Gene variant influences risk for blood clots in COVID patients

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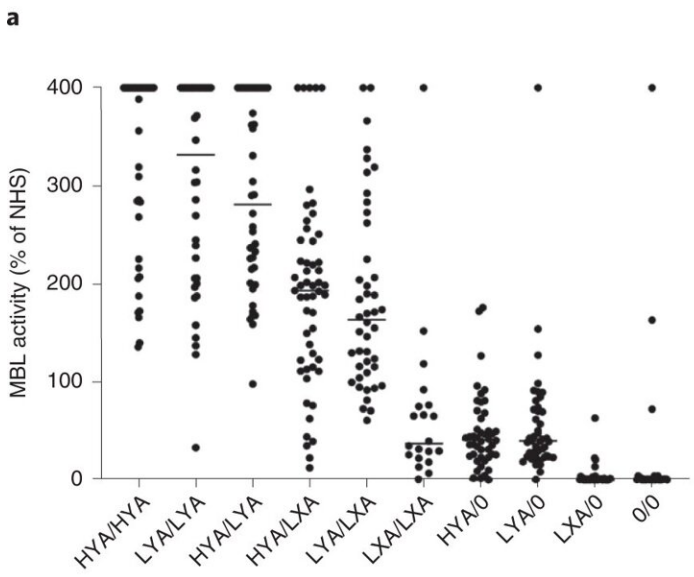

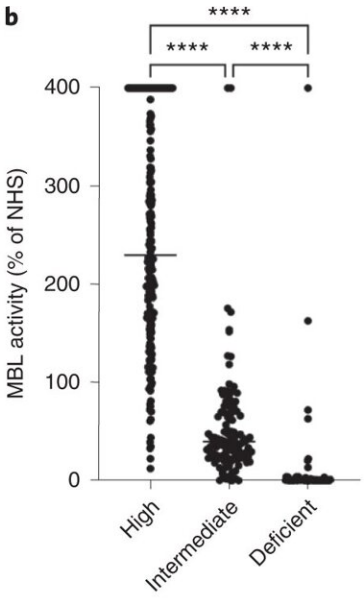

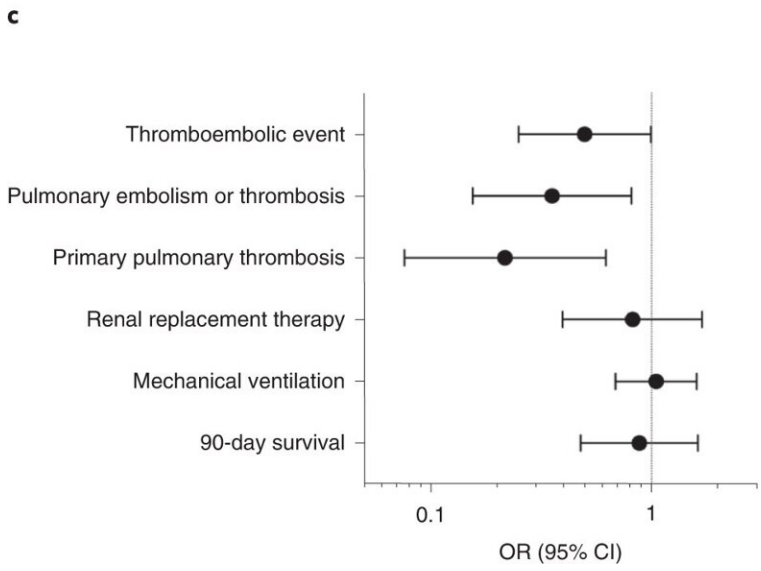

MBL2 intermediate activity haplotypes

OR	(95% CI)	*P* value
0.50	(0.25–0.99)	0.048*
0.36	(0.16–0.81)	0.014*
0.22	(0.08–0.62)	0.004**
0.82	(0.40–1.70)	0.60
1.05	(0.69–1.60)	0.82
0.88	(0.48–1.62)	0.68

MBL2 haplotypes predict MBL activity in plasma and thromboembolic complications during intensive care. a, MBL activity across individual haplotype combinations. MBL activity in plasma at day 1 of intensive care was measured by a functional ELISA using a mannan matrix for MBL capture. Activity is expressed as a percentage of pooled normal human serum (NHS). The genetic variants shown in Table 1, rows 1–5 give rise to six major MBL2 haplotypes, which are denoted by their legacy names: HYA, LYA, LXA, HYD, LYB and LYC. The HYA, LYA and LXA haplotypes encode wild-type MBL protein and are referred to as 'A' haplotypes. The HYD, LYB and LYC haplotypes contain the missense variants referred to as the D, B or C alleles, respectively, and are shown together as '0' haplotypes because they share a common deleterious effect on MBL activity. b, Haplotypes categorized according to MBL activity into high (HYA/HYA, LYA/LYA, HYA/LYA, HYA/LXA, LYA/LXA), intermediate (LXA/LXA, HYA/0, LYA/0) and deficient (LXA/0, 0/0). MBL activity differed significantly between the groups (230% (168–400, median and interquartile range) for the high group, 40% (24–70) for the intermediate group and 0.56% (0.00–1.25) for the deficient group; P