Adverse events following the BNT162b2 mRNA COVID-19 Vaccine (Pfizer-BioNTech) in Aotearoa New Zealand

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Supplementary Information

Table S1: ICD-10-AM codes for the events of interest.

Event of interest	ICD-10-AM	Description
Acute Kidney Injury	D59.3	Hemolytic-uremic syndrome
	E83.4	Disorders of magnesium metabolism
	E87.2	Acidosis lactic metabolic NOS respiratory
	I12.9	Hypertensive nephropathy
	I13	Cardiorenal disease
	K76.7	Hepatorenal syndrome
	N00	Acute nephritic syndrome
	N08	Glomerular disorders in diseases classified elsewhere, includes nephropathy
	N10	Acute tubulo-interstitial nephritis
	N11	Chronic tubulo-interstitial nephritis
	N11.0	Nonobstructive reflux-associated chronic pyelonephritis
	N11.1	Chronic obstructive pyelonephritis
	N11.8	Other, chronic tubulo-interstitial nephritis

	N11.9	Chronic tubulo-interstitial nephritis unspecified
	N12	Tubulo-interstitial nephritis not specified as acute or chronic
	N13	Obstructive and reflux uropathy
	N13.0	Hydronephrosis with ureteropelvic junction obstruction
	N13.1	Hydronephrosis with ureteral stricture not elsewhere classified
	N13.2	Hydronephrosis with renal and ureteral calculus obstructio
	N13.3	Other and unspecified hydronephrosis
	N13.4	Hydroureter
	N13.5	Kinking and stricture of ureter without hydronephrosis
	N13.6	Pyonephrosis
	N13.7	Vesicoureteral-reflux-assocaied uropathy
	N13.8	Other obstrucive and reflux uropathy
	N13.9	Obstrucive and reflux uropathy unspecifed
	N14	Drug and heavy-metal induced tubulo-intersitital and tubular conditions
	N14.0	Analgesic nephropathy
	N14.1	Nephropathy induced by other drugs, medicaments and biological substances
	N14.2	Nephropathy induced by unspecifed drug medicament or biological substance
	N14.3	Nephropathy induced by heavy metals
	N14.4	Toxic nepthropathy not elsewhere classified
	N15	Other renal tubulo-interstitial diseases
	N15.0	Balkan nephropathy
	N15.1	Renal and perinerphric abscess
	N15.8	Other specified renal tubulo-interstitial disease unspecified
	N15.9	Renal tubulo-interstitial disease unspecified

	N16	Renal tubulo-interstitial disorders in infectious and parasitic disease classified elsewhere
	N16.0	Renal tubulo-interstitial disorders in diseases classified elsewhere
	N16.1	Renal tubulo-interstitial disorders in neoplastic diseases
	N16.2	Renal tubulo-interstitial disorders involving the immune mehanism
	N16.3	Renal tubulo-interstitial disorders in metabolic diseases
	N16.4	Renal tubulo-interstitial disorders in systemic connective tissue disorders
	N16.5	Renal tubulo-interstitial disorders in transplant rejection
	N16.8	Renal tubulo-interstitial disorders in other diseases classified elsewhere
	N17	Acute kidney failure
	N17.0	Acute tubular necrosis
	N17.2	Acute kidney failure with medullary necrosis
	N17.9	Acute kidney failure, unspecified
	N19	Unspecified kidney failure
	N28.9	Disorder of kidney and ureter in diseases classified elsewhere
	O08.4	Kidney failure following abortion and ectopic and molar pregnancy
	O90.4	Postpartum acute kidney failure
	R34	Anuria and Oliguria
	R39.2	Extrarenal uremia Prerenal failure
	S37.0	Injury of kidney
	S37.00	Injury of kidney unspecified
	T79.5	Traumatic anuria
Acute Liver Injury	B17.9	Acute hepatitis NOS
	K71	Toxic liver disease
	K71.0	Toxic liver disease with cholestasis

	K71.1	Toxic liver disease with hepatic necrosis
	K71.2	Toxic liver disease with acute hepatitis
	K71.6	Toxic liver disease with hepatitis not elsewhere classified
	K71.7	Toxic liver disease with fibrosis and cirrhosis of liver
	K71.8	Toxic liver disease with other disorders of liver
	K71.9	Toxic liver disease unspecified
	K72	Hepatic coma NOS
	K72.0	Acute and subacute hepatic failure
	K72.9	Hepatic failure unspecified
	K75.9	Inflammatory liver disease, unspecified
Guillain-Barre Syndrome (GBS)	G61.0	Guillain-Barré syndrome
Erythema multiforme	L51	Erythema multiforme
	L51.1	Herpes iris vesicular erythema multiforme
	L51.9	Erythema multiforme unspecified
Herpes Zoster	B02	Zoster
	B02.0	Zoster encephalitis
	B02.1	Zoster meningitis
	B02.2	Zoster with other nervous system involvement
	B02.3	Zoster ocular disease
	B02.7	Disseminated zoster
	B02.8	Zoster with other complications
	B02.9	Zoster without complication
Single organ cutaneous vasculitis	D69.0	Allergic purpura

	L95	Vasculitis limited to skin not elsewhere classified
	L95.8	Other vasculitis limited to the skin
	L95.9	Vasculitis limited to the skin, unspecified
	M31.0	Hypersensitivity angiitis
Myo/pericarditis	140.1	Isolated myocarditis
	140.8	Other acute myocarditis
	140.9	Acute myocarditis, unspecified
	151.4	Myocarditis, unspecified
	130.0	Acute nonspecific idiopathic pericarditis
	130.8	Other forms of acute pericarditis
	130.9	Acute pericarditis, unspecified
	131.9	Disease of pericardium, unspecified
Arterial thrombosis	174.0	Embolism and thrombosis of abdominal aorta
	174.1	Embolism and thrombosis of other and unspecified parts of aorta
	174.2	Embolism and thrombosis of arteries of upper extremities
	174.3	Embolism and thrombosis of arteries of lower extremities
	174.4	Embolism and thrombosis of arteries of extremities, unspecified
	174.5	Embolism and thrombosis of iliac artery
	174.8	Embolism and thrombosis of other arteries
	174.9	Embolism and thrombosis of unspecified artery
Cerebral Venous Thrombosis (CVT)	163.6	Cerebral infarction due to cerebral venous thrombosis, nonpyogenic
	167.6	Nonpyogenic cerebral venous thrombosis
Splanchnic thrombosis	181	Portal thrombosis

	182.0	Budd-Chiari syndrome
	I82.3	Embolism and thrombosis in renal vein
Venous thromboembolism	I26.0	Pulmonary embolism with mention of acute cor pulmonale
	I26.9	Pulmonary embolism without mention of acute cor pulmonale
	I81	Portal vein thrombosis
	I82.0	Budd-Chiari
	I82.2	Embolism and thrombosis of vena cava
	I82.3	Embolism and thrombosis of renal vein
	I82.8	Embolism and thrombosis of other specified veins
	I82.9	Embolism and thrombosis of unspecified vein
	180.1	Phlebitis and thrombophlebitis of femoral vein
	I80.20	Phlebitis and thrombophlebitis of deep vessels of lower extremities, not elsewhere classified
	I80.22	Phlebitis and thrombophlebitis of popliteal vein
	I80.23	Phlebitis and thrombophlebitis of tibial vein
	I80.3	Phlebitis and thrombophlebitis of lower extremities, unspecified
Thrombocytopenia	D69.3	Idopathic thrombocytopenic purpura (Evan's syndrome)
	D69.4	Other primary thrombocytopenia
	D69.5	Secondary thrombocytopenia
	D69.6	Thrombocytopenia, unspecified
	D82.0	Wiskott-Aldrich syndrome
	M31.1	Thrombotic microangiopathy (thrombotic thrombocytopenic purpura)

Table S2. Baseline demographics of patients who were discharged from hospital with an event of interest in a period from 2014 through 2019, New Zealand

Demographic Characteristics		Total population (2014-2019)	Acute Kidney Injury	Acute liver injury	GBS	Erythema multiforme	Herpes Zoster	Vasculitis	Myo/ pericarditis	Arterial thrombosis	CVT	Splanchnic thrombosis	VTE	Thrombocytopenia
Total		29269989	152022	5429	627	633	5286	1749	4581	3507	201	1023	24429	11007
Sex	**Female**	14770293	73509	2931	276	294	2940	807	1320	1554	108	402	12198	5547
	Male	14496951	78510	3594	360	330	2343	942	3264	1953	93	624	12231	5454
Age group	**0-19**	7526508	7671	483	75	363	288	951	234	60	36	36	393	1569
	20-39	7949337	18192	777	120	84	375	165	1161	162	51	90	2130	2262
	40-59	7590234	27591	1662	165	72	846	225	1539	669	54	294	6006	2184
	60-79	5032203	57309	2664	219	84	2094	291	1392	1581	48	483	11166	3741
	80+	1171701	41259	948	42	6	1680	111	246	1032	9	111	4712	1239
Ethnicity	**Māori**	4734330	24369	1230	111	150	648	414	612	519	39	135	2890	1581
	Pacific people	1997523	12117	444	36	42	273	171	288	147	18	63	1029	804
	Asian	4035918	10449	465	57	66	381	219	336	138	30	90	909	1353
	NZ European or other	18502212	102075	4371	408	354	3969	897	3309	2685	111	714	19179	7263

Table S3. Age-specific standardised incidence ratios (95% confidence intervals) of prespecified AESIs in the 21 days following the first dose of the BNT162b2 vaccine, stratified by 20-year age group, 19 February 2021 to 10 February 2022, New Zealand

Adverse event of special interest (AESI)	Age group (years)	No. of participants	Person days	Observed events	Expected events [a]	Standardised Incidence Ratio (95% CI)	Risk Difference (95% CI) (per 100–000 persons)
Acute Kidney Injury	**5-19**	695244	14015322	30.0	39.1	0.8 [0.5– 1.1]	-1.4 [-2.9– 0.3]
	20-39	1298123	28492718	167.0	178.5	0.9 [0.8– 1.1]	-0.8 [-2.7– 1.1]
	40-59	1176151	25849390	261.0	257.3	1.0 [0.9– 1.1]	0.3 [-2.2– 2.9]
	60-79	837342	18415991	479.0	574.2	0.8 [0.8– 0.9]	-10.9 [-15.7– -5.9]
	80+	170185	3737464	364.0	360.3	1.0 [0.9– 1.1]	2.1 [-18.7– 23.5]
Acute Liver Injury	**5-19**	697982	14071193	≤6[b]	≤6	0.4 [0.0– 1.3]	-0.2 [-0.4– 0.1]
	20-39	1315177	28866079	≤6	7.7	0.8 [0.3– 1.5]	-0.1 [-0.4– 0.3]
	40-59	1194628	26255167	8.0	15.7	0.5 [0.2– 0.9]	-0.6 [-1.0– -0.1]
	60-79	863777	18996954	18.0	27.5	0.7 [0.4– 1.0]	-1.1 [-1.9– -0.1]
	80+	182371	4004594	≤6	8.9	0.6 [0.1– 1.1]	-2.0 [-4.1– 0.6]
Guillain Barre Syndrome	**5-19**	698087	14073399	≤6	≤6	2.6 [0.0– 9.1]	0.1 [-0.1– 0.4]
	20-39	1315538	28873964	≤6	≤6	0.8 [0.0– 2.8]	-0.0 [-0.1– 0.1]
	40-59	1194992	26263175	≤6	≤6	0.0 [0.0– 0.0]	-0.1 [-0.1– -0.1]
	60-79	863994	19001714	≤6	≤6	2.2 [0.4– 4.4]	0.3 [-0.1– 0.9]
	80+	182417	4005585	≤6	≤6	0.0 [0.0– 0.0]	-0.3 [-0.3– -0.2]
Erythema multiforme	**5-19**	697961	14071086	≤6	≤6	0.0 [0.0– 0.0]	-0.3 [-0.3– -0.2]
	20-39	1315570	28874672	≤6	≤6	1.2 [0.0– 4.1]	0.0 [-0.1– 0.2]
	40-59	1195055	26264561	≤6	≤6	2.9 [0.0– 8.0]	0.1 [-0.1– 0.4]
	60-79	864114	19004354	≤6	≤6	2.3 [0.0– 6.2]	0.1 [-0.1– 0.5]
	80+	182444	4006179	≤6	≤6	0.0 [0.0– 0.0]	-0.1 [-0.2– -0.0]
Herpes Zoster	**5-19**	698020	14072032	≤6	≤6	0.0 [0.0– 0.0]	-0.2 [-0.2– -0.2]
	20-39	1315346	28869747	≤6	≤6	1.1 [0.3– 2.3]	0.0 [-0.2– 0.3]
	40-59	1194609	26254749	≤6	8	0.6 [0.1– 1.2]	-0.2 [-0.6– 0.2]
	60-79	863260	18985608	15.0	21.6	0.7 [0.4– 1.1]	-0.7 [-1.5– 0.2]
	80+	181973	3995836	12.0	15.7	0.8 [0.4– 1.2]	-1.9 [-5.3– 1.9]
Single Organ Cutaneous Vasculitis	**5-19**	697645	14065102	≤6	≤6	0.2 [0.0– 0.6]	-0.6 [-0.8– -0.2]
	20-39	1315490	28872920	≤6	≤6	3.7 [1.1– 7.0]	0.3 [0.0– 0.7]
	40-59	1194986	26263043	≤6	≤6	0.5 [0.0– 1.5]	-0.1 [-0.2– 0.1]
	60-79	864035	19002616	≤6	≤6	0.7 [0.0– 1.7]	-0.1 [-0.4– 0.2]
	80+	182428	4005827	≤6	≤6	1.0 [0.0– 3.3]	-0.0 [-0.6– 1.1]
Myo/pericarditis	**5-19**	698110	14073857	12.0	≤6	9.8 [4.6– 15.9]	1.6 [0.7– 2.7]

	20-39	1315494	28872988	41.0	11.5	3.5 [2.5– 4.7]	2.1 [1.3– 3.1]
	40-59	1194979	26262889	30.0	14.6	2.1 [1.4– 2.8]	1.2 [0.4– 2.1]
	60-79	864098	19004002	16.0	14.4	1.1 [0.6– 1.7]	0.2 [-0.6– 1.1]
	80+	182447	4006245	≤6	≤6	0.8 [0.0– 2.1]	-0.3 [-1.4– 1.4]
Arterial Thrombosis	**5-19**	698116	14073997	≤6	≤6	2.7 [0.0– 9.5]	0.1 [-0.1– 0.4]
	20-39	1315579	28874858	≤6	≤6	1.9 [0.0– 4.3]	0.1 [-0.1– 0.4]
	40-59	1194971	26262713	≤6	6.3	0.6 [0.2– 1.3]	-0.2 [-0.5– 0.2]
	60-79	863943	19000601	11.0	16.3	0.7 [0.3– 1.1]	-0.6 [-1.3– 0.2]
	80+	182333	4003737	8.0	9.7	0.8 [0.3– 1.5]	-0.9 [-3.5– 2.3]
Cerebral Venous Thrombosis	**5-19**	698125	14074178	≤6	≤6	0.0 [0.0– 0.0]	-0.0 [-0.0– -0.0]
	20-39	1315631	28876002	≤6	≤6	5.8 [0.0– 17.7]	0.1 [-0.0– 0.3]
	40-59	1195085	26265221	≤6	≤6	2.6 [0.0– 9.8]	0.0 [-0.0– 0.2]
	60-79	864132	19004750	≤6	≤6	0.0 [0.0– 0.0]	-0.0 [-0.1– -0.0]
	80+	-	-	-	-	-	-
Splanchnic Thrombosis	**5-19**	698120	14074076	≤6	≤6	0.0 [0.0– 0.0]	-0.0 [-0.1– -0.0]
	20-39	1315606	28875452	≤6	≤6	1.1 [0.0– 3.8]	0.0 [-0.1– 0.2]
	40-59	1195021	26263813	≤6	≤6	0.7 [0.0– 1.9]	-0.1 [-0.2– 0.2]
	60-79	864044	19002814	≤6	≤6	1.2 [0.4– 2.3]	0.1 [-0.4– 0.7]
	80+	182434	4005959	≤6	≤6	1.0 [0.0– 3.3]	-0.0 [-0.6– 1.1]
Venous thromboembolism	**5-19**	698057	14072749	≤6	≤6	1.0 [0.0– 2.6]	-0.0 [-0.3– 0.5]
	20-39	1314508	28851347	20	21.2	0.9 [0.6– 1.4]	-0.1 [-0.7– 0.6]
	40-59	1192614	26210936	71	56.8	1.2 [1.0– 1.6]	1.1 [-0.1– 2.5]
	60-79	860547	18925903	99	115	0.9 [0.7– 1.0]	-1.8 [-3.9– 0.4]
	80+	181319	3981447	44	44	1.0 [0.7– 1.3]	0.0 [-6.6– 7.1]
Thrombocytopenia	**5-19**	697614	14064530	≤6	≤6	0.5 [0.1– 1.0]	-0.6 [-1.1– -0.0]
	20-39	1313829	28836450	12	23.4	0.5 [0.3– 0.8]	-0.8 [-1.3– -0.3]
	40-59	1194113	26243862	19	24.8	0.8 [0.4– 1.1]	-0.5 [-1.1– 0.3]
	60-79	863174	18983689	43	52.5	0.8 [0.6– 1.1]	-1.0 [-2.4– 0.4]
	80+	182191	4000640	15	17.9	0.8 [0.4– 1.3]	-1.5 [-5.3– 2.8]

a. Expected events were calculated using background incidence rates from the SAFE background rate study of COVID-19 AESI in New Zealand (2014-2019) [22] and person time at risk.
b. Events with fewer than six occurrences have been suppressed for privacy reasons.
c. The SIR cannot be calculated for some AESIs in certain age groups since there were too few events observed in the vaccinated and/or historical comparator cohorts.

Table S4. Age-specific standardised incidence ratios (95% confidence intervals) of prespecified AESIs in the 21 days following the second dose of the BNT162b2 vaccine, stratified by 20-year age group, 19 February 2021 to 10 February 2022, New Zealand

Adverse event of special interest (AESI)	Age group (years)	No. of participants	Person days	Observed events	Expected events [a]	Standardised Incidence Ratio (95% CI)	Risk Difference (95% CI) (per 100–000 persons)
Acute Kidney Injury	**5-19**	466102	10148435	33	28.3	1.2 [0.8– 1.6]	1.0 [-1.3– 3.4]
	20-39	1269785	27789944	155	174.1	0.9 [0.8– 1.0]	-1.4 [-3.3– 0.5]
	40-59	1161764	25497781	250	253.8	1.0 [0.9– 1.1]	-0.3 [-2.8– 2.3]
	60-79	835265	18357507	559	572.4	1.0 [0.9– 1.1]	-1.5 [-6.8– 3.9]
	80+	169650	3723511	384	359	1.1 [1.0– 1.2]	14.1 [-7.3– 36.1]
Acute Liver Injury	**5-19**	468009	10189845	≤6	≤6	0.6 [0.0– 1.8]	-0.2 [-0.4– 0.3]
	20-39	1286411	28152055	≤6	7.5	0.7 [0.1– 1.3]	-0.2 [-0.5– 0.2]
	40-59	1180174	25901090	≤6	≤6	0.4 [0.1– 0.7]	-0.8 [-1.1– -0.3]
	60-79	861824	18940394	26	27.5	0.9 [0.6– 1.3]	-0.2 [-1.2– 1.0]
	80+	181874	3991218	≤6	8.8	0.5 [0.1– 0.9]	-2.5 [-4.3– -0.3]
Guillain Barre Syndrome	**5-19**	468087	10191524	≤6	≤6	0.0 [0.0– 0.0]	-0.1 [-0.1– -0.0]
	20-39	1286764	28159739	≤6	≤6	0.0 [0.0– 0.0]	-0.1 [-0.1– -0.1]
	40-59	1180534	25909007	≤6	≤6	2.6 [0.6– 5.5]	0.2 [-0.1– 0.5]
	60-79	862040	18945133	≤6	≤6	0.0 [0.0– 0.0]	-0.3 [-0.3– -0.2]
	80+	181920	3992198	≤6	≤6	0.0 [0.0– 0.0]	-0.3 [-0.3– -0.2]
Erythema multiforme	**5-19**	468055	10190815	≤6	≤6	0.0 [0.0– 0.0]	-0.3 [-0.3– -0.2]
	20-39	1286795	28160416	≤6	≤6	0.0 [0.0– 0.0]	-0.1 [-0.1– -0.0]
	40-59	1180595	25910357	≤6	≤6	0.0 [0.0– 0.0]	-0.1 [-0.1– -0.0]
	60-79	862161	18947795	≤6	≤6	0.0 [0.0– 0.0]	-0.1 [-0.1– -0.1]
	80+	181947	3992792	≤6	≤6	0.0 [0.0– 0.0]	-0.1 [-0.2– -0.0]
Herpes Zoster	**0-19**	468035	10190385	≤6	≤6	1.9 [0.0– 4.9]	0.2 [-0.2– 0.8]
	20-39	1286572	28155583	≤6	≤6	1.4 [0.3– 2.7]	0.1 [-0.2– 0.5]
	40-59	1180143	25900414	12	7.9	1.5 [0.7– 2.5]	0.3 [-0.2– 0.9]
	60-79	861311	18929141	20	21.6	0.9 [0.5– 1.4]	-0.2 [-1.1– 0.9]
	80+	181474	3982453	≤6	15.6	0.4 [0.1– 0.7]	-5.1 [-7.4– -2.3]
Single Organ Cutaneous Vasculitis	**5-19**	467914	10187720	≤6	≤6	0.0 [0.0– 0.0]	-0.7 [-0.8– -0.7]
	20-39	1286715	28158697	≤6	≤6	0.6 [0.0– 2.1]	-0.0 [-0.1– 0.1]
	40-59	1180529	25908900	≤6	≤6	0.9 [0.0– 2.5]	-0.0 [-0.2– 0.2]
	60-79	862082	18946072	≤6	≤6	0.7 [0.0– 1.7]	-0.1 [-0.4– 0.2]
	80+	181932	3992464	≤6	≤6	2.9 [0.0– 6.8]	1.0 [-0.5– 3.1]
Myo/pericarditis	**5-19**	468104	10191896	23	≤6	25.6 [15.5– 37.5]	4.6 [2.7– 6.6]

	20-39	1286717	28158738	74	11.3	6.6 [5.1– 8.2]	4.7 [3.5– 6.0]
	40-59	1180519	25908681	49	14.4	3.4 [2.5– 4.4]	2.8 [1.7– 4.0]
	60-79	862146	18947465	22	14.3	1.5 [0.9– 2.2]	0.8 [-0.1– 1.9]
	80+	181950	3992858	≤6	≤6	1.6 [0.4– 3.4]	0.8 [-0.9– 3.0]
Arterial Thrombosis	**5-19**	468111	10192038	≤6	≤6	0.0 [0.0– 0.0]	-0.1 [-0.1– -0.0]
	20-39	1286803	28160602	≤6	≤6	0.0 [0.0– 0.0]	-0.1 [-0.1– -0.1]
	40-59	1180512	25908524	≤6	6.3	0.8 [0.2– 1.6]	-0.1 [-0.4– 0.3]
	60-79	861994	18944121	11	16.3	0.7 [0.3– 1.1]	-0.6 [-1.3– 0.2]
	80+	181835	3990338	≤6	9.6	0.4 [0.1– 0.9]	-3.0 [-4.7– -0.7]
Cerebral Venous Thrombosis	**5-19**	468118	10192192	≤6	≤6	0.0 [0.0– 0.0]	-0.0 [-0.0– -0.0]
	20-39	1286856	28161784	≤6	≤6	0.0 [0.0– 0.0]	-0.0 [-0.0– -0.0]
	40-59	1180625	25910998	≤6	≤6	2.6 [0.0– 9.8]	0.1 [-0.0– 0.2]
	60-79	862179	18948191	≤6	≤6	0.0 [0.0– 0.0]	-0.0 [-0.1– -0.0]
	80+	-	-	-	-	-	-
Splanchnic Thrombosis	**5-19**	468118	10192192	≤6	≤6	0.0 [0.0– 0.0]	-0.0 [-0.1– -0.0]
	20-39	1286831	28161208	≤6	≤6	2.3 [0.0– 6.2]	0.1 [-0.1– 0.3]
	40-59	1180562	25909612	≤6	≤6	0.4 [0.0– 1.2]	-0.1 [-0.2– 0.0]
	60-79	862091	18946255	9	≤6	1.8 [0.8– 3.1]	0.4 [-0.1– 1.1]
	80+	181937	3992588	≤6	≤6	1.9 [0.0– 5.1]	0.5 [-0.6– 2.1]
Venous thromboembolism	**5-19**	468068	10191097	≤6	≤6	0.7 [0.0– 2.2]	-0.1 [-0.3– 0.3]
	20-39	1285750	28137543	28	20.6	1.4 [0.9– 1.9]	0.5 [-0.2– 1.4]
	40-59	1178154	25856691	59	56	1.1 [0.8– 1.3]	0.2 [-1.0– 1.5]
	60-79	858552	18868468	110	114.7	1.0 [0.8– 1.1]	-0.5 [-2.8– 1.8]
	80+	180807	3967796	48	43.8	1.1 [0.8– 1.4]	2.2 [-4.7– 9.7]
Thrombocytopenia	**5-19**	467879	10186999	≤6	≤6	0.5 [0.0– 1.2]	-0.6 [-1.2– 0.2]
	20-39	1285085	28122971	21	22.8	0.9 [0.5– 1.3]	-0.1 [-0.8– 0.6]
	40-59	1179649	25889561	18	24.5	0.7 [0.4– 1.1]	-0.5 [-1.2– 0.2]
	60-79	861225	18927238	47	52.3	0.9 [0.7– 1.2]	-0.6 [-2.0– 1.0]
	80+	181696	3987292	20	17.8	1.1 [0.7– 1.6]	1.2 [-3.2– 6.0]

a. Expected events were calculated using background incidence rates from the SAFE background rate study of COVID-19 AESI in New Zealand (2014-2019) [22] and person time at risk.
b. Events with fewer than six occurrences have been suppressed for privacy reasons.
c. The SIR cannot be calculated for some AESIs in certain age groups since there were too few events observed in the vaccinated and/or historical comparator cohorts.