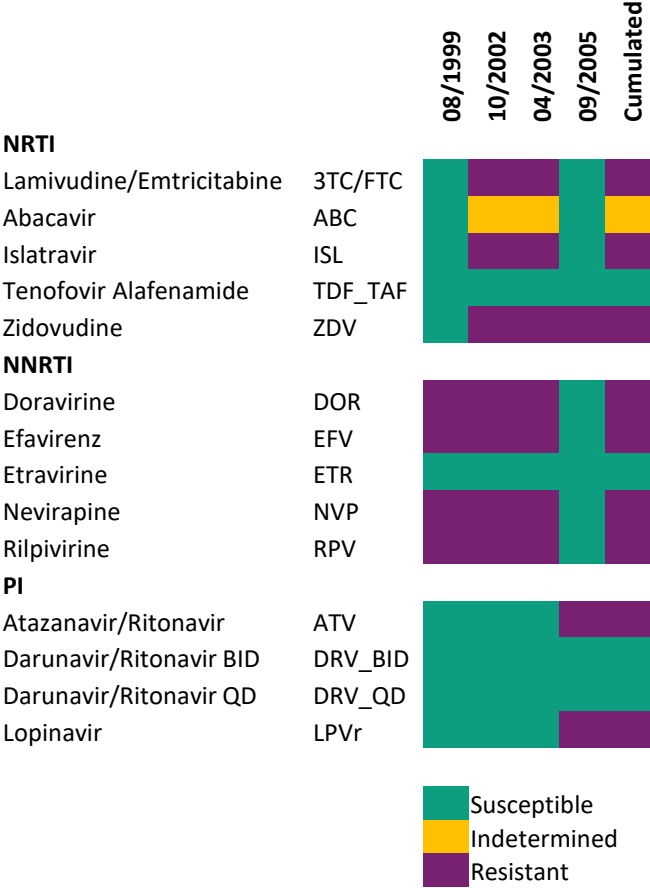


Sustained HIV remission after allogeneic hematopoietic stem cell transplantation with wild-type CCR5 donor cells

In the format provided by the
authors and unedited

Table S1. HIV Drug resistance



As determined by ANRS 2023,34/sg/b algorithm. <https://hivfrenchresistance.org/>

Table S2. HLA class I and class II matching for the donor and IciS-34

DONOR					
A*01:01	B*27:05	C*01:02	DRB1*01:01	DQB1*05:01	DPB1*03:01
A*24:02	B*44:02	C*05:01	-	-	DPB1*04:01
ICIS34					
A*01:01	B*27:05	C*01:02	DRB1*01:01	DQB1*05:01	DPB1*03:01
A*24:02	B*44:02	C*05:01	DRB1*01:02	-	DPB1*04:01

Table S3. Summary of other virologic analyses performed at different times after allo-HSCT

		Intracellular HIV RNA		p24 simoa in cocultures	
Months after allo-HSCT	Months after stop ART	BLOOD		BLOOD	
		µg	RNA	Cells	p24
45	5			1.1M	NO
47	7	0.49	<20	1M	NO
51	11	0.79	<13	1M	NO
52-1	12-1	1.1	<9	1.5M	NO
52-2	12-2			1M	NO
53	13	0.5	<40	1M	NO
54	14			1.3M	NO
55	15	0.6	<33	1.5M	NO
56	16	0.96	<21		
57	17	0.56	<36	0.9M	NO
59	19	2	<13	2M	NO
61	21	1.5	<17		
63	23	2	<13		
65	25	2	<13	0.5M	NO

Table S4. Summary of the antiretroviral screening in plasma samples obtained at different times after ART interruption

	concentration [ng/ml]	concentration [ng/ml]
Date	Tenofovir	Emtricitabine
11/2021-M40	ART INTERRUPTION	
12/2021-M41	0	0
01/2022-M42	4	78
04/2022-M45	0	0
06/2022-M47	0	0
09/2022-M50	0	0
10/2022-M51	0	0
11/2022-M52	0	0
12/2022-M53	1	2.8
01/2023-M54	0	0
04/2023-M57	0	0
05/2023-M58	0	0
06/2023-M59	0	0
04/2024-M69	0	0

Single-dose C₂₄
(from ref#25)

40 (12-74)

63 (48-134)

Analyzed molecules (HPLC-MS/MS): ATV, SQV, LPV, NVP, RPV, EVG, COBI, DTG, ETR, RAL, MVC, RTV, BIC, DOR, CAB, RPV, TDF, FTC, 3TC, ZDV

Detection threshold 1 ng/ml

Table S5. Primers and probes used for cell-associated RNA assay

GAG1	Sense I, II	TCAGCCCAGAAGTAATACCCATGT
SK431	Antisense I	TGCTATGTCAGTTCCTTGGTTCTCT
GAG2	Antisense II	CACTGTGTTTAGCATGGTGTTT
GAG3	Probe	FAM-ATTATCAGAAGGAGCCACCCACAAGA-TAMRA

Table S6. Primers and probes used for the IPDA assay

IPDA HIV

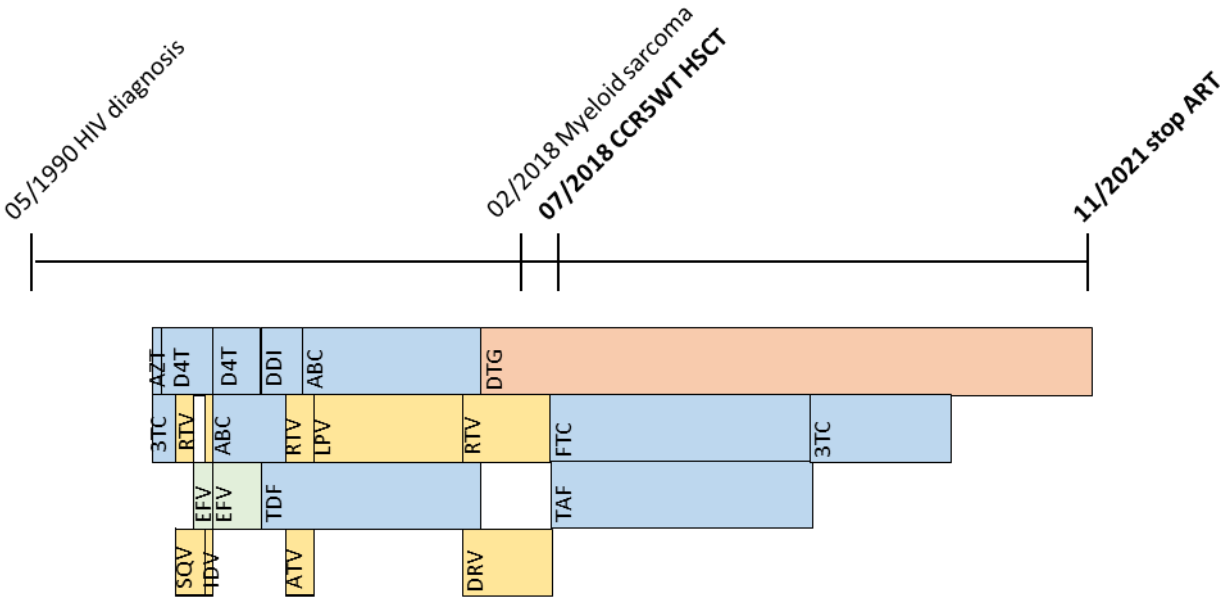
Ψ HIV-1 FR	CAGGACTCGGCTTGCTGARG
Ψ HIV-1 R	GCACCCATCTCTCTCCTTCTAGC
Ψ HIV-1 Probe	5'-FAM-TTTTGGCGTACTCACCAGT-MGB-3'
Env HIV-1 F	AGTGGTGCAGAGAGAAAAAAGAGC
Env HIV-1 R	GTCTGGCCTGTACCGTCAGC
Env HIV-1 intact probe	5'-HEX-CCTTGGGTTCTTGGGA- MGB-3'
Env HIV-1 hypermut probe	5'-none-CCTTAGGTTCTTAGGAGC- MGB-3'

RPP30

RPP30 humain F1	AGATTTGGACCTGCGAGCG
RPP30 humain R1	GAGCGGCTGTCTCCACAAGT
RPP30 humain P1	5'-HEX-TTCTGACCTGAAGGCTCTGCGCG-EDQ-3'
RPP30 humain F2	GCTAACCTTTGATAGGCTCAGT
RPP30 humain R2	CAAATGGTAAGAAGGGCAGAAAC
RPP30 humain P2	5'-FAM-AGCTAAGTGTTGATCCATCTCTTTCTAGCT-EDQ-3'

Figure S1

A



B

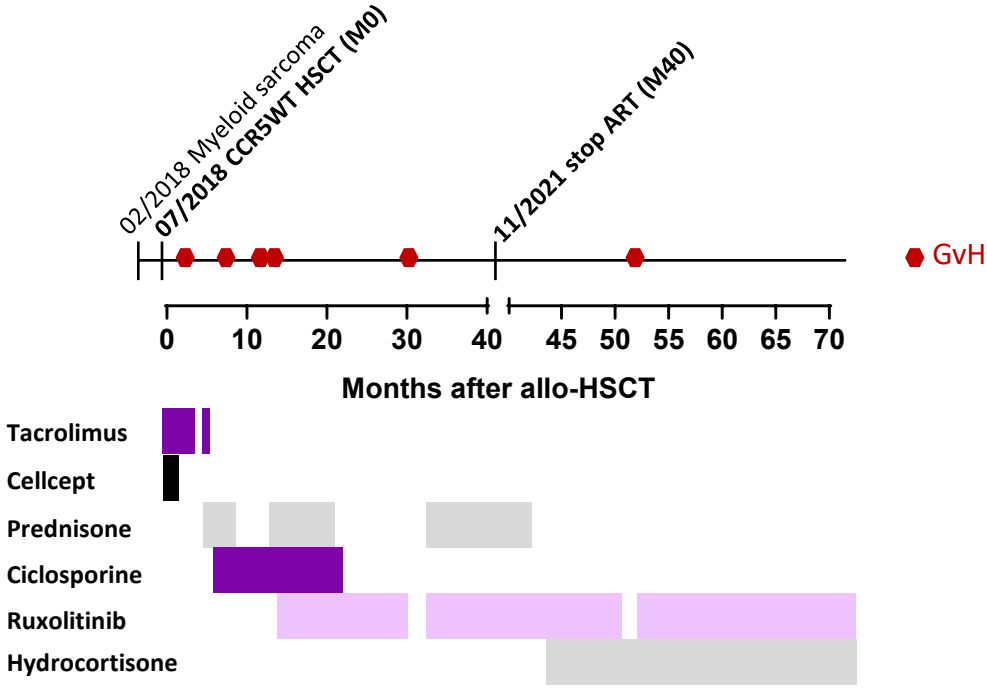


Figure S1. Detailed therapeutic history. (A) successive antiretroviral regimens starting with first generation nucleoside reverse transcriptase inhibitors (3TC: lamivudine; ABC: abacavir; ATV: atazanavir; AZT: azidothymidine; D4T: stavudine; DRV: darunavir; DTG: dolutegravir; EFV: efavirenz; FTC: emtricitabine; IDV: idinavir; LPV: lopinavir; RTV: ritonavir; SQV: saquinavir; TAF: tenofovir alafenamide) (B) Immunosuppressants used since allo-HSCT to prevent and treat graft-vs-host (GvH) disease (hexagons represent different episodes).

Figure S2

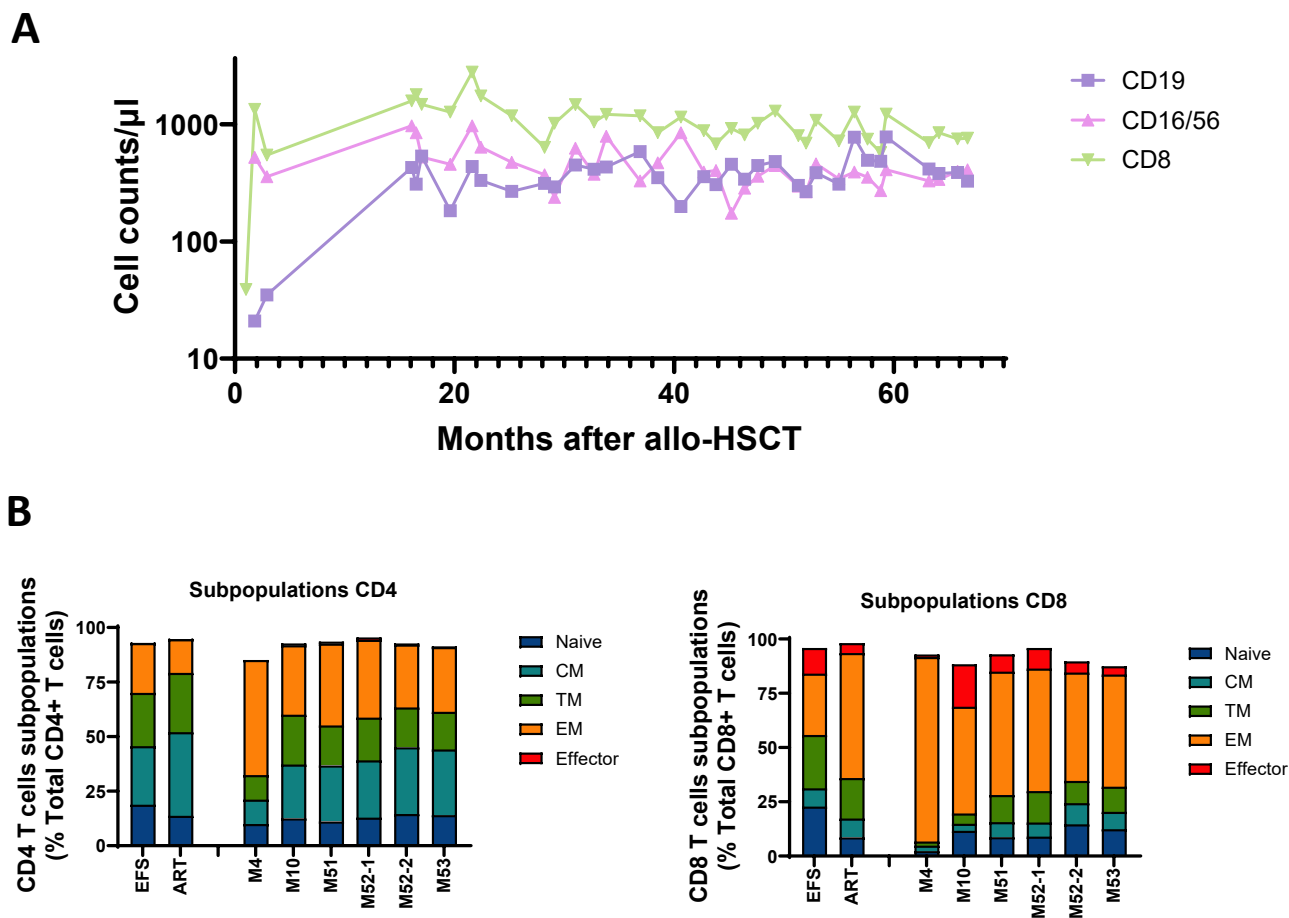


Figure S2. Immune reconstitution after allo-HSCT. (A) Reconstitution of B cells (CD19+), NK cells (CD16+/-CD56+/-) and CD8+ T cells following allogeneic-HSCT. (B) Distribution of CD4+ and CD8+ T cell subsets in PBMCs from Ic1s-34 at different times after allo-HSCT. Results from an unrelated blood donor (EFS) and one person on ART are provided for reference. CM; central memory; TM: transitional memory; EM: effector memory

Figure S3

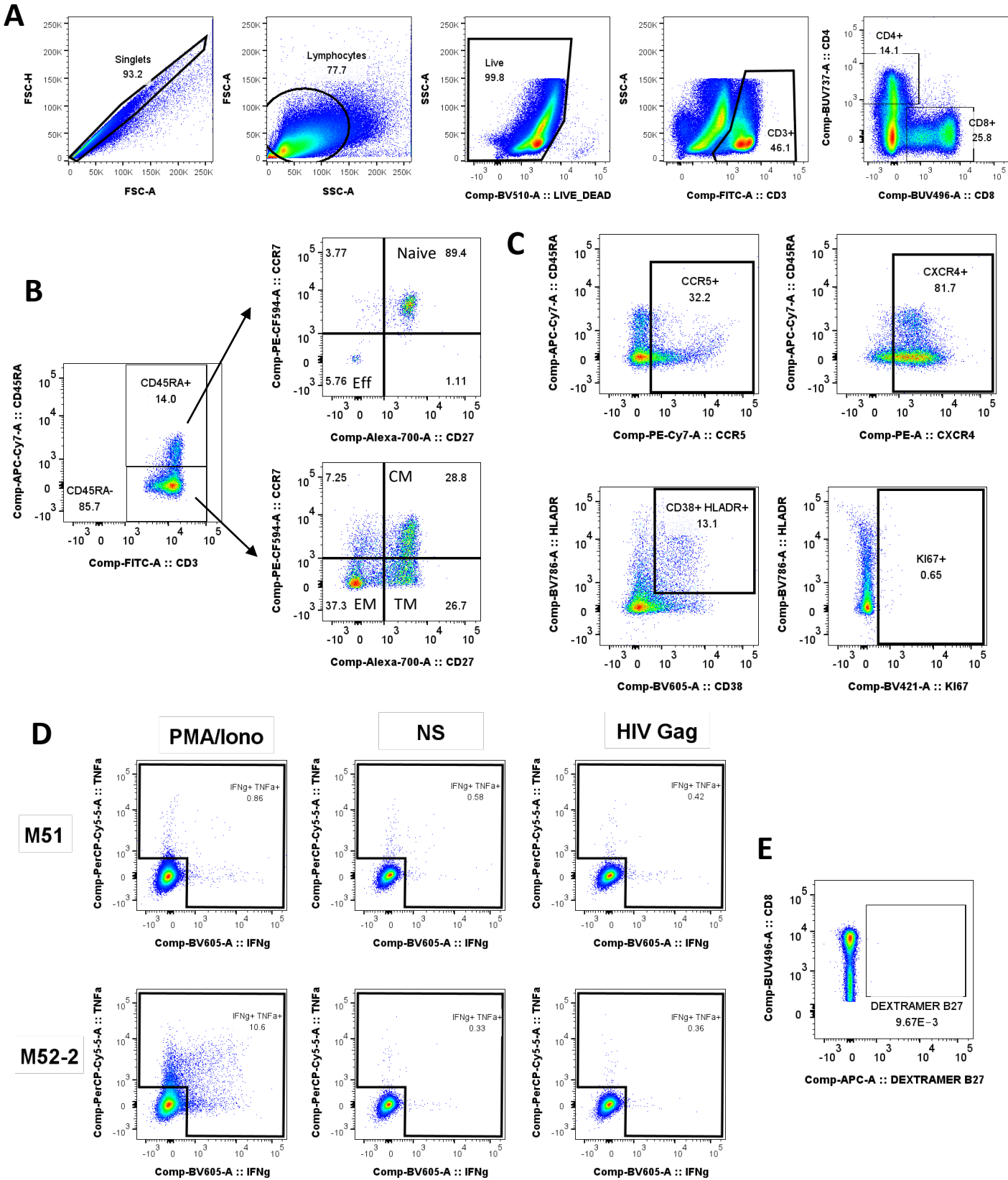
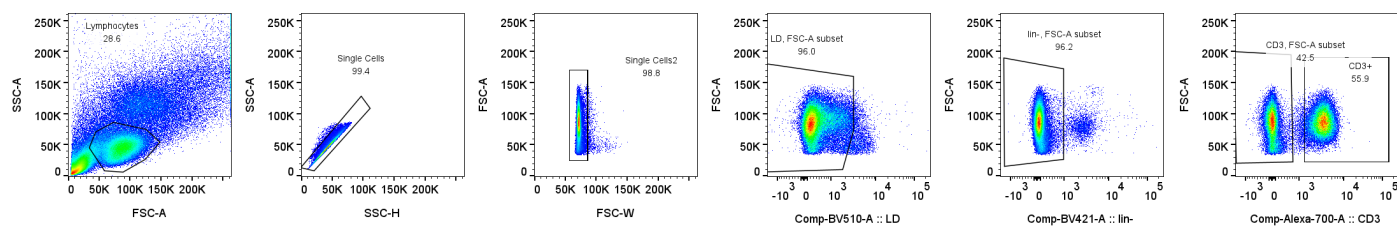


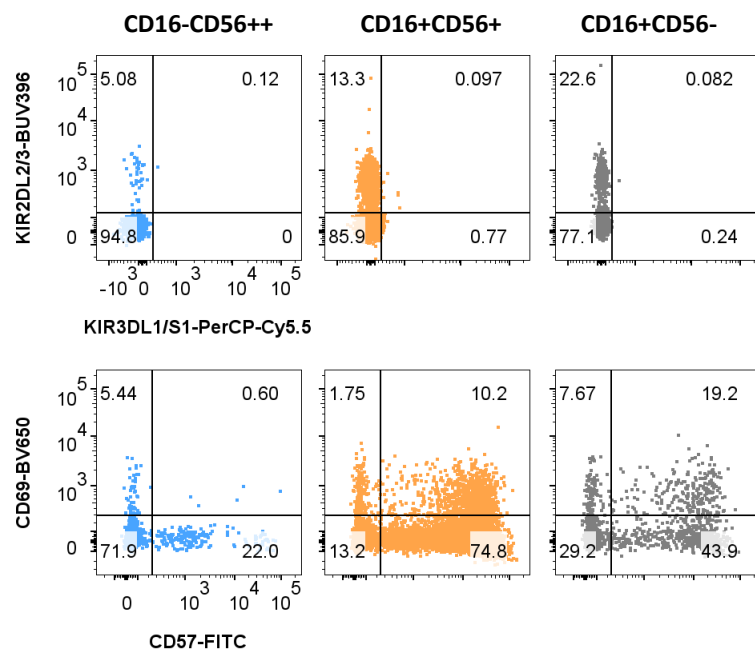
Figure S3. Flow cytometric gating strategy used to analyze the T cell phenotype and reactivity. (A) Gating strategy for the analysis of CD4+ and CD8+ T cells. **(B)** Strategy for the study of T cell differentiation: CM; central memory; TM: transitional memory; EM: effector memory. **(C)** Analysis of CCR5, CXCR4 expression and activation markers. **(D)** CD8+ T cells from IciS-34 (samples before and 4 weeks after discontinuation of ruxolitinb) producing IFN γ and/or TNF α without stimulation (NS) or after stimulation with PMA/Ionomycin or a pool of HIV Gag peptides. **(E)** Absence of CD8+ T cells labelled by HLA-B*27 KK10 dextramer.

Figure S4

A



B



C

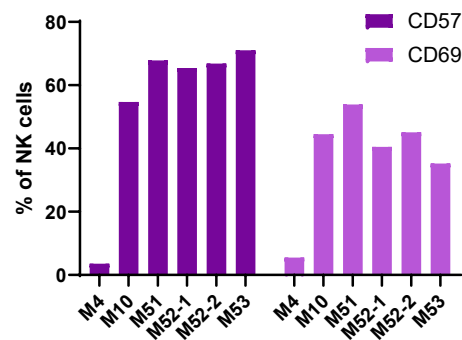


Figure S4. Flow cytometric gating strategy used to analyze NK cell phenotype. (A) Gating strategy for the analysis of NK cells. **(B)** Expression of Expression of KIR2DL2/3 and/or KIR3DL1/S1 and CD69 and/or CD57 in the three NK cell subsets from the person on ART depicted in Figure 6. **(C)** Proportion of NK cells expressing CD57 or CD69 at different timepoints after allo-HSCT.