



**University of Dundee**

**New genetic signals for lung function highlight pathways and chronic obstructive pulmonary disease associations across multiple ancestries**

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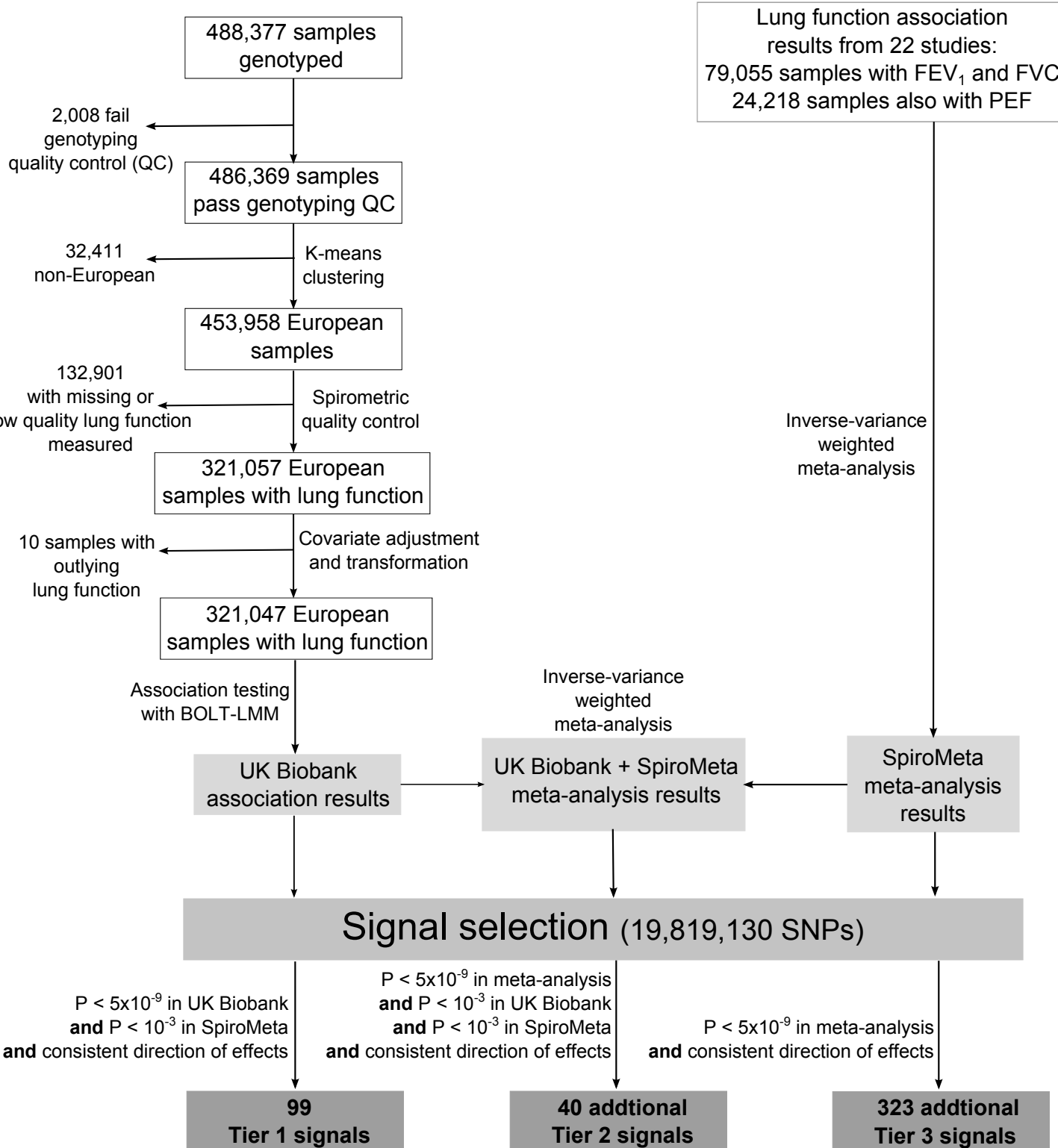
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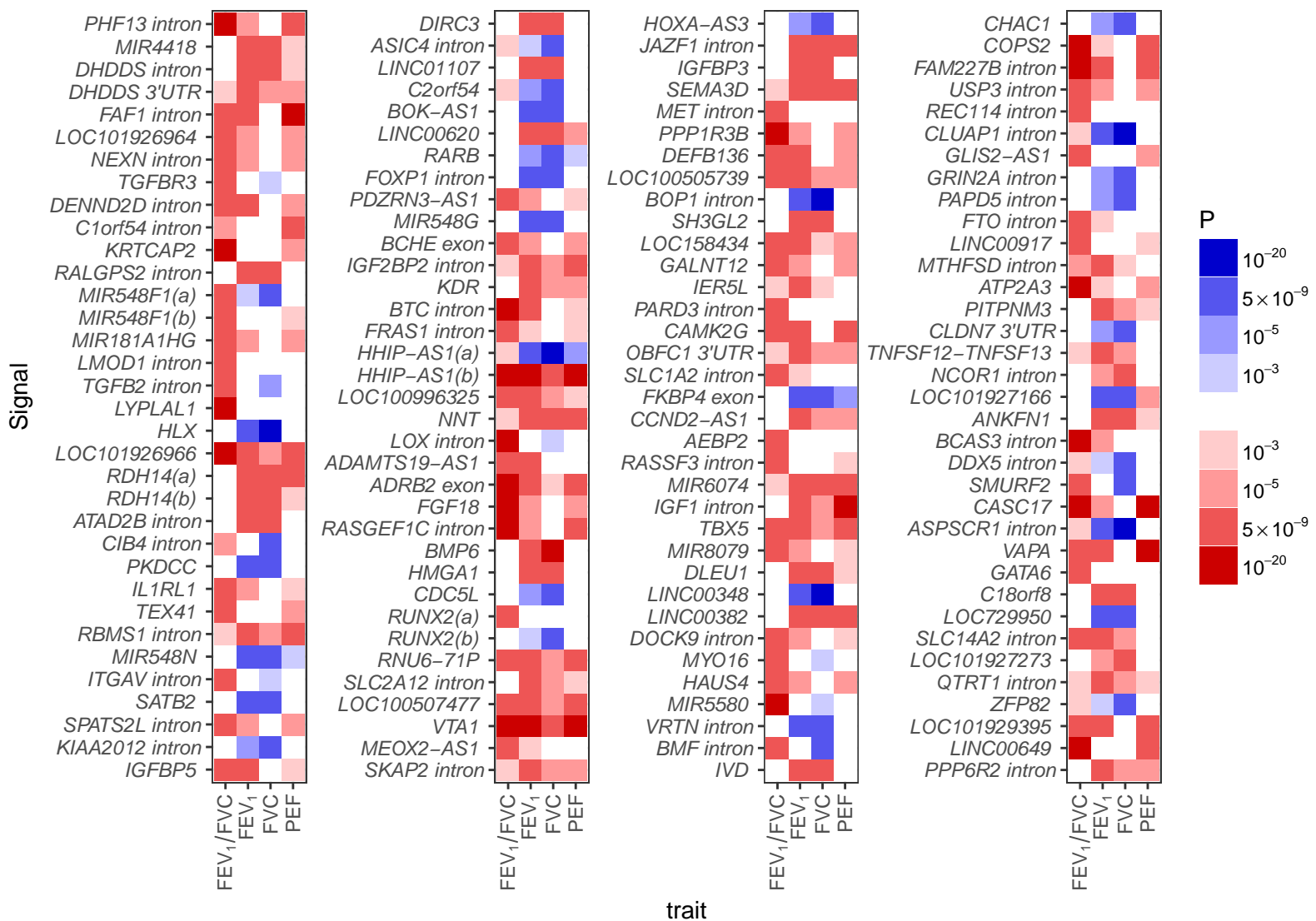
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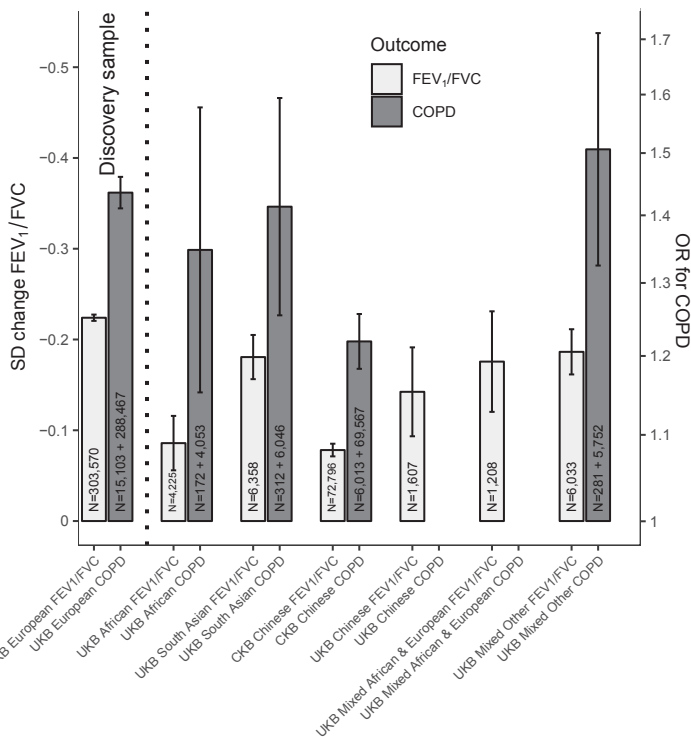
# UK Biobank

# SpiroMeta



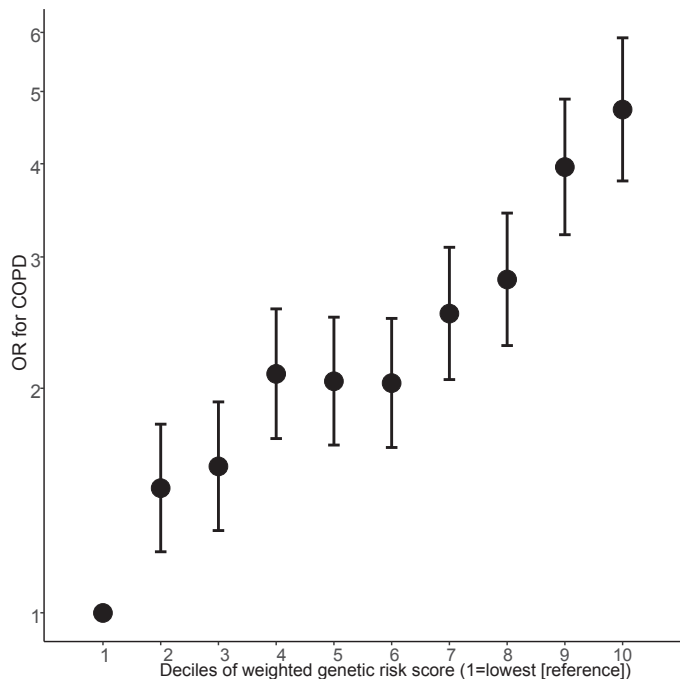


**a Weighted risk score associations with FEV<sub>1</sub>/FVC and COPD in population-based studies**



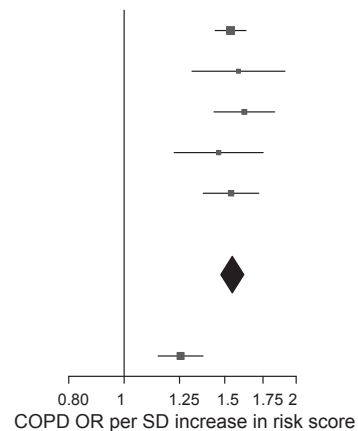
Ancestral group and phenotype studied in UK Biobank or China Kadoorie Biobank

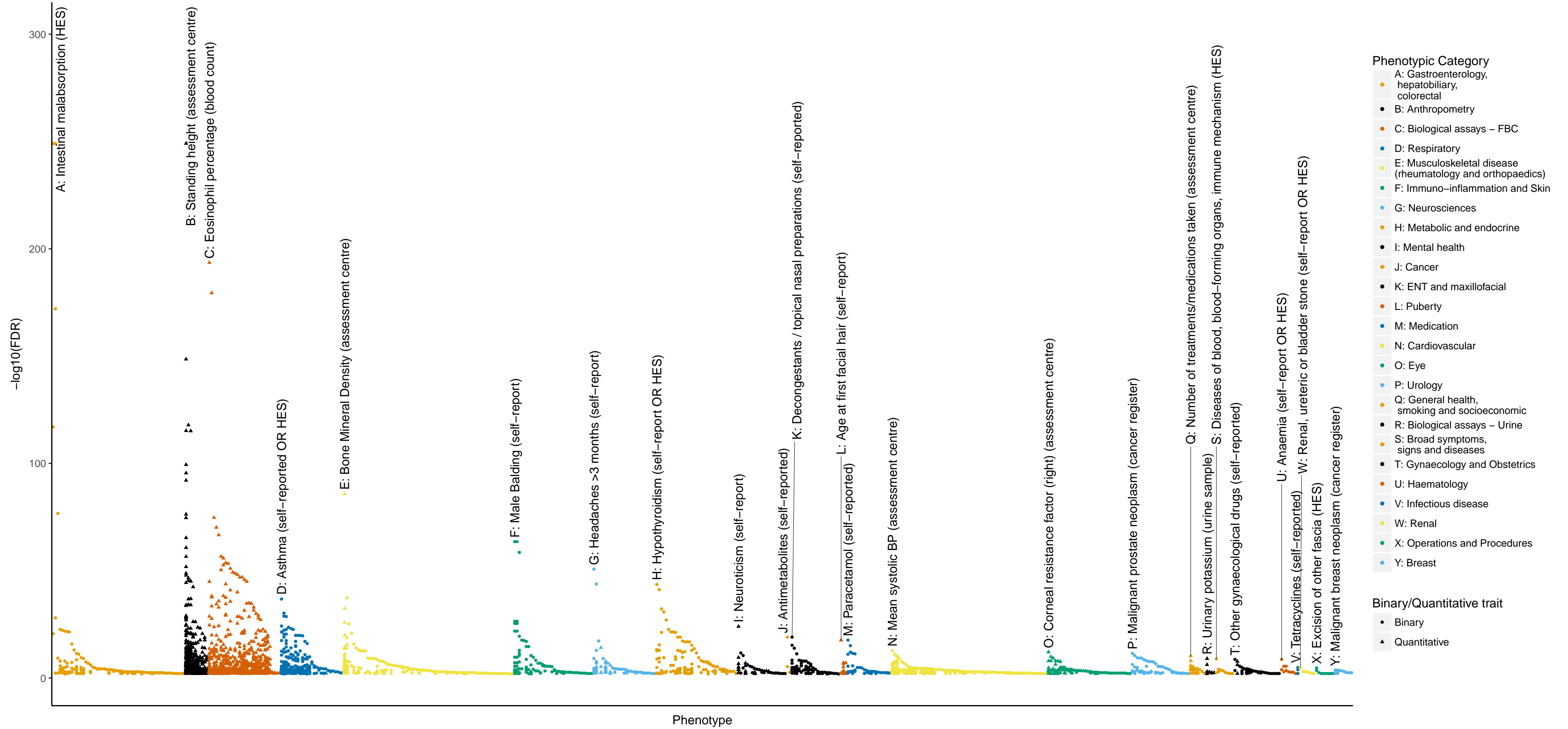
**c Odds ratio of COPD per decile increase in the weighted genetic risk score**



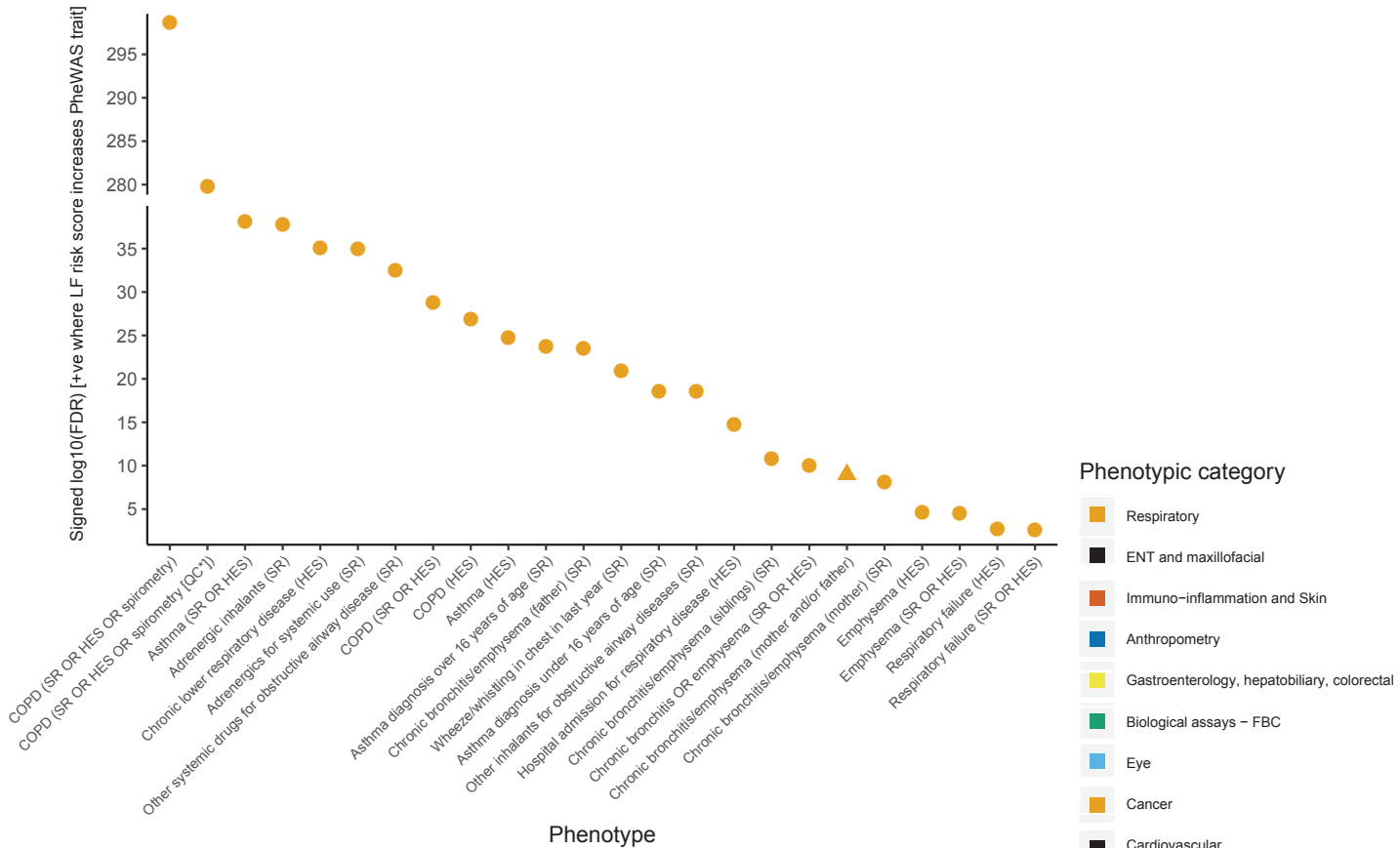
**b Weighted risk score associations with COPD susceptibility in COPD case-control studies**

Ancestry	Cohort	OR	95%LCI	95%UCI	P	Cases	Controls
European	COPDGene (EUR)	1.54	1.44	1.63	1.97x10 <sup>-41</sup>	3068	2110
	ECLIPSE	1.59	1.31	1.91	1.42x10 <sup>-06</sup>	1713	147
	GenKOLS	1.62	1.44	1.83	8.99x10 <sup>-15</sup>	836	692
	NETT-NAS	1.46	1.22	1.75	3.13x10 <sup>-05</sup>	374	429
	SPIROMICS	1.54	1.38	1.72	4.47x10 <sup>-14</sup>	988	537
	<b>Meta-analysis</b>	<b>1.55</b>	<b>1.48</b>	<b>1.62</b>	<b>1.48x10<sup>-75</sup></b>	<b>6979</b>	<b>3915</b>
African	COPDGene (AFR)	1.26	1.15	1.37	8.36x10 <sup>-07</sup>	910	1556





a



b

