

25 **Supplementary Tables**

26 **Table S1a. Individual adverse events graded as severe after vaccination with ChAd63 ME-**
 27 **TRAP.**

Volunteer	Duration (d)	Relatedness to vaccination	Adverse event	Study Group	Vaccine Number
10431111	0	Probable	Shivering	5	1
10431119	2	Definite	Vaccine Site Swelling	5	1
2043 1182	8	Possible	Headache	6	3
2043 1182	7	Possible	Sore throat	6	3
10431124	0	Possible	Nausea/Vomiting	6	1
10431124	0	Possible	Malaise	6	1

28 **Table S1b. Individual adverse events graded as severe after vaccination with MVA ME-**
 29 **TRAP.**

Volunteer	Duration (d)	Relatedness to vaccination	Adverse event	Study Group	Vaccine Number
MVT-10431105	4	Definite	Vaccine Site Pain	1	4
MVT-10431113	4	Definite	Vaccine Site Pain	3	3
MVT-10431113	0	Possible	Malaise	3	3
MVT 2043 1176	5	Definite	Vaccine Site Pain	4	2
MVT-10431114	2	Probable	Feverish	4	2
MVT-10431122	1	Probable	Arthralgia	4	4
MVT-10431122	1	Probable	Myalgia	4	4
MVT-10431119	4	Probable	Vaccine Site Erythema	5	2
MVT-10431119	2	Probable	Vaccine Site Swelling	5	2
MVT 2043 1182	2	Definite	Vaccine Site Swelling	6	2
MVT 2043 1182	3	Definite	Vaccine Site Pain	6	2
MVT 2043 1182	1	Definite	Malaise	6	2
MVT-10431135	0	Probable	Feverish	6	2
MVT-10431135	0	Probable	Malaise	6	2
MVT-10431135	0	Probable	Fatigue	6	2
MVT 2043 1173	7	Definite	Vaccine Site Swelling	7	2
MVT-10431137	2	Definite	Vaccine Site Pain	7	2
MVT-10431137	2	Probable	Feverish	7	2

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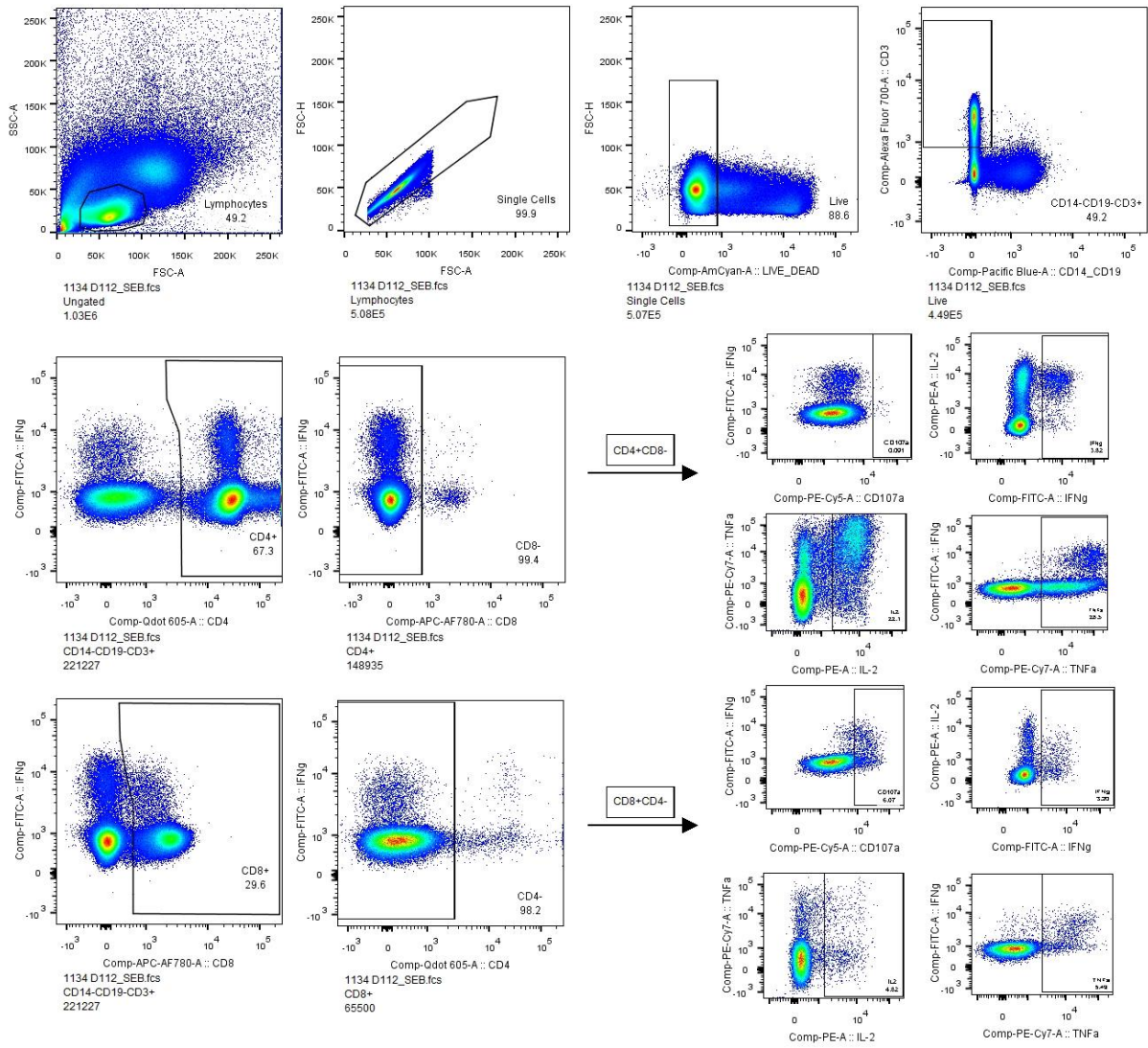
31 **Table S2. Number of local and systemic adverse events reported in each group after each vaccination, stratified according to severity. N/V,**
 32 **nausea and/or vomiting. N, number of volunteers at each vaccination.**

Group	Vaccine	no. doses	n	Local Adverse Events								Systemic Adverse Events									
				Severity	Pain	Swelling	Erythema	Warmth	Scaling	Pruritus	Other	Fever	Feverish	Arthralgia	Myalgia	Malaise	Fatigue	Headache	N/V	Other	Laboratory
1	ChAd63	3	6	Mild	10	4	9	6	0	2	0	1	5	2	4	3	7	5	2	3	1
				Moderate	3	0	0	0	0	0	0	1	2	1	0	0	2	7	0	1	0
				Severe	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	MVA	1	6	Mild	2	4	5	5	0	0	0	0	2	3	2	4	5	3	1	0	0
				Moderate	3	1	0	0	0	0	0	1	1	0	2	0	0	1	0	1	0
				Severe	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2	ChAd63	2	6	Mild	4	3	5	1	0	1	0	5	2	2	4	6	5	2	0	0	
				Moderate	0	0	0	0	0	0	0	1	0	1	1	1	0	1	1	0	
				Severe	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	MVA	2	6	Mild	7	7	9	8	0	3	0	0	1	3	4	6	3	4	1	3	
				Moderate	4	1	1	1	0	0	0	0	0	1	1	0	1	0	0	1	
				Severe	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3	ChAd63	2	6	Mild	7	3	7	7	0	1	0	0	0	2	5	4	5	3	3	2	
				Moderate	0	1	0	0	0	1	0	0	1	0	0	0	1	3	0	1	
				Severe	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	MVA	2	6	Mild	8	7	10	5	0	1	1	1	2	0	7	3	8	5	4	3	
				Moderate	3	1	0	1	0	0	0	0	1	1	0	1	0	2	0	0	
				Severe	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0		
4	ChAd63	1	6	Mild	5	0	4	4	1	1	0	2	3	4	0	3	3	1	2		
				Moderate	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0		
				Severe	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	MVA	3	6	Mild	12	13	18	13	0	2	2	3	7	6	7	5	10	3	1	1	
				Moderate	5	2	0	0	0	0	0	0	0	0	0	2	1	0	1		
				Severe	1	0	0	0	0	0	0	0	1	1	1	0	0	0	0		
5	ChAd63	2	6	Mild	6	1	4	3	0	2	1	2	2	3	5	4	6	3	3		
				Moderate	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1		
				Severe	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1		
	MVA	2	6	Mild	10	6	11	9	0	2	1	1	2	0	2	4	8	4	3		
				Moderate	2	1	1	0	0	0	0	0	1	0	1	0	0	1	0		
				Severe	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0		
6	ChAd63	2	6	Mild	7	2	9	4	0	0	1	1	1	4	3	4	3	1	3		
				Moderate	1	0	0	0	0	0	0	0	1	0	1	0	0	2	0		
				Severe	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1		
	MVA	2	6	Mild	3	8	12	8	0	0	0	1	1	3	1	3	2	0	3		
				Moderate	8	3	0	0	0	0	0	0	0	3	2	2	4	0	0		
				Severe	1	1	0	0	0	0	0	0	1	0	0	2	1	0	0		
7	ChAd63	2	6	Mild	7	4	8	0	0	0	0	3	3	2	4	3	4	4	3		
				Moderate	1	0	0	0	0	0	0	1	1	1	1	1	2	0	2		
				Severe	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	MVA	2	6	Mild	5	9	12	5	0	0	1	4	2	2	4	1	5	4	3		
				Moderate	6	1	0	0	0	0	0	0	0	1	1	0	1	4	0		
				Severe	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0		

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34 **Supplementary Figures**

35 **Figure S1. Sample gating strategy for multi-parameter flow cytometry with intracellular**
 36 **cytokine staining.**



37 **Figure S2. CONSORT diagram displaying volunteer enrolment, exclusion, allocation and**
 38 **follow up.**

