Supplementary Table 1. Characteristics of the Never off Antivirals Group.

Median Age (Range)		49 (19-66)
Recipient VZV Seropositive (%)[1]		140 (97)
Donor VZV Seropositive (%)[1]		133 (98)
VZV Prophylaxis Drug (%)	Acyclovir	196 (70)
	Valacyclovir	82 (29)
	Famciclovir	2 (1)
Underlying Disease (%)	Acute Leukemia	149 (53)
	MDS	33 (12)
	CLL/Lymphoma	51 (18)
	CML	16 (6)
	Other	31 (11)
Donor (%)[2]	Sibling	133 (48)
	MUD	104 (37)
	MMUD	40 (14)
	Haploidentical	3 (1)
Stem Cell Source (%)	Peripheral Blood	252 (90)
	Bone Marrow	20 (7)
	Umbilical Cord	8 (3)
Conditioning (%)	FluBuATG	102 (36)
	FluBuATG + TBI	161 (58)
	Other[3]	17 (6)
GVHD Prophylaxis after HCT (%)	CSA+MTX	269 (96)
	Other[4]	11 (4)
Acute GVHD (%)	None	147 (53)
	I	57 (20)
	II	28 (10)
	III	36 (13)
	IV	12 (4)
Chronic GVHD (%)	None	211 (75)

	No Systemic Rx	7 (3)
	Systemic Rx	62 (22)
Significant GVHD[5]	No	142 (51)
	Yes	138 (49)

[1] VZV serostatus available for 144 recipients and 136 donors.

[2] Sibling = HLA matched sibling; MUD = 8/8 allele matched unrelated donor; MMUD (mismatched unrelated donor) included 6-7/8 allele matched unrelated donors.

[3] Other conditioning regimens included cyclophosphamide 200 mg/m2 plus ATG 4.5 mg/kg with or without TBI (n=6) and myeloablative conditioning composed of combinations of melphalan, fludarabine, etoposide or busulfan with ATG (n=5) or cyclophosphamide, etoposide or busulfan without ATG (n=6).

[4] Other includes cyclosporine alone (n=7), unknown (n=3) or cyclosporine plus corticosteroids (n=1).

[5] Refers to grades 2-4 acute GVHD and chronic GVHD requiring immunosuppression.

Supplementary Table 2. Reasons for ending follow-up in the Never off Antivirals group.

Reason for End of Follow-up	N (%)
Death[1]	113 (40)
Relapse	101 (36)
Last clinic visit[2]	40 (14)
Graft Failure	18 (7)
Second Malignancy	4 (1.5)
VZV Disease	4 (1.5)

[1] Underlying cause of death is infection (n=27), infection/GVHD (n=23), unknown (n=22), acute respiratory distress syndrome (n=11), post-transplant lymphoproliferative disorder (n=7), relapse of underlying disease (n=6), multi-organ failure (n=4), cirrhosis (n=2), intracranial hemorrhage (n=2), leukoencephalopathy (n=2), sinusoidal obstruction syndrome (n=2), graft failure (n=1), myelopathy (n=1), myocarditis (n=1), second malignancy (n=1) and thrombotic microangiopathy (n=1).

[2] Patients remained on VZV prophylaxis at last clinic visit due to ongoing immunosuppression for chronic GVHD (n=21), moved or returned to different centre for follow-up (n=9), lost to follow-up (n=5), unknown reason (n=3), ongoing IVIG therapy precluding vaccine (n=1) and refusal of vaccine (n=1).

Supplementary Table 3. Numbers of Patients Treated with Each Strategy and 5 year Cumulative Incidence of VZV Disease and PHN by Year of HCT.

Year of HCT	N New Strategy (%)	N Old Strategy (%)	N Never off Antiviral (%)	5 year CI VZV %	5 year CI PHN %
2003	2 (3)	31 (45)	36 (52)	19	4
2004	2 (3)	26 (46)	29 (51)	11	2
2005	1 (2)	30 (53)	25 (45)	23	5
2006	9 (15)	24 (40)	27 (45)	15	2
2007	20 (36)	12 (22)	23 (42)	11	7
2008	27 (35)	15 (19)	36 (46)	18	1
2009	16 (29)	8 (15)	30 (56)	7	0
2010	24 (34)	7 (10)	39 (56)	10	1
2011	24 (41)	0 (0)	35 (59)	12	0