Table S3.1

CD3 cells distribution for Vag Biopsy FBS/DMSO specimen comparing BV positive vs negative

Characteristic	Expected Max N	Missing	N	BV Positive	BV Negative
CD3-	197	3	194	60	134
CD4_ofCD45	197	23	174	50	124
Treg_of CD3	197	147	50	15	35
Treg_of CD4	197	147	50	15	35
Treg_ofCD45	197	147	50	15	35
Tconv_of CD3	197	40	157	42	115
Tconv_of CD45	197	40	157	42	115
CD8_of CD45	197	25	172	49	123

A regression model estimating the association of BV status (Positive vs Negative) with CD3 cells' concentration from Vag Biopsy FBS/DMSO specimen, adjusted for hormonal contraceptive use, semen exposure, HIV exposure, and HSV2 status

CD3 cells	Overall	BV Negative	BV Positive	Unadjusted Beta	Unadjusted p-value	Adjusted Beta	Adjusted p-value
live CD45+	0.88 (0.30, 1.99)	0.89 (0.36, 2.07)	0.75 (0.13, 1.75)	-0.19	0.158	-0.21	0.1762
CD3+	78 (64, 88)	77 (63, 87)	83 (70, 89)	4.1	0.0878	4.87	0.0485
CD3-	20 (11, 35)	22 (12, 35)	17 (11, 31)	-3.15	0.1591	-3.79	0.1019
CD4_ofCD45	32 (22, 42)	34 (24, 42)	29 (22, 41)	-3	0.24	-2.77	0.3027

Treg_of CD3	1.75 (1.04, 2.85)	1.82 (1.18, 3.17)	1.66 (0.95, 2.40)	-0.49	0.2534	-0.57	0.0934
Treg_of CD4	3.64 (2.01, 5.54)	3.89 (2.23, 6.48)	3.57 (1.83, 4.73)	-0.64	0.4261	-0.79	0.2904
Treg_ofCD45	1.56 (0.90, 2.26)	1.56 (0.99, 2.52)	1.41 (0.81, 2.02)	-0.34	0.317	-0.47	0.1427
Tconv_of CD3	40 (29, 53)	44 (32, 54)	32 (24, 47)	-7.3	0.0322	-7.96	0.018
Tconv_of CD45	30 (21, 39)	31 (22, 40)	27 (21, 36)	-2.8	0.2631	-2.86	0.2282
CD8_of CD45	32 (21, 45)	30 (19, 42)	38 (25, 55)	8.5	0.0037	8.51	0.0041

Table S3.2

CD3 cells distribution for EctoCx Biopsy FBS/DMSO specimen comparing BV positive vs negative

Characteristic	Expected Max N	Missing	N	BV Positive	BV Negative
CD3-	197	1	196	59	137
CD4_ofCD45	197	19	178	52	126
Treg_of CD3	197	140	57	16	41
Treg_of CD4	197	140	57	16	41
Treg_ofCD45	197	140	57	16	41
Tconv_of CD3	197	31	166	47	119
Tconv_of CD45	197	31	166	47	119
CD8_of CD45	197	18	179	53	126

A regression model estimating the association of BV status (Positive vs Negative) with CD3 cells' concentration from EctoCx Biopsy FBS/DMSO specimen, adjusted for hormonal contraceptive use, semen exposure, HIV exposure, and HSV2 status

CD3 cells	Overall	BV Negative	BV Positive	Unadjusted Beta	Unadjusted p-value	Adjusted Beta	Adjusted p-value
live CD45+	1.1 (0.3, 2.9)	1.1 (0.3, 2.6)	1.0 (0.2, 3.0)	0	1	-0.02	0.9361
CD3+	76 (67, 83)	77 (67, 83)	75 (68, 84)	0.3	0.8829	0.31	0.886
CD3-	23 (16, 31)	23 (16, 32)	24 (15, 31)	-0.3	0.8778	-0.3	0.881
CD4_ofCD45	38 (29, 45)	38 (29, 45)	39 (29, 45)	0.9	0.6813	0.74	0.7499

Treg_of CD3	1.65 (1.16, 2.60)	1.65 (1.11, 2.56)	1.54 (1.17, 3.40)	0.1	0.7601	0.03	0.946
Treg_of CD4	3.09 (2.24, 5.38)	3.09 (2.65, 4.86)	2.94 (1.83, 6.74)	-0.19	0.7523	-0.2	0.7809
Treg_ofCD45	1.30 (0.95, 2.19)	1.29 (0.93, 1.99)	1.34 (0.97, 2.55)	0.1	0.7112	0.05	0.8837
Tconv_of CD3	46 (35, 57)	47 (36, 55)	46 (35, 57)	-0.1	0.971	-0.2	0.948
Tconv_of CD45	35 (26, 42)	35 (26, 42)	36 (26, 42)	0.6	0.768	0.36	0.8724
CD8_of CD45	26 (19, 36)	27 (20, 38)	25 (18, 35)	-2.2	0.3118	-2.48	0.2919

Table S3.3

CD3 cells distribution for PBMC ACD specimen comparing BV positive vs negative

Characteristic	Expected Max N	Missing	N	BV Positive	BV Negative
CD3-	200	0	200	60	140
CD4_ofCD45	200	0	200	60	140
Treg_of CD3	200	1	199	59	140
Treg_of CD4	200	1	199	59	140
Treg_ofCD45	200	1	199	59	140
Tconv_of CD3	200	0	200	60	140
Tconv_of CD45	200	0	200	60	140
CD8_of CD45	200	0	200	60	140

A regression model estimating the association of BV status (Positive vs Negative) with CD3 cells' concentration from PBMC ACD specimen, adjusted for hormonal contraceptive use

CD3 cells	Overall	BV Negative	BV Positive	Unadjusted Beta	Unadjusted p-value	Adjusted Beta	Adjusted p-value
live CD45+	93 (90, 95)	93 (91, 95)	93 (87, 95)	-0.8	0.1411	-0.6	0.2906
CD3+	74 (67, 78)	73 (67, 78)	75 (68, 80)	2.1	0.1137	1.9	0.1787
CD3-	26 (21, 33)	27 (22, 33)	25 (19, 32)	-2.1	0.1063	-1.9	0.1814
CD4_ofCD45	45 (40, 50)	45 (40, 50)	45 (41, 50)	0.7	0.5952	0.7	0.6028

Treg_of CD3	1.22 (0.95, 1.57)	1.21 (0.94, 1.55)	1.28 (0.99, 1.65)	0.06	0.464	0.04	0.6378
Treg_of CD4	1.99 (1.52, 2.53)	1.95 (1.51, 2.46)	2.04 (1.57, 2.61)	0.11	0.4031	0.08	0.5821
Treg_ofCD45	0.89 (0.66, 1.18)	0.88 (0.63, 1.12)	0.97 (0.75, 1.22)	0.07	0.2777	0.06	0.3751
Tconv_of CD3	59 (55, 66)	59 (55, 66)	60 (55, 64)	-0.6	0.6361	-0.66	0.6261
Tconv_of CD45	43 (38, 48)	43 (38, 48)	43 (39, 48)	0.6	0.6319	0.65	0.615
CD8_of CD45	21.1 (17.6, 25.3)	20.3 (17.5, 25.1)	22.0 (17.9, 26.0)	0.8	0.3869	0.8	0.4181

Table S3.4

CD8+ T cells distribution for Vag Biopsy FBS/DMSO specimen comparing BV positive vs negative

Characteristic	Expected Max N	Missing	N	BV Positive	BV Negative
CD8+ CD4-	191	16	175	50	125
CCR5+ CD8+	175	18	157	45	112
CCR6+ CD8+	175	19	156	45	111
CCR7+ CD45RA+ CD8+	175	19	156	45	111
CCR7+ CD45RA- CD8+	175	19	156	45	111
CCR7- CD45RA+ CD8+	175	19	156	45	111
CCR7- CD45RA- CD8+	175	19	156	45	111
CD25+ CD8+	175	19	156	45	111
CD38+ CD8+	175	19	156	45	111
CD39+ CD8+	175	19	156	45	111
CD101+ CD8+	175	19	156	45	111
CD103+ CD69+ CD8+	175	19	156	45	111

CD103+ CD69· CD8+	175	19	156	45	111
CD103- CD69+ CD8+	175	19	156	45	111
CD103- CD69- CD8+	175	19	156	45	111
CD161+ CD8+	175	19	156	45	111
CCR7+ CD45RA+ CD8+	156	39	117	36	81
CCR7+ CD45RA- CD8+	156	39	117	36	81
CCR7- CD45RA+ CD8+	156	39	117	36	81
CCR7- CD45RA- CD8+	156	39	117	36	81
CD161+ CCR6+ CD8+	175	19	156	45	111
CCR7+ CD45RA+ CD8+	156	119	37	13	24
CCR7+ CD45RA- CD8+	156	119	37	13	24

CCR7- CD45RA+ CD8+	156	119	37	13	24
CCR7- CD45RA- CD8+	156	119	37	13	24
CXCR3+ CD8+	175	19	156	45	111
GrzB+ CD8+	175	19	156	45	111
HLA-DR+ CD8+	175	19	156	45	111
HLA-DR+ CD38+ CD8+	175	19	156	45	111
Ki67+ CD8+	175	111	64	16	48
PD-1+ CD8+	175	19	156	45	111
PD-1+ TCF-1- CD8+	175	19	156	45	111
Tbet+ CD8+	175	19	156	45	111
TCF1+ CD8+	175	19	156	45	111

A regression model estimating the association of BV status (Positive vs Negative) with CD8+ T cells' concentration from Vag Biopsy FBS/DMSO specimen, adjusted for hormonal contraceptive use, semen exposure, HIV exposure, and HSV2 status

CD8 cells	Overall	BV Negative	BV Positive	Unadjusted Beta	Unadjusted p-value	Adjusted Beta	Adjusted p-value
CD8+ CD4-	40 (31, 56)	38 (28, 54)	44 (35, 63)	7.89	0.0109	8.43	0.0075
CCR5+ CD8+	86 (65, 94)	85 (59, 94)	87 (76, 95)	2.8	0.2372	2.65	0.293

CCR6+ CD8+	4.9 (2.4, 7.8)	5.2 (3.1, 7.8)	4.1 (2.2, 6.4)	-0.79	0.2232	-0.71	0.3104
CCR7+ CD45RA+ CD8+	5 (2, 15)	5 (2, 16)	5 (2, 12)	-0.35	0.718	-0.26	0.8133
CCR7+ CD45RA- CD8+	9 (5, 14)	9 (6, 13)	9 (5, 16)	0.34	0.7391	0.53	0.6354
CCR7- CD45RA+ CD8+	21 (11, 30)	22 (11, 31)	18 (11, 28)	-1.8	0.466	-1.92	0.4559
CCR7- CD45RA- CD8+	59 (43, 73)	57 (43, 72)	61 (43, 76)	2.9	0.4631	3.35	0.4124
CD25+ CD8+	0.9 (0.2, 2.7)	1.1 (0.3, 2.7)	0.7 (0.0, 2.9)	-0.13	0.5192	-0.18	0.4349
CD38+ CD8+	3.9 (1.5, 8.2)	4.8 (1.6, 8.2)	2.1 (1.1, 7.5)	-1.04	0.131	-1.09	0.1273
CD39+ CD8+	7 (3, 16)	7 (2, 17)	9 (3, 15)	0.79	0.5291	1.06	0.4582
CD101+ CD8+	54 (34, 72)	52 (31, 70)	61 (44, 75)	6.8	0.1258	6.73	0.1446
CD103+ CD69+ CD8+	64 (32, 80)	62 (29, 77)	69 (43, 83)	6.2	0.1824	7.72	0.1149
CD103+ CD69- CD8+	0.94 (0.33, 2.05)	0.92 (0.35, 2.32)	0.97 (0.34, 1.54)	0	1	-0.09	0.6368
CD103- CD69+ CD8+	11 (5, 20)	11 (5, 22)	11 (6, 18)	-0.41	0.807	-0.6	0.7188
CD103- CD69- CD8+	14 (5, 53)	19 (5, 54)	12 (5, 26)	-3.18	0.2812	-3.93	0.215
CD161+ CD8+	30 (21, 40)	29 (20, 41)	32 (25, 39)	1.5	0.582	3.4	0.1979

CD161+CCR7+ CD45RA+ CD8+	3 (1, 7)	3 (1, 7)	3 (1, 7)	0	1	0.13	0.8703
CD161+CCR7+ CD45RA- CD8+	10 (6, 19)	10 (5, 16)	14 (7, 21)	2.88	0.0979	3.58	0.0441
CD161+CCR7- CD45RA+ CD8+	14 (6, 23)	16 (6, 25)	13 (7, 19)	-1.05	0.6253	-1.46	0.4833
CD161+CCR7- CD45RA- CD8+	67 (55, 80)	67 (56, 81)	68 (54, 78)	-0.5	0.8837	0.11	0.9757
CD161+ CCR6+ CD8+	4.0 (1.9, 6.9)	4.1 (1.9, 6.6)	3.8 (2.1, 7.5)	0.24	0.6612	0.29	0.6202
CD161+ CCR6+ CCR7+ CD45RA+ CD8+	3.1 (0.9, 7.3)	1.6 (0.0, 7.2)	4.8 (3.0, 8.1)	2.5	0.0275	2.31	0.0781
CD161+ CCR6+ CCR7+ CD45RA- CD8+	21 (10, 32)	18 (9, 31)	23 (19, 32)	7.3	0.2104	10.87	0.0587
CD161+ CCR6+ CCR7- CD45RA+ CD8+	6 (3, 12)	6 (3, 13)	7 (3, 12)	1.14	0.6813	-1.45	0.6487

CD161+ CCR6+ CCR7- CD45RA- CD8+	62 (46, 78)	66 (54, 79)	55 (39, 68)	-11.01	0.1315	-8.69	0.2353
CXCR3+ CD8+	82 (55, 90)	82 (54, 89)	84 (58, 93)	3.5	0.2365	3.48	0.2812
GrzB+ CD8+	19 (10, 30)	21 (12, 30)	18 (8, 25)	-3	0.1913	-2.48	0.3051
HLA-DR+ CD8+	25 (16, 37)	25 (17, 38)	23 (13, 32)	-4.3	0.1159	-4.78	0.1088
HLA-DR+ CD38+ CD8+	1.7 (0.6, 4.6)	2.0 (0.7, 5.0)	0.9 (0.0, 3.3)	-0.68	0.059	-0.92	0.0309
Ki67+ CD8+	4 (2, 6)	4 (2, 6)	5 (3, 7)	0.7	0.4776	0.81	0.3798
PD-1+ CD8+	47 (28, 60)	46 (26, 59)	50 (35, 63)	6.4	0.116	5.95	0.1865
PD-1+ TCF-1- CD8+	36 (22, 48)	36 (20, 49)	35 (28, 46)	0.5	0.8903	-0.23	0.9535
Tbet+ CD8+	14 (6, 23)	15 (7, 22)	12 (5, 26)	-0.4	0.8399	-0.77	0.7208
TCF1+ CD8+	25 (14, 39)	25 (13, 39)	24 (16, 36)	-0.2	0.946	-0.37	0.9046

Table S3.5

CD8+ T cells distribution for EctoCx Biopsy FBS/DMSO specimen comparing BV positive vs negative

Characteristic	Expected Max N	Missing	N	BV Positive	BV Negative
CD8+ CD4-	194	14	180	53	127
CCR5+ CD8+	180	19	161	46	115
CCR6+ CD8+	180	19	161	46	115
CCR7+ CD45RA+ CD8+	180	19	161	46	115
CCR7+ CD45RA- CD8+	180	19	161	46	115
CCR7- CD45RA+ CD8+	180	19	161	46	115
CCR7- CD45RA- CD8+	180	19	161	46	115
CD25+ CD8+	180	19	161	46	115
CD38+ CD8+	180	19	161	46	115
CD39+ CD8+	180	19	161	46	115
CD101+ CD8+	180	19	161	46	115
CD103+ CD69+ CD8+	180	19	161	46	115

CD103+ CD69- CD8+	180	19	161	46	115
CD103- CD69+ CD8+	180	19	161	46	115
CD103- CD69- CD8+	180	19	161	46	115
CD161+ CD8+	180	19	161	46	115
CCR7+ CD45RA+ CD8+	161	54	107	34	73
CCR7+ CD45RA- CD8+	161	54	107	34	73
CCR7- CD45RA+ CD8+	161	54	107	34	73
CCR7- CD45RA- CD8+	161	54	107	34	73
CD161+ CCR6+ CD8+	180	20	160	46	114
CCR7+ CD45RA+ CD8+	160	126	34	12	22
CCR7+ CD45RA- CD8+	160	126	34	12	22
CCR7- CD45RA+ CD8+	160	126	34	12	22

CCR7- CD45RA- CD8+	160	126	34	12	22
CXCR3+ CD8+	180	19	161	46	115
GrzB+ CD8+	180	19	161	46	115
HLA-DR+ CD8+	180	19	161	46	115
HLA-DR+ CD38+ CD8+	180	19	161	46	115
Ki67+ CD8+	180	115	65	15	50
PD-1+ CD8+	180	19	161	46	115
PD-1+ TCF-1- CD8+	180	19	161	46	115
Tbet+ CD8+	180	19	161	46	115
TCF1+ CD8+	180	19	161	46	115

A regression model estimating the association of BV status (Positive vs Negative) with CD8+ T cells' concentration from EctoCx Biopsy FBS/DMSO specimen, adjusted for hormonal contraceptive use, semen exposure, HIV exposure, and HSV2 status

CD8+ cells	Overall	BV Negative	BV Positive	Unadjusted Beta	Unadjusted p-value	Adjusted Beta	Adjusted p-value
CD8+ CD4-	36 (27, 48)	38 (28, 48)	35 (26, 42)	-3.2	0.2086	-3.58	0.1814
CCR5+ CD8+	78 (45, 92)	78 (48, 91)	80 (41, 94)	2.3	0.4869	1.98	0.5802
CCR6+ CD8+	4.7 (2.4, 8.0)	4.8 (2.7, 7.9)	3.5 (1.8, 8.0)	-0.71	0.2569	-1	0.1515
CCR7+ CD45RA+ CD8+	9 (3, 28)	9 (4, 26)	6 (2, 27)	-1.72	0.2804	-1.78	0.2926

CCR7+ CD45RA- CD8+	9 (6, 13)	8 (6, 13)	9 (5, 12)	-0.31	0.7439	0.11	0.9128
CCR7- CD45RA+ CD8+	22 (14, 30)	23 (15, 30)	22 (13, 27)	-1.4	0.5027	-1.67	0.4719
CCR7- CD45RA- CD8+	53 (35, 68)	53 (35, 66)	56 (35, 73)	4.1	0.3064	3.95	0.356
CD25+ CD8+	1.0 (0.1, 2.4)	1.1 (0.1, 2.5)	0.9 (0.3, 2.0)	0	1	-0.04	0.8477
CD38+ CD8+	10 (5, 16)	10 (4, 15)	10 (5, 17)	-0.1	0.9408	0.1	0.9417
CD39+ CD8+	8 (3, 15)	8 (3, 15)	8 (3, 15)	-0.19	0.8718	-1.3	0.316
CD101+ CD8+	47 (30, 67)	45 (27, 65)	50 (33, 68)	4.8	0.2867	4.65	0.3096
CD103+ CD69+ CD8+	41 (20, 62)	40 (20, 62)	43 (16, 62)	0.08	0.9866	0.81	0.8799
CD103+ CD69- CD8+	1.03 (0.28, 2.56)	0.89 (0.19, 2.48)	1.26 (0.50, 2.69)	0.34	0.1093	0.28	0.2094
CD103- CD69+ CD8+	15 (6, 26)	14 (5, 27)	15 (7, 26)	0.2	0.9277	0.77	0.7459
CD103- CD69- CD8+	28 (9, 70)	31 (9, 70)	22 (9, 69)	-0.64	0.8747	-0.85	0.8501
CD161+ CD8+	26 (17, 37)	26 (17, 39)	28 (17, 37)	-0.8	0.7511	0.7	0.7952
CD161+CCR7 + CD45RA+ CD8+	5 (2, 16)	6 (2, 14)	4 (2, 22)	-0.36	0.7727	-0.53	0.6999
CD161+CCR7 + CD45RA- CD8+	10 (6, 15)	10 (7, 15)	9 (6, 15)	-0.9	0.4937	-0.17	0.9054

CD161+CCR7- CD45RA+ CD8+	16 (8, 24)	18 (10, 23)	14 (7, 26)	-2.01	0.3775	-2.31	0.3335
CD161+CCR7- CD45RA- CD8+	62 (45, 73)	61 (44, 71)	65 (46, 75)	3.4	0.4159	3.75	0.4043
CD161+ CCR6+ CD8+	3.0 (1.8, 6.0)	3.2 (2.0, 6.0)	2.3 (1.1, 5.9)	-0.75	0.086	-0.94	0.057
CD161+ CCR6+ CCR7+ CD45RA+ CD8+	4.1 (1.7, 10.0)	4.1 (2.7, 6.7)	5.5 (1.0, 11.6)	0.56	0.7848	3.91	0.185
CD161+ CCR6+ CCR7+ CD45RA- CD8+	15 (10, 31)	12 (10, 32)	18 (14, 27)	3.73	0.4388	0.56	0.9352
CD161+ CCR6+ CCR7- CD45RA+ CD8+	10 (2, 17)	9 (1, 16)	12 (5, 17)	1.4	0.6519	6.25	0.128
CD161+ CCR6+ CCR7- CD45RA- CD8+	63 (49, 75)	61 (54, 77)	65 (46, 71)	-4.18	0.6001	-4.41	0.66
CXCR3+ CD8+	72 (51, 86)	72 (55, 85)	72 (47, 88)	-1	0.7923	-0.43	0.9175
GrzB+ CD8+	24 (16, 34)	24 (16, 33)	25 (18, 36)	2	0.4149	2.91	0.2817
HLA-DR+ CD8+	33 (20, 47)	33 (20, 48)	29 (21, 45)	-0.7	0.8277	-1.2	0.728

HLA-DR+ CD38+ CD8+	4 (2, 9)	4 (3, 9)	4 (2, 8)	-0.85	0.2239	-0.78	0.2893
Ki67+ CD8+	3.4 (1.7, 6.6)	3.4 (1.6, 6.4)	3.8 (2.1, 7.1)	0.41	0.6721	-0.82	0.2319
PD-1+ CD8+	39 (20, 57)	38 (20, 58)	42 (22, 55)	-0.1	0.98	0.91	0.83
PD-1+ TCF-1- CD8+	31 (15, 49)	31 (15, 50)	30 (14, 48)	-2.5	0.4713	-1.79	0.6218
Tbet+ CD8+	17 (8, 31)	17 (9, 29)	18 (7, 33)	0.7	0.7688	1.21	0.6506
TCF1+ CD8+	29 (14, 43)	28 (14, 42)	32 (19, 47)	3.7	0.2543	4.34	0.2462

Table S3.6

CD8+ T cells distribution for PBMC ACD specimen comparing BV positive vs negative

Characteristic	Expected Max N	Missing	N	BV Positive	BV Negative
CD8+ CD4-	200	0	200	60	140
CCR5+ CD8+	200	0	200	60	140
CCR6+ CD8+	200	0	200	60	140
CCR7+ CD45RA+ CD8+	200	0	200	60	140
CCR7+ CD45RA- CD8+	200	0	200	60	140
CCR7- CD45RA+ CD8+	200	0	200	60	140
CCR7- CD45RA- CD8+	200	0	200	60	140
CD25+ CD8+	200	0	200	60	140
CD38+ CD8+	200	0	200	60	140
CD39+ CD8+	200	0	200	60	140
CD101+ CD8+	200	0	200	60	140
CD103+ CD69+ CD8+	200	0	200	60	140

CD103+ CD69- CD8+	200	0	200	60	140
CD103- CD69+ CD8+	200	0	200	60	140
CD103- CD69- CD8+	200	0	200	60	140
CD161+ CD8+	200	0	200	60	140
CCR7+ CD45RA+ CD8+	200	0	200	60	140
CCR7+ CD45RA- CD8+	200	0	200	60	140
CCR7- CD45RA+ CD8+	200	0	200	60	140
CCR7- CD45RA- CD8+	200	0	200	60	140
CD161+ CCR6+ CD8+	200	0	200	60	140
CCR7+ CD45RA+ CD8+	200	0	200	60	140
CCR7+ CD45RA- CD8+	200	0	200	60	140
CCR7- CD45RA+ CD8+	200	0	200	60	140

CCR7-CD45RA-CD8+	200	0	200	60	140
CXCR3+ CD8+	200	0	200	60	140
GrzB+ CD8+	200	0	200	60	140
HLA-DR+ CD8+	200	0	200	60	140
HLA-DR+ CD38+ CD8+	200	0	200	60	140
Ki67+ CD8+	200	120	80	22	58
PD-1+ CD8+	200	0	200	60	140
PD-1+ TCF-1- CD8+	200	0	200	60	140
Tbet+ CD8+	200	0	200	60	140
TCF1+ CD8+	200	0	200	60	140

A regression model estimating the association of BV status (Positive vs Negative) with CD8+ T cells' concentration from PBMC ACD specimen, adjusted for hormonal contraceptive use

CD8_cells	Overall	BV Negative	BV Positive	Unadjusted Beta	Unadjusted p-value	Adjusted Beta	Adjusted p-value
CD8+ CD4-	30 (25, 35)	30 (25, 35)	30 (25, 34)	0.3	0.7841	0.4	0.7249
CCR5+ CD8+	23 (15, 32)	22 (15, 31)	26 (16, 34)	2.7	0.1417	2.6	0.1878
CCR6+ CD8+	2.36 (1.46, 3.54)	2.56 (1.49, 3.72)	2.27 (1.36, 3.16)	-0.27	0.2365	-0.32	0.1928
CCR7+ CD45RA+ CD8+	40 (31, 52)	40 (31, 50)	42 (31, 53)	2.5	0.3146	2.4	0.3453

Marker							
CCR7+ CD45RA- CD8+	4.1 (2.5, 6.0)	4.1 (2.5, 6.0)	3.8 (2.5, 6.1)	0.01	0.9781	0.04	0.9281
CCR7- CD45RA+ CD8+	33 (25, 41)	33 (26, 41)	32 (24, 42)	-0.4	0.8417	-0.5	0.8059
CCR7- CD45RA- CD8+	18 (14, 25)	18 (14, 27)	19 (14, 23)	-1.3	0.3527	-1.4	0.3663
CD25+ CD8+	0.06 (0.02, 0.25)	0.07 (0.02, 0.25)	0.05 (0.02, 0.21)	0	0.8899	0	0.7499
CD38+ CD8+	8.3 (4.7, 11.8)	7.8 (4.9, 11.4)	8.6 (4.2, 13.3)	0.4	0.5813	0.84	0.2629
CD39+ CD8+	1.29 (0.75, 1.89)	1.26 (0.75, 1.82)	1.38 (0.76, 1.93)	0.11	0.3974	0.1	0.4378
CD101+ CD8+	29 (18, 42)	29 (17, 39)	30 (18, 46)	2.3	0.3957	2.6	0.3338
CD103+ CD69+ CD8+	0.05 (0.03, 0.09)	0.06 (0.03, 0.09)	0.05 (0.03, 0.09)	0	0.4159	-0.01	0.2747
CD103+ CD69- CD8+	1.99 (1.38, 2.77)	2.07 (1.43, 2.77)	1.84 (1.29, 2.57)	-0.2	0.2051	-0.2	0.2092
CD103- CD69+ CD8+	1.23 (0.84, 1.73)	1.25 (0.88, 1.70)	1.14 (0.76, 1.77)	-0.08	0.4262	-0.12	0.2313
CD103- CD69- CD8+	96.50 (95.58, 97.40)	96.40 (95.50, 97.30)	96.75 (95.78, 97.63)	0.3	0.278	0.35	0.1304
CD161+ CD8+	13 (9, 20)	13 (9, 21)	14 (8, 17)	-0.97	0.4512	-0.42	0.7411
CD161+CCR7+ CD45RA+ CD8+	40 (29, 54)	39 (28, 52)	42 (30, 57)	2.36	0.3952	3.35	0.2162

Cell type	Col1	Col2	Col3	Est1	p1	Est2	p2
CD161+CCR7+ CD45RA- CD8+	5.1 (2.9, 7.6)	5.2 (3.2, 7.8)	4.5 (2.6, 7.1)	-0.73	0.1502	-0.55	0.2935
CD161+CCR7- CD45RA+ CD8+	25 (18, 34)	25 (18, 34)	26 (18, 35)	1	0.5973	0.4	0.83
CD161+CCR7- CD45RA- CD8+	24 (16, 34)	25 (17, 34)	21 (14, 30)	-2.6	0.1781	-3.35	0.1008
CD161+ CCR6+ CD8+	1.19 (0.71, 2.19)	1.11 (0.72, 2.29)	1.35 (0.71, 1.99)	0.02	0.8764	0.02	0.882
CD161+ CCR6+CCR7+ CD45RA+ CD8+	13 (7, 25)	13 (6, 24)	14 (8, 26)	1.87	0.2503	2.02	0.2309
CD161+ CCR6+CCR7+ CD45RA- CD8+	9 (6, 14)	9 (6, 14)	9 (5, 14)	0.2	0.8261	0.4	0.6746
CD161+ CCR6+CCR7- CD45RA+ CD8+	13 (8, 21)	13 (7, 22)	15 (9, 18)	0.97	0.4714	0.86	0.5346
CD161+ CCR6+CCR7- CD45RA- CD8+	57 (43, 70)	57 (45, 71)	57 (40, 66)	-2.9	0.3432	-3.26	0.2955
CXCR3+ CD8+	50 (26, 64)	49 (28, 63)	50 (12, 67)	-1.7	0.6499	-3.03	0.4241
GrzB+ CD8+	34 (21, 44)	34 (21, 45)	33 (22, 42)	-1.4	0.5748	-1	0.7095

HLA-DR+ CD8+	18 (12, 25)	17 (12, 25)	18 (14, 25)	0.9	0.5333	0.5	0.7211
HLA-DR+ CD38+ CD8+	2.66 (1.70, 3.89)	2.58 (1.72, 3.49)	2.78 (1.61, 4.65)	0.32	0.1884	0.34	0.1645
Ki67+ CD8+	0.69 (0.44, 1.08)	0.74 (0.44, 1.09)	0.63 (0.49, 0.96)	-0.04	0.7046	-0.03	0.7669
PD-1+ CD8+	6.7 (4.5, 10.6)	6.9 (4.5, 11.1)	6.3 (4.7, 10.1)	-0.42	0.5134	-0.58	0.3788
PD-1+ TCF-1- CD8+	3.9 (2.1, 6.7)	4.3 (2.3, 6.9)	3.2 (2.1, 5.9)	-0.53	0.2293	-0.62	0.1744
Tbet+ CD8+	38 (26, 47)	38 (25, 47)	38 (26, 47)	0.3	0.9054	1	0.7053
TCF1+ CD8+	55 (42, 69)	55 (42, 69)	59 (41, 70)	1.3	0.6532	1.2	0.6851

Table S3.7

Conventional T helper cells distribution for Vag Biopsy FBS/DMSO specimen comparing BV positive vs negative

Characteristic	Expected Max N	Missing	N	BV Positive	BV Negative
CD25- CD127-+	174	17	157	42	115
CCR5+ Tconv	157	2	155	40	115
CCR6+ Tconv	157	2	155	40	115
CCR7+ CD45RA+ Tconv	157	2	155	40	115
CCR7+ CD45RA- Tconv	157	2	155	40	115
CCR7- CD45RA+ Tconv	157	2	155	40	115
CCR7- CD45RA- Tconv	157	2	155	40	115
CD38+ Tconv	157	2	155	40	115
CD39+ Tconv	157	2	155	40	115
CD69+ Tconv	157	2	155	40	115
CD101+ Tconv	157	2	155	40	115
CD103+ CD69+ Tconv	157	2	155	40	115
CD103+ CD69- Tconv	157	2	155	40	115
CD103- CD69+ Tconv	157	2	155	40	115

CD103- CD69- Tconv	157	2	155	40	115
CTLA-4+ Tconv	157	2	155	40	115
CXCR3+ Tconv	157	2	155	40	115
GrzB+ Tconv	157	2	155	40	115
HLA-DR+ Tconv	157	2	155	40	115
HLA-DR+ CD38+ Tconv	157	2	155	40	115
Ki67+ Tconv	157	96	61	13	48
PD-1+ Tconv	157	2	155	40	115
PD-1+TCF-1- Tconv	157	2	155	40	115
TCF-1+ Tconv	157	2	155	40	115
Tbet+	157	2	155	40	115
CCR5+ Th1	155	119	36	11	25
CCR7+ CD45RA+ Th1	155	119	36	11	25
CCR7+ CD45RA- Th1	155	119	36	11	25
CCR7- CD45RA+ Th1	155	119	36	11	25
CCR7- CD45RA- Th1	155	119	36	11	25
CD38+ Th1	155	119	36	11	25
CD39+ Th1	155	119	36	11	25
CD101+ Th1	155	119	36	11	25
CD103+ CD69+ Th1	155	119	36	11	25
CD103+ CD69- Th1	155	119	36	11	25

CD103- CD69+ Th1	155	119	36	11	25
CD103- CD69- Th1	155	119	36	11	25
CTLA-4+ Th1	155	119	36	11	25
CXCR3+ Th1	155	119	36	11	25
GrzB+ Th1	155	119	36	11	25
HLA-DR+ Th1	155	119	36	11	25
HLA-DR+ CD38+ Th1	155	119	36	11	25
Ki67+ Th1	155	144	11	2	9
PD-1+ Th1	155	119	36	11	25
TCF-1+ Th1	155	119	36	11	25
CD161+ CCR6+	157	2	155	40	115
CCR5+ Th17	155	107	48	16	32
CCR7+ CD45RA+ Th17	155	107	48	16	32
CCR7+ CD45RA- Th17	155	107	48	16	32
CCR7- CD45RA+ Th17	155	107	48	16	32
CCR7- CD45RA- Th17	155	107	48	16	32
CD38+ Th17	155	107	48	16	32
CD39+ Th17	155	107	48	16	32
CD101+ Th17	155	107	48	16	32
CD103+ CD69+ Th17	155	107	48	16	32
CD103+ CD69- Th17	155	107	48	16	32

CD103- CD69+ Th17	155	107	48	16	32
CD103- CD69- Th17	155	107	48	16	32
CTLA-4+ Th17	155	107	48	16	32
CXCR3+ Th17	155	107	48	16	32
GrzB+ Th17	155	107	48	16	32
HLA-DR+ Th17	155	107	48	16	32
HLA-DR+ CD38+ Th17	155	107	48	16	32
Ki67+ Th17	155	137	18	4	14
PD-1+ Th17	155	107	48	16	32
TCF-1+ Th17	155	107	48	16	32

A regression model estimating the association of BV status (Positive vs Negative) with conventional T helper cells' concentration from Vag Biopsy FBS/DMSO specimen, adjusted for hormonal contraceptive use, semen exposure, HIV exposure, and HSV2 status

Tconv cells	Overall	BV Negative	BV Positive	Unadjusted Beta	Unadjusted p-value	Adjusted Beta	Adjusted p-value
CD25- CD127-+	91.0 (86.7, 94.4)	91.0 (86.3, 94.8)	91.1 (88.2, 93.6)	0	1	-0.07	0.9469
CCR5+ Tconv	81 (40, 93)	78 (37, 93)	87 (64, 93)	4.89	0.1859	4.98	0.2157
CCR6+ Tconv	14 (9, 18)	14 (8, 18)	15 (11, 18)	1.4	0.3467	1.44	0.2965
CCR7+ CD45RA+ Tconv	4 (1, 20)	5 (1, 24)	3 (1, 9)	-1.03	0.322	-0.98	0.3704
CCR7+ CD45RA- Tconv	15 (9, 21)	16 (9, 21)	15 (8, 20)	-0.8	0.638	-0.71	0.6831
CCR7- CD45RA+ Tconv	1.5 (0.5, 4.1)	1.5 (0.6, 4.6)	1.1 (0.2, 2.7)	-0.37	0.2492	-0.49	0.1559

CCR7- CD45RA- Tconv	76 (49, 87)	74 (49, 87)	79 (51, 88)	3.5	0.3163	3.77	0.3142
CD38+ Tconv	6 (2, 12)	7 (2, 13)	5 (1, 10)	-1.42	0.2104	-1.6	0.1862
CD39+ Tconv	19 (6, 41)	15 (5, 40)	30 (11, 44)	6.78	0.0166	6.63	0.0331
CD69+ Tconv	78 (20, 93)	72 (18, 91)	87 (59, 95)	7.4	0.063	7.5	0.0884
CD101+ Tconv	28 (12, 48)	27 (11, 44)	38 (20, 59)	9.7	0.0147	10.88	0.0118
CD103+ CD69+ Tconv	26 (9, 46)	24 (7, 43)	38 (20, 54)	11.98	0.0032	12.25	0.0061
CD103+ CD69- Tconv	0.05 (0.00, 0.54)	0.07 (0.00, 0.63)	0.00 (0.00, 0.44)	0	1	0	1
CD103- CD69+ Tconv	30 (9, 50)	28 (7, 51)	35 (14, 46)	2	0.6056	2.35	0.6066
CD103- CD69- Tconv	21 (7, 79)	27 (9, 82)	13 (5, 41)	-7.3	0.0663	-7.2	0.0899
CTLA-4+ Tconv	4 (2, 10)	5 (2, 10)	3 (2, 8)	-0.62	0.4336	-0.4	0.6383
CXCR3+ Tconv	36 (22, 51)	36 (22, 53)	34 (19, 44)	-3.4	0.3837	-5.15	0.176
GrzB+ Tconv	1.8 (0.4, 4.2)	1.8 (0.4, 4.6)	2.2 (0.7, 3.6)	0	1	-0.02	0.97
HLA-DR+ Tconv	25 (11, 42)	21 (10, 43)	27 (19, 40)	3.48	0.3089	3.12	0.3864
HLA-DR+ CD38+ Tconv	0.80 (0.00, 2.24)	0.80 (0.00, 2.25)	0.92 (0.00, 2.02)	0	1	0	1
Ki67+ Tconv	3 (1, 6)	3 (1, 5)	4 (2, 7)	1.16	0.2122	1.13	0.2351
PD-1+ Tconv	43 (20, 62)	41 (19, 62)	51 (27, 64)	5.4	0.2149	5.55	0.261
PD-1+TCF-1- Tconv	34 (14, 56)	34 (13, 57)	40 (19, 51)	2.1	0.6226	2.09	0.6578
TCF-1+ Tconv	27 (14, 52)	30 (15, 58)	24 (10, 31)	-8.6	0.0435	-9.2	0.0401
Tbet+	2.7 (1.0, 7.0)	2.9 (1.0, 7.2)	2.1 (0.7, 5.9)	-0.57	0.3284	-0.6	0.3237
CCR5+ Th1	93 (78, 100)	93 (75, 100)	93 (88, 98)	0	1	-3.19	0.549

CCR7+ CD45RA+ Th1	0.9 (0.0, 3.2)	2.1 (0.0, 3.3)	0.4 (0.0, 2.7)	0	1	-0.18	0.8094
CCR7+ CD45RA- Th1	10 (4, 17)	11 (4, 17)	7 (4, 16)	-1.34	0.7078	-1.03	0.8208
CCR7- CD45RA+ Th1	4 (0, 9)	4 (0, 8)	3 (0, 12)	0	1	-0.62	0.8211
CCR7- CD45RA- Th1	81 (66, 87)	82 (69, 87)	75 (46, 89)	-5.4	0.4256	-15.03	0.0771
CD38+ Th1	6 (1, 16)	6 (3, 18)	4 (0, 14)	-2.08	0.444	-2.29	0.4961
CD39+ Th1	7 (0, 23)	15 (1, 39)	5 (0, 14)	-3.3	0.5036	-6.1	0.412
CD101+ Th1	22 (6, 42)	21 (9, 49)	23 (1, 40)	-6.5	0.4177	-8.21	0.4102
CD103+ CD69+ Th1	4 (0, 21)	6 (0, 24)	4 (1, 10)	-0.56	0.8891	-4.87	0.349
CD103+ CD69- Th1	0.00 (0.00, 0.00)	0.00 (0.00, 0.00)	0.00 (0.00, 0.00)	0	1	0	NaN
CD103- CD69+ Th1	32 (4, 51)	32 (3, 49)	27 (5, 66)	2.4	0.7888	8.08	0.5701
CD103- CD69- Th1	44 (19, 93)	44 (20, 96)	44 (14, 64)	-6.9	0.564	-16.29	0.3054
CTLA-4+ Th1	4 (0, 14)	6 (0, 18)	1 (0, 3)	-5.01	0.1142	-6.44	0.0973
CXCR3+ Th1	55 (32, 71)	54 (33, 62)	61 (13, 81)	4.4	0.6927	3.37	0.7827
GrzB+ Th1	29 (13, 50)	33 (13, 55)	26 (10, 47)	-6.4	0.54	-12.82	0.3504
HLA-DR+ Th1	35 (23, 55)	33 (21, 62)	39 (24, 47)	-3.5	0.7107	-5.59	0.5347
HLA-DR+ CD38+ Th1	4 (1, 11)	4 (2, 14)	3 (0, 8)	-1.71	0.4123	-1.76	0.4324
Ki67+ Th1	3 (0, 9)	3 (0, 11)	3 (2, 5)	0	1	1.13	0.2351
PD-1+ Th1	68 (41, 81)	67 (42, 81)	69 (39, 81)	-3	0.7358	-11.45	0.2561
TCF-1+ Th1	18 (8, 31)	15 (7, 31)	24 (10, 37)	3.8	0.5835	3.48	0.6986
CD161+ CCR6+	6 (4, 10)	6 (4, 10)	6 (4, 12)	0.7	0.4213	0.81	0.3618
CCR5+ Th17	96 (91, 99)	96 (88, 100)	97 (93, 99)	1.2	0.5302	2.64	0.2767

CCR7+ CD45RA+ Th17	0.00 (0.00, 2.33)	0.34 (0.00, 2.87)	0.00 (0.00, 0.28)	0	1	0	0.9951
CCR7+ CD45RA- Th17	12 (6, 25)	12 (4, 26)	13 (7, 19)	2.06	0.5762	0.23	0.9604
CCR7- CD45RA+ Th17	0.00 (0.00, 0.57)	0.00 (0.00, 2.03)	0.00 (0.00, 0.00)	0	1	0	1
CCR7- CD45RA- Th17	84 (70, 93)	80 (69, 95)	88 (74, 93)	0.27	0.9549	3.56	0.52
CD38+ Th17	5 (1, 13)	6 (1, 17)	4 (0, 9)	-1.55	0.4666	-0.75	0.7314
CD39+ Th17	57 (32, 76)	52 (16, 77)	59 (47, 71)	7.96	0.4029	6.23	0.5373
CD101+ Th17	53 (24, 74)	47 (17, 65)	65 (52, 79)	23.03	0.0132	27.02	0.0024
CD103+ CD69+ Th17	50 (23, 67)	49 (22, 60)	59 (43, 78)	17.95	0.0293	21.15	0.0059
CD103+ CD69- Th17	0.00 (0.00, 0.00)	0.00 (0.00, 0.00)	0.00 (0.00, 0.00)	0	1	0	1
CD103- CD69+ Th17	39 (20, 60)	39 (22, 64)	38 (20, 50)	-4.27	0.6272	-4.5	0.6827
CD103- CD69- Th17	3 (0, 6)	3 (1, 7)	1 (0, 3)	-1.17	0.3898	-1.35	0.423
CTLA-4+ Th17	10 (3, 23)	13 (6, 27)	7 (2, 11)	-5.9	0.1426	-3.87	0.4037
CXCR3+ Th17	26 (17, 48)	34 (19, 54)	18 (15, 41)	-8.04	0.2032	-12.5	0.0613
GrzB+ Th17	0.00 (0.00, 0.00)	0.00 (0.00, 0.00)	0.00 (0.00, 3.71)	0	1	0	1
HLA-DR+ Th17	45 (31, 60)	38 (28, 69)	48 (36, 52)	-1.36	0.8604	1	0.9151
HLA-DR+ CD38+ Th17	2 (0, 7)	3 (0, 7)	2 (0, 4)	-1.02	0.296	0	1
Ki67+ Th17	5 (1, 8)	5 (1, 8)	5 (2, 9)	0	1	1.13	0.2351
PD-1+ Th17	68 (47, 84)	71 (40, 86)	65 (50, 75)	-7.5	0.2902	-3.27	0.6899
TCF-1+ Th17	10 (5, 22)	13 (6, 28)	8 (2, 18)	-5.36	0.1293	-5.68	0.1451

Table S3.8

Conventional T helper cells distribution for EctoCx Biopsy FBS/DMSO specimen comparing BV positive vs negative

Characteristic	Expected Max N	Missing	N	BV Positive	BV Negative
CD25- CD127-+	178	12	166	47	119
CCR5+ Tconv	166	2	164	46	118
CCR6+ Tconv	166	2	164	46	118
CCR7+ CD45RA+ Tconv	166	2	164	46	118
CCR7+ CD45RA- Tconv	166	2	164	46	118
CCR7- CD45RA+ Tconv	166	2	164	46	118
CCR7- CD45RA- Tconv	166	2	164	46	118
CD38+ Tconv	166	2	164	46	118
CD39+ Tconv	166	2	164	46	118
CD69+ Tconv	166	2	164	46	118
CD101+ Tconv	166	2	164	46	118
CD103+ CD69+ Tconv	166	2	164	46	118
CD103+ CD69- Tconv	166	2	164	46	118

CD103- CD69+ Tconv	166	2	164	46	118
CD103- CD69- Tconv	166	2	164	46	118
CTLA-4+ Tconv	166	2	164	46	118
CXCR3+ Tconv	166	2	164	46	118
GrzB+ Tconv	166	2	164	46	118
HLA-DR+ Tconv	166	2	164	46	118
HLA-DR+ CD38+ Tconv	166	2	164	46	118
Ki67+ Tconv	166	101	65	15	50
PD-1+ Tconv	166	2	164	46	118
PD-1+TCF-1- Tconv	166	2	164	46	118
TCF-1+ Tconv	166	2	164	46	118
Tbet+	166	2	164	46	118
CCR5+ Th1	164	125	39	14	25
CCR7+ CD45RA+ Th1	164	125	39	14	25
CCR7+ CD45RA- Th1	164	125	39	14	25
CCR7- CD45RA+ Th1	164	125	39	14	25
CCR7- CD45RA- Th1	164	125	39	14	25
CD38+ Th1	164	125	39	14	25
CD39+ Th1	164	125	39	14	25
CD101+ Th1	164	125	39	14	25
CD103+ CD69+ Th1	164	125	39	14	25

CD103+ CD69- Th1	164	125	39	14	25
CD103- CD69+ Th1	164	125	39	14	25
CD103- CD69- Th1	164	125	39	14	25
CTLA-4+ Th1	164	125	39	14	25
CXCR3+ Th1	164	125	39	14	25
GrzB+ Th1	164	125	39	14	25
HLA-DR+ Th1	164	125	39	14	25
HLA-DR+ CD38+ Th1	164	125	39	14	25
Ki67+ Th1	164	155	9	2	7
PD-1+ Th1	164	125	39	14	25
TCF-1+ Th1	164	125	39	14	25
CD161+ CCR6+	166	2	164	46	118
CCR5+ Th17	164	108	56	20	36
CCR7+ CD45RA+ Th17	164	108	56	20	36
CCR7+ CD45RA- Th17	164	108	56	20	36
CCR7- CD45RA+ Th17	164	108	56	20	36
CCR7- CD45RA- Th17	164	108	56	20	36
CD38+ Th17	164	108	56	20	36
CD39+ Th17	164	108	56	20	36
CD101+ Th17	164	108	56	20	36
CD103+ CD69+ Th17	164	108	56	20	36

CD103+ CD69- Th17	164	108	56	20	36
CD103- CD69+ Th17	164	108	56	20	36
CD103- CD69- Th17	164	108	56	20	36
CTLA-4+ Th17	164	108	56	20	36
CXCR3+ Th17	164	108	56	20	36
GrzB+ Th17	164	108	56	20	36
HLA-DR+ Th17	164	108	56	20	36
HLA-DR+ CD38+ Th17	164	108	56	20	36
Ki67+ Th17	164	148	16	5	11
PD-1+ Th17	164	108	56	20	36
TCF-1+ Th17	164	108	56	20	36

A regression model estimating the association of BV status (Positive vs Negative) with conventional T helper cells' concentration from EctoCx Biopsy FBS/DMSO specimen, adjusted for hormonal contraceptive use, semen exposure, HIV exposure, and HSV2 status

Tconv cells	Overall	BV Negative	BV Positive	Unadjusted Beta	Unadjusted p-value	Adjusted Beta	Adjusted p-value
CD25- CD127-+	91.4 (86.7, 94.4)	91.4 (87.4, 94.0)	90.5 (85.8, 94.9)	-0.5	0.5719	-0.55	0.5907
CCR5+ Tconv	62 (29, 86)	61 (30, 85)	70 (24, 87)	2.4	0.6179	1.53	0.7716
CCR6+ Tconv	15 (9, 22)	15 (9, 22)	15 (10, 22)	0.9	0.5368	0.44	0.788
CCR7+ CD45RA+ Tconv	11 (2, 28)	13 (4, 27)	10 (1, 28)	-1.37	0.4519	-1.38	0.5254

CCR7+ CD45RA- Tconv	16 (10, 22)	16 (11, 22)	13 (9, 23)	-1.3	0.3586	-1.27	0.4248
CCR7- CD45RA+ Tconv	2.8 (0.9, 5.5)	2.9 (0.9, 6.0)	2.4 (1.0, 5.0)	-0.35	0.4445	-0.34	0.5244
CCR7- CD45RA- Tconv	65 (44, 82)	64 (45, 80)	70 (44, 87)	3	0.4348	2.67	0.5188
CD38+ Tconv	12 (5, 21)	11 (5, 19)	18 (7, 22)	3.23	0.066	3.01	0.1091
CD39+ Tconv	13 (4, 37)	12 (5, 34)	15 (4, 39)	0.53	0.8157	0.5	0.8667
CD69+ Tconv	56 (12, 85)	54 (13, 83)	59 (8, 86)	0.4	0.9268	1.46	0.7789
CD101+ Tconv	22 (8, 47)	22 (8, 41)	22 (11, 57)	3.1	0.361	4.47	0.2583
CD103+ CD69+ Tconv	17 (4, 42)	16 (4, 42)	19 (2, 42)	0	1	0.53	0.8926
CD103+ CD69- Tconv	0.13 (0.00, 0.50)	0.00 (0.00, 0.47)	0.27 (0.00, 0.66)	0	1	0	1
CD103- CD69+ Tconv	20 (5, 41)	19 (5, 41)	22 (4, 40)	0.4	0.8919	1.92	0.6056
CD103- CD69- Tconv	44 (15, 87)	46 (17, 86)	44 (13, 90)	-0.48	0.9147	-1.44	0.7828
CTLA-4+ Tconv	4 (2, 10)	4 (2, 9)	4 (1, 12)	0.14	0.8595	0.05	0.9536
CXCR3+ Tconv	31 (21, 43)	31 (21, 45)	32 (21, 39)	-1.7	0.575	-2.29	0.4947
GrzB+ Tconv	1.9 (0.4, 4.8)	1.9 (0.4, 4.4)	2.1 (0.4, 5.6)	0.24	0.4799	0.4	0.3374
HLA-DR+ Tconv	25 (9, 40)	24 (9, 40)	28 (13, 39)	1.7	0.5581	1.55	0.6607
HLA-DR+ CD38+ Tconv	1.5 (0.5, 3.6)	1.4 (0.5, 3.1)	1.6 (0.9, 5.9)	0.27	0.4246	0.35	0.3406
Ki67+ Tconv	2.3 (0.9, 5.1)	2.0 (0.7, 5.0)	2.7 (1.5, 5.6)	0.53	0.4947	0.52	0.5148
PD-1+ Tconv	35 (16, 57)	33 (15, 57)	39 (18, 63)	3.9	0.2971	3.83	0.3309
PD-1+TCF-1- Tconv	27 (10, 45)	27 (10, 44)	28 (10, 46)	1.47	0.6669	0.8	0.8223

TCF-1+ Tconv	43 (19, 60)	42 (20, 57)	43 (19, 65)	0.61	0.8991	0.64	0.8956
Tbet+	3.0 (1.4, 6.1)	2.9 (1.1, 5.7)	3.5 (1.9, 6.6)	0.57	0.2871	0.59	0.2949
CCR5+ Th1	84 (70, 98)	85 (70, 98)	81 (70, 96)	0	1	-1.79	0.8019
CCR7+ CD45RA+ Th1	1.6 (0.0, 2.9)	1.6 (0.0, 2.9)	1.9 (0.0, 2.9)	0	1	0.04	0.9764
CCR7+ CD45RA- Th1	11 (3, 15)	10 (3, 14)	11 (3, 21)	1.1	0.7198	1.96	0.5246
CCR7- CD45RA+ Th1	4 (0, 10)	3 (0, 10)	6 (2, 9)	1.45	0.497	1.61	0.5283
CCR7- CD45RA- Th1	78 (68, 92)	81 (68, 91)	77 (64, 90)	-2.03	0.7621	-2.47	0.7479
CD38+ Th1	13 (7, 25)	13 (9, 19)	8 (5, 38)	-2.52	0.5028	-5.34	0.2254
CD39+ Th1	13 (4, 28)	15 (7, 30)	4 (2, 22)	-4.02	0.4303	-10.95	0.2051
CD101+ Th1	35 (12, 55)	26 (10, 56)	42 (23, 54)	7.32	0.4167	13.75	0.2556
CD103+ CD69+ Th1	6 (0, 19)	6 (0, 17)	3 (0, 22)	0	1	-4.76	0.4194
CD103+ CD69- Th1	0.00 (0.00, 0.05)	0.00 (0.00, 0.00)	0.00 (0.00, 0.17)	0	1	0	1
CD103- CD69+ Th1	22 (11, 52)	22 (13, 55)	16 (4, 46)	-8.9	0.2788	-11.16	0.3275
CD103- CD69- Th1	50 (9, 88)	44 (8, 79)	82 (13, 95)	10.56	0.293	12.89	0.3617
CTLA-4+ Th1	9 (1, 18)	10 (5, 17)	2 (0, 22)	-3.12	0.3442	-4.42	0.2962
CXCR3+ Th1	57 (38, 71)	57 (39, 72)	59 (39, 67)	-3.76	0.6623	-5.8	0.5873
GrzB+ Th1	26 (2, 72)	14 (1, 59)	41 (12, 84)	16.1	0.1546	21.34	0.1259
HLA-DR+ Th1	36 (24, 67)	36 (27, 55)	37 (21, 70)	0.79	0.9328	-6.84	0.4929
HLA-DR+ CD38+ Th1	10 (3, 19)	10 (4, 19)	8 (3, 21)	0.4	0.9034	-3.66	0.4093
Ki67+ Th1	6 (6, 16)	6 (5, 11)	25 (18, 32)	17.19	0.161	25.64	0.0984
PD-1+ Th1	64 (40, 82)	64 (40, 75)	64 (37, 84)	3.94	0.6746	5.38	0.6746

TCF-1+ Th1	21 (14, 39)	23 (16, 40)	19 (14, 30)	-6.2	0.3501	-10.58	0.1458
CD161+ CCR6+	6.3 (3.9, 10.1)	6.1 (4.0, 9.8)	7.1 (3.8, 12.2)	0.58	0.4554	0.33	0.7036
CCR5+ Th17	89 (71, 95)	89 (71, 93)	88 (70, 97)	0.7	0.8465	5.23	0.1931
CCR7+ CD45RA+ Th17	0.38 (0.00, 2.01)	0.33 (0.00, 2.01)	0.91 (0.00, 1.73)	0	1	-0.07	0.8357
CCR7+ CD45RA- Th17	16 (10, 28)	16 (10, 28)	16 (10, 35)	0.97	0.7939	0.98	0.8228
CCR7- CD45RA+ Th17	0.00 (0.00, 0.79)	0.00 (0.00, 0.53)	0.00 (0.00, 0.85)	0	1	0	1
CCR7- CD45RA- Th17	81 (69, 88)	82 (71, 88)	80 (63, 88)	-1.4	0.72	0.41	0.9326
CD38+ Th17	11 (4, 22)	10 (4, 18)	11 (5, 39)	4.66	0.2257	6.18	0.1406
CD39+ Th17	45 (14, 63)	44 (13, 63)	53 (20, 71)	3.9	0.6266	2.66	0.7689
CD101+ Th17	39 (16, 76)	36 (16, 71)	52 (16, 80)	4.85	0.5073	11.9	0.1884
CD103+ CD69+ Th17	33 (15, 62)	31 (12, 61)	39 (17, 70)	3.5	0.6841	8.02	0.3772
CD103+ CD69- Th17	0.00 (0.00, 0.46)	0.00 (0.00, 0.26)	0.00 (0.00, 0.90)	0	1	0	1
CD103- CD69+ Th17	31 (9, 52)	32 (15, 54)	24 (8, 47)	-5.43	0.473	-3.23	0.7132
CD103- CD69- Th17	10 (2, 34)	10 (3, 32)	10 (2, 41)	-0.35	0.9372	-5.85	0.3004
CTLA-4+ Th17	13 (4, 26)	13 (7, 19)	13 (2, 28)	-0.34	0.9208	1.24	0.7772
CXCR3+ Th17	38 (21, 48)	38 (25, 49)	36 (20, 44)	-3.7	0.4894	-3.09	0.5853
GrzB+ Th17	0.00 (0.00, 0.14)	0.00 (0.00, 0.72)	0.00 (0.00, 0.00)	0	1	0	1
HLA-DR+ Th17	45 (23, 65)	45 (23, 61)	46 (29, 70)	3.05	0.7202	7.2	0.3991
HLA-DR+ CD38+ Th17	5 (2, 13)	6 (1, 11)	5 (2, 21)	2.63	0.2297	4.63	0.0514

Ki67+ Th17	7.3 (3.1, 13.0)	5.3 (2.8, 10.5)	8.1 (7.3, 13.7)	3.87	0.3186	4.31	0.2214
PD-1+ Th17	68 (38, 77)	68 (40, 76)	69 (34, 81)	1.59	0.8027	4.8	0.5425
TCF-1+ Th17	25 (11, 36)	22 (11, 35)	26 (10, 51)	2.02	0.7254	-1.75	0.7722

Table S3.9

Conventional T helper cells distribution for PBMC ACD specimen comparing BV positive vs negative

Characteristic	Expected Max N	Missing	N	BV Positive	BV Negative
CD25- CD127-+	200	0	200	60	140
CCR5+ Tconv	200	0	200	60	140
CCR6+ Tconv	200	0	200	60	140
CCR7+ CD45RA+ Tconv	200	0	200	60	140
CCR7+ CD45RA- Tconv	200	0	200	60	140
CCR7- CD45RA+ Tconv	200	0	200	60	140
CCR7- CD45RA- Tconv	200	0	200	60	140
CD38+ Tconv	200	0	200	60	140
CD39+ Tconv	200	0	200	60	140
CD69+ Tconv	200	0	200	60	140
CD101+ Tconv	200	0	200	60	140
CD103+ CD69+ Tconv	200	0	200	60	140
CD103+ CD69- Tconv	200	0	200	60	140

CD103- CD69+ Tconv	200	0	200	60	140
CD103- CD69- Tconv	200	0	200	60	140
CTLA-4+ Tconv	200	0	200	60	140
CXCR3+ Tconv	200	0	200	60	140
GrzB+ Tconv	200	0	200	60	140
HLA-DR+ Tconv	200	0	200	60	140
HLA-DR+ CD38+ Tconv	200	0	200	60	140
Ki67+ Tconv	200	120	80	22	58
PD-1+ Tconv	200	0	200	60	140
PD-1+TCF-1- Tconv	200	0	200	60	140
TCF-1+ Tconv	200	0	200	60	140
Tbet+	200	0	200	60	140
CCR5+ Th1	200	0	200	60	140
CCR7+ CD45RA+ Th1	200	0	200	60	140
CCR7+ CD45RA- Th1	200	0	200	60	140
CCR7- CD45RA+ Th1	200	0	200	60	140
CCR7- CD45RA- Th1	200	0	200	60	140
CD38+ Th1	200	0	200	60	140
CD39+ Th1	200	0	200	60	140
CD101+ Th1	200	0	200	60	140
CD103+ CD69+ Th1	200	0	200	60	140

CD103+ CD69- Th1	200	0	200	60	140
CD103- CD69+ Th1	200	0	200	60	140
CD103- CD69- Th1	200	0	200	60	140
CTLA-4+ Th1	200	0	200	60	140
CXCR3+ Th1	200	0	200	60	140
GrzB+ Th1	200	0	200	60	140
HLA-DR+ Th1	200	0	200	60	140
HLA-DR+ CD38+ Th1	200	0	200	60	140
Ki67+ Th1	200	120	80	22	58
PD-1+ Th1	200	0	200	60	140
TCF-1+ Th1	200	0	200	60	140
CD161+ CCR6+ CCR5+ Th17	200	0	200	60	140
CCR7+ CD45RA+ Th17	200	0	200	60	140
CCR7+ CD45RA- Th17	200	0	200	60	140
CCR7- CD45RA+ Th17	200	0	200	60	140
CCR7- CD45RA- Th17	200	0	200	60	140
CD38+ Th17	200	0	200	60	140
CD39+ Th17	200	0	200	60	140
CD101+ Th17	200	0	200	60	140
CD103+ CD69+ Th17	200	0	200	60	140

CD103+ CD69- Th17	200	0	200	60	140
CD103- CD69+ Th17	200	0	200	60	140
CD103- CD69- Th17	200	0	200	60	140
CTLA-4+ Th17	200	0	200	60	140
CXCR3+ Th17	200	0	200	60	140
GrzB+ Th17	200	0	200	60	140
HLA-DR+ Th17	200	0	200	60	140
HLA-DR+ CD38+ Th17	200	0	200	60	140
Ki67+ Th17	200	120	80	22	58
PD-1+ Th17	200	0	200	60	140
TCF-1+ Th17	200	0	200	60	140

A regression model estimating the association of BV status (Positive vs Negative) with conventional T helper cells' concentration from PBMC ACD specimen, adjusted for hormonal contraceptive use

Tconv cells	Overall	BV Negative	BV Positive	Unadjusted Beta	Unadjusted p-value	Adjusted Beta	Adjusted p-value
CD25- CD127-+	95.20 (94.18, 96.40)	95.20 (94.10, 96.40)	95.35 (94.20, 96.18)	0	1	0	1
CCR5+ Tconv	13 (9, 17)	13 (9, 17)	12 (9, 17)	-0.3	0.7375	-0.73	0.4413
CCR6+ Tconv	14 (11, 19)	14 (11, 19)	14 (11, 18)	0.2	0.8348	-0.2	0.8521
CCR7+ CD45RA+ Tconv	37 (28, 45)	36 (28, 46)	38 (29, 45)	1	0.6205	1.5	0.4824

CCR7+ CD45RA- Tconv	20 (15, 25)	20 (15, 25)	19 (15, 25)	-0.3	0.7702	-0.4	0.7165
CCR7- CD45RA+ Tconv	7.0 (4.3, 10.8)	7.0 (4.4, 10.8)	6.8 (4.2, 10.6)	-0.21	0.7502	-0.09	0.8942
CCR7- CD45RA- Tconv	34 (26, 43)	35 (26, 43)	32 (24, 42)	-1.9	0.3091	-2.6	0.195
CD38+ Tconv	21 (13, 32)	21 (14, 32)	20 (12, 33)	-0.2	0.9097	0.6	0.7558
CD39+ Tconv	3.45 (2.07, 4.67)	3.45 (1.87, 4.64)	3.45 (2.28, 4.68)	0.14	0.6364	0.11	0.73
CD69+ Tconv	0.86 (0.59, 1.30)	0.88 (0.60, 1.28)	0.81 (0.59, 1.32)	-0.02	0.7785	-0.06	0.3942
CD101+ Tconv	4.7 (2.8, 7.7)	4.3 (2.8, 7.6)	5.2 (2.9, 8.1)	0.22	0.6846	0.39	0.4913
CD103+ CD69+ Tconv	0.009 (0.005, 0.019)	0.009 (0.005, 0.017)	0.009 (0.004, 0.023)	0	0.8643	0	0.6694
CD103+ CD69- Tconv	0.46 (0.33, 0.62)	0.49 (0.35, 0.62)	0.40 (0.33, 0.64)	-0.05	0.128	-0.05	0.153
CD103- CD69+ Tconv	0.81 (0.57, 1.18)	0.86 (0.59, 1.18)	0.76 (0.52, 1.17)	-0.07	0.2722	-0.09	0.2227
CD103- CD69- Tconv	98.70 (98.20, 99.00)	98.70 (98.30, 99.00)	98.80 (98.20, 99.10)	0.1	0.4936	0.1	0.5059
CTLA-4+ Tconv	1.33 (0.83, 1.92)	1.34 (0.83, 1.96)	1.24 (0.85, 1.76)	-0.09	0.4868	-0.1	0.431
CXCR3+ Tconv	22 (16, 30)	23 (17, 30)	20 (9, 31)	-2.3	0.2112	-3.4	0.0797
GrzB+ Tconv	2.6 (1.2, 5.4)	3.0 (1.4, 5.5)	1.8 (0.9, 4.0)	-0.68	0.0573	-0.8	0.0393
HLA-DR+ Tconv	4.80 (3.64, 6.21)	4.83 (3.60, 6.15)	4.66 (3.69, 7.10)	0.13	0.685	0.01	0.9755

HLA-DR+ CD38+ Tconv	1.38 (1.03, 1.85)	1.33 (1.04, 1.76)	1.54 (0.98, 2.29)	0.13	0.1834	0.12	0.2266
Ki67+ Tconv	0.90 (0.65, 1.19)	0.91 (0.65, 1.25)	0.86 (0.62, 1.14)	-0.03	0.7871	-0.01	0.9297
PD-1+ Tconv	8.9 (6.7, 12.8)	8.8 (6.8, 13.1)	9.2 (6.6, 12.0)	0	1	-0.17	0.8046
PD-1+TCF-1- Tconv	4.2 (2.3, 6.6)	4.2 (2.3, 6.7)	3.9 (2.2, 6.3)	-0.25	0.5873	-0.3	0.5131
TCF-1+ Tconv	79 (64, 85)	79 (63, 85)	75 (65, 86)	0.2	0.9227	0.6	0.7848
Tbet+	4.8 (2.6, 8.0)	5.0 (2.9, 7.9)	4.2 (2.2, 8.2)	-0.41	0.4555	-0.53	0.3713
CCR5+ Th1	68 (51, 80)	67 (49, 79)	73 (58, 83)	5.3	0.0773	3.6	0.2653
CCR7+ CD45RA+ Th1	6 (3, 12)	6 (3, 11)	6 (3, 15)	0.75	0.3133	0.66	0.4006
CCR7+ CD45RA- Th1	7 (4, 14)	7 (4, 14)	7 (4, 14)	-0.9	0.3326	-0.73	0.4588
CCR7- CD45RA+ Th1	8 (4, 14)	8 (4, 14)	9 (5, 16)	0.64	0.5204	0.9	0.3712
CCR7- CD45RA- Th1	73 (61, 82)	73 (61, 80)	72 (61, 82)	-0.9	0.698	-1.1	0.6495
CD38+ Th1	13 (8, 19)	13 (8, 18)	16 (9, 28)	3.4	0.0095	3.1	0.0239
CD39+ Th1	3.8 (1.7, 6.5)	3.7 (1.7, 5.5)	3.9 (1.9, 8.6)	0.67	0.1202	0.44	0.3153
CD101+ Th1	14 (8, 30)	13 (8, 25)	18 (8, 39)	2.8	0.1589	3.38	0.1123
CD103+ CD69+ Th1	0.00 (0.00, 0.05)	0.00 (0.00, 0.04)	0.00 (0.00, 0.10)	0	1	0	1
CD103+ CD69- Th1	0.19 (0.10, 0.37)	0.19 (0.11, 0.36)	0.17 (0.06, 0.52)	0	1	0	0.9998
CD103- CD69+ Th1	2.69 (1.62, 4.31)	2.69 (1.59, 4.20)	2.69 (1.68, 4.67)	0.09	0.7612	0	1

	96.95	97.00	96.90				
CD103- CD69- Th1	96.95 (95.38, 98.20)	97.00 (95.48, 98.20)	96.90 (94.95, 98.05)	-0.2	0.4827	-0.05	0.8796
CTLA-4+ Th1	2.32 (1.16, 4.34)	2.31 (1.13, 4.12)	2.43 (1.19, 5.32)	0.18	0.5726	0.17	0.6047
CXCR3+ Th1	31 (16, 57)	30 (20, 55)	31 (9, 60)	-2.3	0.5354	-4	0.3115
GrzB+ Th1	57 (34, 72)	60 (39, 72)	44 (28, 62)	-10.1	0.0076	-9.77	0.0104
HLA-DR+ Th1	25 (18, 33)	24 (17, 31)	27 (19, 37)	3.4	0.0544	3.33	0.0824
HLA-DR+ CD38+ Th1	6.6 (4.1, 11.5)	6.3 (4.0, 10.4)	8.8 (4.2, 16.0)	2	0.0069	1.57	0.032
Ki67+ Th1	4.7 (2.3, 7.2)	4.4 (2.3, 6.8)	5.3 (3.1, 10.9)	1.04	0.2503	1.08	0.2239
PD-1+ Th1	39 (25, 51)	38 (25, 50)	40 (24, 51)	0.83	0.7729	0.27	0.9242
TCF-1+ Th1	33 (19, 49)	31 (19, 47)	36 (21, 50)	4.1	0.1961	4.16	0.2082
CD161+ CCR6+	4.78 (3.35, 6.06)	4.81 (3.25, 6.06)	4.76 (3.42, 5.98)	0.03	0.9311	-0.12	0.7336
CCR5+ Th17	29 (23, 37)	29 (23, 36)	30 (24, 37)	0.6	0.7062	0.1	0.9503
CCR7+ CD45RA+ Th17	2.8 (1.8, 4.7)	2.9 (1.9, 4.7)	2.8 (1.6, 5.9)	0.07	0.8264	0.01	0.9752
CCR7+ CD45RA- Th17	33 (25, 42)	33 (25, 42)	33 (23, 43)	0.9	0.6297	1.6	0.4102
CCR7- CD45RA+ Th17	0.99 (0.58, 1.51)	0.99 (0.60, 1.48)	0.98 (0.53, 1.61)	0	1	-0.03	0.7635
CCR7- CD45RA- Th17	61 (53, 71)	62 (54, 71)	60 (48, 71)	-1.9	0.361	-2.7	0.2383
CD38+ Th17	12 (8, 16)	12 (8, 15)	13 (7, 17)	0.38	0.6873	0.71	0.4789
CD39+ Th17	7.1 (4.0, 11.4)	7.2 (3.8, 11.3)	6.5 (4.3, 11.6)	-0.02	0.9782	-0.03	0.9691
CD101+ Th17	5.7 (3.2, 10.2)	5.8 (3.2, 10.2)	5.5 (3.3, 9.4)	0.06	0.923	0.08	0.9047

CD103+ CD69+ Th17	0.06 (0.00, 0.12)	0.06 (0.01, 0.11)	0.05 (0.00, 0.14)	0	1	0	0.7556
CD103+ CD69- Th17	1.82 (1.14, 2.59)	1.95 (1.27, 2.80)	1.63 (1.05, 2.21)	-0.31	0.0547	-0.23	0.1686
CD103- CD69+ Th17	1.38 (0.95, 2.42)	1.46 (0.96, 2.44)	1.24 (0.89, 2.16)	-0.11	0.4191	-0.16	0.2544
CD103- CD69- Th17	96.50 (95.00, 97.50)	96.40 (94.80, 97.33)	97.20 (95.58, 97.90)	0.5	0.0838	0.55	0.047
CTLA-4+ Th17	4.2 (2.4, 6.9)	4.2 (2.6, 6.9)	4.1 (2.3, 6.4)	-0.33	0.4823	-0.4	0.3961
CXCR3+ Th17	35 (23, 41)	35 (25, 41)	34 (15, 42)	-2.3	0.2922	-3.44	0.1258
GrzB+ Th17	0.39 (0.17, 1.14)	0.44 (0.19, 1.28)	0.33 (0.11, 0.81)	-0.11	0.0989	-0.12	0.0912
HLA-DR+ Th17	6.1 (4.3, 8.5)	6.1 (4.3, 8.4)	6.2 (4.6, 8.9)	0.2	0.6631	0	1
HLA-DR+ CD38+ Th17	2.05 (1.27, 3.37)	1.95 (1.25, 3.23)	2.24 (1.37, 3.73)	0.19	0.3314	0.16	0.4363
Ki67+ Th17	1.33 (0.79, 1.90)	1.40 (0.79, 2.02)	1.26 (0.90, 1.69)	-0.2	0.2785	-0.21	0.259
PD-1+ Th17	15 (11, 20)	15 (11, 20)	15 (11, 19)	0.2	0.8552	0.1	0.9273
TCF-1+ Th17	75 (61, 85)	75 (61, 84)	74 (61, 87)	1	0.6649	1	0.6827

Table S3.10

Regulatory T cell distribution for Vag Biopsy FBS/DMSO specimen comparing BV positive vs negative

Characteristic	Expected Max N	Missing	N	BV Positive	BV Negative
live CD45+	197	0	197	61	136
CD3+	197	6	191	58	133
CD4+ CD8-	191	17	174	50	124
CD25+ CD127 low	174	17	157	42	115
Foxp3+	157	107	50	15	35
CCR5+ Tregs	50	29	21	5	16
CCR6+ Tregs	50	29	21	5	16
CCR7+ CD45RA+ Tregs	50	29	21	5	16
CCR7+ CD45RA- Tregs	50	29	21	5	16
CCR7- CD45RA+ Tregs	50	29	21	5	16
CCR7- CD45RA- Tregs	50	29	21	5	16
CD38+ Tregs	50	29	21	5	16
CD39+ Tregs	50	29	21	5	16

CD69+ Tregs	50	29	21	5	16
CD101+ Tregs	50	29	21	5	16
CD103+ CD69+ Tregs	50	29	21	5	16
CD103+ CD69- Tregs	50	29	21	5	16
CD103- CD69+ Tregs	50	29	21	5	16
CD103- CD69- Tregs	50	29	21	5	16
CTLA-4+ Tregs	50	29	21	5	16
CXCR3+ Tregs	50	29	21	5	16
GrzB+ Tregs	50	29	21	5	16
HLA-DR+ Tregs	50	29	21	5	16
HLA-DR+ CD38+ Tregs	50	29	21	5	16
Ki67+ Tregs	50	40	10	0	10
PD-1+ Tregs	50	29	21	5	16
PD-1+TCF-1- Tregs	50	29	21	5	16
TCF-1+ Tregs	50	29	21	5	16
Tbet+ (Th1)	50	29	21	5	16
CD161+ CCR6+ (Th17)	50	29	21	5	16

A regression model estimating the association of BV status (Positive vs Negative) with regulatory T cells' concentration from Vag Biopsy FBS/DMSO specimen, adjusted for hormonal contraceptive use, semen exposure, HIV exposure, and HSV2 status

Treg cells	Overall	BV Negative	BV Positive	Unadjusted Beta	Unadjusted p-value	Adjusted Beta	Adjusted p-value
live CD45+	0.88 (0.30, 1.99)	0.89 (0.36, 2.07)	0.75 (0.13, 1.75)	-0.19	0.158	-0.21	0.1762
CD3+	78 (64, 88)	77 (63, 87)	83 (70, 89)	4.1	0.0878	4.87	0.0485
CD4+ CD8-	43 (31, 56)	45 (33, 58)	37 (27, 50)	-6.9	0.0312	-7.18	0.0303
CD25+ CD127 low	6.4 (3.8, 9.4)	6.5 (3.6, 10.2)	6.2 (4.3, 8.4)	-0.13	0.874	0.27	0.7366
Foxp3+	44 (34, 57)	46 (36, 62)	42 (27, 49)	-8.6	0.1681	-7.83	0.1491
CCR5+ Tregs	88 (67, 94)	81 (63, 94)	92 (89, 94)	11.25	0.303	28.47	0.0815
CCR6+ Tregs	14 (8, 19)	14 (8, 20)	16 (11, 19)	2.34	0.6915	11.23	0.0808
CCR7+ CD45RA+ Tregs	0.0 (0.0, 2.9)	0.3 (0.0, 1.8)	0.0 (0.0, 3.0)	0	1	0	1
CCR7+ CD45RA- Tregs	10 (8, 20)	9 (8, 20)	11 (9, 33)	2.33	0.6688	3.38	0.5778
CCR7- CD45RA+ Tregs	0.00 (0.00, 2.50)	0.39 (0.00, 2.59)	0.00 (0.00, 0.00)	0	1	-2	0.0883
CCR7- CD45RA- Tregs	83 (73, 91)	82 (76, 91)	89 (64, 92)	-1.09	0.8888	4.54	0.6457
CD38+ Tregs	13 (9, 23)	11 (7, 25)	13 (10, 21)	0.21	0.969	-4.08	0.5579
CD39+ Tregs	76 (54, 86)	80 (52, 89)	74 (62, 85)	-3.36	0.7618	13.17	0.3921
CD69+ Tregs	77 (62, 81)	76 (48, 82)	77 (76, 79)	-0.41	0.9637	22.58	0.2187

CD101+ Tregs	27 (15, 57)	27 (15, 58)	27 (23, 47)	1.97	0.8828	21.5	0.2558
CD103+ CD69+ Tregs	13 (3, 20)	17 (3, 29)	11 (6, 13)	-4.35	0.6032	-3.44	0.8117
CD103+ CD69- Tregs	0.00 (0.00, 1.96)	0.06 (0.00, 2.06)	0.00 (0.00, 0.00)	0	1	-0.96	0.3479
CD103- CD69+ Tregs	61 (37, 65)	48 (34, 64)	65 (64, 68)	17.93	0.1673	30.6	0.0313
CD103- CD69- Tregs	23 (18, 37)	23 (17, 44)	23 (21, 24)	0	1	-13.77	0.4187
CTLA-4+ Tregs	50 (18, 71)	55 (17, 73)	36 (21, 39)	-15.5	0.393	2.31	0.9208
CXCR3+ Tregs	41 (26, 63)	32 (20, 44)	74 (70, 87)	41.07	0.0004	40.95	0.0039
GrzB+ Tregs	0.00 (0.00, 1.96)	0.00 (0.00, 0.00)	2.13 (0.00, 3.03)	1.18	0.993	0	1
HLA-DR+ Tregs	58 (50, 83)	62 (52, 84)	52 (40, 52)	-15.31	0.1251	-0.53	0.974
HLA-DR+ CD38+ Tregs	9 (6, 19)	9 (7, 22)	9 (6, 11)	-0.67	0.8553	-6.31	0.3472
Ki67+ Tregs	3.7 (1.7, 7.4)	3.7 (1.7, 7.4)	NA (NA, NA)	NA	NA	NA	NA
PD-1+ Tregs	61 (44, 72)	50 (36, 71)	68 (64, 75)	17.7	0.1675	17.3	0.2308
PD-1+TCF-1- Tregs	50 (27, 64)	46 (24, 55)	64 (57, 68)	22.37	0.092	23.95	0.055
TCF-1+ Tregs	10 (4, 23)	11 (5, 24)	5 (0, 8)	-5.25	0.3719	-10.33	0.0722
Tbet+ (Th1)	3 (1, 14)	3 (1, 8)	3 (3, 19)	1.23	0.6415	-0.54	0.9004
CD161+ CCR6+ (Th17)	6 (3, 12)	5 (3, 12)	8 (6, 18)	3.23	0.4219	11.52	0.0551

Table S3.11

Regulatory T cell distribution for EctoCx Biopsy FBS/DMSO specimen comparing BV positive vs negative

Characteristic	Expected Max N	Missing	N	BV Positive	BV Negative
live CD45+	197	0	197	59	138
CD3+	197	3	194	59	135
CD4+ CD8-	194	16	178	52	126
CD25+ CD127 low	178	13	165	47	118
Foxp3+	165	107	58	17	41
CCR5+ Tregs	58	29	29	11	18
CCR6+ Tregs	58	29	29	11	18
CCR7+ CD45RA+ Tregs	58	29	29	11	18
CCR7+ CD45RA- Tregs	58	29	29	11	18
CCR7- CD45RA+ Tregs	58	29	29	11	18
CCR7- CD45RA- Tregs	58	29	29	11	18
CD38+ Tregs	58	29	29	11	18
CD39+ Tregs	58	29	29	11	18

CD69+ Tregs	58	29	29	11	18
CD101+ Tregs	58	29	29	11	18
CD103+ CD69+ Tregs	58	29	29	11	18
CD103+ CD69- Tregs	58	29	29	11	18
CD103- CD69+ Tregs	58	29	29	11	18
CD103- CD69- Tregs	58	29	29	11	18
CTLA-4+ Tregs	58	29	29	11	18
CXCR3+ Tregs	58	29	29	11	18
GrzB+ Tregs	58	29	29	11	18
HLA-DR+ Tregs	58	29	29	11	18
HLA-DR+ CD38+ Tregs	58	29	29	11	18
Ki67+ Tregs	58	47	11	3	8
PD-1+ Tregs	58	29	29	11	18
PD-1+TCF-1- Tregs	58	29	29	11	18
TCF-1+ Tregs	58	29	29	11	18
Tbet+ (Th1)	58	29	29	11	18
CD161+ CCR6+ (Th17)	58	29	29	11	18

A regression model estimating the association of BV status (Positive vs Negative) with regulatory T cells' concentration from EctoCx Biopsy FBS/DMSO specimen, adjusted for hormonal contraceptive use, semen exposure, HIV exposure, and HSV2 status

Treg cells	Overall	BV Negative	BV Positive	Unadjusted Beta	Unadjusted p-value	Adjusted Beta	Adjusted p-value
live CD45+	1.1 (0.3, 2.9)	1.1 (0.3, 2.6)	1.0 (0.2, 3.0)	0	1	-0.02	0.9361
CD3+	76 (67, 83)	77 (67, 83)	75 (68, 84)	0.3	0.8829	0.31	0.886
CD4+ CD8-	51 (39, 60)	50 (39, 59)	51 (37, 62)	1.2	0.6645	0.81	0.7745
CD25+ CD127 low	6.3 (4.2, 10.1)	6.3 (4.2, 9.9)	5.9 (4.0, 10.3)	0.08	0.9099	0.28	0.7147
Foxp3+	47 (36, 61)	44 (36, 61)	52 (40, 64)	6	0.345	2.36	0.724
CCR5+ Tregs	86 (63, 93)	89 (64, 94)	81 (68, 88)	-4.3	0.4632	4	0.6465
CCR6+ Tregs	13 (7, 19)	17 (8, 24)	10 (7, 13)	-5.67	0.1792	-6.33	0.2215
CCR7+ CD45RA+ Tregs	0.5 (0.0, 3.7)	0.3 (0.0, 3.5)	0.8 (0.1, 4.4)	0.23	0.769	-0.23	0.8672
CCR7+ CD45RA- Tregs	8 (6, 13)	8 (6, 11)	7 (5, 14)	-0.12	0.9651	1.33	0.6941
CCR7- CD45RA+ Tregs	1.7 (0.3, 3.9)	1.5 (0.1, 3.3)	1.8 (1.1, 5.6)	0.59	0.5394	0.99	0.524
CCR7- CD45RA- Tregs	87 (77, 92)	87 (79, 92)	86 (77, 93)	0.43	0.9173	-1.64	0.729
CD38+ Tregs	21 (12, 39)	15 (11, 26)	39 (27, 41)	18.86	0.0055	15.93	0.023
CD39+ Tregs	73 (59, 89)	74 (62, 85)	73 (42, 89)	-1.47	0.8692	-13.62	0.2674
CD69+ Tregs	75 (47, 88)	81 (49, 90)	65 (49, 81)	-6.4	0.486	2.28	0.8856
CD101+ Tregs	19 (6, 43)	15 (4, 44)	20 (11, 33)	4.54	0.5604	7.18	0.3822
CD103+ CD69+ Tregs	10 (2, 21)	10 (4, 28)	10 (1, 11)	-3.9	0.3474	-1.62	0.7558
CD103+ CD69- Tregs	0.00 (0.00, 0.00)	0.00 (0.00, 0.00)	0.00 (0.00, 0.35)	0	1	0	1

CD103- CD69+ Tregs	52 (39, 73)	47 (40, 72)	56 (35, 71)	3.01	0.7713	7.4	0.6464
CD103- CD69- Tregs	25 (13, 53)	19 (10, 51)	35 (18, 53)	6.13	0.513	-1.62	0.9112
CTLA-4+ Tregs	59 (33, 70)	58 (39, 70)	61 (31, 72)	-1.42	0.8767	-3.51	0.803
CXCR3+ Tregs	39 (29, 57)	39 (27, 51)	44 (30, 59)	2.04	0.838	5.59	0.5795
GrzB+ Tregs	0.55 (0.00, 2.61)	0.28 (0.00, 2.65)	0.62 (0.00, 2.37)	0	1	0.05	0.9502
HLA-DR+ Tregs	53 (32, 75)	52 (32, 73)	54 (32, 69)	0.91	0.9256	-1.31	0.9022
HLA-DR+ CD38+ Tregs	14 (6, 19)	9 (3, 19)	16 (14, 29)	9.63	0.0411	5.48	0.3046
Ki67+ Tregs	4 (3, 11)	3 (2, 6)	10 (8, 15)	6.81	0.0641	7	0.0101
PD-1+ Tregs	62 (43, 76)	58 (43, 77)	68 (55, 71)	4	0.6976	3.24	0.8551
PD-1+TCF-1- Tregs	54 (38, 67)	51 (38, 67)	64 (36, 65)	6.46	0.475	1.93	0.8906
TCF-1+ Tregs	11 (6, 19)	9 (3, 16)	13 (9, 29)	6.51	0.1014	3.63	0.4851
Tbet+ (Th1)	6 (3, 14)	6 (3, 15)	6 (2, 13)	-0.36	0.8943	-1	0.7644
CD161+ CCR6+ (Th17)	7 (3, 11)	8 (5, 12)	6 (3, 8)	-2.34	0.3162	-2.53	0.3964

Table S3.12

Regulatory T cell distribution for PBMC ACD specimen comparing BV positive vs negative

Characteristic	Expected Max N	Missing	N	BV Positive	BV Negative
live CD45+	200	0	200	60	140
CD3+	200	0	200	60	140
CD4+ CD8-	200	0	200	60	140
CD25+ CD127 low	200	0	200	60	140
Foxp3+	200	0	200	60	140
CCR5+ Tregs	200	0	200	60	140
CCR6+ Tregs	200	0	200	60	140
CCR7+ CD45RA+ Tregs	200	0	200	60	140
CCR7+ CD45RA- Tregs	200	0	200	60	140
CCR7- CD45RA+ Tregs	200	0	200	60	140
CCR7- CD45RA- Tregs	200	0	200	60	140
CD38+ Tregs	200	0	200	60	140
CD39+ Tregs	200	0	200	60	140

CD69+ Tregs	200	0	200	60	140
CD101+ Tregs	200	0	200	60	140
CD103+ CD69+ Tregs	200	0	200	60	140
CD103+ CD69- Tregs	200	0	200	60	140
CD103- CD69+ Tregs	200	0	200	60	140
CD103- CD69- Tregs	200	0	200	60	140
CTLA-4+ Tregs	200	0	200	60	140
CXCR3+ Tregs	200	0	200	60	140
GrzB+ Tregs	200	0	200	60	140
HLA-DR+ Tregs	200	0	200	60	140
HLA-DR+ CD38+ Tregs	200	0	200	60	140
Ki67+ Tregs	200	120	80	22	58
PD-1+ Tregs	200	0	200	60	140
PD-1+TCF-1- Tregs	200	0	200	60	140
TCF-1+ Tregs	200	0	200	60	140
Tbet+ (Th1)	200	0	200	60	140
CD161+ CCR6+ (Th17)	200	0	200	60	140

A regression model estimating the association of BV status (Positive vs Negative) with regulatory T cells' concentration from PBMC ACD specimen, adjusted for hormonal contraceptive use

Treg cells	Overall	BV Negative	BV Positive	Unadjusted Beta	Unadjusted p-value	Adjusted Beta	Adjusted p-value
live CD45+	93 (90, 95)	93 (91, 95)	93 (87, 95)	-0.8	0.1411	-0.6	0.2906
CD3+	74 (67, 78)	73 (67, 78)	75 (68, 80)	2.1	0.1137	1.9	0.1787
CD4+ CD8-	63 (57, 69)	62 (58, 69)	63 (57, 67)	-0.4	0.7584	-0.4	0.7636
CD25+ CD127 low	3.66 (2.96, 4.76)	3.63 (2.96, 4.83)	3.66 (3.07, 4.58)	-0.03	0.8937	0.03	0.9141
Foxp3+	54 (45, 64)	52 (45, 63)	56 (49, 65)	3.4	0.1259	2.2	0.3141
CCR5+ Tregs	27 (22, 36)	27 (23, 37)	26 (20, 34)	-1.8	0.2776	-2.4	0.1681
CCR6+ Tregs	13 (8, 17)	13 (8, 18)	13 (8, 17)	-0.25	0.8188	-0.49	0.6491
CCR7+ CD45RA+ Tregs	12 (7, 17)	11 (8, 16)	13 (7, 19)	1.33	0.2151	1.22	0.2507
CCR7+ CD45RA- Tregs	9.3 (6.2, 12.9)	9.3 (6.4, 12.7)	8.9 (5.3, 14.9)	-0.4	0.5985	-0.1	0.8964
CCR7- CD45RA+ Tregs	13 (10, 18)	13 (9, 18)	14 (10, 19)	0.9	0.3772	1.18	0.2729
CCR7- CD45RA- Tregs	63 (54, 72)	64 (57, 72)	60 (52, 71)	-3	0.119	-3.4	0.0853
CD38+ Tregs	15 (11, 21)	15 (11, 20)	15 (12, 21)	0.3	0.7796	0.6	0.5933
CD39+ Tregs	46 (30, 56)	45 (28, 55)	48 (33, 57)	2.14	0.4434	1.8	0.5318
CD69+ Tregs	1.43 (0.97, 2.14)	1.43 (0.97, 2.16)	1.41 (0.84, 2.08)	-0.08	0.5702	-0.11	0.4542

CD101+ Tregs	12 (5, 18)	13 (5, 21)	12 (5, 17)	-0.71	0.5805	-0.65	0.6303
CD103+ CD69+ Tregs	0.00 (0.00, 0.05)	0.00 (0.00, 0.01)	0.00 (0.00, 0.09)	0	1	0	1
CD103+ CD69- Tregs	1.14 (0.69, 1.81)	1.19 (0.73, 1.76)	1.06 (0.62, 2.02)	-0.07	0.5507	-0.09	0.4736
CD103- CD69+ Tregs	1.40 (0.90, 2.03)	1.42 (0.94, 2.08)	1.35 (0.80, 1.88)	-0.13	0.3114	-0.12	0.3632
CD103- CD69- Tregs	97.35 (96.28, 98.00)	97.20 (96.30, 97.93)	97.80 (96.13, 98.10)	0.2	0.2444	0.3	0.1113
CTLA-4+ Tregs	18 (12, 24)	19 (13, 25)	15 (11, 22)	-3.5	0.0102	-3.7	0.0102
CXCR3+ Tregs	18 (12, 26)	19 (13, 27)	18 (9, 25)	-1.8	0.3023	-2.6	0.1533
GrzB+ Tregs	0.76 (0.40, 1.77)	0.83 (0.49, 2.01)	0.54 (0.27, 1.21)	-0.29	0.014	-0.3	0.0157
HLA-DR+ Tregs	25 (21, 32)	26 (21, 34)	24 (21, 31)	-0.8	0.5595	-1.35	0.3451
HLA-DR+ CD38+ Tregs	4.30 (3.18, 6.16)	4.33 (3.18, 5.91)	4.23 (3.23, 6.49)	0.08	0.8148	0	0.9998
Ki67+ Tregs	2.58 (1.86, 3.78)	2.63 (1.95, 3.86)	2.43 (1.67, 3.50)	-0.28	0.4534	-0.19	0.6029
PD-1+ Tregs	8.4 (6.0, 10.7)	8.4 (6.1, 10.7)	8.4 (5.4, 10.5)	0	1	-0.12	0.845
PD-1+TCF-1- Tregs	6.2 (4.0, 8.3)	6.4 (4.1, 8.7)	5.7 (3.7, 7.9)	-0.57	0.2974	-0.63	0.2582
TCF-1+ Tregs	34 (21, 45)	32 (20, 44)	36 (26, 51)	5.9	0.0335	5.9	0.0408
Tbet+ (Th1)	1.61 (0.85, 3.17)	1.67 (0.98, 3.23)	1.47 (0.80, 2.68)	-0.2	0.3581	-0.27	0.2362
CD161+ CCR6+ (Th17)	2.98 (1.80, 4.34)	2.98 (1.90, 4.41)	2.96 (1.48, 3.94)	-0.32	0.2831	-0.35	0.248