

Figure S1

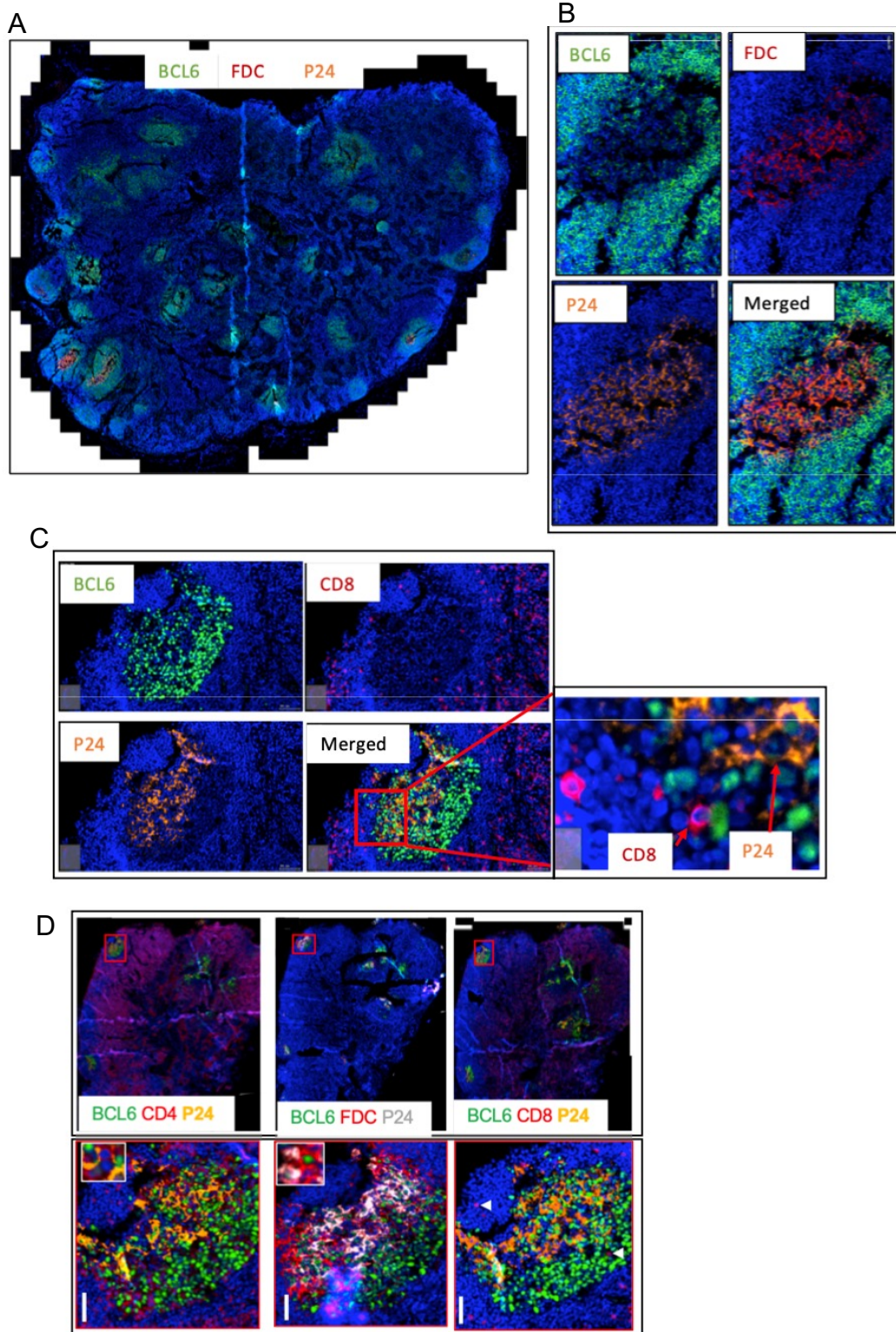
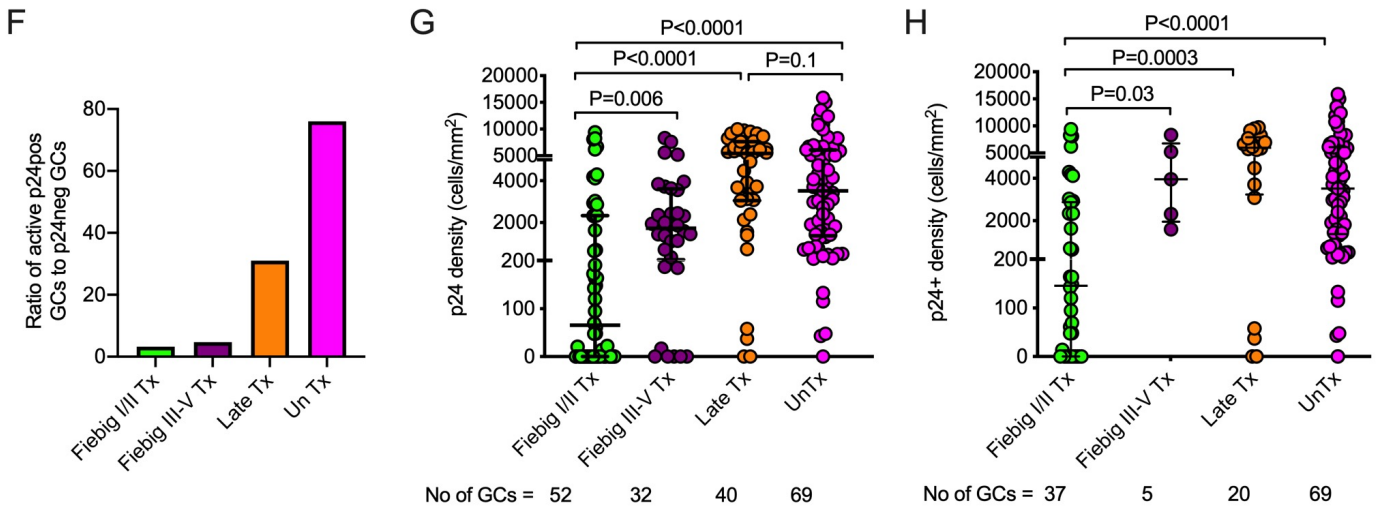
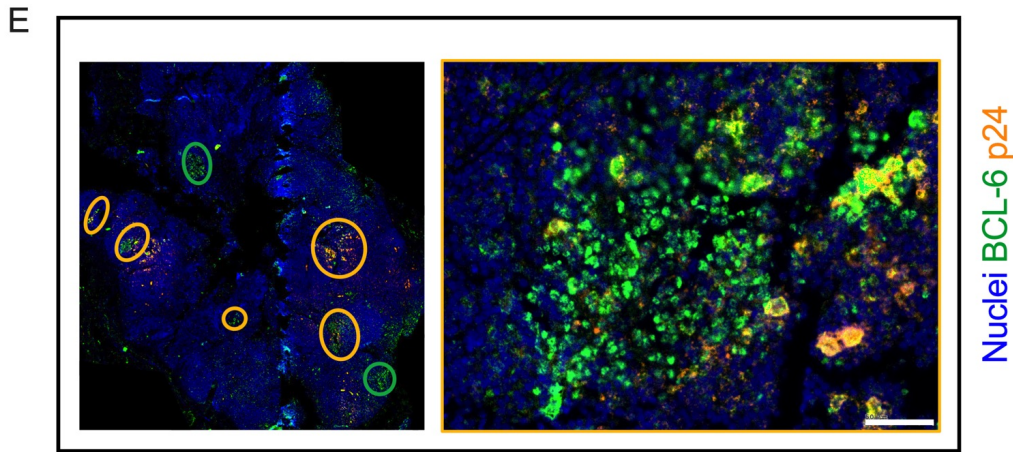
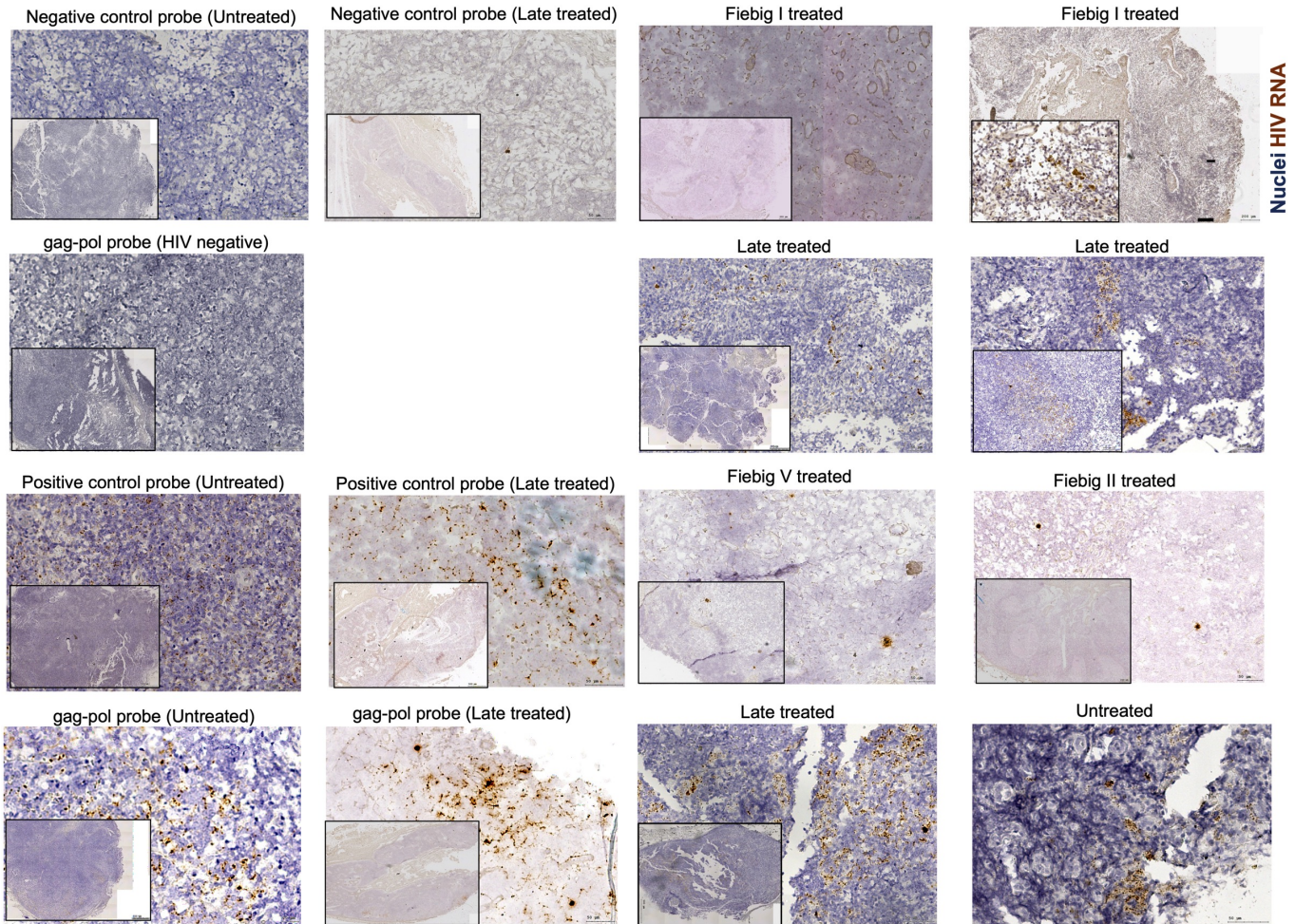


Figure S1



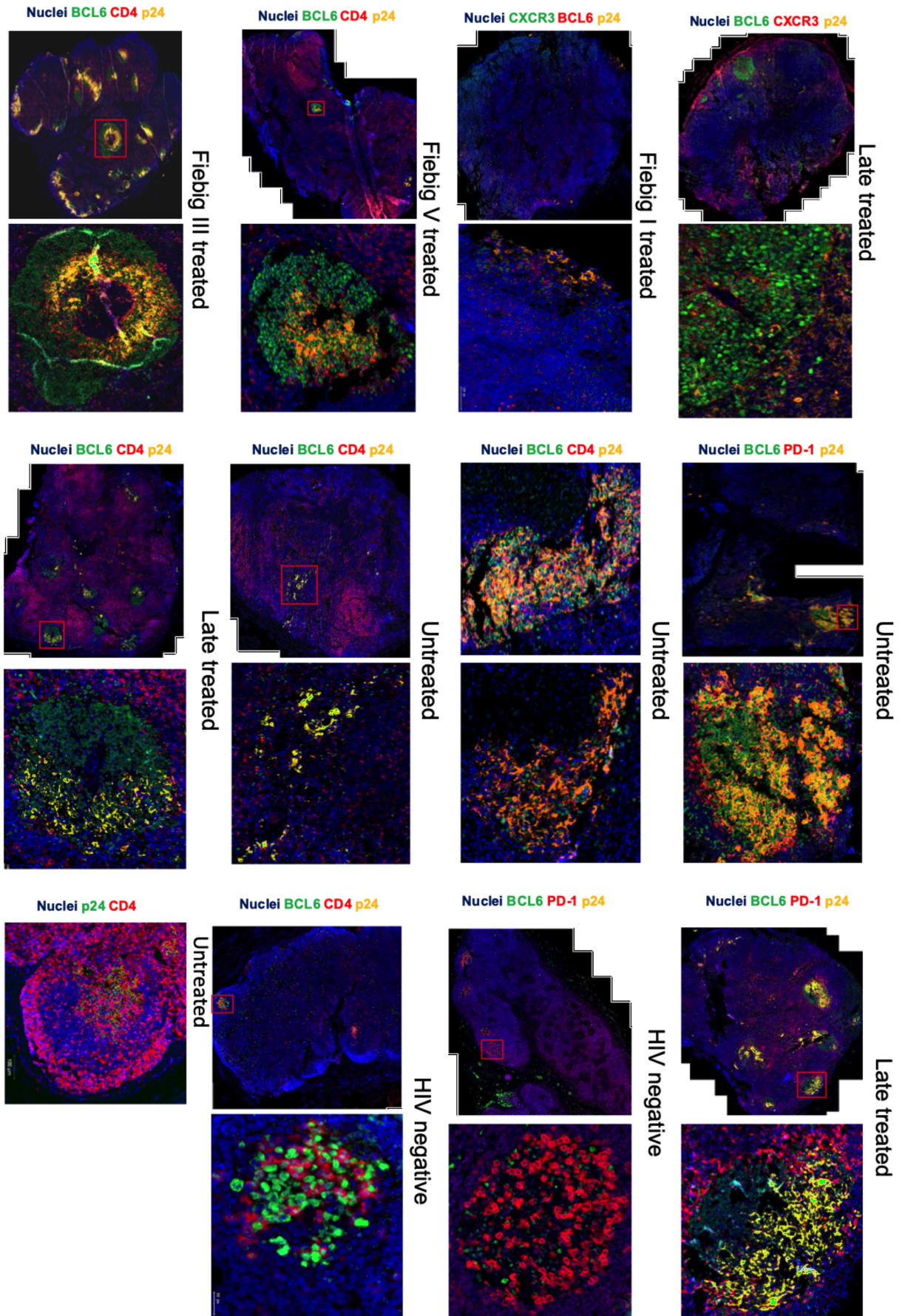
Supplementary Figure S1: HIV Gag p24 staining co-localizes with Follicular dendritic cells and BCL-6 but not with CD8⁺ T cell staining in lymph node (LN) sections. (A) Representative images of a whole LN section showing Gag p24 (yellow), BCL-6 (green) and FDCs (Red). (B) Representative images showing Gag p24 and FDC co-staining. (C-D) Representative images of serial sections either showing (C) no co-staining between Gag p24 and CD8⁺ T cell marker or (D) co-staining of Gag p24 with CD4⁺ T cell and FDC markers. (E) Representative whole LN section with encircled GCs that are either Gag p24 positive (pos, yellow) or negative (neg, green) and a zoomed Gag p24 positive GC. Scale bar is 50 μ m (F) The overall ratio of Gag p24 pos and neg GCs was compared across the groups. (G-H) The density of Gag p24 per GC in immunofluorescent images was computed using the nuclear segmentation method in TissueQuestTM. Summary plots comparing results for (G) 13 Fiebig I/II Tx, 3 Fiebig III-V Tx, 9 late Tx and 11 unTx HIV-infected donors and (H) donors Tx beyond 1 year. Each dot represents the density of Gag p24 per GC and the total number of GCs analysed per group is displayed.

Figure S2



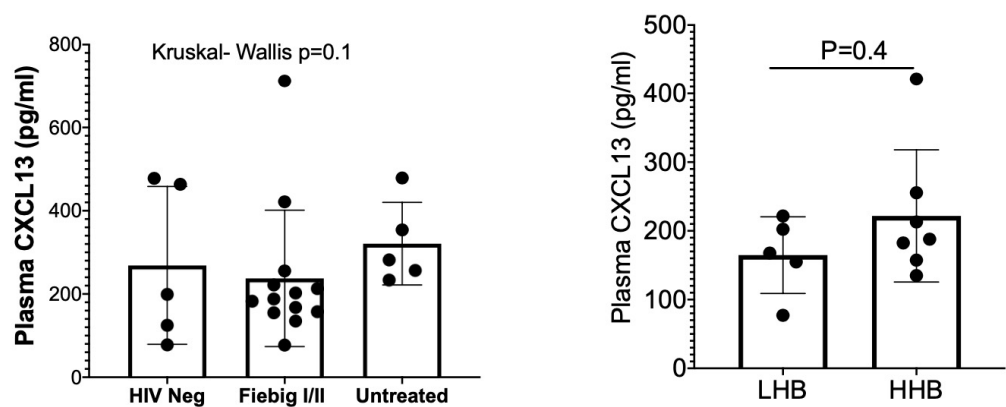
Supplementary Figure S2: Detection of RNA *in-situ* hybridization (ISH) images. Micrographs from *gag-pol* RNAscope ISH detected using 3,3'-diaminobenzidine as brown punctate dots with nuclei signals in blue. The specificity of staining was confirmed by using a probe for the bacterial gene *dapB* (negative control probe) or by using the *gag-pol* probe with samples for a HIV negative individual. In addition, a probe for human peptidylpropyl isomerase B was used as positive control. Inset is the full image of the magnified field of view.

Figure S3



Supplementary Figure S3: HIV Gag p24 co-localizes with BCL-6 and CD4 or PD-1 markers in lymph node sections. Representative images of Gag p24 (yellow) and BCL-6 (green) and CD4 (red) or PD-1 (red) staining in LN sections of representative study participants.

Figure S4



Supplementary Figure S4: Low antigen persistence in treated HIV-1 infection is not associated with plasma CXCL-13 levels. Plasma CXCL-13 levels in treated and untreated hyperacute HIV infection, and healthy controls and in donors with low or high persistent HIV burden (LHB and HHB) in LNs during ART. Kruskal-Wallis and Mann U-Whitney P values are reported.

Table S1

Table S1. Detailed patients' characteristics

Study group	Patient identifier	Type of node	Age	Gender	HIV status	Time to ART initiation (days)	Treatment status	ART Regimen	Absolute CD4 count (cells/ μ l)	Plasma viral load (copies/ml)	Feibig stage at treatment initiation	Treatment duration (days)	Time to suppression (days)
HIV negative	LN020	Inguinal	22	F	Neg	NA	NA	NA	1081	NA	NA	NA	NA
HIV negative	LN022	Cervical	21	F	Neg	NA	NA	NA	710	NA	NA	NA	NA
HIV negative	LN028	Inguinal	19	F	Neg	NA	NA	NA	976	NA	NA	NA	NA
HIV negative	LN031	Cervical	22	F	Neg	NA	NA	NA	1210	NA	NA	NA	NA
HIV negative	LN032	Cervical	20	F	Neg	NA	NA	NA	1115	NA	NA	NA	NA
HIV negative	LN034	Cervical	21	F	Neg	NA	NA	NA	695	NA	NA	NA	NA
HIV negative	LN035	Cervical	21	F	Neg	NA	NA	NA	1150	NA	NA	NA	NA
HIV negative	LN105	Inguinal	23	F	Neg	NA	NA	NA	949	NA	NA	NA	NA
HIV negative	LN106	Inguinal	24	F	Neg	NA	NA	NA	928	NA	NA	NA	NA
HIV negative	LN109	Inguinal	21	F	Neg	NA	NA	NA	1226	NA	NA	NA	NA
HIV negative	LN113	Inguinal	24	F	Neg	NA	NA	NA	704	NA	NA	NA	NA
HIV negative	LN116	Inguinal	22	F	Neg	NA	NA	NA	874	NA	NA	NA	NA
HIV negative	LN118	Inguinal	22	F	Neg	NA	NA	NA	1333	NA	NA	NA	NA
Feibig I/II treated	LN045	Inguinal	18	F	Pos	1	Yes	FDC pill+RAL	1291	<20	I	21	9
Feibig I/II treated	LN049	Axillary	22	F	Pos	1	Yes	FDC pill+RAL	1104	<20	I	355	17
Feibig I/II treated	LN052	Groin	19	F	Pos	3	Yes	FDC pill	652	<20	I	502	21
Feibig I/II treated	LN057	Groin	21	F	Pos	1	Yes	FDC pill+RAL	724	<20	I	403	13
Feibig I/II treated	LN063	Inguinal	24	F	Pos	1	Yes	FDC pill+RAL	772	<20	I	385	6
Feibig I/II treated	LN064	Inguinal	21	F	Pos	2	Yes	FDC pill+RAL	782	<20	I	479	33
Feibig I/II treated	LN065	Inguinal	19	F	Pos	1	Yes	FDC pill+RAL	628	<20	I	19	17
Feibig I/II treated	LN078	Inguinal	25	F	Pos	1	Yes		1042	<20	I	694	13
Feibig I/II treated	LN087	Inguinal	20	F	Pos	1	Yes		966	<20	I	63	6
Feibig I/II treated	LN095	Inguinal	23	F	Pos	1	Yes	FDC pill+RAL	1290	<20	I	56	9
Feibig I/II treated	LN099	Inguinal	21	F	Pos	1	Yes	FDC pill+RAL	953	<20	II	33	20
Feibig I/II treated	LN147	Inguinal	22	F	Pos	1	Yes	FDC pill+RAL	695	<20	I	26	16
Feibig I/II treated	LN149	Inguinal	26	F	Pos	1	Yes	FDC pill+RAL	869	<20	I	916	11
Feibig I/II treated	LN152	Inguinal	26	F	Pos	1	Yes	FDC pill	1168	<20	I	1647	27
Feibig III-V treated	LN053	Inguinal	19	F	Pos	1	Yes	FDC pill+RAL	885	<20	V	427	22
Feibig III-V treated	LN077	Inguinal	18	F	Pos	1	Yes	FDC pill+RAL	507	<20	III	29	22
Feibig III-V treated	LN088	Inguinal	22	F	Pos	1	Yes	FDC pill+RAL	942	<20	III	120	16
Feibig III-V treated	LN089	Inguinal	25	F	Pos	3	Yes	FDC pill	1033	<20	V	926	7
Feibig III-V treated	LN101	Inguinal	22	F	Pos	1	Yes	FDC pill+RAL	1139	<20	III	63	17
Late treated	LN008	Axillary	36	F	Pos	UNK	Yes	UNK	416	<20	UNK	UNK	UNK
Late treated	LN025	Axillary	36	F	Pos	UNK	Yes	UNK	521	<20	UNK	UNK	UNK
Late treated	LN043	Inguinal	26	F	Pos	UNK	Yes	UNK	748	<20	UNK	571	UNK
Late treated	LN061	Axillary	24	F	Pos	UNK	Yes	UNK	464	<20	UNK	1065	UNK
Late treated	LN068	Inguinal	26	F	Pos	UNK	Yes	UNK	1189	<20	UNK	272	UNK
Late treated	LN071	Inguinal	28	F	Pos	UNK	Yes	UNK	809	<20	UNK	599	UNK
Late treated	LN074	Inguinal	24	F	Pos	UNK	Yes	UNK	589	<20	UNK	554	UNK
Late treated	LN079	Inguinal	26	F	Pos	UNK	Yes	UNK	775	<20	UNK	764	UNK
Late treated	LN096	Inguinal	28	F	Pos	UNK	Yes	UNK	856	<20	UNK	UNK	UNK
Late treated	LN122	Inguinal	19	F	Pos	UNK	Yes	UNK	467	<20	UNK	79	UNK
Late treated	LN126	Inguinal	23	F	Pos	UNK	Yes	UNK	406	<20	UNK	85	UNK
Late treated	LN129	Inguinal	22	F	Pos	UNK	Yes	UNK	509	<20	UNK	713	UNK
Late treated	LN133	Inguinal	22	M	Pos	UNK	Yes	UNK	714	<20	UNK	115	UNK
Late treated	LN137	Inguinal	21	F	Pos	UNK	Yes	UNK	317	<20	UNK	899	UNK
Late treated	LN145	Inguinal	25	F	Pos	UNK	Yes	UNK	444	<20	UNK	760	UNK
Late treated	LN155	Inguinal	22	F	Pos	UNK	Yes	UNK	614	<20	UNK	8	UNK
Late treated	LN171	Inguinal	21	F	Pos	UNK	Yes	UNK	1369	59	UNK	UNK	UNK
Untreated	LN037	Inguinal	24	F	Pos	NA	No	NA	610	200000	NA	NA	NA
Untreated	LN040	Cervical	24	F	Pos	NA	No	NA	595	120	NA	NA	NA
Untreated	LN041	Cervical	24	F	Pos	NA	No	NA	720	14000	NA	NA	NA
Untreated	LN042	Axillary	37	M	Pos	NA	No	NA	359	21000	NA	NA	NA
Untreated	LN044	Inguinal	18	F	Pos	NA	No	NA	565	8800	NA	NA	NA
Untreated	LN046	Axillary	25	F	Pos	NA	UNK	NA	401	15000	NA	NA	NA
Untreated	LN062	Inguinal	24	F	Pos	NA	No	NA	355	22000	NA	NA	NA
Untreated	LN072	Inguinal	24	F	Pos	NA	UNK	NA	639	11000	NA	NA	NA
Untreated	LN076	Inguinal	26	F	Pos	NA	No	NA	752	4100	NA	NA	NA
Untreated	LN086	Inguinal	30	F	Pos	NA	UNK	NA	461	240	NA	NA	NA
Untreated	LN094	Inguinal	26	F	Pos	NA	No	NA	667	59000	NA	NA	NA
Untreated	LN097	Inguinal	24	F	Pos	NA	No	NA	1092	1900	NA	NA	NA
Untreated	LN127	Inguinal	29	M	Pos	NA	No	NA	251	400000	NA	NA	NA
Untreated	LN151	Inguinal	49	M	Pos	NA	No	NA	430	7300	NA	NA	NA
Untreated	LN165	Inguinal	22	F	Pos	NA	UNK	NA	733	140	NA	NA	NA

ART: antiretroviral therapy

FDC pill: Tenofovir, emtricitabine and efavirenz

RAL: Raltegravir

F: Female

M: Male

NA: Not applicable

UNK: Unknown