Centre > Touchscreen > Psychosocial factors > Mental health
1950	Sensitivity / hurt feelings	UK Biobank Assessment Centre > Touchscreen > Psychosocial factors > Mental health
1960	Fed-up feelings	UK Biobank Assessment Centre > Touchscreen > Psychosocial factors > Mental health
1970	Nervous feelings	UK Biobank Assessment Centre > Touchscreen > Psychosocial factors > Mental health
1980	Worrier / anxious feelings	UK Biobank Assessment Centre > Touchscreen > Psychosocial factors > Mental health
1990	Tense / 'highly strung'	UK Biobank Assessment Centre > Touchscreen > Psychosocial factors > Mental health
2000	Worry too long after embarrassment	UK Biobank Assessment Centre > Touchscreen > Psychosocial factors > Mental health
2010	Suffer from 'nerves'	UK Biobank Assessment Centre > Touchscreen > Psychosocial factors > Mental health
2020	Loneliness, isolation	UK Biobank Assessment Centre > Touchscreen > Psychosocial factors > Mental health
2030	Guilty feelings	UK Biobank Assessment Centre > Touchscreen > Psychosocial factors > Mental health
2040	Risk taking	UK Biobank Assessment Centre > Touchscreen > Psychosocial factors > Mental health
2050	Frequency of depressed mood in last 2 weeks	UK Biobank Assessment Centre > Touchscreen > Psychosocial factors > Mental health
2060	Frequency of unenthusiasm / disinterest in last 2 weeks	UK Biobank Assessment Centre > Touchscreen > Psychosocial factors > Mental health
2070	Frequency of tenseness / restlessness in last 2 weeks	UK Biobank Assessment Centre > Touchscreen > Psychosocial factors > Mental health
2080	Frequency of tiredness / lethargy in last 2 weeks	UK Biobank Assessment Centre > Touchscreen > Psychosocial factors > Mental health
2090	Seen doctor (GP) for nerves, anxiety, tension or depression	UK Biobank Assessment Centre > Touchscreen > Psychosocial factors > Mental health
2100	Seen a psychiatrist for nerves, anxiety, tension or depression	UK Biobank Assessment Centre > Touchscreen > Psychosocial factors > Mental health
6145	Illness, injury, bereavement, stress in last 2 years	UK Biobank Assessment Centre > Touchscreen > Psychosocial factors > Mental health
20127	Neuroticism score	UK Biobank Assessment Centre > Touchscreen > Psychosocial factors > Mental health
F - Physical measurements		
21	Weight method	UK Biobank Assessment Centre > Physical measures > Anthropometry > Body size measures
23	Spirometry method	UK Biobank Assessment Centre > Physical measures > Spirometry
46	Hand grip strength (left)	UK Biobank Assessment Centre > Physical measures > Hand grip strength
47	Hand grip strength (right)	UK Biobank Assessment Centre > Physical measures > Hand grip strength
48	Waist circumference	UK Biobank Assessment Centre > Physical measures > Anthropometry > Body size measures
49	Hip circumference	UK Biobank Assessment Centre > Physical measures > Anthropometry > Body size measures
50	Standing height	UK Biobank Assessment Centre > Physical measures > Anthropometry > Body size measures
102	Pulse rate, automated reading	UK Biobank Assessment Centre > Physical measures > Blood pressure
120	Birth weight known	UK Biobank Assessment Centre > Verbal interview > Early life factors
1687	Comparative body size at age 10	UK Biobank Assessment Centre > Touchscreen > Early life factors
1697	Comparative height size at age 10	UK Biobank Assessment Centre > Touchscreen > Early life factors
3062	Forced vital capacity (FVC)	UK Biobank Assessment Centre > Physical measures > Spirometry
3064	Peak expiratory flow (PEF)	UK Biobank Assessment Centre > Physical measures > Spirometry
3088	Contra-indications for spirometry	UK Biobank Assessment Centre > Physical measures > Spirometry
3089	Caffeine drink within last hour	UK Biobank Assessment Centre > Physical measures > Spirometry
3090	Used an inhaler for chest within last hour	UK Biobank Assessment Centre > Physical measures > Spirometry
3137	Number of measurements made	UK Biobank Assessment Centre > Physical measures > Spirometry
4079	Diastolic blood pressure, automated reading	UK Biobank Assessment Centre > Physical measures > Blood pressure
4080	Systolic blood pressure, automated reading	UK Biobank Assessment Centre > Physical measures > Blood pressure
20015	Sitting height	UK Biobank Assessment Centre > Physical measures > Anthropometry > Body size measures
21001	Body mass index (BMI)	UK Biobank Assessment Centre > Physical measures > Anthropometry > Body size measures
21002	Weight	UK Biobank Assessment Centre > Physical measures > Anthropometry > Body size measures
23099	Body fat percentage	UK Biobank Assessment Centre > Physical measures > Anthropometry > Impedance measures
23101	Whole body fat-free mass	UK Biobank Assessment Centre > Physical measures > Anthropometry > Impedance measures
23102	Whole body water mass	UK Biobank Assessment Centre > Physical measures > Anthropometry > Impedance measures
23107	Impedance of leg (right)	UK Biobank Assessment Centre > Physical measures > Anthropometry > Impedance measures
23110	Impedance of arm (left)	UK Biobank Assessment Centre > Physical measures > Anthropometry > Impedance measures
G - Health and medical history		
87	Non-cancer illness year/age first occurred	UK Biobank Assessment Centre > Verbal interview > Medical conditions
92	Operation year/age first occurred	UK Biobank Assessment Centre > Verbal interview > Operations
134	Number of self-reported cancers	UK Biobank Assessment Centre > Verbal interview > Medical conditions

135	Number of self-reported non-cancer illnesses	UK Biobank Assessment Centre > Verbal interview > Medical conditions
136	Number of operations, self-reported	UK Biobank Assessment Centre > Verbal interview > Operations
137	Number of treatments/medications taken	UK Biobank Assessment Centre > Verbal interview > Medications
1797	Father still alive	UK Biobank Assessment Centre > Touchscreen > Family history
1807	Father's age at death	UK Biobank Assessment Centre > Touchscreen > Family history
1835	Mother still alive	UK Biobank Assessment Centre > Touchscreen > Family history
1873	Number of full brothers	UK Biobank Assessment Centre > Touchscreen > Family history
1883	Number of full sisters	UK Biobank Assessment Centre > Touchscreen > Family history
2178	Overall health rating	UK Biobank Assessment Centre > Touchscreen > Health and medical history > General health
2188	Long-standing illness, disability or infirmity	UK Biobank Assessment Centre > Touchscreen > Health and medical history > General health
2207	Wears glasses or contact lenses	UK Biobank Assessment Centre > Touchscreen > Health and medical history > Eyesight
2217	Age started wearing glasses or contact lenses	UK Biobank Assessment Centre > Touchscreen > Health and medical history > Eyesight
2227	Other eye problems	UK Biobank Assessment Centre > Touchscreen > Health and medical history > Eyesight
2247	Hearing difficulty/problems	UK Biobank Assessment Centre > Touchscreen > Health and medical history > Hearing
2257	Hearing difficulty/problems with background noise	UK Biobank Assessment Centre > Touchscreen > Health and medical history > Hearing
2296	Falls in the last year	UK Biobank Assessment Centre > Touchscreen > Health and medical history > General health
2306	Weight change compared with 1 year ago	UK Biobank Assessment Centre > Touchscreen > Health and medical history > General health
2316	Wheeze or whistling in the chest in last year	UK Biobank Assessment Centre > Touchscreen > Health and medical history > Breathing
2335	Chest pain or discomfort	UK Biobank Assessment Centre > Touchscreen > Health and medical history > Chest pain
2345	Ever had bowel cancer screening	UK Biobank Assessment Centre > Touchscreen > Health and medical history > Cancer screening
2443	Diabetes diagnosed by doctor	UK Biobank Assessment Centre > Touchscreen > Health and medical history > Medical conditions
2453	Cancer diagnosed by doctor	UK Biobank Assessment Centre > Touchscreen > Health and medical history > Medical conditions
2463	Fractured/broken bones in last 5 years	UK Biobank Assessment Centre > Touchscreen > Health and medical history > Medical conditions
2473	Other serious medical condition/disability diagnosed by doctor	UK Biobank Assessment Centre > Touchscreen > Health and medical history > Medical conditions
2492	Taking other prescription medications	UK Biobank Assessment Centre > Touchscreen > Health and medical history > Medication
2844	Had other major operations	UK Biobank Assessment Centre > Touchscreen > Health and medical history > Operations
3079	Pace-maker	UK Biobank Assessment Centre > Verbal interview > Operations
3140	Pregnant	UK Biobank Assessment Centre > Verbal interview > Medical conditions
6147	Reason for glasses/contact lenses	UK Biobank Assessment Centre > Touchscreen > Health and medical history > Eyesight
6149	Mouth/teeth dental problems	UK Biobank Assessment Centre > Touchscreen > Health and medical history > Mouth
6151	Fractured bone site(s)	UK Biobank Assessment Centre > Touchscreen > Health and medical history > Medical conditions
6152	Blood clot, DVT, bronchitis, emphysema, asthma, rhinitis, eczema, allergy diagnosed by doctor	UK Biobank Assessment Centre > Touchscreen > Health and medical history > Medical conditions
6153	Medication for cholesterol, blood pressure, diabetes, or take exogenous hormones	UK Biobank Assessment Centre > Touchscreen > Health and medical history > Medication
6154	Medication for pain relief, constipation, heartburn	UK Biobank Assessment Centre > Touchscreen > Health and medical history > Medication
6159	Pain type(s) experienced in last month	UK Biobank Assessment Centre > Touchscreen > Health and medical history > Pain
20001	Cancer code, self-reported	UK Biobank Assessment Centre > Verbal interview > Medical conditions
20002	Non-cancer illness code, self-reported	UK Biobank Assessment Centre > Verbal interview > Medical conditions
20003	Treatment/medication code	UK Biobank Assessment Centre > Verbal interview > Medications
20004	Operation code	UK Biobank Assessment Centre > Verbal interview > Operations
20008	Interpolated Year when non-cancer illness first diagnosed	UK Biobank Assessment Centre > Verbal interview > Medical conditions
20009	Interpolated Age of participant when non-cancer illness first diagnosed	UK Biobank Assessment Centre > Verbal interview > Medical conditions
20010	Interpolated Year when operation took place	UK Biobank Assessment Centre > Verbal interview > Operations
20011	Interpolated Age of participant when operation took place	UK Biobank Assessment Centre > Verbal interview > Operations
20107	Illnesses of father	UK Biobank Assessment Centre > Touchscreen > Family history
20110	Illnesses of mother	UK Biobank Assessment Centre > Touchscreen > Family history
20111	Illnesses of siblings	UK Biobank Assessment Centre > Touchscreen > Family history

#### H - Biomarkers

30000	White blood cell (leukocyte) count	Biological samples > Assay results > Blood assays > Blood count
30010	Red blood cell (erythrocyte) count	Biological samples > Assay results > Blood assays > Blood count
30020	Haemoglobin concentration	Biological samples > Assay results > Blood assays > Blood count
30040	Mean corpuscular volume	Biological samples > Assay results > Blood assays > Blood count
30050	Mean corpuscular haemoglobin	Biological samples > Assay results > Blood assays > Blood count
30060	Mean corpuscular haemoglobin concentration	Biological samples > Assay results > Blood assays > Blood count
30070	Red blood cell (erythrocyte) distribution width	Biological samples > Assay results > Blood assays > Blood count
30080	Platelet count	Biological samples > Assay results > Blood assays > Blood count
30090	Platelet crit	Biological samples > Assay results > Blood assays > Blood count
30100	Mean platelet (thrombocyte) volume	Biological samples > Assay results > Blood assays > Blood count
30110	Platelet distribution width	Biological samples > Assay results > Blood assays > Blood count
30120	Lymphocyte count	Biological samples > Assay results > Blood assays > Blood count
30130	Monocyte count	Biological samples > Assay results > Blood assays > Blood count
30150	Eosinophil count	Biological samples > Assay results > Blood assays > Blood count
30160	Basophil count	Biological samples > Assay results > Blood assays > Blood count
30170	Nucleated red blood cell count	Biological samples > Assay results > Blood assays > Blood count
30190	Monocyte percentage	Biological samples > Assay results > Blood assays > Blood count
30200	Neutrophil percentage	Biological samples > Assay results > Blood assays > Blood count
30210	Eosinophil percentage	Biological samples > Assay results > Blood assays > Blood count
30220	Basophil percentage	Biological samples > Assay results > Blood assays > Blood count
30240	Reticulocyte percentage	Biological samples > Assay results > Blood assays > Blood count
30260	Mean reticulocyte volume	Biological samples > Assay results > Blood assays > Blood count
30270	Mean spheroid cell volume	Biological samples > Assay results > Blood assays > Blood count
30280	Immature reticulocyte fraction	Biological samples > Assay results > Blood assays > Blood count
30290	High light scatter reticulocyte percentage	Biological samples > Assay results > Blood assays > Blood count
30500	Microalbumin in urine	Biological samples > Assay results > Urine assays
30510	Creatinine (enzymatic) in urine	Biological samples > Assay results > Urine assays
30520	Potassium in urine	Biological samples > Assay results > Urine assays
30530	Sodium in urine	Biological samples > Assay results > Urine assays
30600	Albumin	Biological samples > Assay results > Blood assays > Blood biochemistry
30610	Alkaline phosphatase	Biological samples > Assay results > Blood assays > Blood biochemistry
30620	Alanine aminotransferase	Biological samples > Assay results > Blood assays > Blood biochemistry
30650	Aspartate aminotransferase	Biological samples > Assay results > Blood assays > Blood biochemistry
30660	Direct bilirubin	Biological samples > Assay results > Blood assays > Blood biochemistry
30670	Urea	Biological samples > Assay results > Blood assays > Blood biochemistry
30680	Calcium	Biological samples > Assay results > Blood assays > Blood biochemistry

30690 Cholesterol	Biological samples > Assay results > Blood assays > Blood biochemistry
30700 Creatinine	Biological samples > Assay results > Blood assays > Blood biochemistry
30710 C-reactive protein	Biological samples > Assay results > Blood assays > Blood biochemistry
30720 Cystatin C	Biological samples > Assay results > Blood assays > Blood biochemistry
30730 Gamma glutamyltransferase	Biological samples > Assay results > Blood assays > Blood biochemistry
30740 Glucose	Biological samples > Assay results > Blood assays > Blood biochemistry
30750 Glycated haemoglobin (HbA1c)	Biological samples > Assay results > Blood assays > Blood biochemistry
30760 HDL cholesterol	Biological samples > Assay results > Blood assays > Blood biochemistry
30770 IGF-1	Biological samples > Assay results > Blood assays > Blood biochemistry
30790 Lipoprotein A	Biological samples > Assay results > Blood assays > Blood biochemistry
30800 Oestradiol	Biological samples > Assay results > Blood assays > Blood biochemistry
30810 Phosphate	Biological samples > Assay results > Blood assays > Blood biochemistry
30820 Rheumatoid factor	Biological samples > Assay results > Blood assays > Blood biochemistry
30830 SHBG	Biological samples > Assay results > Blood assays > Blood biochemistry
30840 Total bilirubin	Biological samples > Assay results > Blood assays > Blood biochemistry
30850 Testosterone	Biological samples > Assay results > Blood assays > Blood biochemistry
30860 Total protein	Biological samples > Assay results > Blood assays > Blood biochemistry
30870 Triglycerides	Biological samples > Assay results > Blood assays > Blood biochemistry
30880 Urate	Biological samples > Assay results > Blood assays > Blood biochemistry
30890 Vitamin D	Biological samples > Assay results > Blood assays > Blood biochemistry

**Supplementary Table 3.** List of known risk factors tested for their associations with ovarian cancer in the study dataset. Risk factors (highlighted) with p-value <0.05 were picked up for additional adjustments in the risk adjusted models.

#	Risk/protective factor <sup>1</sup>	UKB Field Used	P-value	Decision
1	Education	6138 (Qualifications)	0.67	Not to include
2	Family history of OC, BC and PC	20110 (Illness of mother, code 5 and 13), 20107 (Illness of father, code 5 and 13), 20111 (Illness of siblings, code 5 and 13)	0.01	Include
3	BMI	21001 (Body mass index (BMI))	0.25	Not to include
4	Daily walking time	874 (Duration of walks)	0.95	Not to include
5	Physical activity	Physical activity MET (based on Bradbury, K.E. 2017)	0.87	Not to include
6	Tea intake	1488 (Tea intake)	0.25	Not to include
7	Smoking status	20116 (Smoking status)	0.29	Not to include
8	Alcohol consumption	1558 (Alcohol intake frequency)	0.41	Not to include
9	Parity	2734 (Number of live births)	2.48E-10	Include
10	Menopausal status	2724 (Had menopause?)	0.25	Not to include
11	Age at menopause	3581 (Age at menopause (last menstrual period))	0.28	Not to include
12	Age at menarche	2714 (Age when periods started (menarche))	0.21	Not to include
13	Hormone therapy	2814 (Ever used hormone-replacement therapy (HRT))	0.92	Not to include
14	Daily sleeping time	1160 (Sleep duration)	0.93	Not to include
15	Use of oral contraceptives	2784 (Ever taken oral contraceptive pill)	2.80E-06	Include
16	Tubal ligation	20004 (Operation code, 1362 - sterilisation)	0.03	Include
17	Family income	738 (Average total household income before tax)	0.02	Include

<sup>1</sup>Risk factors identified in the systematic review "Biller VS, Leitzmann MF, Sedlmeier AM, Berger FF, Ortmann O, Jochem C. Sedentary behaviour in relation to ovarian cancer risk: a systematic review and meta-analysis. Eur J Epidemiol 2021; 36(8): 769-80"

**Supplementary Table 4.** Top 3% features identified by the GBDT-SHAP pipeline as being important in predicting ovarian cancer, with their odds ratios and 95% confidence intervals from both basic adjusted and risk factor adjusted models. Risk factor adjusted models were created for only those features which passed type I error threshold ( $\alpha$ ) of 0.05 after correcting for false discovery rate (FDR). Age, ethnicity, assessment centre, year of attending the centre, and Townsend deprivation index were used for basic adjustment. Risk adjusted models were additionally adjusted for family history of breast cancer/prostate cancer, ever-use of the oral contraceptive pill, parity, tubal ligation and household income. Features passing the FDR threshold are shown in bold text. The features sitting height, standing height and weight are in standard deviations. Age when last used oral contraceptive pill has been scaled by dividing by five.

							Basic adjusted							Risk factor adjusted										
Feature ID	Feature description	Type	SHAP value (all features)	SHAP rank (all features)	SHAP value (important features)	SHAP rank (important features)	Level	Level Description	N	Cases	OR	LCI	UCI	P-value	Q-value	Pass FDR correction (True/False)	N	Cases	OR	LCI	UCI	P-value	Q-value	Pass FDR correction (True/False)
A - Baseline & personal characteristics																								
x21022	Age at recruitment	Continuous	15.48	1	8.49	1			221461	1441	1.05	1.05	1.06	2.02E-48	1.76E-46	True	181172	1152	1.05	1.05	1.06	9.07E-29	1.81E-27	True
x130	Place of birth in UK - east co-ordinate	Continuous	1.02	14	1.45	13			194405	1294	1.0000004	1	1.000001	2.69E-01	3.61E-01	False	NA	NA	NA	NA	NA	NA	NA	NA
x1647	Country of birth (UK/elsewhere)	Categorical	0.56	25	1.22	23	1	England	170386	1181	1	1	1				NA	NA	NA	NA	NA	NA	NA	NA
							2	Wales	9781	54	0.85	0.6	1.2				NA	NA	NA	NA	NA	NA	NA	NA
							3	Scotland	17679	79	0.92	0.67	1.25	7.02E-01	7.78E-01	False	NA	NA	NA	NA	NA	NA	NA	NA
							4	Northern Ireland/Republic of Ireland	3524	26	1.03	0.7	1.52				NA	NA	NA	NA	NA	NA	NA	NA
							5	Elsewhere	19334	98	0.87	0.67	1.13				NA	NA	NA	NA	NA	NA	NA	NA
x129	Place of birth in UK - north co-ordinate	Continuous	0.31	36	0.71	48			194405	1294	1.0000001	1	1.000001	6.97E-01	7.78E-01	False	NA	NA	NA	NA	NA	NA	NA	NA
B - Female-specific factors																								
x2724	Had menopause	Binary	4.54	5	3.03	5			187031	1261	0.88	0.71	1.09	2.52E-01	3.42E-01	False	NA	NA	NA	NA	NA	NA	NA	NA
x2674	Ever had breast cancer screening / mammogram	Binary	1.42	11	2.52	6			220609	1438	0.93	0.76	1.13	4.38E-01	5.37E-01	False	NA	NA	NA	NA	NA	NA	NA	NA
x2804	Age when last used oral contraceptive pill	Continuous	0.80	16	1.52	11			161865	930	0.92	0.88	0.96	1.85E-04	2.01E-03	True	138311	771	0.89	0.85	0.93	2.23E-06	1.11E-05	True
x2794	Age started oral contraceptive pill	Continuous	2.12	8	1.32	18			173620	992	1.01	0.997	1.03	1.09E-01	1.99E-01	False	NA	NA	NA	NA	NA	NA	NA	NA
x2734	Number of live births	Continuous	1.09	13	1.30	19			220752	1438	0.86	0.83	0.9	3.27E-10	9.47E-09	True	181172	1152	0.87	0.82	0.91	5.20E-08	3.47E-07	True
x2814	Ever used hormone-replacement therapy (HRT)	Binary	0.64	21	1.26	21			220159	1432	1.01	0.9	1.13	9.21E-01	9.32E-01	False	NA	NA	NA	NA	NA	NA	NA	NA
x2744	Birth weight of first child	Continuous	0.77	17	1.20	24			175361	1081	1.04	0.99	1.1	1.10E-01	1.99E-01	False	NA	NA	NA	NA	NA	NA	NA	NA
x2784	Ever taken oral contraceptive pill	Binary	1.71	9	1.14	25			220271	1433	0.74	0.66	0.84	1.78E-06	3.87E-05	True	181172	1152	0.73	0.63	0.83	6.27E-06	2.51E-05	True
C - Sociodemographics																								
x6141__2	People in household- son and/or daughter	Binary	7.05	4	6.07	3			219365	1428	0.76	0.66	0.87	1.02E-04	1.26E-03	True	180828	1150	0.94	0.80	1.10	4.34E-01	4.34E-01	False
x6142__2	Retired	Binary	7.07	3	3.13	4			220215	1435	1.11	0.96	1.28	1.67E-01	2.57E-01	False	NA	NA	NA	NA	NA	NA	NA	NA
x738	Average total household income before tax	Categorical	1.45	10	1.96	8	1	Less than 18,000	42928	343	1	1	1				NA	NA	NA	NA	NA	NA	NA	NA
							2	18,000 to 30,999	47074	367	1.07	0.92	1.25				NA	NA	NA	NA	NA	NA	NA	NA
							3	31,000 to 51,999	47221	257	0.89	0.75	1.06	2.41E-02	7.77E-02	False	NA	NA	NA	NA	NA	NA	NA	NA
							4	52,000 to 100,000	35382	150	0.79	0.64	0.97				NA	NA	NA	NA	NA	NA	NA	NA
							5	Greater than 100,000	9153	41	0.87	0.62	1.21				NA	NA	NA	NA	NA	NA	NA	NA
x699	Length of time at current address	Continuous	0.65	20	1.08	27			220435	1436	1.003	0.999	1.01	1.38E-01	2.22E-01	False	NA	NA	NA	NA	NA	NA	NA	NA
x6142__1	In paid employment or self-employed	Binary	0.93	15	0.52	70			220215	1435	0.93	0.82	1.06	2.78E-01	3.67E-01	False	NA	NA	NA	NA	NA	NA	NA	NA
x709	Number in household	Binary	2.19	7	0.46	75			219584	1429	0.94	0.89	0.99	3.12E-02	8.70E-02	False	NA	NA	NA	NA	NA	NA	NA	NA
D - Lifestyle and environment																								
x1070	Time spent watching television (TV)	Continuous	0.40	29	1.01	28			218852	1423	1.02	0.99	1.05	2.02E-01	2.93E-01	False	NA	NA	NA	NA	NA	NA	NA	NA
x1677	Breastfed as a baby	Binary	0.22	47	0.90	38			179987	1149	1.14	0.99	1.3	6.33E-02	1.38E-01	False	NA	NA	NA	NA	NA	NA	NA	NA
x1050	Time spend outdoors in summer	Continuous	0.19	53	0.77	43			204603	1302	0.99	0.96	1.02	5.28E-01	6.21E-01	False	NA	NA	NA	NA	NA	NA	NA	NA
x6164__3	Light DIY (eg: pruning, watering the lawn)	Binary	0.21	50	0.68	52			218456	1418	0.78	0.61	1.001	5.09E-02	1.24E-01	False	NA	NA	NA	NA	NA	NA	NA	NA
x894	Duration of moderate activity	Continuous	0.33	34	0.57	64			159291	976	1.001	0.9997	1.001	2.18E-01	3.11E-01	False	NA	NA	NA	NA	NA	NA	NA	NA
x6179__1	Mineral or other dietary supplements- Fish oil	Binary	0.12	87	0.51	71			218931	1418	1.08	0.97	1.21	1.56E-01	2.47E-01	False	NA	NA	NA	NA	NA	NA	NA	NA
x6162__1	Types of transport used (excluding work)- car/motor vehicle	Binary	0.13	76	0.49	72			218605	1418	0.86	0.76	0.98	2.12E-02	7.28E-02	False	NA	NA	NA	NA	NA	NA	NA	NA
x6179__100	Mineral or other dietary supplements- None	Binary	0.22	45	0.48	73			218931	1418	0.93	0.84	1.04	1.94E-01	2.85E-01	False	NA	NA	NA	NA	NA	NA	NA	NA
x1628	Alcohol intake versus 10 years previously	Categorical	0.12	84	0.45	76	1	More nowadays	39218	235	1	1	1				NA	NA	NA	NA	NA	NA	NA	NA
							2	About the same	76648	509	1.02	0.87	1.19	4.03E-01	5.09E-01	False	NA	NA	NA	NA	NA	NA	NA	NA
							3	Less nowadays	82267	549	1.09	0.94	1.28				NA	NA	NA	NA	NA	NA	NA	NA
x981	Duration walking for pleasure	Categorical	0.13	73	0.31	84	1	Non-walkers/Less than 15 minutes	60,909	383	1.00	1.00	1.00				48,989	306	1.00	1.00	1.00			
							2	Between 15 min and 1.5 hrs	122,853	793	1.03	0.91	1.16	7.67E-03	4.17E-02	True	102,808	641	1.01	0.88	1.16	1.25E-03	3.12E-03	True
							3	Between 1.5 hrs and 3 hrs	24,715	145	0.88	0.72	1.07				20,603	115	0.84	0.68	1.05			
							4	Over 3 hrs	9,115	89	1.41	1.12	1.78				7,702	82	1.52	1.19	1.95			
x																								

H - Biomarkers																						
x30870	Triglycerides	Continuous	0.30	37	1.93	9	206510	1350	0.99	0.94	1.05	8.47E-01	8.73E-01	False	NA	NA	NA	NA	NA	NA	NA	
x30650	Aspartate aminotransferase	Continuous	0.15	68	1.59	10	205892	1347	0.89	0.82	0.96	2.66E-03	1.78E-02	True	170030	1092	0.88	0.81	0.96	4.65E-03	7.76E-03	True
x30050	Mean corpuscular haemoglobin	Continuous	0.60	23	1.52	12	210186	1357	0.93	0.88	0.98	9.49E-03	4.86E-02	True	173611	1099	0.94	0.89	1.00	7.04E-02	8.28E-02	False
x30770	Insulin-like growth factor 1 (IGF-1)	Continuous	1.14	12	1.44	15	205499	1345	0.93	0.88	0.99	1.83E-02	6.64E-02	False	NA	NA	NA	NA	NA	NA	NA	
x30740	Glucose	Continuous	0.20	51	1.24	22	187565	1232	0.96	0.9	1.02	1.86E-01	2.79E-01	False	NA	NA	NA	NA	NA	NA	NA	
x30210	Eosinophil percentage	Continuous	0.67	19	0.99	30	209794	1356	0.95	0.89	1.004	6.87E-02	1.46E-01	False	NA	NA	NA	NA	NA	NA	NA	
x30190	Monocyte percentage	Continuous	0.21	48	0.95	34	209794	1356	0.97	0.91	1.03	3.13E-01	4.06E-01	False	NA	NA	NA	NA	NA	NA	NA	
x30070	Red blood cell (erythrocyte) distribution width	Continuous	0.27	38	0.91	36	210186	1357	1.09	1.04	1.15	3.72E-04	3.60E-03	True	173611	1099	1.08	1.03	1.15	4.05E-03	7.76E-03	True
x30270	Mean sphered cell volume	Continuous	0.12	85	0.90	37	206371	1336	0.95	0.9	1.01	9.44E-02	1.87E-01	False	NA	NA	NA	NA	NA	NA	NA	
x30040	Mean corpuscular volume	Continuous	0.38	31	0.83	40	210186	1357	0.92	0.87	0.97	1.75E-03	1.38E-02	True	173611	1099	0.92	0.87	0.98	1.29E-02	1.72E-02	True
x30520	Potassium in urine	Continuous	0.18	58	0.81	42	212567	1384	1.04	0.99	1.1	1.08E-01	1.99E-01	False	NA	NA	NA	NA	NA	NA	NA	
x30720	Cystatin C	Continuous	0.23	43	0.75	46	206627	1349	1.04	0.999	1.09	5.73E-02	1.28E-01	False	NA	NA	NA	NA	NA	NA	NA	
x30710	C-reactive protein	Continuous	0.23	44	0.70	50	206271	1349	1.02	0.97	1.07	5.45E-01	6.32E-01	False	NA	NA	NA	NA	NA	NA	NA	
x30620	Alanine aminotransferase	Continuous	0.18	56	0.68	53	206618	1351	0.89	0.83	0.96	1.60E-03	1.38E-02	True	170627	1096	0.91	0.84	0.98	1.06E-02	1.52E-02	True
x30860	Total protein	Continuous	0.17	59	0.68	55	187596	1233	0.98	0.92	1.04	4.65E-01	5.61E-01	False	NA	NA	NA	NA	NA	NA	NA	
x30120	Lymphocyte count	Continuous	0.17	63	0.63	60	209791	1356	0.96	0.91	1.01	1.15E-01	2.00E-01	False	NA	NA	NA	NA	NA	NA	NA	
x30280	Immature reticulocyte fraction	Continuous	0.21	49	0.56	68	206370	1336	1.06	1.01	1.12	3.20E-02	8.70E-02	False	NA	NA	NA	NA	NA	NA	NA	
x30750	Glycated haemoglobin (HbA1c)	Continuous	0.13	79	0.52	69	205294	1326	0.96	0.91	1.02	2.34E-01	3.28E-01	False	NA	NA	NA	NA	NA	NA	NA	
x30200	Neutrophil percentage	Continuous	0.13	74	0.48	74	209794	1356	1.08	1.03	1.14	4.44E-03	2.58E-02	True	173302	1098	1.06	0.99	1.12	8.38E-02	9.31E-02	False
x30290	High light scatter reticulocyte percentage	Continuous	0.24	40	0.41	78	206371	1336	1.01	0.99	1.04	4.03E-01	5.09E-01	False	NA	NA	NA	NA	NA	NA	NA	
x30760	HDL cholesterol	Continuous	0.13	80	0.40	80	187699	1233	0.96	0.9	1.01	1.20E-01	2.00E-01	False	NA	NA	NA	NA	NA	NA	NA	
x30690	Cholesterol	Continuous	0.16	67	0.32	83	206623	1351	0.99	0.94	1.04	6.69E-01	7.66E-01	False	NA	NA	NA	NA	NA	NA	NA	
x30150	Eosinophil count	Continuous	0.16	65	0.30	86	209791	1356	0.96	0.9	1.02	1.68E-01	2.57E-01	False	NA	NA	NA	NA	NA	NA	NA	

\* Group 2 diseases = Parkinson's disease, severe depression, lung cancer, bowel cancer, breast cancer  
Additional abbreviations: LCI lower confidence interval, OC ovarian cancer, OR odds ratio, Q-value FDR-corrected P-value, UCI upper confidence interval.



**Supplementary Table 5.** SHAP-important biomarkers that were subject to statistical modelling using basic adjusted and risk factor adjusted logistic regression models with their mean and standard deviation before standardising. Analysis method for each assay is also provided. For additional information on these biomarkers, please refer to the footnotes accompanying the table.

Feature ID	Biomarker	Analysis method	N	Mean (SD) Unit
<i>Red Blood Cell Indices</i> <sup>1</sup>				
x30040	Mean corpuscular volume	Coulter	210,450	90.81 (4.67) fL
x30050	Mean corpuscular haemoglobin	Coulter	210,450	31.25 (1.93) pg
x30070	Red blood cell (erythrocyte) distribution width	Coulter	210,450	13.51 (1.05) %
x30270	Mean spheroid cell volume	Coulter	206,633	82.92 (5.25) fL
x30280	Immature reticulocyte fraction	Coulter	206,632	0.29 (0.06) ratio
x30290	High light scatter reticulocyte percentage	Coulter	206,633	0.39 (0.34) %
<i>White Blood Cell Indices</i> <sup>1</sup>				
x30120	Lymphocyte count	Coulter	210,055	2.00 (0.61) x 10 <sup>9</sup> cells/L
x30150	Eosinophil count	Coulter	210,055	0.16 (0.13) x 10 <sup>9</sup> cells/L
x30190	Monocyte percentage	Coulter	210,058	6.56 (2.48) %
x30200	Neutrophil percentage	Coulter	210,058	60.58 (8.28) %
x30210	Eosinophil percentage	Coulter	210,058	2.42 (1.8) %
<i>Liver function</i> <sup>2</sup>				
x30620	Alanine aminotransferase	IFCC	206,955	20.08 (12.08) U/L
x30650	Aspartate aminotransferase	IFCC	206,227	24.38 (9.51) U/L
x30860	Total protein	Biuret	187,908	72.46 (4.09) g/L
<i>Lipid profile</i> <sup>2</sup>				
x30690	Cholesterol	CHO-POD	206,961	5.86 (1.12) mmol/L
x30760	HDL cholesterol	Enzyme immunoinhibition	188,012	1.6 (0.38) mmol/L
x30870	Triglycerides	GPO-POD	206,847	1.53 (0.85) mmol/L
<i>Glucose metabolism markers</i> <sup>2</sup>				
x30740	Glucose	Hexokinase	187,878	5.05 (1.05) mmol/L
x30750	Glycated haemoglobin (HbA1c)	HPLC	205,547	35.65 (5.89) mmol/mol
<i>Kidney marker</i> <sup>2</sup>				
x30720	Cystatin C	Immuno-turbidimetric	206,965	0.87 (0.16) mg/L
<i>Other markers</i>				
x30710	C-reactive protein <sup>2</sup>	Immunoturbidimetric - high sensitivity	206,609	2.62 (4.23) mg/L
x30770	IGF-1 <sup>2</sup>	Chemiluminescent Immunoassay – one step sal	205,835	21.1 (5.76) nmol/L
x30520	Potassium in urine <sup>3</sup>	ISE	212,835	58.63 (33.21) mmol/L

<sup>1</sup><https://biobank.ndph.ox.ac.uk/ukb/ukb/docs/haematology.pdf>

<sup>2</sup>[https://biobank.ndph.ox.ac.uk/showcase/showcase/docs/serum\\_biochemistry.pdf](https://biobank.ndph.ox.ac.uk/showcase/showcase/docs/serum_biochemistry.pdf)

<sup>3</sup>[https://biobank.ndph.ox.ac.uk/showcase/showcase/docs/urine\\_assay.pdf](https://biobank.ndph.ox.ac.uk/showcase/showcase/docs/urine_assay.pdf)

**Supplementary Table 6.** Top 3% features identified by the G80T-SHAP pipeline as being important in predicting ovarian cancer, with their odds ratios and 95% confidence intervals from basic adjusted models with the outcomes being ovarian cancer subtypes: serous, endometrioid, clear cell and mucinous ovarian cancer. Age, ethnicity, assessment centre, year of attending the centre, and Townsend deprivation index were used for basic adjustment. Both the raw P-values and false discovery rate (FDR) corrected Q-values are given. Features passing the FDR threshold are shown in bold text. The features sitting height, standing height and weight are in standard deviations. Age when last used oral contraceptive pill has been indexed by dividing by five.

\* Group 2 diseases = Parkinson's disease, severe depression, lung cancer, bowel cancer, breast cancer  
Additional abbreviations: CI lower confidence interval; OC ovarian cancer; OR odds ratio; ICI upper confidence interval

**Supplementary Table 7.** Sensitivity analysis results of excluding incident cases reported within the first two years after the baseline assessment for the features which were associated in the main analysis. Odds ratios and 95% confidence intervals are from the basic adjusted models (adjusted for age, ethnicity, assessment centre, year of attending the centre, and Townsend deprivation index). The features sitting height, standing height and weight are in standard deviations. Age when last used oral contraceptive pill has been scaled by dividing by five.

						All (no lag)					2 year lag analysis				
	Feature ID	Feature description	Level	Level Description	OC group	N	Cases	OR	LCI	UCI	N	Cases	OR	LCI	UCI
A - Baseline & personal characteristics	x21022	Age at recruitment			All OC	221461	1441	1.05	1.05	1.06	221269	1249	1.05	1.05	1.06
					Serous OC	220636	616	1.09	1.08	1.10	220560	540	1.09	1.07	1.10
B - Female-specific factors	x2804	Age when last used oral contraceptive pill			All OC	161865	930	0.92	0.88	0.96	161750	815	0.92	0.87	0.96
					Serous OC	161306	371	0.98	0.96	0.99	161263	328	0.88	0.81	0.95
	x2734	Number of live births			All OC	220752	1438	0.86	0.83	0.90	220560	1246	0.87	0.83	0.91
					Clear Cell OC	190432	50	0.55	0.42	0.71	190423	41	0.59	0.45	0.79
	x2784	Ever taken oral contraceptive pill			All OC	220271	1433	0.74	0.66	0.84	220079	1241	0.77	0.67	0.88
					Serous OC	219453	615	0.70	0.59	0.84	219377	539	0.71	0.58	0.86
C - Sociodemographics	x6141__2	People in household- son and/or daughter			All OC	219365	1428	0.76	0.66	0.87	219174	1237	0.75	0.65	0.87
D - Lifestyle and environment	x981	Duration walking for pleasure	1	Non-walkers/Less than 15 minutes	All OC	60,909	383	1.00	1.00	1.00	60,858	332	1.00	1.00	1.00
			2	Between 15 min and 1.5 hrs		122,853	793	1.03	0.91	1.16	122,746	686	1.03	0.90	1.17
			3	Between 1.5 hrs and 3 hrs		24,715	145	0.88	0.72	1.07	24,695	125	0.88	0.71	1.08
			4	Over 3 hrs		9,115	89	1.41	1.12	1.78	9,106	80	1.47	1.15	1.88
D - Lifestyle and environment	x6162__1	Types of transport used (excluding work)- car/motor vehicle			Clear Cell OC	188403	49	0.34	0.19	0.62	188394	40	0.43	0.22	0.85
E - Cognitive and psychosocial factors	x1960	Fed-up feelings			All OC	215979	1406	0.87	0.78	0.97	215792	1219	0.89	0.80	1.01
F - Physical measurements	x20015	Sitting height			All OC	218965	1417	1.13	1.07	1.20	218778	1230	1.16	1.09	1.23
	x50	Standing height			All OC	220534	1435	1.13	1.07	1.20	220344	1245	1.14	1.08	1.21
	x21002	Weight			All OC	220366	1432	1.08	1.03	1.14	220176	1242	1.09	1.03	1.15
	x3137	Number of measurements made			All OC	202492	1301	1.21	1.06	1.37	202318	1127	1.21	1.05	1.38
	x20004__1355	Operation code: bilateral oophorectomy			All OC	221126	1440	0.21	0.14	0.31	220934	1248	0.22	0.15	0.34
G -Health and medical history					Serous OC	220302	616	0.20	0.11	0.37	220226	540	0.23	0.13	0.43
G -Health and medical history	x20011	Interpolated Age of participant when operation took place			All OC	174210	1170	1.00	0.99	1.00	174057	1017	0.99	0.99	1.00
G -Health and medical history	x20110__101	Illnesses of mother - none (group 2 diseases)			All OC	207783	1354	0.85	0.76	0.96	207603	1174	0.85	0.74	0.97
H - Biomarkers	x30650	Aspartate aminotransferase			All OC	205892	1347	0.89	0.82	0.96	205715	1170	0.86	0.79	0.94
	x30620	Alanine aminotransferase			All OC	206618	1351	0.89	0.83	0.96	206441	1174	0.90	0.83	0.97
	x30770	Insulin-like growth factor 1 (IGF-1)			Clear Cell OC	176989	48	0.61	0.44	0.85	176906	39	0.62	0.43	0.89
	x30070	Red blood cell (erythrocyte) distribution width			All OC	210186	1357	1.09	1.04	1.15	210004	1175	1.09	1.04	1.15
					Clear Cell OC	181458	47	1.31	1.17	1.46	181443	38	1.30	1.13	1.48
	x30040	Mean corpuscular volume			All OC	210186	1357	0.92	0.87	0.97	210004	1175	0.91	0.85	0.96
	x30050	Mean corpuscular haemoglobin			All OC	210186	1357	0.93	0.88	0.98	210004	1175	0.90	0.85	0.96
	x30050	Mean corpuscular haemoglobin			Clear cell OC	181453	47	0.71	0.59	0.86	181444	38	0.79	0.60	1.04
	x30200	Neutrophil percentage			All OC	209794	1356	1.08	1.03	1.14	209612	1174	1.09	1.03	1.15

Abbreviations: LCI lower confidence interval, OC ovarian cancer, OR odds ratio, UCI upper confidence interval.

Supplementary Table 8. Mendelian randomisation associations for GBDT-SHAP important and related traits, with risk of ovarian cancer

Exposure							Ovarian cancer					Serous OC (High grade and low grade serous OC)					Endometrioid OC					Clear Cell OC					Mucinous OC (Invasive mucinous OC)						
							25509 cases, 40941 controls					14049 cases, 40941 controls					2807 cases, 40941 controls					1366 cases, 40941 controls					1417 cases, 40941 controls						
							OR	LCI	UCI	p-value	Intercept p-value (MR-Egger)	OR	LCI	UCI	p-value	Intercept p-value (MR-Egger)	OR	LCI	UCI	p-value	Intercept p-value (MR-Egger)	OR	LCI	UCI	p-value	Intercept p-value (MR-Egger)	OR	LCI	UCI	p-value	Intercept p-value (MR-Egger)		
Category	Trait description	Source	Exposure ID	Author	Sample Size	No. of SNPs	Method																										
B - Female-specific factors	Age at menopause	ukb	ukb-b-17422	Ben Elsworth	143819	102	IVW	1.12	1.02	1.23	1.80E-02		1.08	0.97	1.21	1.40E-01		1.47	1.23	1.75	1.80E-05		1.07	0.83	1.39	6.00E-01		0.90	0.70	1.15	3.90E-01		
		consortia	ieu-a-1004	Felix Day	69360	35	MR-Egger	1.15	0.94	1.42	1.80E-01	7.85E-01		1.08	0.86	1.36	5.10E-01	9.74E-01	1.85	1.07	3.21	2.80E-02	2.73E-02	1.18	0.69	2.01	5.40E-01		1.18	0.69	2.01	5.40E-01	2.53E-01
							IVW	1.03	1.00	1.06	6.90E-02		1.02	0.99	1.05	2.50E-01		1.09	1.02	1.16	6.70E-03		1.05	0.96	1.14	2.90E-01		1.00	0.92	1.09	9.70E-01		
							MR-Egger	1.07	1.00	1.15	5.60E-02	2.04E-01		1.04	0.97	1.11	2.70E-01	4.90E-01	1.26	1.05	1.53	1.70E-02	3.11E-02	1.00	0.81	1.23	1.00E+00		1.00	0.89	1.23	1.00E+00	9.83E-01
	Number of live births	ukb	ukb-b-1209	Ben Elsworth	250782	10	IVW	0.81	0.26	2.53	7.10E-01		0.99	0.31	3.16	9.80E-01		0.33	0.08	1.40	1.30E-01		0.31	0.09	1.10	6.90E-02		0.99	0.17	5.95	9.90E-01		
							MR-Egger	111.63	0.00	1.71E+07	4.00E-01	3.80E-01		676.54	0.01	8.25E+07	2.50E-01	2.50E-01	40.40	0.00	2.12E+08	6.10E-01	5.10E-01	0.11	0.00	1.13E+05	7.30E-01	8.70E-01	11.47	0.00	3.29E+09	7.90E-01	7.90E-01
		consortia	ieu-b-4760	Clare Horscroft	460654	7	IVW	1.05	0.52	2.14	8.90E-01		1.18	0.52	2.68	6.90E-01		0.20	0.04	1.06	5.80E-02		0.09	0.01	0.89	3.90E-02		11.27	1.35	94.12	2.50E-02		
							MR-Egger	2.17	0.02	237.14	7.10E-01	7.30E-01		1.04	0.00	234.20	9.90E-01	9.60E-01	1.04	0.00	9.99E+03	6.00E-01	8.10E-01	945.00	0.00	1.43E+09	3.10E-01	1.80E-01	0.75	0.00	1.79E+09	6.80E-01	6.80E-01
	Age at first birth	consortia	ebi-a-GCST90000050	Melinda Mills	542901	54	IVW	1.05	0.98	1.12	2.00E-01		1.02	0.94	1.10	7.10E-01		1.06	0.92	1.23	3.90E-01		1.35	1.12	1.63	1.70E-03		1.01	0.84	1.22	9.00E-01		
							MR-Egger	1.18	0.89	1.57	2.40E-01	3.80E-01		1.15	0.81	1.63	4.30E-01	4.70E-01	1.07	0.59	1.95	8.10E-01	9.80E-01	1.25	0.57	2.73	5.70E-01	8.40E-01	0.90	0.42	1.95	7.90E-01	7.60E-01
Female infertility	FinnGen	finn-b-N14_FEMALEINFERT	NA	NG	1	Wald ratio	1.26	0.92	1.71	1.50E-01	NA		1.07	0.74	1.53	7.30E-01	NA	1.90	0.99	3.67	5.40E-02	NA	2.67	1.10	6.47	2.90E-02	NA	0.84	0.76	4.49	1.80E-01	NA	
D - Lifestyle and environment	Omega-3 fatty acids	ukb	met-d-Omega_3	Maria Borges	114999	49	IVW	0.95	0.87	1.03	2.30E-01		0.94	0.86	1.04	2.40E-01		0.89	0.77	1.04	1.50E-01		0.88	0.73	1.05	1.50E-01		1.05	0.86	1.29	6.10E-01		
		consortia	met-c-855	Johannes Kettunen	13544	6	MR-Egger	0.94	0.83	1.07	3.40E-01	8.73E-01		0.95	0.82	1.09	4.40E-01	9.32E-01	0.81	0.66	1.01	6.30E-02	2.27E-01	0.86	0.66	1.11	2.50E-01	8.22E-01	1.07	0.80	1.43	6.70E-01	9.20E-01
							IVW	0.87	0.77	0.97	1.60E-02		0.88	0.77	1.00	5.40E-02		0.77	0.60	0.99	4.10E-02		0.68	0.48	0.97	3.10E-02		0.89	0.63	1.26	5.30E-01		
							MR-Egger	0.65	0.38	1.12	1.30E-01	2.53E-01		0.65	0.35	1.21	1.70E-01	2.93E-01	0.37	0.12	1.17	1.00E-01	1.80E-01	0.67	0.13	3.36	5.70E-01	9.73E-01	1.07	0.22	5.35	9.20E-01	7.86E-01
	Omega-6 fatty acids	ukb	met-d-Omega_6	Maria Borges	114999	58	IVW	1.10	0.98	1.22	9.30E-02		1.05	0.94	1.18	3.60E-01		1.28	1.06	1.56	1.20E-02		0.95	0.75	1.21	7.00E-01		1.30	0.99	1.69	5.50E-02		
		consortia	met-c-856	Johannes Kettunen	13506	13	MR-Egger	0.97	0.79	1.22	8.0E-01	1.73E-01		0.98	0.79	1.22	8.40E-01	4.28E-01	1.16	0.97	1.20	3.40E-01	7.52E-03	0.97	0.62	1.53	2.90E-02	9.26E-01	1.48	1.02	2.78	8.0E-02	2.40E-01
							IVW	1.09	1.00	1.19	5.20E-02		1.07	0.98	1.17	1.50E-01		1.02	0.80	1.29	8.90E-01		1.02	0.80	1.29	8.90E-01		1.30	1.03	1.65	2.90E-02		
							MR-Egger	0.91	0.73	1.12	3.40E-01	6.55E-02		0.97	0.76	1.24	8.10E-01	3.81E-01	0.85	0.53	1.35	4.70E-01	1.47E-01	0.82	0.43	1.57	5.30E-01	4.57E-01	1.23	0.65	2.33	5.00E-01	8.35E-01
	Ratio of omega-6 fatty acids to omega-3 fatty acids	ukb	met-d-Omega_6_by_Omega_3	Maria Borges	114999	38	IVW	1.08	0.98	1.19	1.10E-01		1.06	0.95	1.19	2.60E-01		1.23	1.06	1.43	7.70E-03		1.14	0.95	1.37	1.60E-01		1.01	0.81	1.26	9.20E-01		
							MR-Egger	1.05	0.92	1.21	4.30E-01	5.65E-01		1.04	0.90	1.21	5.80E-01	6.66E-01	1.23	1.00	1.51	5.50E-02	9.96E-01	1.15	0.89	1.48	2.70E-01	9.15E-01	1.03	0.76	1.39	8.60E-01	8.75E-01
	Alcohol intake versus 10 years previously	ukb	ukb-b-3460	Ben Elsworth	428117	13	IVW	1.25	0.61	2.53	5.40E-01		1.97	0.76	5.12	1.60E-01		0.42	0.08	2.19	3.00E-01		0.92	0.09	8.98	9.40E-01		0.78	0.09	6.78	8.20E-01		
							MR-Egger	6.23	0.90	43.15	6.60E-02	7.57E-02		16.02	1.68	152.66	2.20E-02	5.01E-02	0.99	0.01	121.68	1.00E+00	6.85E-01	12.34	0.02	8195.78	4.20E-01	3.68E-01	0.38	0.00	226.72	7.50E-01	7.97E-01
	Alcoholic drinks per week	consortia	ieu-b-73	Mengzhen Liu	335394	32	IVW	0.80	0.55	1.17	2.50E-01		0.77	0.50	1.17	2.10E-01		1.00	0.51	1.97	9.90E-01		0.77	0.36	1.65	5.00E-01		1.07	0.44	2.63	8.80E-01		
							MR-Egger	0.67	0.37	1.20	1.70E-01	3.92E-01		0.54	0.28	1.01	5.40E-02	1.32E-01	1.33	0.45	3.89	5.90E-01	4.89E-01	0.73	0.22	2.46	6.10E-01	9.14E-01	1.42	0.32	6.26	6.30E-01	6.16E-01
	Duration of walks	ukb	ukb-b-16998	Ben Elsworth	395831	12	IVW	1.69	0.95	3.01	7.60E-02		1.79	0.92	3.49	8.70E-02		3.16	0.59	11.06	7.20E-02		1.48	0.23	9.53	6.80E-01		0.51	0.09	2.88	4.50E-01		
							MR-Egger	1.19	0.10	13.81	8.80E-01	7.50E-01		1.69	0.10	1362.48	4.40E-01	9.60E-01	7.69	0.10	1362.48	4.40E-01	7.40E-01	0.00	0.00	7.93	1.40E-01	1.10E-01	1.45	0.00	23.93	1.90E-01	7.60E-01
	Accelerometer-based physical activity measurement (average accelerat	consortia	ebi-a-GCST006099	Yann Klimentidis	91084	8	IVW	1.00	0.85	1.18	9.60E-01		1.01	0.85	1.20	9.50E-01		0.99	0.83	1.17	8.7												

							MR-Egger	0.64	0.36	1.15	1.30E-01	1.61E-01		<b>0.46</b>	<b>0.23</b>	<b>0.91</b>	<b>2.70E-02</b>	<b>4.03E-02</b>		0.97	0.35	2.68	9.50E-01	7.59E-01		2.42	0.69	8.45	1.60E-01	6.27E-01		0.62	0.17	2.28	4.70E-01	8.64E-01
			consortia	ebi-a-GCST007432	Nick Shrine	321047	244	IVW	1.00	0.89	1.13	9.90E-01		1.04	0.91	1.18	5.70E-01		1.00	0.79	1.27	9.90E-01				1.00	0.74	1.34	9.90E-01		0.90	0.67	1.20	4.60E-01		
							MR-Egger	0.73	0.49	1.07	1.00E-01	8.43E-02		<b>0.66</b>	<b>0.43</b>	<b>1.00</b>	<b>4.80E-02</b>	<b>2.38E-02</b>		1.03	0.47	2.26	9.50E-01	9.49E-01		1.49	0.56	3.97	4.20E-01	3.93E-01		0.71	0.27	1.83	4.70E-01	6.03E-01
			consortia	ebi-a-GCST007431	Nick Shrine	321047	285	IVW	0.96	0.89	1.04	3.20E-01		0.98	0.90	1.07	6.70E-01		0.97	0.83	1.14	7.20E-01				0.87	0.69	1.08	2.00E-01		0.81	0.73	1.13	3.90E-01		
							MR-Egger	0.89	0.75	1.06	1.80E-01	3.24E-01		0.93	0.76	1.12	4.30E-01	5.07E-01		0.94	0.65	1.37	7.60E-01	8.66E-01		0.91	0.55	1.50	7.00E-01	8.45E-01		0.71	0.43	1.18	1.90E-01	2.92E-01
			consortia	ebi-a-GCST007432	Nick Shrine	321047	244	IVW	<b>0.87</b>	<b>0.78</b>	<b>0.98</b>	<b>1.70E-02</b>		<b>0.87</b>	<b>0.76</b>	<b>0.99</b>	<b>3.40E-02</b>		0.94	0.77	1.13	5.10E-01				0.83	0.63	1.10	2.00E-01		0.79	0.61	1.03	7.70E-02		
							MR-Egger	0.85	0.67	1.08	1.70E-01	7.80E-01		0.82	0.62	1.09	1.60E-01	6.50E-01		0.91	0.60	1.37	6.40E-01	8.60E-01		0.73	0.41	1.33	3.10E-01	6.30E-01		0.88	0.50	1.55	6.60E-01	6.60E-01
			consortia	ebi-a-GCST007431	Nick Shrine	321047	285	IVW	0.94	0.83	1.04	1.90E-01		0.94	0.83	1.06	3.00E-01		1.04	0.84	1.29	7.10E-01				1.01	0.74	1.36	9.60E-01		0.93	0.68	1.26	6.30E-01		
							MR-Egger	0.86	0.71	1.04	1.20E-01	2.90E-01		0.90	0.71	1.14	3.70E-01	6.60E-01		0.93	0.60	1.42	7.30E-01	5.40E-01		0.55	0.30	1.00	5.00E-02	<b>2.20E-02</b>		0.77	0.41	1.42	4.00E-01	4.90E-01
			consortia	ebi-a-GCST007432	Nick Shrine	321047	244	IVW	0.96	0.88	1.04	3.10E-01		0.94	0.85	1.02	1.50E-01		1.06	0.91	1.24	4.80E-01				1.06	0.87	1.29	5.80E-01		0.84	0.69	1.02	7.90E-02		
							MR-Egger	1.13	0.96	1.33	1.40E-01	<b>2.20E-02</b>		1.03	0.86	1.23	7.70E-01	2.40E-01		<b>1.61</b>	<b>1.19</b>	<b>2.19</b>	<b>2.30E-03</b>	<b>1.90E-03</b>		1.18	0.79	1.75	4.10E-01	5.30E-01		0.83	0.56	1.23	3.50E-01	9.50E-01
			consortia	prot-a-1443	Benjamin Sun	3301	3	IVW	0.96	0.84	1.09	5.40E-01		0.96	0.82	1.12	6.10E-01		0.88	0.72	1.08	2.20E-01				0.85	0.64	1.13	2.70E-01		1.23	0.92	1.65	1.60E-01		
							MR-Egger	1.12	0.74	1.71	5.40E-01	4.10E-01		1.08	0.53	2.20	7.90E-01	6.70E-01		1.02	0.47	2.18	9.50E-01	6.20E-01		0.90	0.31	2.59	8.00E-01	8.90E-01		1.92	0.63	5.88	3.20E-01	4.00E-01
			consortia	ebi-a-GCST007432	Nick Shrine	321047	244	IVW	0.99	0.92	1.06	7.90E-01		1.00	0.93	1.09	9.20E-01		0.92	0.78	1.07	2.90E-01				1.03	0.84	1.27	7.50E-01		0.94	0.77	1.14	5.30E-01		
							MR-Egger	0.92	0.83	1.02	1.10E-01	4.63E-02		0.96	0.86	1.08	5.20E-01	3.15E-01		<b>0.79</b>	<b>0.63</b>	<b>0.99</b>	<b>4.40E-02</b>	7.38E-02		1.00	0.74	1.35	9.80E-01	7.34E-01		0.97	0.73	1.29	8.20E-01	7.64E-01
			consortia	ieu-b-4764	Laurence Howe	61308	29	IVW	<b>0.89</b>	<b>0.80</b>	<b>1.00</b>	<b>4.90E-02</b>		0.90	0.79	1.03	1.20E-01		<b>0.74</b>	<b>0.58</b>	<b>0.95</b>	<b>1.80E-02</b>				1.15	0.81	1.62	4.30E-01		0.79	0.56	1.11	1.70E-01		
							MR-Egger	0.96	0.74	1.24	7.40E-01	5.15E-01		1.01	0.75	1.35	9.70E-01	3.93E-01		0.99	0.57	1.71	9.70E-01	2.41E-01		1.07	0.50	2.32	8.50E-01	8.46E-01		1.61	0.76	3.44	2.10E-01	<b>3.89E-02</b>
			consortia	ebi-a-GCST007432	Nick Shrine	321047	244	IVW	1.05	0.97	1.14	2.50E-01		1.04	0.95	1.15	3.80E-01		1.09	0.92	1.28	3.10E-01				0.98	0.80	1.19	8.30E-01		1.18	0.96	1.45	1.20E-01		
							MR-Egger	1.00	0.88	1.12	9.50E-01	2.49E-01		0.96	0.83	1.10	5.20E-01	9.37E-02		1.00	0.79	1.28	9.90E-01	3.57E-01		1.06	0.79	1.43	6.80E-01	4.43E-01		1.33	0.97	1.81	7.50E-02	3.09E-01
			consortia	met-a-307	So-Youn Shin	7813	2	IVW	2.21	0.50	9.76	3.00E-01	NA	1.77	0.32	9.86	5.10E-01	NA		2.13	0.08	53.72	6.50E-01	NA		49.30	0.52	4673.16	9.30E-02	NA	26.91	0.29	2485.93	1.50E-01	NA	
							MR-Egger	1.02	0.95	1.10	5.90E-01		1.01	0.92	1.11	8.10E-01		0.98	0.85	1.13	7.90E-01				1.21	0.99	1.48	5.70E-02		1.10	0.91	1.34	3.20E-01			
			consortia	ieu-b-109	Tom Richardson	403943	324	IVW	1.08	0.96	1.21	2.10E-01	2.35E-01	1.09	0.95	1.25	2.30E-01	1.69E-01		1.04	0.83	1.29	7.40E-01	5.01E-01		1.13	0.84	1.54	4.20E-01	5.64E-01		<b>1.43</b>	<b>1.06</b>	<b>1.91</b>	<b>1.90E-02</b>	<b>2.46E-02</b>
							MR-Egger	1.03	0.96	1.12	3.80E-01		1.01	0.93	1.10	8.20E-01		1.10	0.94	1.29	2.20E-01				1.14	0.92	1.41	2.20E-01		1.09	0.89	1.33	4.00E-01			
			consortia	ebi-a-GCST002223	Cristen Willer	94595	78	IVW	1.10	0.98	1.25	1.10E-01	1.81E-01	1.05	0.92	1.20	4.90E-01	4.83E-01		1.22	0.95	1.57	1.10E-01	2.83E-01		1.19	0.85	1.68	3.10E-01	7.35E-01		1.32	0.96	1.82	8.80E-02	1.27E-01
							MR-Egger	1.04	0.96	1.13	3.10E-01		1.03	0.93	1.13	5.90E-01		1.12	0.96	1.32	1.50E-01				0.88	0.72	1.08	2.20E-01		1.05	0.86	1.27	6.60E-01			
			consortia	met-c-934	Johannes Kettunen	21545	12	IVW	0.98	0.87	1.10	7.00E-01	1.61E-01	0.98	0.85	1.13	7.70E-01	3.82E-01		0.99	0.78	1.26	9.50E-01	1.71E-01		0.81	0.60	1.11	1.90E-01	4.97E-01		0.83	0.62	1.12	2.20E-01	<b>4.29E-02</b>
							MR-Egger	0.99	0.90	1.09	8.10E-01		0.99	0.90	1.10	9.20E-01		1.00	0.83	1.21	9.80E-01				0.88	0.63	1.22	4.50E-01		0.93	0.72	1.19	5.50E-01			
			consortia	ebi-a-GCST007432	Nick Shrine	321047	244	IVW	0.99	0.73	1.24	5.20E-01	5.47E-01	0.99	0.73	1.35	9.60E-01	9.85E-01		0.69	0.39	1.23	1.90E-01	1.62E-01		0.60	0.21	1.75	3.30E-01	4.29E-01		0.78	0.34	1.79	5.30E-01	6.37E-01
							MR-Egger	1.04	0.92	1.17	5.20E-01		1.01	0.87	1.17	8.60E-01		0.96	0.77	1.20	7.40E-01				1.16	0.82	1.64	4.10E-01		<b>1.39</b>	<b>1.01</b>	<b>1.91</b>	<b>4.20E-02</b>			
			consortia	met-a-307	So-Youn Shin	7813	2	IVW	1.07	0.88	1.30	5.20E-01	7.55E-01	1.02	0.79	1.30	9.00E-01	9.77E-01		0.86	0.59	1.23	4.00E-01	4.19E-01		<b>1.78</b>	<b>1.00</b>	<b>3.15</b>	<b>4.90E-02</b>	6.43E-02		<b>2.05</b>	<b>1.21</b>	<b>3.47</b>	<b>8.10E-03</b>	6.97E-02
							MR-Egger	1.09	0.90	1.33	3.70E-01		1.04	0.82	1.32	7.50E-01		1.32	0.91	1.90	1.40E-01				1.41	0.85	2.35	1.90E-01		1.62						