

SUPPLEMENTARY FIGURES AND TABLES

Supplementary Table 1. Co-morbidities and long-term medications included in the analysis.

Comorbidity	ICD10-CM codes
Asthma	J45, J45.20, J45.21, J45.22
Cancer (all except non-melanoma skin cancer)	C00-C97 (except C44), D00-D09
Atrial fibrillation	I48.0, I48.1, I48.2, I48.91
Cerebrovascular disease	G45.0, G45.1, G45.2, G45.8, G45.9, G46.0, G46.1, G46.2, G46.3, G46.4, G46.5, G46.6, G46.7, G46.9, I63.00, I63.10, I63.20, I63.30, I63.40, I63.50, I63.6, I63.8, I63.9, I67.82, I67.9, I69.30, I69.320 I69.398, I69.80, I69.998 I61.0, I61.1, I61.2, I61.3, I61.4, I61.5, I61.6, I61.8, I61.9, I61.10
Chronic Kidney Disease	E66.01, E66.09, E66.1, E66.2, E66.8, E66.9
Chronic obstructive pulmonary disease	J43.0, J43.1, J43.2, J43.8, J43.9, J44, J44.0, J44.1, J44.9
Diabetes mellitus (type I and II)	E10.10, E10.29, E10.311, E10.359, E10.39, E10.49, E10.59, E10.621, E10.65, E10.69, E10.8, E10.9 E11.01, E11.21, E11.22, E11.29, E11.311, E11.39, E11.40, E11.43, E11.49, E11.51, E11.59, E11.610, E11.621, E11.638, E11.641, E11.649, E11.65, E11.69, E11.8, E11.9, E13.10, E13.29, E13.39, E13.49, E13.59, E13.641, E13.69, E13.8, E13.9
Heart failure	I50.1, I50.20, I50.30, I50.32, I50.9
HIV infection	Z21, B20, B97.35
Hypertension	I10, I11.0, I11.9, I12.0, I12.9, I13.0, I13.10, I13.2, I15.0, I15.1, I15.2, I15.8, I15.9
Ischaemic heart disease	I20, I20.0, I20.8, I20.9, I24.0, I24.1, I24.8, I24.9, I25, I25.10, I25.2, I25.41, I25.5, I25.6, I25.89, I25.9, I70.90, I21, I21.0, I21.01, I21.02, I21.09, I21.1, I21.11, I21.19, I21.2, I21.29, I21.3, I21.4, I22.0, I22.1, I22.2, I22.8, I22.9, I23.0, I23.1, I23.2, I23.3, I23.4, I23.5, I23.6, I23.8
Liver disease	K70.0, K70.10, K70.2, K70.30, K70.9, K73.0, K73.1, K73.2, K73.8, K73.9, K75.0, K75.2, K75.3, K75.4, K75.89, K75.9, K76.5, K76.7, K76.9

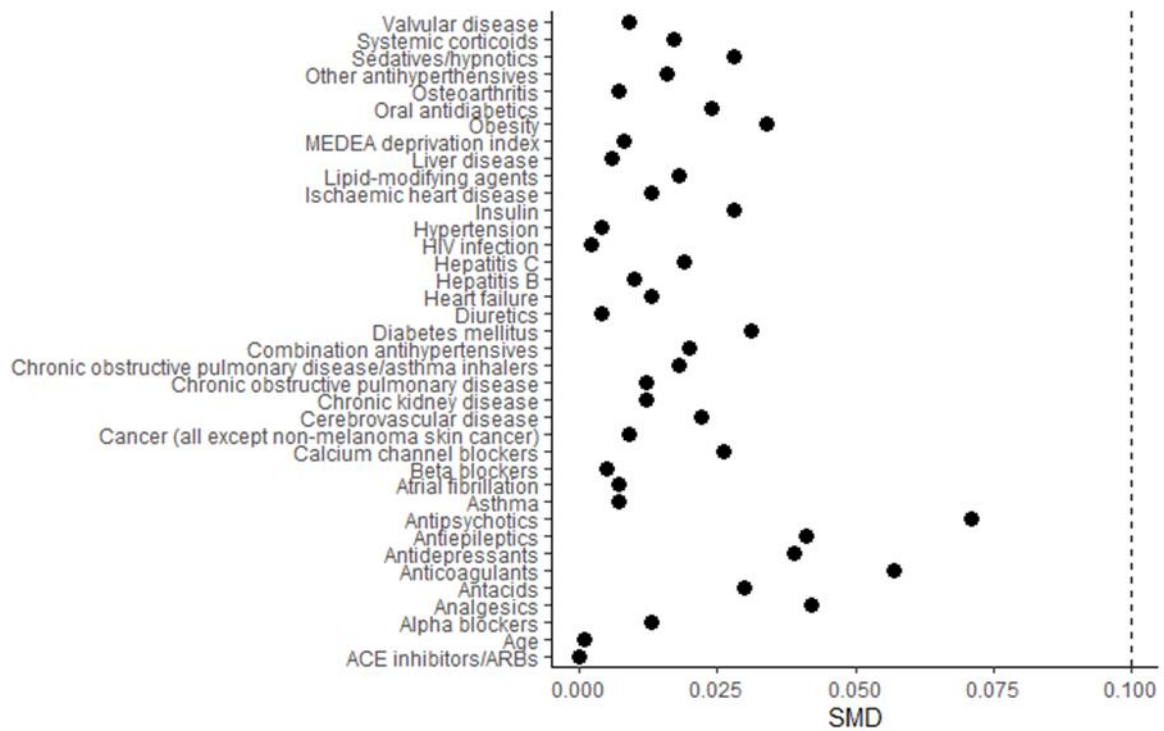
Obesity	E66.01, E66.09, E66.1, E66.2, E66.8, E66.9
Type B hepatitis	B16.0, B16.1, B16.2, B16.9
Type C hepatitis	B17.10, B18.2
Medicine or drug class	ATC codes
Analgesics	M01AX%, N02AA%, N02AB%, N02AC%, N02AD%, N02AE%, N02AX%, N02BA%, N02BB%, N02BE% M01AA%, M01AB%, M01AC%, M01AE%, M01AG%, M01AH%.
Sedatives/hypnotics	N05BA%, N05BB%, N05BE%, N05BX%, N05CD%, N05CF%, N05CM%,
Anticoagulants	B01AA%, B01AB%, B01AC%, B01AE%, B01AF%, B01AX%
Antidepressants	N06AA%, N06AB%, N06AG%, N06AX%
Antiepileptics	N03AA%, N03AB%, N03AC%, N03AD%, N03AE%, N03AF%, N03AG%, N03AX%
Anti-psychotics	N05AA%, N05AB%, N05AC%, N05AD%, N05AE%, N05AF%, N05AH%, N05AX%, N05AK%, N05AL%
Antiacids	A02AB%, A02AD%, A02AX%, A02BA%, A02BB%, A02BC%, A02BX%,
Systemic corticoids	H02AB%, H02BX91
Oral antidiabetics agents	A10BA%, A10BB%, A10BD%, A10BF%, A10BG%, A10BH%, A10BX%, A10BK%, A10BJ%
Insulin	A10AB%, A10AC%, A10AD%, A10AE%
Lipid modifying agents	C10AA% C10AB%, C10AC%, C10AD%, C10AX%, C10BA%, C10BX%,
Alpha blockers	C02CA%
Beta blockers	C07AA%, C07AB%, C07AG%
Calcium channel blockers	C08CA%, C08DA%, C08DB%

Diuretics	C03AA%, C03BA%, C03DA%, C03DB%, C03EA%, C03EB%
ACEI/ARBs	C09AA%, C09CA%
Inhalers	R03AA%, R03AC%, R03AK%, R03AL%, R03BA%, R03BB%

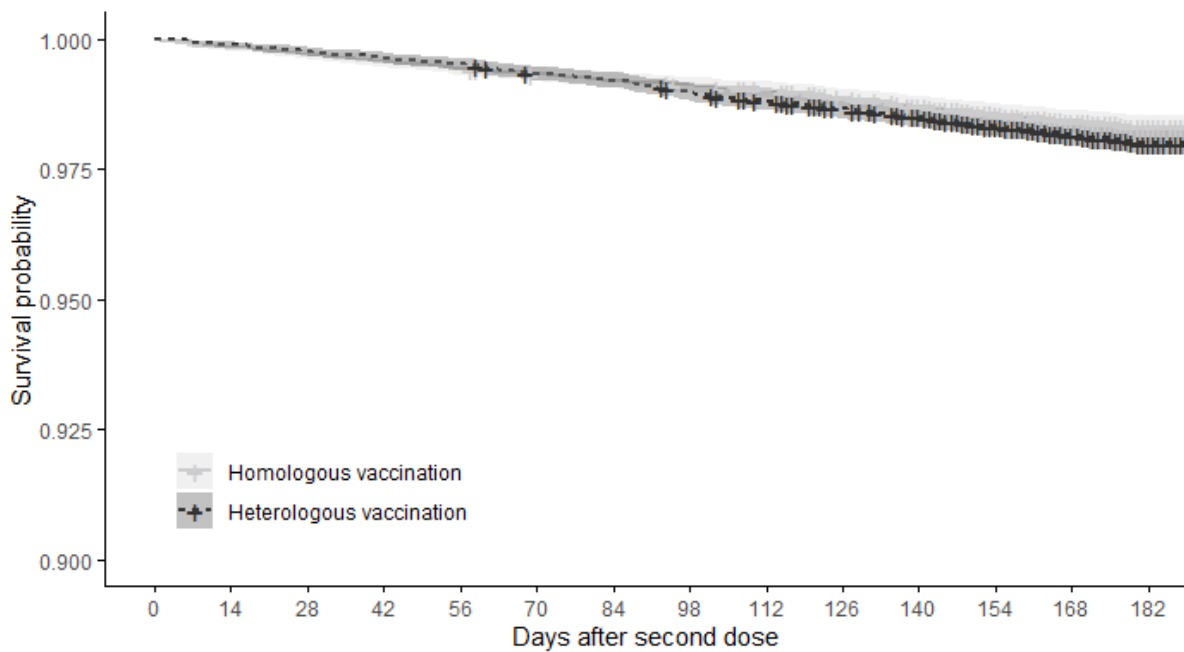
Supplementary Table S2. Diagnostic codes (ICD-10) of adverse events considered in the study

Adverse event	ICD-10 codes
Venous thromboembolism (VTE), includes cerebral venous sinus thrombosis, mesenteric thrombosis, portal vein thrombosis, non-limb venous thrombosis, venous thrombosis of extremities, non-specific venous thrombosis, pulmonary embolism	G08, I676, I636, K55011, K55012, K55019, K55021, K55022, K55029, K55031, K55032, K55039, K55041, K55042, K55049, K55051, K55052, K55059, K55061, K55062, K55069, I81, I821, I82210, I82220, I82290, I823, I82B11, I82B12, I82B13, I82B19, I82C11, I82C12, I82C13, I82C19, I82401, I82402, I82403, I82409, I82411, I82412, I82413, I82419, I82421, I82422, I82423, I82429, I82431, I82432, I82433, I82439, I82441, I82442, I82443, I82449, I82491, I82492, I82493, I82499, I824Y1, I824Y2, I824Y3, I824Y9, I824Z1, I824Z2, I824Z3, I824Z9, I82601, I82602, I82603, I82609, I82611, I82612, I82613, I82619, I82621, I82622, I82623, I82629, I82811, I82812, I82813, I82819, I82A11, I82A12, I82A13, I82A19, I8000, I8001, I8002, I8003, I8010, I8011, I8012, I8013, I80201, I80202, I80203, I80209, I80211, I80212, I80213, I80219, I80221, I80222, I80223, I80229, I80231, I80232, I80233, I80239, I80291, I80292, I80293, I80299, I803, I82890, I8290, I808, I809, I2601, I2602, I2609, I2690, I2692, I2699
Thrombocytopenia	D693, D6959, D696, D7582
Pericarditis/myocarditis	I30, I40, I010, I012, I090, I092, I241, I300, I301, I308, I309, I310, I311, I32, I400, I401, I408, I409, I41, I514, I970, D8685, J1182, A3952, B2682, A3953, B3323, B3322, J1082, M3212, A381, B5881

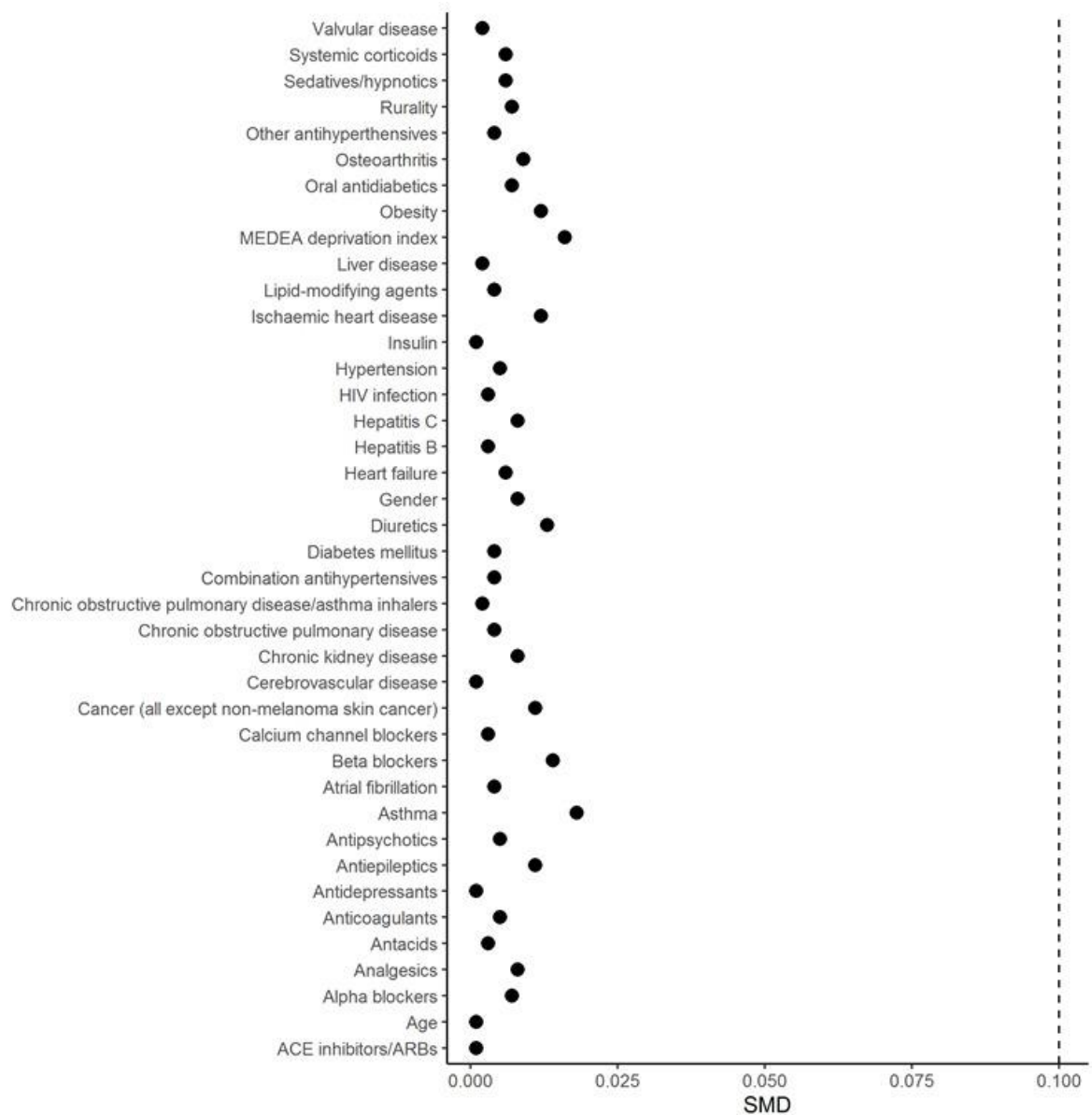
Supplementary Figure 1. Standardised mean differences (SMD) in the matched study population, showing confounder imbalance



Supplementary Figure 2. Kaplan-Meier of low back pain according to vaccination schedule



Supplementary Figure 3. Standardised mean differences (SMD) in the propensity score matched cohorts (post-hoc analysis)



Supplementary Figure 4. Uptake of different vaccination regimens in Catalonia over calendar time during the study period.

