Supplementary Table 1. Mendelian randomization sensitivity analysis for the causal effects of MDD on COVID-19

Exposure	Outcome	Method	Q_P	I2	Egger_intercept	P_pleiotropy
MDD	SARS-CoV-2 infection	IVW	0.093	0.172	NA	NA
MDD	SARS-CoV-2 infection	WM	NA	NA	NA	NA
MDD	SARS-CoV-2 infection	MR Egger	0.081	0.172	-0.001	0.855
MDD	Hospitalized COVID-19	IVW	0.026	0.243	NA	NA
MDD	Hospitalized COVID-19	WM	NA	NA	NA	NA
MDD	Hospitalized COVID-19	MR Egger	0.033	0.223	0.011	0.146
MDD	Critical COVID-19	IVW	2.15E-03	0.329	NA	NA
MDD	Critical COVID-19	WM	NA	NA	NA	NA
MDD	Critical COVID-19	MR Egger	3.61E-03	0.307	0.020	0.100

MDD: major depressive disorder; IVW: inverse variance weighted; MR: Mendelian randomization; WM: weighted median; Q: statistics of heterogeneity analysis; Q_P: P value of heterogeneity analysis; I2: I2 statistics of heterogeneity; Egger_intercept: intercept of MR-Egger intercept analysis; P_pleiotropy: P value of MR-Egger intercept analysis.

Supplemental material

BMJ Publishing Group Limited (BMJ) disclaims all liability and responsibility arising from any reliance placed on this supplemental material which has been supplied by the author(s)

General Psychiatry

Supplementary Table 2. Mendelian randomization sensitivity analysis for the causal effects COVID-19 on MDD

Exposure	Outcome	Method	Q_P	I2	Egger_intercept	P_pleiotropy
SARS-CoV-2 infection	MDD	IVW	0.036	0.403	NA	NA
SARS-CoV-2 infection	MDD	WM	NA	NA	NA	NA
SARS-CoV-2 infection	MDD	MR Egger	0.051	0.346	0.006	0.22
Hospitalized COVID-19	MDD	IVW	9.35E-04	0.49	NA	NA
Hospitalized COVID-19	MDD	WM	NA	NA	NA	NA
Hospitalized COVID-19	MDD	MR Egger	1.30E-03	0.468	0.004	0.255
Critical COVID-19	MDD	IVW	0.036	0.335	NA	NA
Critical COVID-19	MDD	WM	NA	NA	NA	NA
Critical COVID-19	MDD	MR Egger	0.034	0.321	0.002	0.429

MDD: major depressive disorder; IVW: inverse variance weighted; MR: Mendelian randomization; WM: weighted median; Q: statistics of heterogeneity analysis; Q_P: P value of heterogeneity analysis; I2: I2 statistics of heterogeneity; Egger_intercept: intercept of MR-Egger intercept analysis; P_pleiotropy: P value of MR-Egger intercept analysis.