

Supplementary Table S1: Lineage classification of strains included in the study, accession number and spike identified mutations.

Code	Pango Lineage	WHO	Spike aa substitutions
EPI_ISL_2472896	B.1		D614G
EPI_ISL_2840619	B.1.617.2	Delta	T19R, E156G, F157del, R158del, S255F, L452R, T478K, D614G, P681R, D950N
EPI_ISL_8020894	BA.1.17	Omicron	A67V, D614G, D796Y, E484A, F220del, G142D, G219del, G339D, G446S, G496S, H69del, H655Y, ins152KSW, ins214EPE, K417N, L212I, L981F, N211del, N440K, N501Y, N679K, N764K, N856K, N969K, P681H, Q493R, Q498R, Q954H, S221del, S371L, S373P, S375F, S477N, T95I, T478K, T547K, V70del, V143del, Y144del, Y145del, Y505H
EPI_ISL_11814364	BA.2.13	Omicron	A27S, D405N, D614G, D796Y, E484A, G142D, G339D, Spike H655Y, K417N, L24del, N501Y, N679K, N764K, N969K, P25del, P26del, P681H, Q493R, Q498R, Q954H, R408S, S371F, S373P, S375F, S477N, T19I, T376A, T478K, V213G, Y505H

Supplementary Table S2: Clinical features of enrolled individuals.

ID	Sex	Age (years)	mAbs	Symptoms	Comorbidities	Vaccination
1	Male	22	BAM/ETE	Fever, cough, headache	Myotonic Dystrophy Type 1, hypothyroidism	no
2	Male	70	BAM/ETE	Cough, gastrointestinal, dysgeusia/anosmia	Hypertension, dyslipidaemia, Type 2 Diabetes	no
3	Male	62	BAM/ETE	Headache, arthomyalgia	Hemosiderosis, previous HBV infection, other respiratory diseases	no
4	Male	66	BAM/ETE	Fever, cough, headache	Hypertension, dyslipidaemia, other respiratory diseases	no
5	Male	80	BAM/ETE	Fever	Hypertension, cardiopathy, haemato-oncological disease	yes
6	Female	80	BAM/ETE	Fever	Hypertension, BPCO, haemato-oncological disease, other respiratory diseases	yes
7	Female	37	BAM/ETE	Fever, cough, gastrointestinal, dysgeusia/anosmia, headache, arthomyalgia	BMI > 35	no
8	Female	67	BAM/ETE	Fever, arthomyalgia	Haemato-oncological disease, dyslipidaemia, latent tuberculosis, dysthyroidism	yes
9	Male	67	BAM/ETE	Fever, cough	Hypertension, cardiopathy, hypothyroidism, dyslipidaemia	no
10	Female	53	BAM/ETE	Fever, cough	Hypertension, Type 2 Diabetes	no
11	Male	40	BAM/ETE	Dysgeusia/anosmia, headache	Hypertension, dyslipidaemia, hyperuricemia	no
12	Female	52	BAM/ETE	Fever, cough, gastrointestinal, headache, arthomyalgia	Hypertension, BMI > 35	no

13	Female	77	CAS/IMD	Headache	Hypertension	no
14	Female	73	CAS/IMD	Cough	Hypertension, Type 2 Diabetes, COPD, hypothyroidism	no
15	Male	74	CAS/IMD	Dyspnoea	Hypertension, dyslipidaemia	no
16	Female	65	CAS/IMD	Fever, cough, dyspnoea, headache, arthomyalgia	Cardiopathy, other respiratory diseases	no
17	Female	77	CAS/IMD	Cough	Hypertension, cardiopathy, BMI > 35	no
18	Female	46	CAS/IMD	None	Hypertension, dyslipidaemia, BMI > 35	no
19	Female	88	CAS/IMD	Fever, cough	Hypertension, COPD	no
20	Male	62	CAS/IMD	Fever, cough, headache	Cardiopathy, Type 2 Diabetes, dyslipidaemia	no
21	Female	57	CAS/IMD	Cough, headache	Hypertension, autoimmune disease, hyperuricemia, BMI = 32	no
22	Male	18	CAS/IMD	Dysgeusia/anosmia	Cardiopathy	no
23	Male	77	CAS/IMD	Fever, cough	Hypertension, Chronic Ischemic Cardiomyopathy, cardiomyopathy, Type 2 Diabetes, haemato-oncological disease	yes
24	Male	75	CAS/IMD	Fever, cough	Hypertension, haemato-oncological disease	yes
25	Male	69	CAS/IMD	Fever, dysgeusia/anosmia, arthomyalgia	Hypertension, Chronic Ischemic Cardiomyopathy, dyslipidaemia	yes
26	Female	51	CAS/IMD	Dysgeusia/anosmia, gastrointestinal, cough, fever	BMI > 35	no
27	Female	54	SOT	Fever, cough, dysgeusia/anosmia, headache, arthomyalgia	No comorbidity	no
28	Female	52	SOT	Fever, cough	BMI > 35	no
29	Female	59	SOT	Fever, headache	Ischemic Chronic Cardiopathy, BMI > 35	no
30	Male	19	SOT	Fever, cough, headache, arthomyalgia	Other respiratory diseases	no
31	Female	34	SOT	Fever, arthomyalgia	Hemoglobinopathy	no
32	Male	56	SOT	Cough, gastrointestinal	Immunodeficiency	no
33	Male	78	SOT	Fever, cough, arthomyalgia	Cardiopathy	no
34	Female	83	SOT	Fever, arthomyalgia	Cardiopathy	no
35	Female	69	SOT	Cough, headache	Cardiopathy	no
36	Male	78	SOT	Fever, cough, headache	Chronic Ischemic Cardiomyopathy	no
37	Female	57	SOT	Fever, cough	Chronic Ischemic Cardiomyopathy, immunodeficiency	no
38	Female	55	SOT	Cough	Immunodeficiency	no
39	Male	52	SOT	Fever, arthomyalgia	Immunodeficiency	no
40	Male	41	SOT	Fever, cough	BMI > 35	no

BAM/ETE = Bamlanivimab plus etesevimab; CAS/IMD = casirivimab plus imdevimab; SOT = sotrovimab; BMI = body mass index; COPD = chronic obstructive pulmonary disease

Supplementary Figure 1. Cytotoxicity of the P-gp inhibitor CP-100356 in VERO E6 cells. Cell viability was measured at 72h by CellTiter-Glo 2.0 Luminescent Cell Viability Assay (Promega). The luminescence values obtained from cells treated with P-gp inhibitor or DMSO were measured with the GloMax® Discover Multimode Microplate Reader (Promega) and elaborated with the GraphPad PRISM software version 6.01 (La Jolla, California, USA).

