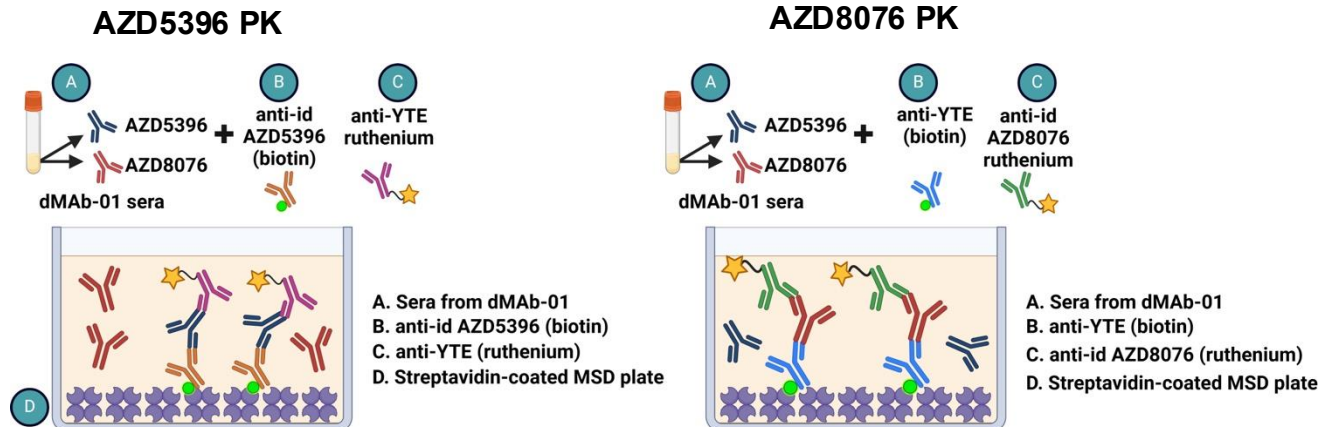


Supplementary Fig. 1

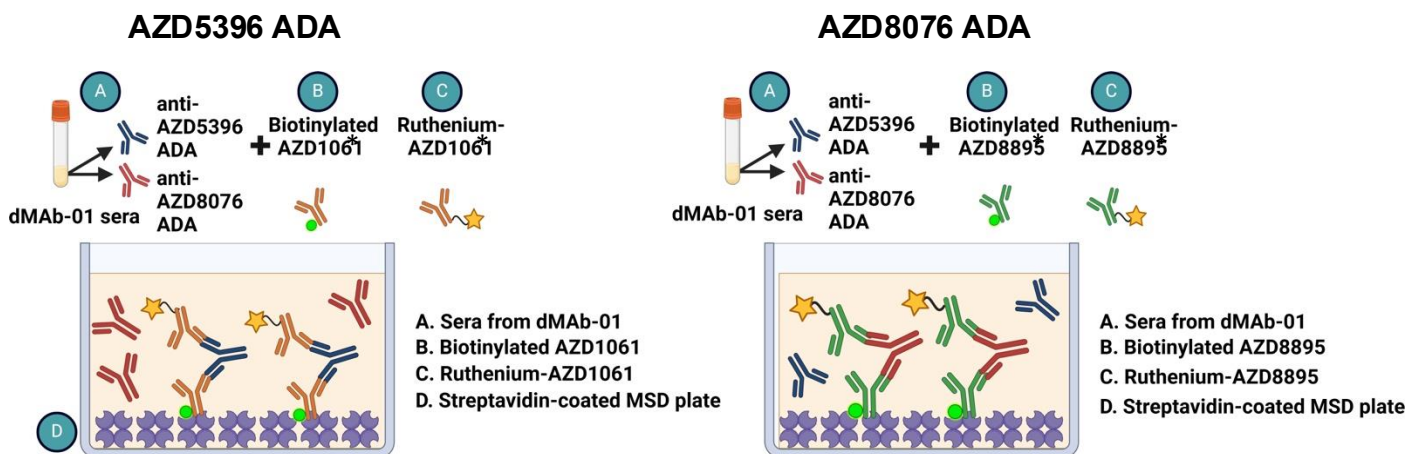
a

Pharmacokinetic assays



b

Anti-drug antibody assays



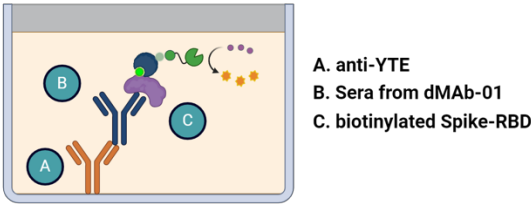
*AZD1061 and AZD8895 have identical amino acid sequences to AZD5396 and AZD8076, respectively except for a three amino acid modification present in the Fc region of AZD1061 and AZD8895.

Supplementary Fig. 1. Schematic of pharmacokinetic and anti-drug antibody assays. For all four assays, two assay components consisting of variations of biotinylated or ruthenium labeled reagents (labeled B and C) are combined with DMAb-01 serum (labeled as A) to allow a bridged complex to form. **a**, AZD5396 PK assay components (left): biotinylated anti-AZD5396 and ruthenium labeled anti-YTE AZD8076. AZD8076 PK assay components (right): biotinylated anti-YTE and ruthenium labeled anti-AZD8076. **b**, AZD5396 ADA assay components (left): biotinylated AZD1061 and ruthenium labeled AZD8076. AZD5396 ADA assay components (right): biotinylated AZD8895 and ruthenium labeled AZD8895. For all four assays, the A+B+C mixture containing the bridged complex is added to a streptavidin plate where the complex is immobilized via the streptavidin-biotin interaction. Light signal is generated via the ruthenium label attached to the bridged complex upon electrical stimulation by an MSD instrument.

Supplementary Fig. 2.

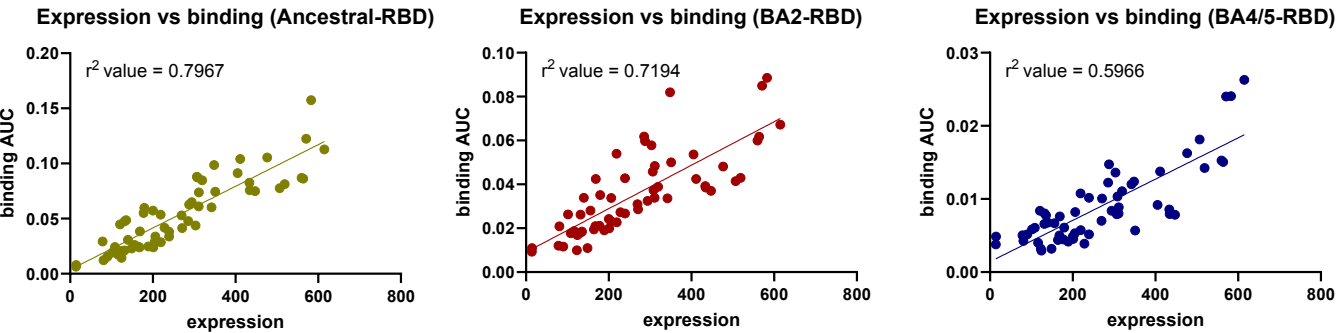
a

Anti-YTE and Biotinylated SARS-CoV-2 RBD ELISA



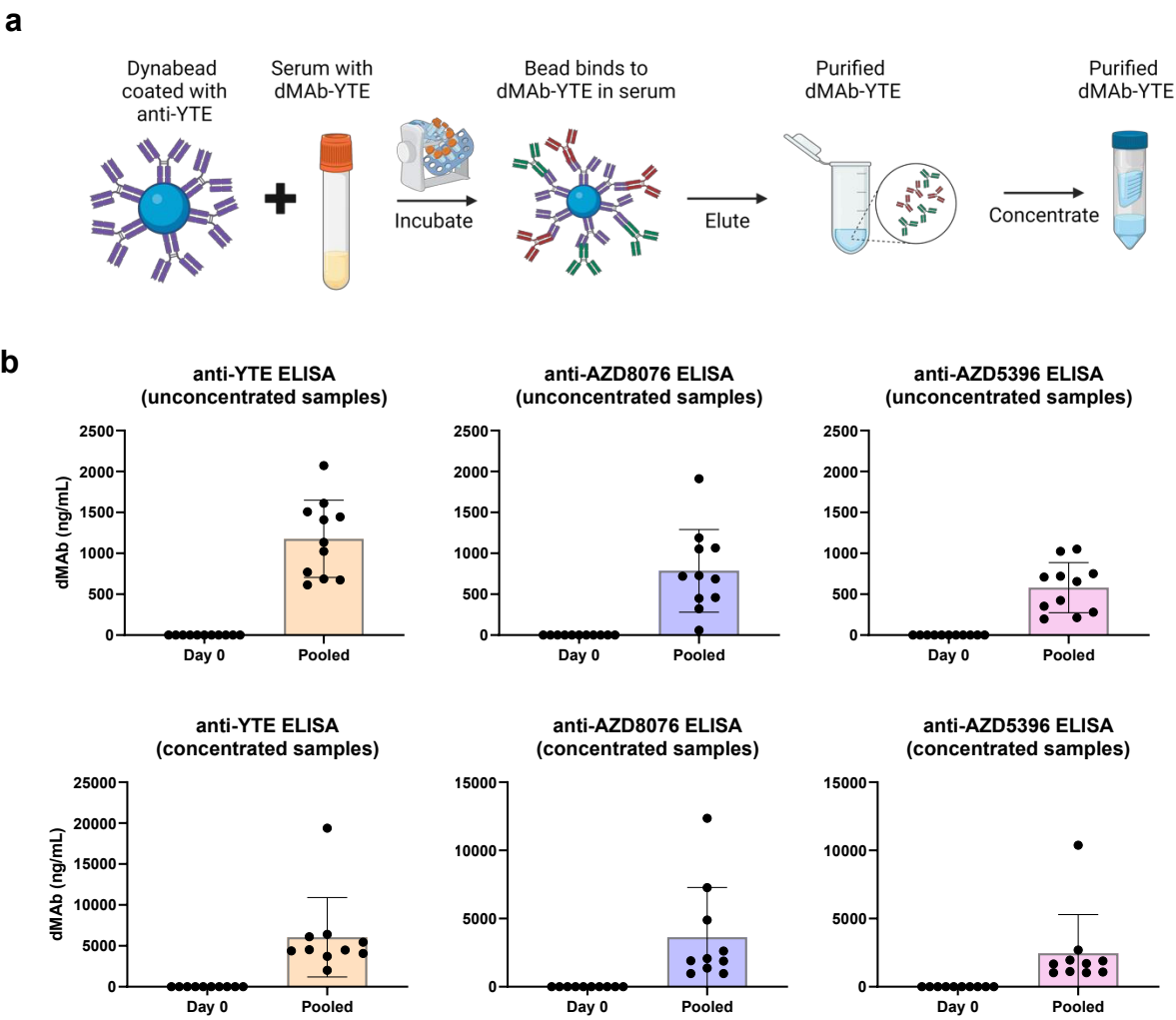
b

Correlation between MSD PK and Anti-YTE RBD ELISAs



Supplementary Fig. 2. Correlation between MSD PK and anti-YTE RBD ELISAs. a, schematic of anti-YTE RBD binding ELISAs. b, Correlation between DMAb quantification assay (MSD PK; ng/mL) and degree of binding to Ancestral, BA.2 and BA.4/5 Spike RBDs as detected in the anti-YTE RBD ELISAs.

Supplementary Fig. 3



Supplementary Fig. 3. Anti-YTE bead purification of the (YTE-encoding) DMAB cocktail from participant sera. a, Overview of bead purification protocol. **b,** Detection and confirmation of successful elution and purification of anti-YTE containing DMABs by ELISA using anti-idiotypes antibodies. Purified DMABs were quantified (ng/mL) before (top) and after (bottom). further concentration as needed.

Supplementary Table 1. Participant Demographics (N=44)

Variable	Category	Total (N=44)	Percentage (%)
Gender	Women	17	39%
	Male	27	61%
Race	Asian	3	7%
	Black or African American	3	7%
	Native Hawaiian/Pacific Islander	0	0%
	White	37	84%
	Other (Middle Eastern)	1	2%
Ethnicity	Hispanic or Latino	0	0%
	Not Hispanic or Latino	44	100%
Age	Median (Min, Max)	32.5 (20, 58)	-

Supplementary Tables 2-8: Adverse Event Reporting

Adverse Events

Until the reporting cut-off date, adverse events have been documented, including the severity of all adverse events (systemic and local) by body system, descriptions of those adverse events, elicited local reactions for the first 7 and 10 days after dosing, and the number of subjects who experienced at least one elicited local or systemic reaction in the first 7 days post-dose.

The most frequent side effects were short-lived local reactions, such as pain and erythema, related to the administration of the study product. These mild local reactions are expected and consistent with similar interventions. To better understand the specific local reactions associated with each product and study arm, reactions were tracked based on the location of administration rather than aggregated.

Supplementary Table 2. Summary List of Systemic AE by severity (N=449)

Adverse Event Body System	Grade			Total
	Mild	Moderate	Severe	
Blood and lymphatic system disorders	1	8	4	13
Cardiac disorders	1	0	0	1
Endocrine disorders	1	0	0	1
Gastrointestinal disorders	10	1	0	11
General disorders and administration site conditions	201	37	0	238
Hepatobiliary disorders	0	1	0	1
Immune system disorders	1	0	0	1
Infections and infestations	36	11	1	48
Injury, poisoning and procedural complications	5	3	0	8
Metabolism and nutrition disorders	1	0	0	1
Musculoskeletal and connective tissue disorders	49	18	0	67
Nervous system disorders	18	5	0	23
Psychiatric disorders	2	0	0	2
Renal and urinary disorders	1	1	0	2
Reproductive system and breast disorders	1	0	1	2
Respiratory, thoracic and mediastinal disorders	1	1	2	4
Skin and subcutaneous tissue disorders	17	2	1	20
Surgical and medical procedures	0	1	0	1
Other ^a	5	0	0	5
Total	351	89	9	449

^a Other Lymph node swollen; left lower dental crown; left upper dental crown; salivary gland swelling; toothache

Supplementary Table 3. All Adverse Events by Body System by severity (N=449)

Row Labels	Mild (1)	Moderate (2)	Severe (3)	Grand Total
Blood and lymphatic system disorders	1	8	4	13
Elevated CPK	0	0	1	1
Elevated CPK level	0	0	1	1
Elevated potassium level	0	0	1	1
Hypoglycemia	0	1	0	1
Low Hemoglobin	0	1	0	1
Right Lymph node swollen	1	0	0	1
elevated CPK	0	0	1	1
elevated potassium	0	1	0	1
hyperglycemia	0	1	0	1
hypoglycemia	0	2	0	2
low hemoglobin	0	1	0	1
low hemoglobin	0	1	0	1
Cardiac disorders	1	0	0	1
Vasovagal/syncope	1	0	0	1
Endocrine disorders	1	0	0	1
thyroid nodule	1	0	0	1
Gastrointestinal disorders	10	1	0	11
Acid Reflux	1	0	0	1
Diarrhea	1	0	0	1
Gastroenteritis	1	0	0	1
Indigestion	1	0	0	1
Nausea	2	1	0	3
food poisoning	1	0	0	1
intermittent left abdominal pain (mild)	1	0	0	1
nausea	1	0	0	1
stomach ache	1	0	0	1
General disorders and administration site conditions	201	37	0	238
Bruising (3.0 cm) - Right Deltoid (Day 0)	2	0	0	2
Bruising (left lower deltoid, day 3) 4.0 cm	1	0	0	1
Bruising (left lower deltoid, day 3) 6.0 cm	0	1	0	1
Bruising (left lower deltoid, day 3) 7.0 cm	0	1	0	1
Bruising (right lower deltoid, day 3) 3.0 - 4.0 cm	1	0	0	1

Row Labels	Mild (1)	Moderate (2)	Severe (3)	Grand Total
Bruising (right lower deltoid, day 3) 6.0 cm	0	1	0	1
Bruising (right lower deltoid, day 3) 7.0 cm	0	1	0	1
Bruising - (2.5 cm) Left Deltoid (Lower) Day 3	1	0	0	1
Bruising - (2.5 cm) Right Deltoid (Lower) Day 3	1	0	0	1
Bruising - (3.0 cm) Right Deltoid (Lower) Day 3	2	0	0	2
Bruising - (3.0 cm) Left Deltoid (Lower) Day 3	1	0	0	1
Bruising - (4cm) Right Deltoid (Lower) Day 3	1	0	0	1
Bruising at Upper left Deltoid (Day 0) 3 cm	1	0	0	1
Bruising at injection site (Lower Left Arm - Day 3 Dosing)	1	0	0	1
Bruising at injection site (Upper Left Arm - Day 0 Dosing)	1	0	0	1
Bruising at injection site (left lower deltoid Day 3)	1	0	0	1
Bruising injection site R deltoid	1	0	0	1
Erythema at injection site (Day 3, Lower left deltoid)	1	0	0	1
Erythema at injection site (Day 3, Lower right deltoid)	1	0	0	1
Erythema at injection site (day 0, upper right deltoid) 6.0 cm	0	1	0	1
Fatigue	1	1	0	2
Generalized muscle aches	1	0	0	1
Headache	1	0	0	1
Itchiness Right Upper Deltoid	1	0	0	1
Itchiness at injection site (Day 28) Left Upper Deltoid	1	0	0	1
Itchiness at injection site (Day 31) Left Upper Deltoid	1	0	0	1
Itchiness at injection site (Day 31) Right Upper Deltoid	1	0	0	1
Itchiness at injection site (lower left deltoid)	1	0	0	1
Itchiness at the injection site (Day 0 - Upper Left Deltoid)	2	0	0	2
Itchiness at the injection site (Day 0 - Upper Right Deltoid)	2	0	0	2
Itchiness at the injection site (Day 3- Lower Left Deltoid)	1	0	0	1
Itchiness at the injection site (Day 3- Lower Right Deltoid)	1	0	0	1
Itching at injection site (Right deltoid-upper)	1	0	0	1
Itching- Left Deltoid Day 0	1	0	0	1
Joint Pain	1	0	0	1
Malaise	3	0	0	3
Muscle ache/tiredness from Covid-19 booster and flu shot	1	0	0	1
Muscle twinge at left deltoid injection (intermittent)	1	0	0	1
Muscle twinge at right deltoid injection site (intermittent)	1	0	0	1

Row Labels	Mild (1)	Moderate (2)	Severe (3)	Grand Total
Pain (Day 0 Left Upper Deltoid)	1	0	0	1
Pain (Day 0 Right Upper Deltoid)	1	0	0	1
Pain (Day 28 Left Upper Deltoid)	1	0	0	1
Pain (Day 28 Right Upper Deltoid)	1	1	0	2
Pain (Day 3 Left Lower Deltoid)	1	0	0	1
Pain (Day 3 Right Lower Deltoid)	1	1	0	2
Pain (Day 31 Right Lower deltoid)	1	1	0	2
Pain -Left Lower Deltoid (Day 3)	1	0	0	1
Pain -Left Upper Deltoid (Day 0)	1	0	0	1
Pain -Right Lower Deltoid (Day 3)	1	0	0	1
Pain -Right Upper Deltoid (Day 0)	1	0	0	1
Pain - Injection site Left Upper Deltoid (Day 0)	2	1	0	3
Pain - Injection site Right Upper Deltoid (Day 0)	2	1	0	3
Pain - Left Deltoid(Day 0)	1	0	0	1
Pain - Right Deltoid(Day 0)	1	0	0	1
Pain - Right Deltoid (Lower) Day 3	1	0	0	1
Pain - injection site Left Upper Deltoid (Day 0)	1	0	0	1
Pain - left deltoid (Day - 0)	1	0	0	1
Pain - left deltoid (Day 3)	1	0	0	1
Pain - right deltoid (Day - 0)	1	0	0	1
Pain - right deltoid (Day 3)	1	0	0	1
Pain -Injection site Left Lower Deltoid (Day 3)	1	1	0	2
Pain -Injection site Right Lower Deltoid (Day 3)	1	1	0	2
Pain Injection 1 on day 0	1	1	0	2
Pain Injection 1 on day 3	1	0	0	1
Pain Injection 2 on day 0	1	1	0	2
Pain Injection 2 on day 3	1	0	0	1
Pain at Left Lower Deltoid (Day 3 injection)	1	0	0	1
Pain at Left Upper Deltoid (Day 0 injection)	1	0	0	1
Pain at Right Lower Deltoid (Day 3 injection)	1	0	0	1
Pain at Right Upper Deltoid (Day 0 injection)	1	0	0	1
Pain at injection (left upper deltoid Day 0)	1	0	0	1
Pain at injection site (Day 0, Upper left deltoid)	1	0	0	1
Pain at injection site (Day 0, Upper right deltoid)	1	0	0	1

Row Labels	Mild (1)	Moderate (2)	Severe (3)	Grand Total
Pain at injection site (Day 3, lower left deltoid)	1	1	0	2
Pain at injection site (Day 3, lower right deltoid)	1	1	0	2
Pain at injection site (Left Upper Deltoid) Day 0	1	0	0	1
Pain at injection site (Left arm-Day 3)	1	0	0	1
Pain at injection site (Left deltoid-lower)	1	0	0	1
Pain at injection site (Right deltoid-lower)	1	1	0	2
Pain at injection site (Upper Left Deltoid - Day 0)	1	0	0	1
Pain at injection site (left arm - day 0)	1	0	0	1
Pain at injection site (left arm)	2	1	0	3
Pain at injection site (left arm-day 0)	1	0	0	1
Pain at injection site (left leg)	1	0	0	1
Pain at injection site (left lower deltoid day 3)	1	0	0	1
Pain at injection site (left lower deltoid, Day 3)	2	0	0	2
Pain at injection site (left lower deltoid-Day 3)	1	0	0	1
Pain at injection site (left upper day 0)	1	0	0	1
Pain at injection site (right arm - day 0)	1	0	0	1
Pain at injection site (right arm)	1	1	0	2
Pain at injection site (right lower deltoid day 3)	1	0	0	1
Pain at injection site (right lower deltoid-Day 3)	2	0	0	2
Pain at injection site (right upper day 0)	1	0	0	1
Pain at injection site (right upper deltoid Day 0)	1	0	0	1
Pain at injection site - Left Lower Deltoid (Day 31)	1	0	0	1
Pain at injection site - Left Upper Deltoid (Day 28)	1	0	0	1
Pain at injection site - Right Lower Deltoid (Day 31)	1	0	0	1
Pain at injection site - Right Upper Deltoid (Day 28)	1	0	0	1
Pain at injection site -(Lower Left Deltoid) Day 31	1	0	0	1
Pain at injection site -(Lower Right Deltoid) Day 31	1	0	0	1
Pain at injection site -(Upper Left Deltoid) Day 28	1	0	0	1
Pain at injection site -(Upper Right Deltoid) Day 28	1	0	0	1
Pain at the injection (left upper deltoid, Day 0)	1	0	0	1
Pain at the injection (right upper deltoid, Day 0)	1	0	0	1
Pain at the injection site (Day 0 - Upper Left Deltoid)	2	0	0	2
Pain at the injection site (Day 0 - Upper Right Deltoid)	2	0	0	2
Pain at the injection site (Day 28) Left Upper Deltoid	1	0	0	1

Row Labels	Mild (1)	Moderate (2)	Severe (3)	Grand Total
Pain at the injection site (Day 28) Right Upper Deltoid	1	0	0	1
Pain at the injection site (Day 3 - Left Lower Deltoid)	1	0	0	1
Pain at the injection site (Day 3 - Right Lower Deltoid)	1	0	0	1
Pain at the injection site (Day 31) Left Upper Deltoid	1	0	0	1
Pain at the injection site (Day 31) Right Upper Deltoid	1	0	0	1
Pain at the injection site (Left arm)	1	0	0	1
Pain at the injection site (Left deltoid-upper)	1	1	0	2
Pain at the injection site (Left lower deltoid, Day 3)	1	0	0	1
Pain at the injection site (Left upper deltoid, Day 0)	1	0	0	1
Pain at the injection site (Lower Left Arm - Day 3 Dosing)	1	0	0	1
Pain at the injection site (Lower Right Arm - Day 3 Dosing)	1	0	0	1
Pain at the injection site (Lower left arm) from day 3	1	0	0	1
Pain at the injection site (Lower right arm from day 3)	1	0	0	1
Pain at the injection site (Right Lower Deltoid, Day 3)	1	0	0	1
Pain at the injection site (Right Quad)	0	1	0	1
Pain at the injection site (Right deltoid-upper)	2	1	0	3
Pain at the injection site (Right lower deltoid, Day 3)	1	0	0	1
Pain at the injection site (Right upper deltoid, Day0)	1	0	0	1
Pain at the injection site (Upper Left Arm - Day 0 Dosing)	1	0	0	1
Pain at the injection site (Upper Right Arm - Day 0 Dosing)	1	0	0	1
Pain at the injection site (Upper left deltoid Day 0)	1	0	0	1
Pain at the injection site (Upper right deltoid Day 0)	1	0	0	1
Pain at the injection site (left leg)	1	1	0	2
Pain at the injection site (left thigh)	1	0	0	1
Pain at the injection site (left upper deltoid, Day 0)	1	0	0	1
Pain at the injection site - 1st inject right deltoid (day 3)	1	0	0	1
Pain at the injection site - 2nd injection right thigh(day 3)	1	0	0	1
Pain in muscle at injection site (left arm)	0	1	0	1
Pain in muscle at injection site (left leg)	0	1	0	1
Pain left arm (deltoid) - first injection site	1	0	0	1
Pain left deltoid (day 0)	1	0	0	1
Pain left thigh - second injection site	1	0	0	1
Pain lower left deltoid (day 3)	1	0	0	1
Pain lower right deltoid (day 3)	0	1	0	1

Row Labels	Mild (1)	Moderate (2)	Severe (3)	Grand Total
Pain right deltoid (day 0)	1	0	0	1
Pain- Left Deltoid (lower) Day 3	1	0	0	1
Pain- Left Deltoid Day 0	1	0	0	1
Pain- Upper left Deltoid (Day 0)	1	0	0	1
Pain- Upper right Deltoid (Day 0)	1	0	0	1
Pulsing/ throbbing soreness (Upper right deltoid)	1	0	0	1
Redness (right lower deltoid, day 3) 3.0 cm	1	0	0	1
Sharp/stinging pain at injection site (Left Lower Deltoid)	1	0	0	1
Swelling (Day 31 Right Lower deltoid)	1	0	0	1
Swelling at injection site (left lower deltoid Day 3)	0	1	0	1
Swelling injection site R deltoid	1	0	0	1
Unusually tired	2	0	0	2
Unusually tired/ feeling unwell	1	0	0	1
Unusually tired/Feeling unwell	2	0	0	2
Unusually tired/feeling unwell	14	1	0	15
headache	3	0	0	3
pain - left deltoid (day 0)	3	1	0	4
pain - left deltoid (lower) - day 3	0	1	0	1
pain - left deltoid (upper) - day 0	1	1	0	2
pain - right deltoid (day 0)	2	1	0	3
pain - right deltoid (lower) - day 3	1	0	0	1
pain - right deltoid (upper) - day 0	1	0	0	1
pain at injection site (left arm)	2	1	0	3
pain at injection site (left leg)	3	1	0	4
pain at the injection site (left arm)	1	0	0	1
soreness from COVID booster and flu vaccine on left arm	1	0	0	1
swelling (1 cm) - left deltoid (day 0)	1	0	0	1
swelling (1 cm) - right deltoid (day 0)	1	0	0	1
unusually tired/feeling unwell	6	2	0	8
Hepatobiliary disorders	0	1	0	1
Elevated ALT and AST	0	1	0	1
Immune system disorders	1	0	0	1
GI, Fever, Congestion	1	0	0	1

Row Labels	Mild (1)	Moderate (2)	Severe (3)	Grand Total
Infections and infestations	36	11	1	48
nausea	0	0	1	1
COVID - 19	0	1	0	1
COVID 19 infection	1	0	0	1
COVID-19	3	0	0	3
COVID-19 infection	0	1	0	1
Cold	1	0	0	1
Common cold	1	0	0	1
Covid - 19	1	0	0	1
Covid - 19 infection	0	1	0	1
Covid-19	2	0	0	2
Covid-19 Infection	0	1	0	1
Flu	0	1	0	1
Head cold (sinus congestion)	0	1	0	1
Sinus infection	1	0	0	1
Sore -throat	1	0	0	1
Sore throat	1	0	0	1
UTI	1	0	0	1
Upper Respiratory Infection	1	0	0	1
Upper Respiratory Infections	1	0	0	1
Upper Respiratory Tract Infection	1	0	0	1
cold	5	1	0	6
cold symptoms	0	1	0	1
common cold	8	0	0	8
covid	0	1	0	1
fever	1	0	0	1
runny nose	2	1	0	3
sore throat	1	1	0	2
strep throat	1	0	0	1
upper respiratory infection	1	0	0	1
yeast infection	1	0	0	1
Injury, poisoning and procedural complications	5	3	0	8
Ferret Bite	1	0	0	1
Left Ankle Pain	1	0	0	1

Row Labels	Mild (1)	Moderate (2)	Severe (3)	Grand Total
Right hand laceration	1	0	0	1
Scratched by macaque	1	0	0	1
chin laceration	1	0	0	1
head injury	0	1	0	1
left wrist fracture	0	1	0	1
right deltoid pain	0	1	0	1
Metabolism and nutrition disorders	1	0	0	1
blood in stool	1	0	0	1
Musculoskeletal and connective tissue disorders	49	18	0	67
Generalized muscle aches	2	2	0	4
Joint Pain	1	0	0	1
Back Pain	1	0	0	1
Back sprain	0	1	0	1
Bruising at injection site on Left Lower Deltoid (Day 3) 3cm	1	0	0	1
Bruising at injection site on Right Lower Deltoid (Day 3) 3cm	1	0	0	1
Bruising right knee (patient fell on knee)	1	0	0	1
Finger injury	1	0	0	1
General muscle aches	1	1	0	2
Generalized joint pain	3	1	0	4
Hand injury due to work	0	1	0	1
Joint pain	4	0	0	4
Left arm tender	1	0	0	1
Muscle Aches	3	0	0	3
Muscle Twitch - Left armpit	0	1	0	1
Muscle ache	1	0	0	1
Muscle aches	9	4	0	13
Muscle spasm (upper back)	0	1	0	1
Muscle twitch - Left shoulder	1	0	0	1
Myalgia	1	0	0	1
Myalgias	0	1	0	1
Neck stiffness	2	0	0	2
Right Knee Joint Pain	1	0	0	1
Right ring finger got caught on leash (swollen, purple)	1	0	0	1
Shoulder Pain	1	0	0	1

Row Labels	Mild (1)	Moderate (2)	Severe (3)	Grand Total
Swelling lymph nodes (bilateral)	0	1	0	1
Weakness in right arm	1	0	0	1
back pain	0	1	0	1
general muscle aches	2	0	0	2
generalized muscles aches	1	0	0	1
hand pain	0	1	0	1
joint pain	2	1	0	3
muscle aches	4	0	0	4
right hip pain	1	0	0	1
right shin muscular injury	0	1	0	1
soreness - bilateral lower limbs	1	0	0	1
Nervous system disorders	18	5	0	23
nausea	1	0	0	1
Headache	9	3	0	12
headache	5	1	0	6
muscle aches	1	0	0	1
forehead abrasion	1	0	0	1
paresthesia of both hands	1	0	0	1
vasovagal syncope	0	1	0	1
Psychiatric disorders	2	0	0	2
anxiety	1	0	0	1
shakiness	1	0	0	1
Renal and urinary disorders	1	1	0	2
UTI	1	0	0	1
blood urea nitrogen (BUN)	0	1	0	1
Reproductive system and breast disorders	1	0	1	2
Regular menstrual symptoms (headache, nausea and cramps)	1	0	0	1
miscarriage	0	0	1	1
Respiratory, thoracic and mediastinal disorders	1	1	2	4
Recurrent Left Pneumothorax			1	1
Respiratory infection		1		1
left pneumothorax	0	0	1	1
pleural effusion	1	0	0	1

Row Labels	Mild (1)	Moderate (2)	Severe (3)	Grand Total
Skin and subcutaneous tissue disorders	17	2	1	20
Bruising at injection site (right lower deltoid-Day 3) 3 cm	1	0	0	1
Bruising on right leg	1	0	0	1
Erythema at injection site (right lower deltoid-Day 3) 3 cm	1	0	0	1
Itching (right arm)	1	0	0	1
Itching at injection site (Upper Left Deltoid - Day 0)	1	0	0	1
Itching at injection site (left upper deltoid Day 0)	1	0	0	1
Itching at the injection site (Right deltoid)	1	0	0	1
Itching at the injection site (left arm)	1	0	0	1
Itching at the injection site (right arm)	1	0	0	1
Itching- injection site Lower Left Deltoid (Day 3)	1	0	0	1
Itching-Injection site Left Upper Deltoid (Day 0)	1	0	0	1
L foot splinter	1	0	0	1
Melanoma in situ	0	0	1	1
Rash	0	1	0	1
Rash (right forearm)	1	0	0	1
Redness at the injection site, left leg (Day 0) 3cm	1	0	0	1
Right eyelid lesion excision	1	0	0	1
Swelling at the injection site, left leg (Day 0) 6 cm	0	1	0	1
frostbite	1	0	0	1
itching at injection site (right upper deltoid Day 0)	1	0	0	1
Surgical and medical procedures	0	1	0	1
Colposcopy: High grade squamous intraepithelial lesion (CIN2 involving endocervical glands)	0	1	0	1
Other, specify	5	0	0	5
Left Lymph node swollen	1	0	0	1
left lower dental crown	1	0	0	1
left upper dental crown	1	0	0	1
salivary gland swelling	1	0	0	1
toothache	1	0	0	1
Grand Total	351	89	9	449

Supplementary Table 4. Elicited local reactions for the first 7 days after final dose

						Cohorts A1 - G		Cohort G only	
	Subj ^a	Event	Mild	Moderate	Severe	Day 0 inj.	Day 3 inj.	Day 28 inj.	Day 31 inj.
Pain	42	156	127	29	0	87	49	10	10
Pruritis	4	4	4	0	0	2	1	1	0
Erythema	19	34	30	4	0	18	16	0	0
Swelling	4	5	4	1	0	3	2	0	0
Scab	40	222	222	0	0	109	80	17	16
Infection	0	0	0	0	0	0	0	0	0
Other ^b	12	23	18	5	0	14	9	0	0
Total	43	444	405	39	0	233	157	28	26

^a Table columns show the total number (n) of subjects, events, number of events by severity grade, and number of events by injection day.

^b soreness with movement; soreness with movement; diffuse pain across the upper right arm; diffuse pain across the upper left arm; muscle soreness (contraction) left deltoid; numbness at injection site (left deltoid); hematoma: subject had mild hematoma after the electroporation. the swelling was 3.0 cm after 30 min; numbness at injection site (left upper deltoid) lasted 10 minutes; neck stiffness; subject experienced moderate bleeding and bruising from the left lower deltoid injection; bruising (4.0 cm); bruising; bruising; bleeding: the bleeding was noted immediately after the device was removed; flushed; palpitations

Supplementary Table 5. Elicited local reactions for the first 10 days after final dose

	Subj ^a	Event	Mild	Moderate	Severe	Day 0	Day 3	Day 7	Day 10
Hypotension	1	1	1	0	0	0	0	1	0
Hyperhidrosis	0	0	0	0	0	0	0	0	0
Erythema (systemic)	0	0	0	0	0	0	0	0	0
Headache	3	4	4	0	0	1	2	1	0
Dizziness	0	0	0	0	0	0	0	0	0
Myalgia (pain in muscle)	4	4	2	2	0	2	1	0	1
Arthralgia (pain in joints)	1	1	1	0	0	0	0	0	1
Fever	0	0	0	0	0	0	0	0	0
Peripheral Edema	0	0	0	0	0	0	0	0	0
Other ^b	2	2	2	0	0	2	0	0	0
Total	9	12	10	2	0	5	3	2	2

^a Table columns show the total number (n) of subjects, events, number of events by severity grade, and number of events by observed visit day of reaction.

^b Nausea during injection; tiredness

Supplementary Table 6. Number of Subjects who Experienced an Elicited Local and Systemic Reaction at Least Once in the First 7 Days after Last Dose

	Number of reaction-types ^a experienced at least once							
Cohort	0	1	2	3	4	5	6	7
A1, N=4	0	3	0	1	0	0	0	0
A2, N=3	0	0	1	2	0	0	0	0
B, N=6	1	0	1	3	1	0	0	0
C, N=6	0	0	0	3	1	2	0	0
D, N=7	0	0	2	3	1	1	0	0
E, N=6	0	0	5	0	1	0	0	0
F, N=7	0	0	0	6	0	0	1	0
G, N=5	0	0	3	2	0	0	0	0
Total, N=44	1	3	12	20	4	3	1	0

^a types are listed in leftmost column of previous summary table

Supplementary Table 7. Number of subjects with elicited local and systemic reactions by maximum severity grade per person in the first 7 days after last dose

	None	Mild	Moderate	Severe	Total
Pain	2	27	15	0	44
Pruritis	40	4	0	0	44
Erythema	25	16	3	0	44
Swelling	40	3	1	0	44
Scab	4	40	0	0	44
Infection	44	0	0	0	44
Other events	32	7	5	0	44

Serious Adverse Events

Supplementary 8 describes the SAEs occurred since the beginning of the study. There have been eight (8) serious adverse events reported up to the report cut-off date.

Supplementary Table 8. Serious Adverse Events

Subject Number	Cohort/Dose	Serious Adverse Event	Date of First Dose	Date of Onset of SAE	Relationship to Study Product or Procedure
6302-0011	B (2 x 0.5mg + 2 x 0.5mg)	Melanoma in situ	9/6/2022	10/26/2023	Unrelated
6302-0019	B (2 x 0.5mg + 2 x 0.5mg)	Recurrent Left Pneumothorax	11/15/2022	12/21/2022	Unrelated
6302-0024	B (2 x 0.5mg + 2 x 0.5mg)	Miscarriage	1/5/2023	2/1/2024	Unrelated
6302-0035	D (2 x 0.25mg + 2 x 0.25mg)	Elevated potassium level	3/9/2023	4/20/2023	Unrelated
6302-0035	D (2 x 0.25mg + 2 x 0.25mg)	Elevated CPK level	3/9/2023	8/24/2023	Unrelated
6302-0047	F (2 x 0.5mg + 2 x 0.5mg)	Elevated CPK	11/27/2023	1/22/2024	Unrelated
6302-0050	F (2 x 0.5mg + 2 x 0.5mg)	Elevated CPK	12/5/2023	12/5/2023	Unrelated
6302-0058	G (4 x 0.5mg + 4 x 0.5mg)	Nausea	2/6/2024	2/14/2024	Possibly