Supplementary material to article by Å. Ingvar et al. "No Association between Infections, HLA Type and Other Transplant-related Factors and Risk of Cutaneous Squamous Cell Carcinoma in Solid Organ Transplant Recipients"

Table SI. Relative risks^a (RRs) of cutaneous squamous cell carcinoma (SCC) after organ transplantation in relation to number and timing of bacterial, viral and fungal infections

	Cases, <i>n</i> (%)	Controls, n (%)	Adjusted RR ^{a,b} (95% CI)	<i>p</i> -value*
Number of infections				
0	21 (10)	22 (12)	Ref	
1–3	73 (36)	63 (34)	1.5 (0.6–3.4)	
3–7	53 (26)	57 (30)	1.3 (0.6–3.1)	0.81
>7	56 (28)	45 (24)	1.5 (0.6–3.6)	0.63**
Combinations of infection types				
No infections	26 (13)	31 (16)	Ref	
Only bacterial	63 (30)	52 (28)	1.7 (0.8–3.5)	
Only viral	5 (2)	6(3)	0.8 (0.2–4.0)	
Bacterial/viral	53 (26)	49 (26)	1.6 (0.8–3.6)	
Bacterial/fungal	19 (9)	24 (13)	1.0 (0.4–2.5)	
Bacterial/viral/fungal	41 (20)	27 (14)	1.6 (0.7–3.7)	0.52
Bacterial infections			(
0	31 (15)	37 (20)	Ref	
1–2	63 (30)	57 (30)	1.3 (0.7–2.7)	
3–6	61 (29)	56 (30)	1.7 (0.9–3.4)	0.35
>6	52 (25)	39 (21)	1.9 (0.8–4.2)	0.33
Herpes virus group infections	32 (23)	37 (21)	1.7 (0.0-7.2)	0.17
Never	102 (50)	101 (54)	Ref	
	103 (50)	101 (54)		0.66
Ever	102 (50)	86 (46)	1.1 (0.7–1.8)	0.66
CMV infection	105 ((5)	122 (71)	P. 6	
Never	137 (67)	133 (71)	Ref	0.70
Ever	66 (33)	54 (29)	1.1 (0.7–1.9)	0.70
HSV infection				
Never	164 (79)	155 (82)	Ref	
Ever	43 (21)	34 (18)	1.2 (0.7–2.1)	0.59
VZV infection				
Never	180 (87)	169 (89)	Ref	
Ever	27 (13)	20 (11)	0.9 (0.4–1.8)	0.72
EBV infection				
Never	204 (99)	186 (98)	Ref	
Ever	3 (1)	3 (2)	0.6 (0.04–6.0)°	0.95
Hepatitis infection	- ()	- ()	(
Never	192 (95)	173 (93)	Ref	
Ever	10 (5)	14 (7)	1.1 (0.4–3.5)	0.85
Fungal infection ^d	10 (3)	14(7)	1.1 (0.4 3.3)	0.05
Never	141 (69)	132 (70)	Ref	
Ever	` /	\ /		0.47
	64 (31)	56 (30)	0.8 (0.5–1.4)	0.4/
Candida infection	1(1(70)	140 (70)	D -£	
Never	161 (78)	148 (78)	Ref	
1	32 (15)	31 (16)	0.8 (0.4–1.6)	0.04
≥2	14 (7)	10 (5)	0.9 (0.3–2.5)	0.84
Time to first infection from first transplantation				
Bacterial infection	<u>.</u>	(-0)		
No infection	31 (15)	37 (20)	Ref	
<1 month	86 (42)	72 (38)	1.7 (0.9–3.4)	
1–6 months	45 (22)	40 (21)	1.4 (0.7–2.9)	0.45
>6 months	45 (22)	40 (22)	1.6 (0.8–3.4)	0.80**
Herpes virus group infection				
No infection	103 (51)	101 (54)	Ref	
<1 month	15 (7)	15 (8)	0.8 (0.3–1.9)	
1–6 months	52 (26)	41 (22)	1.3 (0.7–2.3)	0.63
>6 months	33 (16)	30 (16)	0.9 (0.4–1.8)	0.82**
Fungal infection ^d	()	= = (=/	(
No infection	141 (73)	132 (75)	Ref	
<1 month	11 (6)	9 (5)	0.9 (0.3–3.1)	
1–6 months	18 (9)	16 (9)	1.1 (0.5–2.7)	0.80
>6 months	23 (12)	20 (11)	0.7 (0.3–1.5)	0.52**

Controls were matched to cases by age (± 5 years) and calendar period of transplantation (± 5 years) and were further required to be alive and free of cancer at the time of the case SCC diagnosis.

^{*}Relative risks were estimated by odds ratios and 95% confidence intervals (CI) using multivariate conditional logistic regression models.

^bEstimates adjusted for sex of the recipient and total accumulated dose of azathioprine, cyclosporine and corticosteroids.

RRs and 95% CI were estimated using exact logistic regression due to low number of exposed. The multivariate exact logistic regression model was only adjusted for sex and accumulated dose of azathioprine.

dCandida infections included.

^{*}Statistical significance (p-value) was estimated with likelihood ratio tests.

^{**}p-value for linear trend in risk of SCC.

CMV: cytomegalovirus; HSV: herpes simplex virus; VZV: varicella zoster virus; EBV: Epstein-Barr virus.