

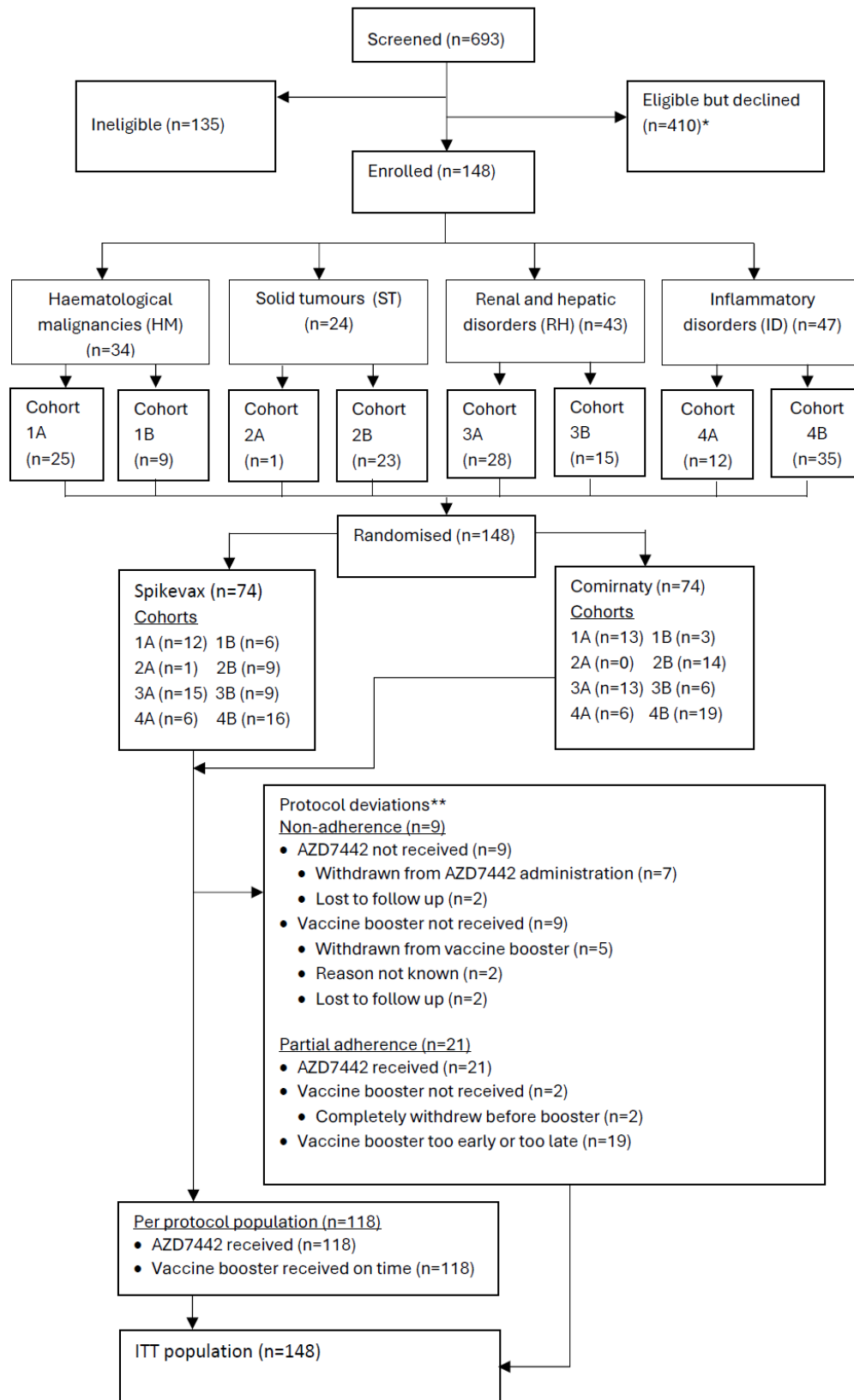


Figure 1: CONSORT diagram

Haematological malignancies (HM)

1A=Active therapy with immuno-suppressive or modulating agents

1B=Aggressive therapy expected to cause temporary ablation of immune function

Solid tumours (ST)

2A=Early cancer on systemic treatment

2B=Advanced cancer on systemic treatment

Renal and hepatic disorders (RH)

3A=Renal disorders (currently receiving immunosuppression; dialysis; transplant recipient receiving immunosuppression)

3B=Hepatic disorders (autoimmune liver disease and liver transplantation on immune suppressive therapy)

Inflammatory disorders (ID)

4A=Receiving rituximab

4B=Receiving non-rituximab immunosuppressants

Baseline characteristic	All cohorts (n=148)
Age (years) (median (IQR; range; n))	62.3 (55.4-70.2; 32.0-87.7; 148)
Gender (n (%))	
Female	75 (50.7%)
Male	71 (48.0%)
Missing	2 (1.4%)
WHO Performance status (n (%))	
0	24 (16.2%)
1	113 (76.4%)
Missing	11 (7.4%)
Household composition (living continuously in the household in the past month) (median (IQR; range; n))	
Total number of household members	2.0 (1.0-3.0; 0.0-7.0; 146)
Household members who....	
attended school/college in person or outside the home in the past month	0.0 (0.0-0.0; 0.0-3.0; 146)
attended childcare/nursery in person or outside the home in the past month	0.0 (0.0-0.0; 0.0-5.0; 146)
work in health and social care e.g. nurse, doctor, healthcare assistant, social	0.0 (0.0-0.0; 0.0-2.0; 146)
Number of previous COVID-19 vaccinations (n (%))	
2	12 (8.1%)
3	20 (13.5%)
4	106 (71.6%)
5	1 (0.7%)
6	4 (2.7%)
7	1 (0.7%)

Baseline characteristic	All cohorts (n=148)
Missing	4 (2.7%)
Previous COVID-19 infection (n (%))	
No	90 (60.8%)
Yes	55 (37.2%)
Missing	3 (2.0%)
If yes, severity	
Asymptomatic	2 (1.4%)
Symptomatic - Not hospitalised for SARS-COV-2	51 (34.5%)
Hospitalised for SARS-COV-2 with Oxygen	2 (1.4%)
Full blood count (median (IQR; range; n))	
White blood cells (x10 ⁹ /L)	6.1 (4.9-8.1; 2.0-83.4; 138)
Lymphocytes (x10 ⁹ /L)	1.3 (0.9-1.8; 0.1-99.0; 138)
Absolute neutrophil count (x10 ⁹ /L)	3.9 (2.8-5.8; 0.2-13.8; 138)
Platelets (x10 ⁹ /L)	232.0 (184.0-282.0; 13.0-462.0; 138)
Haemoglobin (g/L)	133.0 (122.0-143.0; 82.0-163.0; 138)
Eosinophils (x10 ⁹ /L)	0.1 (0.1-0.2; 0.0-0.9; 138)
Basophils (x10 ⁹ /L)	0.0 (0.0-0.1; 0.0-0.2; 138)
Monocytes (x10 ⁹ /L)	0.6 (0.4-0.7; 0.1-1.6; 138)
Liver function tests (median (IQR; range; n))	
INR	1.0 (1.0-1.1; 0.0-2.3; 47)
APTT ratio	1.0 (0.9-1.2; 0.0-1.5; 12)
Albumin	43.0 (40.0-46.0; 21.0-55.0; 139)
Serum bilirubin (µmol/L)	8.0 (6.0-12.0; 3.0-67.0; 137)
ALT (IU/L)	20.0 (14.0-30.0; 6.0-243.0; 139)
ALP (IU/L)	75.0 (59.0-96.0; 16.0-791.0; 138)
Urea and electrolytes (median (IQR; range; n))	
Sodium (mmol/L)	140.0 (138.0-142.0; 114.0-145.0; 139)
Potassium (mmol/L)	4.3 (4.0-4.6; 3.3-5.5; 139)
Urea (mmol/L)	5.8 (4.4-8.0; 0.0-22.3; 135)
Serum creatinine (µmol/L)	79.0 (62.0-99.0; 2.0-674.0; 139)
Calculated GFR (ml/min)	79.0 (59.0-90.0; 6.0-116.0; 139)
Bone profile (median (IQR; range; n))	
Albumin (g/L)	43.0 (40.0-46.0; 21.0-55.0; 139)
Alkaline phosphatase (g/L)	74.0 (58.0-95.0; 9.0-791.0; 138)
Total protein (g/L)	69.0 (65.0-73.0; 3.4-86.0; 131)
Calcium (mmol/L)	2.4 (2.3-2.5; 2.0-2.7; 138)

Table 1: Baseline medical and demographic characteristics

Sub-cohort	Cmax (µg/ml)		Concentration at day 28 (µg/ml)		Concentration at day 180 (µg/ml)	
	Tixagevim ab	Cilgavim ab	Tixagevim ab	Cilgavim ab	Tixagevim ab	Cilgavim ab
HM 1A (n=25)	22.7 (18.0-31.7)	19.8 (16.4-27.8)	22.7 (18.0-31.7)	19.8 (16.4-27.8)	7.1 (5.9-8.9)	5.7 (4.7-7.5)
HM 1B (n=9)	36.5 (22.6-38.8)	27.0 (19.4-36.5)	36.5 (22.6-38.8)	27.0 (19.4-36.5)	8.7 (6.9-10.1)	7.9 (4.2-9.3)
ST 2A (n=1)	35.5 (35.5-35.5)	27.1 (27.1-27.1)	35.5 (35.5-35.5)	27.1 (27.1-27.1)	9.7 (9.7-9.7)	8.4 (8.4-8.4)
ST 2B (n=23)	28.2 (25.0-34.3)	26.9 (25.7-29.2)	29.7 (25.4-34.9)	27.0 (26.3-29.5)	7.0 (4.0-10.7)	6.1 (3.9-8.9)
RH 3A (n=28)	28.0 (19.3-35.5)	26.7 (17.3-32.1)	27.8 (22.1-34.1)	26.4 (19.2-31.2)	7.6 (6.4-10.4)	6.8 (5.4-8.1)
RH 3B (n=15)	27.3 (17.5-30.7)	24.1 (12.7-32.1)	27.3 (17.5-30.7)	24.1 (12.7-32.1)	7.3 (6.0-11.7)	5.5 (5.3-9.9)
ID 4A (n=12)	25.5 (22.4-47.1)	29.2 (22.7-41.1)	25.5 (22.4-47.1)	29.2 (22.7-41.1)	10.6 (6.7-12.3)	10.4 (6.8-13.2)
ID 4B (n=35)	29.6 (22.6-39.1)	27.5 (20.4-36.2)	30.2 (23.3-39.1)	27.8 (23.9-36.2)	8.9 (6.5-10.9)	8.3 (6.0-10.7)
Overall I (n=148)	27.8 (20.9-35.5)	26.6 (19.3-32.1)	28.1 (22.1-35.5)	26.7 (19.8-32.1)	8.1 (6.1-10.6)	7.2 (5.0-9.2)

Table 2: AZD7442 pharmacokinetics

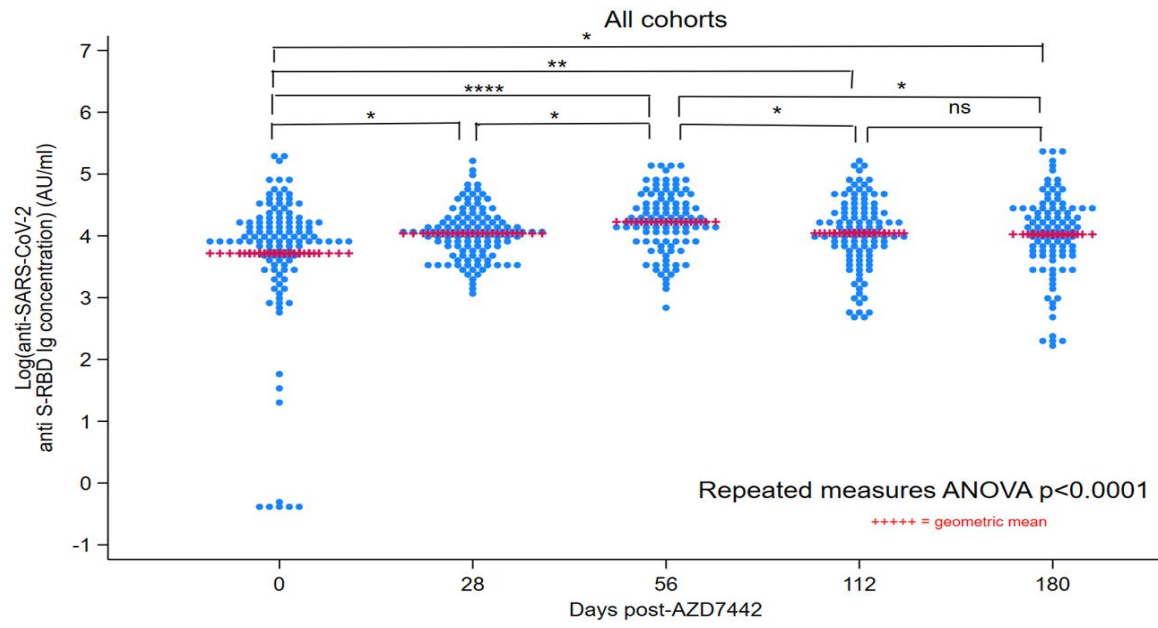


Figure 2: Longitudinal anti-SARS-CoV-2 Spike antibody responses

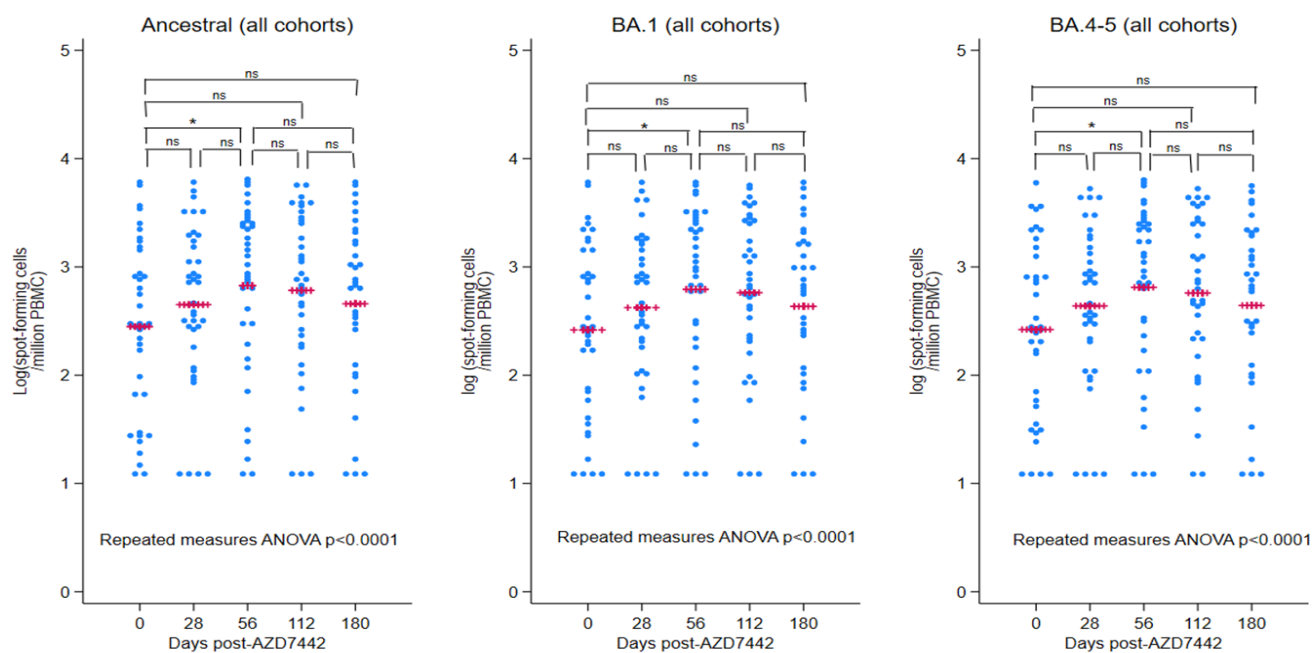


Figure 3: Longitudinal T cell responses (Oxford patients)

SAE Reporting:

Two serious adverse events were reported, both of which resolved

