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**Title:** Signal monitoring for adverse events following immunisation with COVID-19 vaccines during the SARS-CoV-2-pandemic: an evaluation of the South African surveillance system

**Short running title (<100 characters):** Signal monitoring for COVID-19 AEFI in South Africa

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Supplementary table 1.

**Results of disproportionality analyses of the top 10 reported adverse events following immunisation for the Ad26.COV2.S COVID-19 vaccine for datasets A (NDoH-EPI), B (NDoH-EPI augmented) and C (NDoH-EPI augmented) (shaded cells represent signals of disproportionate reporting based on lower 95% credibility limit).**

Preferred term	Dataset A (NDoH-EPI)				Dataset B (NDoH-EPI augmented)				Dataset C (NDoH-EPI augmented)			
	<i>a</i>	ROR	ROR*	IC**	<i>a</i>	ROR	ROR*	IC**	<i>a</i>	ROR	ROR*	IC**
Headache	670	2.47	2.16	0.39	670	2.60	2.27	0.43	670	5.11	4.50	1.10
Myalgia	334	3.74	3.01	0.53	334	3.91	3.15	0.57	334	7.45	6.09	1.27
Pyrexia	282	1.95	1.61	0.23	282	1.97	1.63	0.25	282	1.35	1.17	0.10
Dizziness	268	1.54	1.28	0.09	268	1.63	1.35	0.13	268	3.28	2.75	0.81
Injection site pain	243	1.76	1.44	0.16	243	1.86	1.52	0.20	243	3.44	2.85	0.83
Fatigue	144	1.41	1.11	-0.03	144	1.47	1.16	0.001	144	2.81	2.23	0.64
Pain	125	1.29	0.99	-0.11	125	1.34	1.04	-0.08	125	1.96	1.56	0.34
Nausea	124	1.76	1.33	0.08	124	1.84	1.39	0.11	124	2.72	2.13	0.60
Injection site swelling	123	0.93	0.73	-0.35	123	1.00	0.79	-0.30	123	1.52	1.22	0.11
Chills	104	2.54	1.81	0.25	104	2.65	1.89	0.28	104	4.75	3.47	0.92

NDoH- National Department of Health; EPI – Expanded Programme on Immunisation; ROR – Reporting Odds Ratios; IC – Information Component

Supplementary table 2.

**Results of disproportionality analyses of the top 10 reported adverse events following immunisation with the BNT162b2 vaccine for datasets A (NDoH-EPI), B (NDoH-EPI augmented) and C (NDoH-EPI augmented) (shaded cells represent signals of disproportionate reporting)**

Preferred term	Dataset A (NDoH-EPI)				Dataset B (NDoH-EPI augmented)				Dataset C (NDoH-EPI augmented)			
	<i>a</i>	ROR	ROR*	IC**	<i>a</i>	ROR	ROR*	IC**	<i>a</i>	ROR	ROR*	IC**
Headache	356	0.46	0.40	-0.74	356	0.49	0.43	-0.71	356	1.17	0.15	-0.03
Dizziness	209	0.72	0.60	-0.47	209	0.76	0.63	-0.43	209	1.70	1.42	0.25
Dyspnea	183	2.51	1.90	0.25	183	2.64	2.00	0.28	183	3.08	2.47	0.67
Pyrexia	160	0.49	0.40	-0.82	160	0.50	0.41	-0.81	160	0.52	0.43	-0.96
Injection site pain	159	0.58	0.47	-0.67	159	0.62	0.50	-0.63	159	1.32	1.08	-0.0003
Chest pain	125	3.57	2.44	0.32	125	3.75	2.56	0.35	125	7.96	5.55	1.08
Fatigue	124	0.82	0.64	-0.44	124	0.86	0.67	-0.41	124	1.79	1.42	0.23
Injection site swelling	120	0.70	0.55	-0.56	120	0.76	0.60	-0.51	120	1.23	0.99	-0.10
Myalgia	114	0.31	0.25	-1.32	114	0.32	0.26	-1.28	114	0.77	0.62	-0.58
Rash	113	1.73	1.27	0.01	113	1.84	1.35	0.06	113	0.94	0.76	-0.37

NDoH- National Department of Health; EPI – Expanded Programme on Immunisation; ROR – Reporting Odds Ratios; IC – Information Component