APPENDIX P

Immunologic Evaluation

TABLE P-1.

Summary Statistics for Scale Evaluation

Variable	Scale	Skewness	Kurtosis	D:Normal*
CD2 Cells	Original	0.57	0.42	0.061
	Log	-0.59	1.34	0.039
CD4 Cells	Original	0.88	1.37	0.084
	Log	-0.64	2.21	0.040
CD8 Cells	Original	1.23	2.35	0.079
	Log	-0.32	0.34	0.045
CD20 Cells	Original	7.35	116.64	0.136
	Log	-0.15	1.22	0.032
CD14 Cells	Original	2.31	8.51	0.131
	Log	-0.26	0.32	0.028
CD25 Cells	Original	15.72	328.20	0.362
	Log	0.20	0.43	0.024
HLA-DR Cells	Original	3.63	32.34	0.109
	Log	0.09	1.06	0.024
CD4/CD8 Ratio	Original	7.24	106.88	0.121
	Log	0.04	1.39	0.025
TLC	Original	0.62	.42	0.058
	Log	-0.39	).62	0.037
IgG	Original	0.74	1.68	0.054
	Log	-0.10	0.41	0.022
IgA	Original	2.30	18.17	0.077
	Log	-0.80	5.56	0.031
IgM	Original	2.32	10.76	0.100
	Log	0.19	0.73	0.018
Unstimulated PHA Response (day 1)	Original	1.72	4.93	0.110
	Log	0.00	-0.25	0.022
Unstimulated PHA Response (day 2)	Original	1.72	4.93	0.110
	Log	-0.01	-0.31	0.018
PHA Net Response (day 1, conc. 1)	Original	1.05	1.69	0.071
	Log	-0.87	1.34	0.069

TABLE P-1. (continued)

Summary Statistics for Scale Evaluation

Variable	Scale	Skewness	Kurtosis	D:Normal*
PHA Net Response (day 1, conc. 2)	**Original**	**0.41**	**-0.42**	**0.045**
	Log	-0.91	1.50	0.071
PHA Net Response (day 1, conc. 3)	**Original**	**0.47**	**-0.06**	**0.055**
	Log	-1.02	2.13	0.075
PHA Net Response (day 2, conc. 1)	**Original**	**0.13**	**-0.31**	**0.023**
	Log	-1.66	4.11	0.127
PHA Net Response (day 2, conc. 2)	**Original**	**0.17**	**0.33**	**0.037**
	Log	-1.79	5.96	0.119
PHA Net Response (day 2, conc. 3)	**Original**	**0.64**	**0.67**	**0.052**
	Log	-1.33	4.20	0.077
Maximum PHA Net Response	**Original**	**0.02**	**-0.14**	**0.026**
	Log	-1.45	3.81	0.104
Unstimulated MLC Response	Original	2.44	9.70	0.145
	Log	**-0.19**	**-0.14**	**0.028**
MLC Net Response	**Original**	**0.62**	**0.44**	**0.064**
	Log	-1.60	4.18	0.100
NKCA 50/1 Net Response	**Original**	**0.57**	**0.29**	**0.054**
	Log	-0.94	1.51	0.069
NKCA 50/1 Percent Release	**Original**	**0.05**	**-0.62**	**0.052**
	Log	-1.21	1.92	0.095
NKCI 50/1 Net Response	**Original**	**0.35**	**0.31**	**0.067**
	Log	-0.70	1.84	0.059
NKCI 50/1 Percent Release	**Original**	**-1.45**	**3.81**	**0.137**
	Log	-2.74	10.97	0.182

Notes: Scale in bold was used for analyses. Log denotes natural logarithm scale.

*Kolomogorov D statistic.

TABLE P-2.

Dependent Variable-Covariate Associations* for the Immunologic Evaluation

Dependent Variable	Level	Age				Race		
		Born ≥1942	Born 1923-1941	Born ≤1922	p-Value	Black	Nonblack	p-Value
Composite Skin Test Diagnosis	Abnormal	(n=706) 4.8%	(n=966) 5.5%	(n=63) 7.9%	0.530	(n=103) 5.5%	(n=1,632) 2.9%	0.380
CD2 Cells[a]		(n=350) $\bar{x}$=1,674.5	(n=462) $\bar{x}$=1,566.9	(n=33) $\bar{x}$=1,300.6	<0.001	(n=44) $\bar{x}$=1,615.9	(n=801) $\bar{x}$=1,599.6	0.852
CD4 Cells[a]		(n=355) $\bar{x}$=955.1	(n=462) $\bar{x}$=872.7	(n=33) $\bar{x}$=665.5	<0.001	(n=43) $\bar{x}$=911.4	(n=807) $\bar{x}$=897.4	0.806
CD8 Cells[a]		(n=355) $\bar{x}$=504.4	(n=461) $\bar{x}$=469.3	(n=33) $\bar{x}$=396.6	0.011	(n=44) $\bar{x}$=487.9	(n=805) $\bar{x}$=480.8	0.847
CD20 Cells[a]		(n=355) $\bar{x}$=170.4	(n=463) $\bar{x}$=144.1	(n=33) $\bar{x}$=105.7	<0.001	(n=44) $\bar{x}$=198.5	(n=807) $\bar{x}$=151.3	0.002
CD14 Cells[a]		(n=356) $\bar{x}$=29.9	(n=464) $\bar{x}$=32.7	(n=34) $\bar{x}$=34.2	0.233	(n=45) $\bar{x}$=23.2	(n=809) $\bar{x}$=32.0	0.006
CD25 Cells[a,b]		(n=261) $\bar{x}$=13.3	(n=322) $\bar{x}$=12.4	(n=25) $\bar{x}$=8.1	0.081	(n=31) $\bar{x}$=11.4	(n=577) $\bar{x}$=12.6	0.601
HLA-DR Cells[a]		(n=355) $\bar{x}$=450.1	(n=464) $\bar{x}$=418.0	(n=34) $\bar{x}$=346.9	<0.001	(n=45) $\bar{x}$=444.7	(n=808) $\bar{x}$=427.8	0.538
CD4/CD8 Ratio[a]		(n=355) $\bar{x}$=1.91	(n=460) $\bar{x}$=1.84	(n=33) $\bar{x}$=1.68	0.295	(n=43) $\bar{x}$=1.94	(n=805) $\bar{x}$=1.86	0.595

TABLE P-2. (continued)

Dependent Variable-Covariate Associations* for the Immunologic Evaluation

Dependent Variable	Level	Age				Race		
		Born ≥1942	Born 1923-1941	Born ≤1922	p-Value	Black	Nonblack	p-Value
TLC[a]		(n=356) $\bar{x}$=2,066.5	(n=464) $\bar{x}$=1,966.7	(n=34) $\bar{x}$=1,651.5	<0.001	(n=45) $\bar{x}$=2,067.0	(n=809) $\bar{x}$=1,989.8	0.520
IgG		(n=931) $\bar{x}$=1,054.7	(n=1,198) $\bar{x}$=1,032.0	(n=77) $\bar{x}$=1,081.7	0.028	(n=133) $\bar{x}$=1,264.2	(n=2,073) $\bar{x}$=1,029.1	<0.001
IgA[a]		(n=931) $\bar{x}$=204.77	(n=1,198) $\bar{x}$=211.75	(n=77) $\bar{x}$=221.98	0.103	(n=133) $\bar{x}$=226.06	(n=2,073) $\bar{x}$=208.08	0.035
IgM[a]		(n=930) $\bar{x}$=113.80	(n=1,197) $\bar{x}$=109.09	(n=77) $\bar{x}$=106.58	0.088	(n=133) $\bar{x}$=96.70	(n=2,071) $\bar{x}$=111.95	<0.001
Unstimulated PHA Response (day 1)[a]		(n=354) $\bar{x}$=2,043	(n=459) $\bar{x}$=1,844	(n=34) $\bar{x}$=1,629	0.002	(n=44) $\bar{x}$=2,308	(n=803) $\bar{x}$=1,902	0.007
Unstimulated PHA Response (day 2)[a]		(n=349) $\bar{x}$=2,224	(n=459) $\bar{x}$=1,918	(n=34) $\bar{x}$=1,604	<0.001	(n=45) $\bar{x}$=2,749	(n=797) $\bar{x}$=2,001	<0.001
PHA Net Response (day 1, conc. 1)		(n=353) $\bar{x}$=111,953	(n=459) $\bar{x}$=91,675	(n=34) $\bar{x}$=86,669	<0.001	(n=44) $\bar{x}$=116,774	(n=802) $\bar{x}$=99,550	0.014
PHA Net Response (day 1, conc. 2)		(n=353) $\bar{x}$=177,443	(n=459) $\bar{x}$=149,059	(n=34) $\bar{x}$=129,819	<0.001	(n=44) $\bar{x}$=177,087	(n=802) $\bar{x}$=159,905	0.035
PHA Net Response (day 1, conc. 3)		(n=353) $\bar{x}$=162,016	(n=459) $\bar{x}$=135,851	(n=34) $\bar{x}$=110,263	<0.001	(n=44) $\bar{x}$=166,867	(n=802) $\bar{x}$=145,282	0.005

TABLE P-2. (continued)

Dependent Variable-Covariate Associations* for the Immunologic Evaluation

Dependent Variable	Level	Age				Race		
		Born >>1942	Born 1923-1941	Born <<1922	p-Value	Black	Nonblack	p-Value
PHA Net Response (day 2, conc. 1)		(n=348) $\bar{x}$=165,370	(n=458) $\bar{x}$=159,549	(n=34) $\bar{x}$=144,773	0.040	(n=45) $\bar{x}$=168,353	(n=795) $\bar{x}$=161,138	0.323
PHA Net Response (day 2, conc. 2)		(n=348) $\bar{x}$=190,416	(n=458) $\bar{x}$=174,418	(n=34) $\bar{x}$=152,011	<0.001	(n=45) $\bar{x}$=187,207	(n=795) $\bar{x}$=180,109	0.325
PHA Net Response (day 2, conc. 3)		(n=348) $\bar{x}$=134,016	(n=458) $\bar{x}$=123,717	(n=34) $\bar{x}$=100,378	<0.001	(n=45) $\bar{x}$=146,588	(n=795) $\bar{x}$=126,291	0.005
Maximum PHA Net Response		(n=346) $\bar{x}$=220,904	(n=452) $\bar{x}$=196,253	(n=34) $\bar{x}$=163,872	<0.001	(n=44) $\bar{x}$=215,213	(n=788) $\bar{x}$=204,621	0.108
Unstimulated MLC Response[a]		(n=347) $\bar{x}$=4,647	(n=457) $\bar{x}$=3,516	(n=33) $\bar{x}$=2,541	<0.001	(n=45) $\bar{x}$=6,246	(n=792) $\bar{x}$=3,831	<0.001
MLC Net Response		(n=347) $\bar{x}$=90,828	(n=457) $\bar{x}$=84,924	(n=33) $\bar{x}$=78,324	0.063	(n=45) $\bar{x}$=95,963	(n=792) $\bar{x}$=86,811	0.125
NKCA 50/1 Net Response		(n=343) $\bar{x}$=401.9	(n=460) $\bar{x}$=428.8	(n=34) $\bar{x}$=409.6	0.139	(n=45) $\bar{x}$=420.8	(n=792) $\bar{x}$=416.3	0.874
NKCA 50/1 Percent Release		(n=343) $\bar{x}$=34.4	(n=460) $\bar{x}$=36.5	(n=34) $\bar{x}$=34.9	0.153	(n=45) $\bar{x}$=35.8	(n=792) $\bar{x}$=35.5	0.887
NKCI 50/1 Net Response		(n=353) $\bar{x}$=802.5	(n=457) $\bar{x}$=818.2	(n=33) $\bar{x}$=808.9	0.144	(n=44) $\bar{x}$=788.7	(n=799) $\bar{x}$=811.9	0.172
NKCI 50/1 Percent Release		(n=353) $\bar{x}$=66.1	(n=457) $\bar{x}$=67.4	(n=33) $\bar{x}$=66.6	0.121	(n=44) $\bar{x}$=64.9	(n=799) $\bar{x}$=66.9	0.130

TABLE P-2. (continued)

Dependent Variable-Covariate Associations* for Immunologic Evaluation

Dependent Variable	Level	Occupation: Officer	Occupation: Enlisted Flyer	Occupation: Enlisted Groundcrew	p-Value
Composite Skin Test Diagnosis	Abnormal	(n=680) 4.6%	(n=281) 7.5%	(n=774) 5.2%	0.181
CD2 Cells[a]		(n=318) $\bar{x}$=1,538.5	(n=157) $\bar{x}$=1,652.6	(n=370) $\bar{x}$=1,634.0	0.042
CD4 Cells[a]		(n=318) $\bar{x}$=855.8	(n=158) $\bar{x}$=930.1	(n=374) $\bar{x}$=922.5	0.030
CD8 Cells[a]		(n=317) $\bar{x}$=462.4	(n=158) $\bar{x}$=498.1	(n=374) $\bar{x}$=490.5	0.196
CD20 Cells[a]		(n=318) $\bar{x}$=139.0	(n=158) $\bar{x}$=159.1	(n=375) $\bar{x}$=164.0	<0.001
CD14 Cells[a]		(n=319) $\bar{x}$=31.0	(n=159) $\bar{x}$=32.0	(n=376) $\bar{x}$=31.7	0.902
CD25 Cells[a,b]		(n=235) $\bar{x}$=11.8	(n=112) $\bar{x}$=13.0	(n=261) $\bar{x}$=13.0	0.567
HLA-DR Cells[a]		(n=319) $\bar{x}$=402.5	(n=159) $\bar{x}$=448.1	(n=375) $\bar{x}$=443.6	0.005
CD4/CD8 Ratio[a]		(n=317) $\bar{x}$=1.85	(n=158) $\bar{x}$=1.83	(n=373) $\bar{x}$=1.90	0.662

TABLE P-2. (continued)

Dependent Variable–Covariate Associations* for Immunologic Evaluation

Dependent Variable	Level	Occupation			p-Value
		Officer	Enlisted Flyer	Enlisted Groundcrew	
TLC[a]		(n=319) $\bar{x}$=1,905.1	(n=159) $\bar{x}$=2,065.6	(n=376) $\bar{x}$=2,041.5	0.016
IgG		(n=828) $\bar{x}$=1,020.8	(n=374) $\bar{x}$=1,027.9	(n=1,004) $\bar{x}$=1,067.6	<0.001
IgA[a]		(n=828) $\bar{x}$=203.56	(n=374) $\bar{x}$=210.24	(n=1,004) $\bar{x}$=213.40	0.070
IgM[a]		(n=826) $\bar{x}$=109.53	(n=374) $\bar{x}$=110.87	(n=1,004) $\bar{x}$=112.19	0.551
Unstimulated PHA Response (day 1)[a]		(n=315) $\bar{x}$=1,809	(n=158) $\bar{x}$=1,851	(n=374) $\bar{x}$=2,050	0.002
Unstimulated PHA Response (day 2)[a]		(n=316) $\bar{x}$=1,904	(n=158) $\bar{x}$=1,955	(n=368) $\bar{x}$=2,184	0.003
PHA Net Response (day 1, conc. 1)		(n=313) $\bar{x}$=100,304	(n=158) $\bar{x}$=94,434	(n=375) $\bar{x}$=102,937	0.154
PHA Net Response (day 1, conc. 2)		(n=313) $\bar{x}$=154,669	(n=158) $\bar{x}$=158,066	(n=375) $\bar{x}$=166,943	0.012
PHA Net Response (day 1, conc. 3)		(n=313) $\bar{x}$=138,662	(n=158) $\bar{x}$=145,781	(n=375) $\bar{x}$=152,947	0.002

TABLE P-2. (continued)

Dependent Variable-Covariate Associations* for Immunologic Evaluation

Dependent Variable	Level	Occupation: Officer	Occupation: Enlisted Flyer	Occupation: Enlisted Groundcrew	p-Value
PHA Net Response (day 2, conc. 1)		(n=316) $\bar{x}$=165,673	(n=157) $\bar{x}$=153,648	(n=367) $\bar{x}$=161,299	0.046
PHA Net Response (day 2, conc. 2)		(n=316) $\bar{x}$=175,499	(n=157) $\bar{x}$=180,597	(n=367) $\bar{x}$=184,678	0.055
PHA Net Response (day 2, conc. 3)		(n=316) $\bar{x}$=121,213	(n=157) $\bar{x}$=131,229	(n=367) $\bar{x}$=130,709	0.023
Maximum PHA Net Response		(n=309) $\bar{x}$=199,887	(n=156) $\bar{x}$=198,386	(n=367) $\bar{x}$=212,528	0.008
Unstimulated MLC Response[a]		(n=313) $\bar{x}$=3,635	(n=154) $\bar{x}$=3,573	(n=370) $\bar{x}$=4,359	0.002
MLC Net Response		(n=313) $\bar{x}$=88,850	(n=154) $\bar{x}$=84,852	(n=370) $\bar{x}$=86,877	0.593
NKCA 50/1 Net Response		(n=317) $\bar{x}$=439.1	(n=158) $\bar{x}$=405.0	(n=362) $\bar{x}$=401.4	0.032
NKCA 50/1 Percent Release		(n=317) $\bar{x}$=37.3	(n=158) $\bar{x}$=34.4	(n=362) $\bar{x}$=34.4	0.039
NKCI 50/1 Net Response		(n=312) $\bar{x}$=816.3	(n=157) $\bar{x}$=822.7	(n=374) $\bar{x}$=801.2	0.077
NKCI 50/1 Percent Release		(n=312) $\bar{x}$=67.3	(n=157) $\bar{x}$=67.5	(n=374) $\bar{x}$=66.1	0.130

TABLE P-2. (continued)

Dependent Variable-Covariate Associations* for the Immunologic Evaluation

Dependent Variable	Level	Current Cigarette Smoking					Lifetime Cigarette Smoking History			
		0-Never	0-Former	>0-20	>20	p-Value	0	>0-10	>10	p-Value
Composite Skin Test Diagnosis	Abnormal	(n=498) 5.0%	(n=684) 4.8%	(n=278) 5.8%	(n=275) 6.5%	0.717	(n=499) 5.0%	(n=474) 5.9%	(n=762) 5.1%	0.786
CD2 Cells[a]		(n=227) $\bar{x}$=1,490.5	(n=327) $\bar{x}$=1,506.7	(n=152) $\bar{x}$=1,793.0	(n=139) $\bar{x}$=1,858.6	<0.001	(n=227) $\bar{x}$=1,491.3	(n=228) $\bar{x}$=1,614.2	(n=390) $\bar{x}$=1,667.4	<0.001
CD4 Cells[a]		(n=227) $\bar{x}$=798.8	(n=331) $\bar{x}$=835.8	(n=153) $\bar{x}$=1,051.4	(n=139) $\bar{x}$=1,111.1	<0.001	(n=227) $\bar{x}$=799.8	(n=231) $\bar{x}$=920.2	(n=392) $\bar{x}$=955.0	<0.001
CD8 Cells[a]		(n=228) $\bar{x}$=458.8	(n=330) $\bar{x}$=457.0	(n=153) $\bar{x}$=523.9	(n=138) $\bar{x}$=540.4	<0.001	(n=228) $\bar{x}$=459.0	(n=230) $\bar{x}$=474.7	(n=391) $\bar{x}$=500.2	0.104
CD20 Cells[a]		(n=228) $\bar{x}$=139.6	(n=331) $\bar{x}$=138.1	(n=153) $\bar{x}$=186.9	(n=139) $\bar{x}$=186.6	<0.001	(n=228) $\bar{x}$=140.8	(n=231) $\bar{x}$=156.4	(n=392) $\bar{x}$=160.2	0.025
CD14 Cells[a]		(n=228) $\bar{x}$=26.0	(n=334) $\bar{x}$=28.7	(n=153) $\bar{x}$=40.1	(n=139) $\bar{x}$=43.1	<0.001	(n=228) $\bar{x}$=26.2	(n=232) $\bar{x}$=29.9	(n=394) $\bar{x}$=36.7	<0.001
CD25 Cells[a,b]		(n=163) $\bar{x}$=11.7	(n=233) $\bar{x}$=11.8	(n=117) $\bar{x}$=14.2	(n=95) $\bar{x}$=13.9	0.251	(n=163) $\bar{x}$=11.8	(n=168) $\bar{x}$=13.3	(n=277) $\bar{x}$=12.5	0.560
HLA-DR Cells[a]		(n=228) $\bar{x}$=378.8	(n=334) $\bar{x}$=396.9	(n=153) $\bar{x}$=515.6	(n=138) $\bar{x}$=527.6	<0.001	(n=228) $\bar{x}$=381.3	(n=232) $\bar{x}$=427.9	(n=393) $\bar{x}$=463.4	<0.001
CD4/CD8 Ratio[a]		(n=227) $\bar{x}$=1.75	(n=330) $\bar{x}$=1.86	(n=153) $\bar{x}$=2.00	(n=138) $\bar{x}$=1.97	0.043	(n=227) $\bar{x}$=1.75	(n=230) $\bar{x}$=1.97	(n=391) $\bar{x}$=1.89	0.041

TABLE P-2. (continued)

Dependent Variable-Covariate Associations* for the Immunologic Evaluation

Dependent Variable	Level	Current Cigarette Smoking					Lifetime Cigarette Smoking History			
		0-Never	0-Former	>0-20	>20	p-Value	0	>0-10	>10	p-Value
TLC[a]		(n=228) $\bar{x}$=1,849.7	(n=334) $\bar{x}$=1,862.5	(n=153) $\bar{x}$=2,251.5	(n=139) $\bar{x}$=2,323.2	<0.001	(n=228) $\bar{x}$=1,849.7	(n=232) $\bar{x}$=2,008.3	(n=393) $\bar{x}$=2,073.4	0.001
IgG		(n=607) $\bar{x}$=1094.2	(n=863) $\bar{x}$=1,043.4	(n=376) $\bar{x}$=1,015.5	(n=360) $\bar{x}$=986.3	<0.001	(n=608) $\bar{x}$=1,094.1	(n=604) $\bar{x}$=1,041.2	(n=994) $\bar{x}$=1,013.4	<0.001
IgA[a]		(n=607) $\bar{x}$=213.46	(n=863) $\bar{x}$=211.81	(n=376) $\bar{x}$=208.03	(n=360) $\bar{x}$=196.97	0.032	(n=608) $\bar{x}$=212.39	(n=604) $\bar{x}$=205.55	(n=994) $\bar{x}$=208.73	0.327
IgM[a]		(n=606) $\bar{x}$=110.79	(n=862) $\bar{x}$=112.74	(n=376) $\bar{x}$=107.99	(n=360) $\bar{x}$=110.21	0.506	(n=607) $\bar{x}$=110.84	(n=604) $\bar{x}$=108.73	(n=993) $\bar{x}$=112.43	0.384
Unstimulated PHA Response (day 1)[a]		(n=227) $\bar{x}$=1,949	(n=332) $\bar{x}$=1,843	(n=151) $\bar{x}$=2,020	(n=137) $\bar{x}$=1,939	0.209	(n=227) $\bar{x}$=1,953	(n=231) $\bar{x}$=1,865	(n=389) $\bar{x}$=1,930	0.540
Unstimulated PHA Response (day 2)[a]		(n=226) $\bar{x}$=2,060	(n=332) $\bar{x}$=1,955	(n=149) $\bar{x}$=2,148	(n=135) $\bar{x}$=2,031	0.312	(n=226) $\bar{x}$=2,064	(n=229) $\bar{x}$=2,014	(n=387) $\bar{x}$=2,018	0.855
PHA Net Response (day 1, conc. 1		(n=226) $\bar{x}$=100,844	(n=331) $\bar{x}$=101,965	(n=152) $\bar{x}$=101,289	(n=137) $\bar{x}$=94,237	0.402	(n=226) $\bar{x}$=100,829	(n=231) $\bar{x}$=103,140	(n=389) $\bar{x}$=98,337	0.435
PHA Net Response (day 1, conc. 2)		(n=226) $\bar{x}$=160,487	(n=331) $\bar{x}$=162,763	(n=152) $\bar{x}$=159,486	(n=137) $\bar{x}$=157,004	0.757	(n=226) $\bar{x}$=160,493	(n=231) $\bar{x}$=166,479	(n=389) $\bar{x}$=157,360	0.113
PHA Net Response (day 1, conc. 3		(n=226) $\bar{x}$=143,630	(n=330) $\bar{x}$=146,961	(n=152) $\bar{x}$=149,135	(n=138) $\bar{x}$=146,309	0.773	(n=226) $\bar{x}$=143,768	(n=231) $\bar{x}$=153,032	(n=389) $\bar{x}$=143,911	0.055

TABLE P-2. (continued)

Dependent Variable-Covariate Associations* for the Immunologic Evaluation

Dependent Variable	Level	Current Cigarette Smoking					Lifetime Cigarette Smoking History			
		0-Never	0-Former	>0-20	>20	p-Value	0	>0-10	>10	p-Value
PHA Net Response (day 2, conc. 1)		(n=226) $\bar{x}$=163,835	(n=330) $\bar{x}$=166,067	(n=149) $\bar{x}$=152,397	(n=135) $\bar{x}$=156,143	0.019	(n=226) $\bar{x}$=163,526	(n=228) $\bar{x}$=163,763	(n=386) $\bar{x}$=158,701	0.343
PHA Net Response (day 2, conc. 2)		(n=226) $\bar{x}$=181,189	(n=330) $\bar{x}$=181,821	(n=149) $\bar{x}$=176,810	(n=135) $\bar{x}$=179,802	0.762	(n=226) $\bar{x}$=181,118	(n=228) $\bar{x}$=183,002	(n=386) $\bar{x}$=178,435	0.499
PHA Net Response (day 2, conc. 3)		(n=226) $\bar{x}$=123,944	(n=330) $\bar{x}$=127,037	(n=149) $\bar{x}$=126,486	(n=135) $\bar{x}$=135,047	0.202	(n=226) $\bar{x}$=124,039	(n=228) $\bar{x}$=131,044	(n=386) $\bar{x}$=127,117	0.292
Maximum PHA Net Response		(n=224) $\bar{x}$=205,098	(n=326) $\bar{x}$=208,960	(n=148) $\bar{x}$=196,066	(n=134) $\bar{x}$=206,196	0.303	(n=224) $\bar{x}$=205,098	(n=226) $\bar{x}$=213,174	(n=382) $\bar{x}$=200,502	0.459
Unstimulated MLC Response[a]		(n=224) $\bar{x}$=3,772	(n=328) $\bar{x}$=3,728	(n=149) $\bar{x}$=4,258	(n=136) $\bar{x}$=4,331	0.114	(n=224) $\bar{x}$=3,789	(n=225) $\bar{x}$=4,128	(n=388) $\bar{x}$=3,888	0.453
MLC Net Response		(n=224) $\bar{x}$=81,169	(n=328) $\bar{x}$=84,935	(n=149) $\bar{x}$=91,349	(n=136) $\bar{x}$=99,745	<0.001	(n=224) $\bar{x}$=81,368	(n=225) $\bar{x}$=86,642	(n=388) $\bar{x}$=91,447	0.012
NKCA 50/1 Net Response		(n=225) $\bar{x}$=436.4	(n=329) $\bar{x}$=429.7	(n=149) $\bar{x}$=382.3	(n=134) $\bar{x}$=384.6	0.007	(n=225) $\bar{x}$=435.3	(n=225) $\bar{x}$=413.7	(n=387) $\bar{x}$=405.6	0.190
NKCA 50/1 Percent Release		(n=225) $\bar{x}$=37.0	(n=329) $\bar{x}$=36.7	(n=149) $\bar{x}$=32.5	(n=134) $\bar{x}$=33.1	0.007	(n=225) $\bar{x}$=36.9	(n=225) $\bar{x}$=35.2	(n=387) $\bar{x}$=34.7	0.249
NKCI 50/1 Net Response		(n=225) $\bar{x}$=827.7	(n=330) $\bar{x}$=817.4	(n=150) $\bar{x}$=787.0	(n=138) $\bar{x}$=789.9	<0.001	(n=225) $\bar{x}$=827.0	(n=231) $\bar{x}$=806.3	(n=387) $\bar{x}$=802.7	0.034
NKCI 50/1 Percent Release		(n=225) $\bar{x}$=68.2	(n=330) $\bar{x}$=67.3	(n=150) $\bar{x}$=65.0	(n=138) $\bar{x}$=65.0	<0.001	(n=225) $\bar{x}$=68.2	(n=231) $\bar{x}$=66.6	(n=387) $\bar{x}$=66.0	0.019

TABLE P-2. (continued)

Dependent Variable-Covariate Associations* for the Immunologic Evaluation

Dependent Variable	Level	Current Alcohol Use				Lifetime Alcohol History			
		0-1	>1-4	>4	p-Value	0	>0-40	>40	p-Value
Composite Skin Test Diagnosis	Abnormal	(n=1,379) 5.4%	(n=299) 4.3%	(n=52) 7.7%	0.554	(n=155) 3.9%	(n=1,190) 5.3%	(n=379) 5.8%	0.662
CD2 Cells[a]		(n=671) $\bar{x}$=1,590.1	(n=143) $\bar{x}$=1,635.7	(n=29) $\bar{x}$=1,608.4	0.686	(n=72) $\bar{x}$=1,500.1	(n=574) $\bar{x}$=1,603.6	(n=196) $\bar{x}$=1,623.6	0.255
CD4 Cells[a]		(n=675) $\bar{x}$=886.1	(n=144) $\bar{x}$=951.4	(n=29) $\bar{x}$=911.3	0.166	(n=72) $\bar{x}$=804.7	(n=579) $\bar{x}$=897.9	(n=196) $\bar{x}$=940.0	0.022
CD8 Cells[a]		(n=675) $\bar{x}$=481.8	(n=143) $\bar{x}$=476.9	(n=29) $\bar{x}$=448.5	0.741	(n=72) $\bar{x}$=460.6	(n=578) $\bar{x}$=486.7	(n=196) $\bar{x}$=465.4	0.433
CD20 Cells[a]		(n=676) $\bar{x}$=155.6	(n=144) $\bar{x}$=145.7	(n=29) $\bar{x}$=122.4	0.053	(n=72) $\bar{x}$=145.6	(n=579) $\bar{x}$=156.1	(n=197) $\bar{x}$=147.1	0.324
CD14 Cells[a]		(n=677) $\bar{x}$=30.6	(n=146) $\bar{x}$=34.5	(n=29) $\bar{x}$=44.0	0.020	(n=72) $\bar{x}$=31.5	(n=580) $\bar{x}$=30.5	(n=199) $\bar{x}$=35.2	0.082
CD25 Cells[a,b]		(n=475) $\bar{x}$=12.7	(n=108) $\bar{x}$=11.4	(n=23) $\bar{x}$=12.4	0.635	(n=54) $\bar{x}$=11.8	(n=408) $\bar{x}$=12.6	(n=143) $\bar{x}$=12.5	0.910
HLA-DR Cells[a]		(n=676) $\bar{x}$=427.1	(n=146) $\bar{x}$=435.5	(n=29) $\bar{x}$=416.3	0.817	(n=72) $\bar{x}$=415.5	(n=579) $\bar{x}$=429.9	(n=199) $\bar{x}$=430.8	0.799
CD4/CD8 Ratio[a]		(n=674) $\bar{x}$=1.85	(n=143) $\bar{x}$=1.93	(n=29) $\bar{x}$=2.04	0.412	(n=72) $\bar{x}$=1.73	(n=578) $\bar{x}$=1.85	(n=195) $\bar{x}$=2.01	0.050
TLC[a]		(n=677) $\bar{x}$=1,996.4	(n=146) $\bar{x}$=1,974.0	(n=29) $\bar{x}$=1,992.8	0.940	(n=72) $\bar{x}$=1,901.1	(n=580) $\bar{x}$=2,000.5	(n=199) $\bar{x}$=2,008.0	0.161

TABLE P-2. (continued)

Dependent Variable-Covariate Associations* for the Immunologic Evaluation

Dependent Variable	Level	Current Alcohol Use				Lifetime Alcohol History			
		0-1	>1-4	>4	p-Value	0	>0-40	>40	p-Value
IgG		(n=1,746) $\bar{x}$=1,049.2	(n=380) $\bar{x}$=1,016.2	(n=74) $\bar{x}$=1,039.0	0.043	(n=193) $\bar{x}$=1,079.0	(n=1,502) $\bar{x}$=1,043.8	(n=498) $\bar{x}$=1,028.7	0.040
IgA[a]		(n=1,746) $\bar{x}$=207.36	(n=380) $\bar{x}$=213.07	(n=74) $\bar{x}$=232.37	0.060	(n=193) $\bar{x}$=197.06	(n=1,502) $\bar{x}$=207.24	(n=498) $\bar{x}$=220.52	0.003
IgM[a]		(n=1,746) $\bar{x}$=110.08	(n=378) $\bar{x}$=111.91	(n=74) $\bar{x}$=129.93	0.011	(n=193) $\bar{x}$=112.12	(n=1,501) $\bar{x}$=110.34	(n=497) $\bar{x}$=113.12	0.568
Unstimulated PHA Response (day 1)[a]		(n=670) $\bar{x}$=1,936	(n=146) $\bar{x}$=1,807	(n=29) $\bar{x}$=2,053	0.196	(n=70) $\bar{x}$=2,105	(n=575) $\bar{x}$=1,893	(n=199) $\bar{x}$=1,925	0.208
Unstimulated PHA Response (day 2)[a]		(n=677) $\bar{x}$=2,057	(n=144) $\bar{x}$=1,843	(n=29) $\bar{x}$=2,375	0.018	(n=72) $\bar{x}$=2,247	(n=569) $\bar{x}$=1,977	(n=198) $\bar{x}$=2,105	0.079
PHA Net Response (day 1, conc. 1)		(n=670) $\bar{x}$=100,501	(n=145) $\bar{x}$=100,628	(n=29) $\bar{x}$=91,943	0.624	(n=69) $\bar{x}$=100,741	(n=576) $\bar{x}$=99,968	(n=198) $\bar{x}$=101,467	0.924
PHA Net Response (day 1, conc. 2)		(n=670) $\bar{x}$=160,411	(n=145) $\bar{x}$=164,828	(n=29) $\bar{x}$=142,684	0.126	(n=69) $\bar{x}$=155,862	(n=576) $\bar{x}$=161,322	(n=198) $\bar{x}$=160,589	0.730
PHA Net Response (day 1, conc. 3)		(n=670) $\bar{x}$=146,050	(n=145) $\bar{x}$=149,795	(n=29) $\bar{x}$=129,190	0.131	(n=69) $\bar{x}$=141,666	(n=576) $\bar{x}$=146,731	(n=198) $\bar{x}$=146,501	0.733
PHA Net Response (day 2, conc. 1)		(n=665) $\bar{x}$=161,458	(n=144) $\bar{x}$=162,921	(n=29) $\bar{x}$=147,467	0.289	(n=71) $\bar{x}$=157,555	(n=569) $\bar{x}$=161,450	(n=197) $\bar{x}$=162,759	0.749
PHA Net Response (day 2, conc. 2)		(n=665) $\bar{x}$=180,779	(n=144) $\bar{x}$=181,440	(n=29) $\bar{x}$=165,635	0.250	(n=71) $\bar{x}$=173,105	(n=569) $\bar{x}$=182,214	(n=197) $\bar{x}$=178,350	0.246

TABLE P-2. (continued)

Dependent Variable-Covariate Associations* for the Immunologic Evaluation

Dependent Variable	Level	Current Alcohol Use				Lifetime Alcohol History			
		0-1	>1-4	>4	p-Value	0	>0-40	>40	p-Value
PHA Net Response (day 2, conc. 3)		(n=665) $\bar{x}$=127,350	(n=144) $\bar{x}$=128,112	(n=29) $\bar{x}$=116,717	0.493	(n=71) $\bar{x}$=123,846	(n=569) $\bar{x}$=127,222	(n=197) $\bar{x}$=128,776	0.765
Maximum PHA Net Response		(n=658) $\bar{x}$=204,307	(n=143) $\bar{x}$=208,602	(n=29) $\bar{x}$=207,013	0.546	(n=68) $\bar{x}$=211,846	(n=565) $\bar{x}$=206,364	(n=196) $\bar{x}$=199,714	0.606
Unstimulated MLC Response[a]		(n=664) $\bar{x}$=3,990	(n=143) $\bar{x}$=3,694	(n=28) $\bar{x}$=3,276	0.263	(n=71) $\bar{x}$=4,181	(n=568) $\bar{x}$=3,917	(n=195) $\bar{x}$=3,829	0.709
MLC Net Response		(n=664) $\bar{x}$=86,453	(n=143) $\bar{x}$=90,744	(n=28) $\bar{x}$=89,247	0.491	(n=71) $\bar{x}$=83,096	(n=568) $\bar{x}$=86,949	(n=195) $\bar{x}$=89,018	0.564
NKCA 50/1 Net Response		(n=661) $\bar{x}$=408.1	(n=145) $\bar{x}$=443.9	(n=29) $\bar{x}$=506.1	0.006	(n=70) $\bar{x}$=388.9	(n=570) $\bar{x}$=412.8	(n=194) $\bar{x}$=445.8	0.048
NKCA 50/1 Percent Release		(n=661) $\bar{x}$=34.9	(n=145) $\bar{x}$=37.4	(n=29) $\bar{x}$=41.8	0.022	(n=70) $\bar{x}$=33.7	(n=570) $\bar{x}$=35.3	(n=194) $\bar{x}$=37.4	0.161
NKCI 50/1 Net Response		(n=669) $\bar{x}$=809.5	(n=143) $\bar{x}$=813.8	(n=29) $\bar{x}$=834.2	0.500	(n=72) $\bar{x}$=826.1	(n=573) $\bar{x}$=806.0	(n=196) $\bar{x}$=820.4	0.143
NKCI 50/1 Percent Release		(n=669) $\bar{x}$=66.7	(n=143) $\bar{x}$=67.2	(n=29) $\bar{x}$=68.7	0.467	(n=72) $\bar{x}$=67.0	(n=573) $\bar{x}$=66.4	(n=196) $\bar{x}$=67.7	0.104

[a]Transformed from natural logarithm scale.
[b]CD25 cell counts contained both zero values and positive values. Dependent variable-covariate associations were based on positive CD25 cell counts only.
*Dependent variable-covariate associations were adjusted for batch-to-batch variation for CD2 cells, CD4 cells, and CD8 cells. Associations were adjusted for batch-to-batch variation and blood draw day-to-day variation for all other dependent variables except composite skin test diagnosis, which was not adjusted by any covariates.

TABLE P-3.

Summary of Group-by-Covariate Interactions for Immunologic Variables

Variable	Interaction	Stratification	Statistic	Group: Ranch Hand	Group: Comparison	Adj. Relative Risk (95% C.I.)	p-Value
Composite Skin Test Diagnosis	Group-by-Lifetime Cigarette Smoking History	0	n	208	290		
			Number/%				
			Abnormal	12 5.8%	13 4.5%	1.32 (0.59,2.97)	0.497
			Normal	196 94.2%	277 95.5%		
		>0 - 10	n	200	272		
			Number/%				
			Abnormal	13 6.5%	15 5.5%	1.24 (0.57,2.68)	0.590
			Normal	187 93.5%	257 94.5%		
		>10	n	335	425		
			Number/%				
			Abnormal	26 7.8%	13 3.1%	2.66 (1.35,5.27)	0.005
			Normal	309 92.2%	412 96.9%		
PHA Net Response (day 1, conc. 1)	Group-by-Current Alcohol Use	0-1	n	304	366		
			Adj. Mean	109,902	106,264	—	0.305
			95% C.I.	(101,738, 118,066)	(98,435, 114,093)		
		>1-4	n	60	85		
			Adj. Mean	104,644	109,786	—	0.489
			95% C.I.	(91,735, 117,552)	(98,544, 121,027)		
		>4	n	8	21		
			Adj. Mean	73,793	114,309	—	0.024
			95% C.I.	(42,986, 104,600)	(93,907, 134,710)		

TABLE P-3. (continued)

Summary of Group-by-Covariate Interactions for Immunologic Variables

Variable	Interaction	Stratification	Statistic	Group: Ranch Hand	Group: Comparison	Adj. Relative Risk (95% C.I.)	p-Value
MLC Net Response	Group-by-Race	Nonblack	n Adj. Mean 95% C.I.	350 87,867 (83,517, 92,256)	442 85,200 (81,357, 89,044)	—	0.341
		Black	n Adj. Mean 95% C.I.	20 87,383 (70,302, 104,464)	25 109,376 (94,048, 124,705)	—	0.059
NKCA 50/1 Net Response	Group-by-Race	Nonblack	n Adj. Mean 95% C.I.	350 410.0 (389.1,430.8)	441 424.7 (406.3,443.1)	—	0.268
		Black	n Adj. Mean 95% C.I.	19 467.1 (384.1,550.2)	25 359.3 (280.2,438.4)	—	0.065
NKCA 50/1 Percent Release	Group-by-Race	Nonblack	n Adj. Mean 95% C.I.	350 35.1 (33.3,36.8)	441 36.0 (34.5,37.5)	—	0.392
		Black	n Adj. Mean 95% C.I.	19 40.4 (33.6,47.2)	25 30.1 (23.7,36.6)	—	0.031

TABLE P-3. (continued)

Summary of Group-by-Covariate Interactions for Immunologic Variables

Variable	Interaction	Stratification	Statistic	Group: Ranch Hand	Group: Comparison	Adj. Relative Risk (95% C.I.)	p-Value
NKCI 50/1 Net Response	Group-by-Race	Nonblack	n	351	448		
			Adj. Mean	809.2	820.5	—	0.146
			95% C.I.	(796.9,821.5)	(809.7,831.2)		
		Black	n	20	24		
			Adj. Mean	828.6	734.7	—	0.007
			95% C.I.	(780.7,876.6)	(686.5,782.9)		
NKCI 50/1 Percent Release	Group-by-Race	Nonblack	n	351	448		
			Adj. Mean	66.5	67.7	—	0.069
			95% C.I.	(65.6,67.5)	(66.8,68.5)		
		Black	n	20	24		
			Adj. Mean	67.9	60.5	—	0.008
			95% C.I.	(64.0,71.7)	(56.7,64.3)		

—Adjusted relative risk not applicable for continuous analysis of a variable.

Note: Refer to Tables 19-6 and 19-10 for specification of adjusted model.

TABLE P-4.

Exposure Index-by-Covariate Interactions for Immunologic Variables

Variable	Interaction (Occupation)	Stratification	Statistic	Exposure Index: Low		Exposure Index: Medium		Exposure Index: High		Exposure Index Contrast	Adj. Relative Risk (95% C.I.)	p-Value
Composite Skin Test Diagnosis	Exposure Index-by-Lifetime Cigarette Smoking History	0 pack-yrs. 0-1 dr./day	n	29		30		31		Overall		0.142
			Number/%									
			Abnormal	3	10.3%	1	3.3%	0	0.0%	M vs. L	0.30 (0.03,3.05)	0.586
			Normal	26	89.7%	29	96.7%	31	100.0%	H vs. L	—	0.214
	Exposure Index-by-Current Alcohol Use (Officer)	0 pack-yrs. >1-4 dr./day	n	8		3		4		Overall		0.229
			Number/%									
			Abnormal	0	0.0%	0	0.0%	1	25.0%	M vs. L	—	—
			Normal	8	100.0%	3	100.0%	3	75.0%	H vs. L	—	0.666
		>0-10 pack-yrs. >0-1 dr./day	n	22		15		17		Overall		0.266
			Number/%									
			Abnormal	0	0.0%	1	6.7%	0	0.0%	M vs. L	—	0.810
			Normal	22	100.0%	14	93.3%	17	100.0%	H vs. L	—	—
		>0-10 pack-yrs. >1-4 dr./day	n	5		10		3		Overall		0.619
			Number/%									
			Abnormal	1	20.0%	1	10.0%	1	33.3%	M vs. L	0.44 (0.02,9.03)	0.999
			Normal	4	80.0%	9	90.0%	2	66.7%	H vs. L	2.00 (0.08,51.59)	0.999
		>0-10 pack-yrs. >4 dr./day	n	0		0		1		Overall		—
			Number/%									
			Abnormal	0	—	0	—	0	0.0%	M vs. L	—	—
			Normal	0	—	0	—	1	100.0%	H vs. L	—	—

TABLE P-4. (continued)

Exposure Index-by-Covariate Interactions for Immunologic Variables

Variable	Interaction (Occupation)	Stratification	Statistic	Exposure Index Low		Exposure Index Medium		Exposure Index High		Exposure Index Contrast	Adj. Relative Risk (95% C.I.)	p-Value
Composite Skin Test Diagnosis (continued)		>10 pack-yrs. 0-1 dr./day	n	18		27		32		Overall		0.035
			Number/%									
			Abnormal	3	16.7%	1	3.7%	0	0.0%	M vs. L	0.19 (0.02,2.02)	0.336
			Normal	15	83.3%	26	96.3%	32	100.0%	H vs. L	—	0.083
		>10 pack-yrs. >1-4 dr./day	n	6		9		13		Overall		0.149
			Number/%									
			Abnormal	1	16.7%	0	0.0%	0	0.0%	M vs. L	—	0.800
			Normal	5	83.3%	9	100.0%	13	100.0%	H vs. L	—	0.632
		>10 pack-yrs. >4 dr./day	n	4		0		1		Overall		—
			Number/%									
			Abnormal	0	0.0%	0	—	0	0.0%	M vs. L	—	—
			Normal	4	100.0%	0	—	1	100.0%	H vs. L	—	—

TABLE P-4. (continued)

Exposure Index-by-Covariate Interactions for Immunologic Variables

Variable	Interaction (Occupation)	Stratification	Statistic	Exposure Index						Exposure Index Contrast	Adj. Relative Risk (95% C.I.)	p-Value
				Low		Medium		High				
Composite Skin Test Diagnosis	Exposure Index-by-Lifetime Alcohol History (Enlisted Flyer)	0	n	2		5		6		Overall		—
			Number/%									
			Abnormal	0	0.0%	0	0.0%	0	0.0%	M vs. L	—	—
			Normal	2	100.0%	5	100.0%	6	100.0%	H vs. L	—	—
		>0-40	n	25		22		28		Overall		0.255
			Number/%									
			Abnormal	3	12.0%	0	0.0%	3	10.7%	M vs. L	—	0.284
			Normal	22	88.0%	22	100.0%	25	89.3%	H vs. L	0.88 (0.16,4.82)	0.999
		>40	n	12		16		6		Overall		0.049
			Number/%									
			Abnormal	3	25.0%	0	0.0%	0	0.0%	M vs. L	—	0.134
			Normal	9	75.0%	16	100.0%	6	100.0%	H vs. L	—	0.540

TABLE P-4. (continued)

Exposure Index-by-Covariate Interactions for Immunologic Variables

Variable	Interaction (Occupation)	Stratification	Statistic	Exposure Index: Low		Exposure Index: Medium		Exposure Index: High		Exposure Index Contrast	Adj. Relative Risk (95% C.I.)	p-Value
Composite Skin Test Diagnosis	Exposure Index-by-Lifetime Alcohol History	0 dr.-yrs. 0-1 dr./day	n	10		13		14		Overall		0.927
			Number/%									
			Abnormal	1	10.0%	2	15.4%	2	14.3%	M vs. L	1.64 (0.13,21.10)	0.999
			Normal	9	90.0%	11	84.6%	12	85.7%	H vs. L	1.50 (0.12,19.24)	0.999
		>0-40 dr.-yrs. 0-1 dr./day	n	71		64		60		Overall		0.315
			Number/%									
			Abnormal	3	4.2%	7	10.9%	4	6.7%	M vs. L	2.78 (0.69,11.26)	0.246
			Normal	68	95.8%	57	89.1%	56	93.3%	H vs. L	1.62 (0.35,7.54)	0.814
	Exposure Index-by-Current Alcohol Use (Enlisted Groundcrew)	>0-40 dr.-yrs. >1-4 dr./day	n	11		9		12		Overall		0.423
			Number/%									
			Abnormal	0	0.0%	0	0.0%	1	8.3%	M vs. L	—	—
			Normal	11	100.0%	9	100.0%	11	91.7%	H vs. L	—	0.999
		>40 dr.-yrs. 0-1 dr./day	n	11		11		13		Overall		0.034
			Number/%									
			Abnormal	1	9.1%	4	36.4%	0	0.0%	M vs. L	5.71 (0.52,62.66)	0.310
			Normal	10	90.9%	7	63.6%	13	100.0%	H vs. L	—	0.916
		>40 dr.-yrs. >1-4 dr./day	n	7		6		6		Overall		—
			Number/%									
			Abnormal	0	0.0%	0	0.0%	0	0.0%	M vs. L	—	—
			Normal	7	100.0%	6	100.0%	6	100.0%	H vs. L	—	—
		>40 dr.-yrs. >4 dr./day	n	5		2		3		Overall		0.659
			Number/%									
			Abnormal	1	20.0%	0	0.0%	1	33.3%	M vs. L	—	0.999
			Normal	4	80.0%	2	100.0%	2	66.7%	H vs. L	2.00 (0.08,51.59)	0.999

TABLE P-4. (continued)

Exposure Index-by-Covariate Interactions for Immunologic Variables

Variable	Interaction (Occupation)	Stratification	Statistic	Exposure Index			Exposure Index Contrast	Adj. Relative Risk (95% C.I.)	p-Value
				Low	Medium	High			
CD2 Cells	Exposure Index-by-Current Alcohol Use (Enlisted Flyer)	0-1	n	17	20	20			
			Adj. Mean[a]	1,586.5	1,539.1	1,876.5	M vs. L	—	0.769
			95% C.I.[a]	(1,282.6, 1,962.4)	(1,224.3, 1,934.8)	(1,507.2, 2,336.3)	H vs. L	—	0.110
		>1	n	3	4	4			
			Adj. Mean[a]	1,411.8	1,835.2	1,352.0	M vs. L	—	0.278
			95% C.I.[a]	(961.4, 2,073.3)	(1,335.2, 2,522.4)	(951.8, 1,920.5)	H vs. L	—	0.851
CD2 Cells	Exposure Index-by-Lifetime Cigarette Smoking History (Enlisted Groundcrew)	0	n	9	15	9			
			Adj. Mean[a]	1,562.2	1,505.5	1,511.9	M vs. L	—	0.801
			95% C.I.[a]	(1,225.6, 1,991.3)	(1,230.4, 1,842.1)	(1,185.1, 1,928.8)	H vs. L	—	0.842
		>0-10	n	18	19	17			
			Adj. Mean[a]	1,789.3	1,687.4	1,308.9	M vs. L	—	0.610
			95% C.I.[a]	(1,493.8, 2,143.2)	(1,407.1, 2,023.4)	(1,096.4, 1,562.5)	H vs. L	—	0.010
		>10	n	15	30	21			
			Adj. Mean[a]	1,522.5	1,657.3	1,908.9	M vs. L	—	0.446
			95% C.I.[a]	(1,245.7, 1,860.8)	(1,427.6, 1,924.1)	(1,615.1, 2,256.1)	H vs. L	—	0.061

TABLE P-4. (continued)

Exposure Index-by-Covariate Interactions for Immunologic Variables

Variable	Interaction (Occupation)	Stratification	Statistic	Exposure Index			Exposure Index Contrast	Adj. Relative Risk (95% C.I.)	p-Value
				Low	Medium	High			
CD4 Cells	Exposure Index-by-Current Alcohol Use (Enlisted Flyer)	0-1	n	17	20	20			
			Adj. Mean[a]	891.5	886.5	1,004.1	M vs. L	—	0.962
			95% C.I.[a]	(696.9, 1,140.4)	(680.3, 1,155.2)	(779.0, 1,294.1)	H vs. L	—	0.324
		>1	n	3	4	5			
			Adj. Mean[a]	946.0	1,119.6	841.7	M vs. L	—	0.545
			95% C.I.[a]	(606.3, 1,476.0)	(775.3, 1,616.9)	(578.8, 1,224.2)	H vs. L	—	0.649
CD4 Cells	Exposure Index-by-Lifetime Cigarette Smoking History (Enlisted Groundcrew)	0	n	9	14	9			
			Adj. Mean[a]	840.9	773.5	784.3	M vs. L	—	0.589
			95% C.I.[a]	(653.8, 1,081.6)	(618.7, 967.0)	(609.5, 1,009.4)	H vs. L	—	0.681
		>0-10	n	18	19	17			
			Adj. Mean[a]	1,058.3	991.4	734.5	M vs. L	—	0.582
			95% C.I.[a]	(876.8, 1,277.3)	(819.9, 1,198.7)	(611.3, 882.6)	H vs. L	—	0.004
		>10	n	15	30	21			
			Adj. Mean[a]	858.8	958.3	1,098.3	M vs. L	—	0.341
			95% C.I.[a]	(697.6, 1,057.3)	(820.4, 1,119.4)	(923.0, 1,306.9)	H vs. L	—	0.240

TABLE P-4. (continued)

Exposure Index-by-Covariate Interactions for Immunologic Variables

Variable	Interaction (Occupation)	Stratification	Statistic	Exposure Index			Exposure Index Contrast	Adj. Relative Risk (95% C.I.)	p-Value
				Low	Medium	High			
CD8 Cells	Exposure Index-by-Age (Officer)	Born ≥1942	n	16	8	6			
			Adj. Mean[a]	405.5	477.1	690.7	M vs. L	—	0.415
			95% C.I.[a]	(245.3, 670.2)	(272.6, 834.9)	(388.1, 1,229.2)	H vs. L	—	0.015
		Born 1923-1941	n	32	37	39			
			Adj. Mean[a]	525.2	520.4	504.6	M vs. L	—	0.935
			95% C.I.[a]	(325.3, 848.0)	(332.5, 814.5)	(315.1, 808.0)	H vs. L	—	0.720
		Born ≤1922	n	3	8	2			
			Adj. Mean[a]	1,121.9	399.2	466.1	M vs. L	—	<0.001
			95% C.I.[a]	(568.6, 2,213.7)	(231.2, 689.4)	(215.9, 1,006.2)	H vs. L	—	0.036
CD8 Cells	Exposure Index-by-Current Alcohol Use (Enlisted Flyer)	0-1	n	17	20	20			
			Adj. Mean[a]	499.6	502.8	674.9	M vs. L	—	0.965
			95% C.I.[a]	(369.7, 675.0)	(363.8, 695.0)	(494.9, 920.4)	H vs. L	—	0.044
		>1	n	3	4	5			
			Adj. Mean[a]	244.2	569.6	383.6	M vs. L	—	0.015
			95% C.I.[a]	(141.7, 420.6)	(363.5, 892.7)	(242.7, 606.5)	H vs. L	—	0.153

TABLE P-4. (continued)

Exposure Index-by-Covariate Interactions for Immunologic Variables

Variable	Interaction (Occupation)	Stratification	Statistic	Exposure Index			Exposure Index Contrast	Adj. Relative Risk (95% C.I.)	p-Value
				Low	Medium	High			
CD8 Cells	Exposure Index-by-Lifetime Alcohol History	0 dr.-yrs.	n	4	4	8			
		0-1 dr./day	Adj. Mean[a]	465.8	311.7	364.5	M vs. L	—	0.234
			95% C.I.[a]	(286.8, 756.6)	(194.5, 499.5)	(259.0, 513.0)	H vs. L	—	0.403
		>0-40 dr.-yrs.	n	28	37	27			
	Exposure Index-by-Current Alcohol Use (Enlisted Groundcrew)	0-1 dr./day	Adj. Mean[a]	482.9	469.2	496.0	M vs. L	—	0.810
			95% C.I.[a]	(393.9, 592.0)	(384.0, 573.3)	(404.9, 607.5)	H vs. L	—	0.835
		>0-40 dr.-yrs.	n	1	9	1			
		>1-4 dr./day	Adj. Mean[a]	940.0	441.4	588.4	M vs. L	—	0.132
			95% C.I.[a]	—	(316.8, 615.2)	—	H vs. L	—	0.484
		>40 dr.-yrs.	n	5	8	7			
		0-1 dr./day	Adj. Mean[a]	339.3	572.0	422.1	M vs. L	—	0.060
			95% C.I.[a]	(217.1, 530.4)	(407.1, 803.6)	(290.2, 614.0)	H vs. L	—	0.437
		>40 dr.-yrs.	n	2	5	2			
		>1-4 dr./day	Adj. Mean[a]	539.0	343.0	844.9	M vs. L	—	0.263
			95% C.I.[a]	(275.3, 1,055.1)	(220.4, 533.6)	(431.0, 1,656.6)	H vs. L	—	0.349
		>40 dr.-yrs.	n	2	1	1			
		>4 dr./day	Adj. Mean[a]	390.1	638.5	975.9	M vs. L	—	0.400
			95% C.I.[a]	(201.7, 754.3)	—	—	H vs. L	—	0.121

TABLE P-4. (continued)

Exposure Index-by-Covariate Interactions for Immunologic Variables

Variable	Interaction (Occupation)	Stratification	Statistic	Exposure Index			Exposure Index Contrast	Adj. Relative Risk (95% C.I.)	p-Value
				Low	Medium	High			
CD20 Cells	Exposure Index-by-Lifetime Cigarette Smoking History	0 pack-yrs. 0 cigs./day	n	20	19	18			
			Adj. Mean[a]	168.2	181.6	185.5	M vs. L	—	0.669
			95% C.I.[a]	(86.3, 328.1)	(93.7, 352.0)	(95.3, 361.3)	H vs. L	—	0.587
		>0-10 pack-yrs. 0 cigs./day	n	9	7	8			
			Adj. Mean[a]	194.7	217.5	175.8	M vs. L	—	0.692
			95% C.I.[a]	(94.9, 399.3)	(104.1, 454.4)	(85.2, 362.7)	H vs. L	—	0.701
	Exposure Index-by-Current Cigarette Smoking (Officer)	>0-10 pack-yrs. >0-20 cigs./day	n	2	3	1			
			Adj. Mean[a]	327.8	184.4	217.2	M vs. L	—	0.249
			95% C.I.[a]	(123.8, 867.8)	(77.1, 440.9)	—	H vs. L	—	0.537
		>0-10 pack-yrs. >20 cigs./day	n	0	1	1			
			Adj. Mean[a]	—	179.1	160.5	M vs. L	—	—
			95% C.I.[a]	—	—	—	H vs. L	—	—

TABLE P-4. (continued)

Exposure Index-by-Covariate Interactions for Immunologic Variables

Variable	Interaction (Occupation)	Stratification	Statistic	Exposure Index			Exposure Index Contrast	Adj. Relative Risk (95% C.I.)	p-Value
				Low	Medium	High			
CD20 Cells (continued)		>10 pack-yrs. 0 cigs./day	n	12	14	13			
			Adj. Mean[a]	202.8	239.6	211.9	M vs. L	—	0.452
			95% C.I.[a]	(101.1, 407.0)	(121.6, 472.1)	(105.9, 423.8)	H vs. L	—	0.845
		>10 pack-yrs. >0-20 cigs./day	n	3	4	5			
			Adj. Mean[a]	197.8	234.2	243.4	M vs. L	—	0.704
			95% C.I.[a]	(82.8, 472.6)	(126.5, 433.6)	(111.8, 530.0)	H vs. L	—	0.602
		>10 pack-yrs. >20 cigs./day	n	5	5	2			
			Adj. Mean[a]	397.9	245.1	497.7	M vs. L	—	0.164
			95% C.I.[a]	(182.6, 867.3)	(111.8, 537.4)	(184.7, 1,340.9)	H vs. L	—	0.631

TABLE P-4. (continued)

Exposure Index-by-Covariate Interactions for Immunologic Variables

Variable	Interaction (Occupation)	Stratification	Statistic	Exposure Index			Exposure Index Contrast	Adj. Relative Risk (95% C.I.)	p-Value
				Low	Medium	High			
CD20 Cells	Exposure Index-by-Lifetime Cigarette Smoking History (Enlisted Groundcrew)	0	n	9	15	9			
			Adj. Mean[a]	206.4	134.3	154.7	M vs. L	—	0.059
			95% C.I.[a]	(142.2, 299.5)	(98.5, 183.0)	(106.4, 224.8)	H vs. L	—	0.254
		>0-10	n	18	19	17			
			Adj. Mean[a]	227.5	179.5	158.0	M vs. L	—	0.181
			95% C.I.[a]	(172.5, 300.2)	(135.8, 237.2)	(120.4, 207.3)	H vs. L	—	0.049
		>10	n	15	30	21			
			Adj. Mean[a]	150.9	204.5	238.7	M vs. L	—	0.077
			95% C.I.[a]	(110.9, 205.4)	(162.6, 257.2)	(184.6, 308.5)	H vs. L	—	0.014

TABLE P-4. (continued)

Exposure Index-by-Covariate Interactions for Immunologic Variables

Variable	Interaction (Occupation)	Stratification	Statistic	Exposure Index			Exposure Index Contrast	Adj. Relative Risk (95% C.I.)	p-Value
				Low	Medium	High			
CD14 Cells	Exposure Index-by-Lifetime Cigarette Smoking History	≤10 pack-yrs. 0-1 dr./day	n	23	25	23			
			Adj. Mean[a]	29.4	19.5	24.8	M vs. L	—	0.036
			95% C.I.[a]	(21.3,40.5)	(14.2,26.6)	(18.2,33.8)	H vs. L	—	0.408
		≤10 pack-yrs. >1 dr./day	n	4	9	3			
			Adj. Mean[a]	29.9	17.9	25.3	M vs. L	—	0.220
			95% C.I.[a]	(15.0,59.4)	(11.0,29.3)	(11.5,55.9)	H vs. L	—	0.754
	Exposure Index-by-Current Alcohol Use	>10 pack-yrs. 0-1 dr./day	n	14	24	20			
			Adj. Mean[a]	21.6	36.5	28.6	M vs. L	—	0.023
			95% C.I.[a]	(14.4,32.2)	(26.6,49.9)	(20.6,39.8)	H vs. L	—	0.246
	(Enlisted Groundcrew)	>10 pack-yrs. >1 dr./day	n	1	6	2			
			Adj. Mean[a]	14.1	21.3	36.5	M vs. L	—	0.581
			95% C.I.[a]	—	(12.0,37.9)	(13.9,95.7)	H vs. L	—	0.258
CD25 Cells	Exposure Index-by-Lifetime Alcohol History (Officer)	0	n	5	0	5			
			Adj. Mean[a]	8.1	—	14.3	M vs. L	—	—
			95% C.I.[a]	(1.9,34.1)	—	(3.5,59.3)	H vs. L	—	0.399
		>0-40	n	29	27	19			
			Adj. Mean[a]	12.7	14.1	11.2	M vs. L	—	0.847
			95% C.I.[a]	(4.1,40.1)	(4.8,40.8)	(3.5,36.1)	H vs. L	—	0.687
		>40	n	5	10	6			
			Adj. Mean[a]	12.7	11.6	46.5	M vs. L	—	0.875
			95% C.I.[a]	(2.8,56.8)	(3.1,43.1)	(11.6,185.7)	H vs. L	—	0.051

TABLE P-4. (continued)

Exposure Index-by-Covariate Interactions for Immunologic Variables

Variable	Interaction (Occupation)	Stratification	Statistic	Exposure Index			Exposure Index Contrast	Adj. Relative Risk (95% C.I.)	p-Value
				Low	Medium	High			
HLA-DR Cells	Exposure Index-by-Lifetime Cigarette Smoking History (Enlisted Groundcrew)	0	n	9	15	9			
			Adj. Mean[a]	475.3	325.4	392.3	M vs. L	—	0.013
			95% C.I.[a]	(370.7, 609.4)	(264.7, 400.0)	(305.7, 503.5)	H vs. L	—	0.256
		>0-10	n	18	19	17			
			Adj. Mean[a]	491.5	426.4	369.7	M vs. L	—	0.229
			95% C.I.[a]	(408.6, 591.3)	(354.0, 513.6)	(308.4, 443.3)	H vs. L	—	0.022
		>10	n	15	30	22			
			Adj. Mean[a]	383.9	476.9	528.6	M vs. L	—	0.059
			95% C.I.[a]	(312.5, 471.5)	(409.3, 555.7)	(446.7, 625.5)	H vs. L	—	0.010
CD4/CD8 Ratio	Exposure Index-by-Age (Officer)	Born ≥1942	n	16	8	6			
			Adj. Mean[a]	1.61	1.43	1.17	M vs. L	—	0.558
			95% C.I.[a]	(0.96,2.72)	(0.80,2.56)	(0.65,2.13)	H vs. L	—	0.155
		Born 1923-1941	n	32	37	39			
			Adj. Mean[a]	1.34	1.59	1.39	M vs. L	—	0.154
			95% C.I.[a]	(0.82,2.21)	(1.00,2.53)	(0.85,2.27)	H vs. L	—	0.773
		Born ≤1922	n	3	8	2			
			Adj. Mean[a]	0.54	1.57	1.30	M vs. L	—	0.001
			95% C.I.[a]	(0.27,1.10)	(0.89,2.76)	(0.58,2.88)	H vs. L	—	0.044

TABLE P-4. (continued)

Exposure Index-by-Covariate Interactions for Immunologic Variables

Variable	Interaction (Occupation)	Stratification	Statistic	Exposure Index			Exposure Index Contrast	Adj. Relative Risk (95% C.I.)	p-Value
				Low	Medium	High			
CD4/CD8 Ratio	Exposure Index-by-Current Alcohol Use (Enlisted Groundcrew)	0-1	n	37	48	42			
			Adj. Mean[a]	2.07	2.04	2.00	M vs. L	—	0.973
			95% C.I.[a]	(1.75,2.44)	(1.40,3.00)	(1.72,2.33)	H vs. L	—	0.719
		>1	n	5	15	4			
			Adj. Mean[a]	2.04	2.26	6.80	M vs. L	—	0.643
			95% C.I.[a]	(1.40,3.00)	(1.79,2.87)	(4.43,10.45)	H vs. L	—	0.067
TLC	Exposure Index-by-Lifetime Cigarette Smoking History (Enlisted Groundcrew)	0	n	9	15	9			
			Adj. Mean	1,955.1	1,836.5	1,813.1	M vs. L	—	0.587
			95% C.I.	(1,632.6, 2,341.3)	(1,597.2, 2,111.7)	(1,514.0, 2,171.2)	H vs. L	—	0.558
		>0-10	n	18	19	17			
			Adj. Mean	2,248.3	2,182.2	1,669.4	M vs. L	—	0.820
			95% C.I.	(1,863.8, 2,712.1)	(1,818.0, 2,619.2)	(1,376.4, 2,024.7)	H vs. L	—	0.031
		>10	n	16	30	22			
			Adj. Mean	2,023.0	2,219.4	2,402.0	M vs. L	—	0.273
			95% C.I.	(1,766.8, 2,316.4)	(2,010.5, 2,450.2)	(2,140.0, 2,696.1)	H vs. L	—	0.058

TABLE P-4. (continued)

Exposure Index-by-Covariate Interactions for Immunologic Variables

Variable	Interaction (Occupation)	Stratification	Statistic	Exposure Index			Exposure Index Contrast	Adj. Relative Risk (95% C.I.)	p-Value
				Low	Medium	High			
IgG	Exposure Index-by-Lifetime Cigarette Smoking History (Enlisted Groundcrew)	0	n	40	36	23			
			Adj. Mean	1,148.3	1,208.2	1,278.7	M vs. L	—	0.273
			95% C.I.	(1,065.0, 1,231.6)	(1,120.1, 1,296.5)	(1,173.5, 1,384.0)	H vs. L	—	0.036
		>0-10	n	42	51	38			
			Adj. Mean	1,097.9	1,138.8	1,134.2	M vs. L	—	0.409
			95% C.I.	(1,018.6, 1,177.2)	(1,063.7, 1,213.9)	(1,052.4, 1,215.9)	H vs. L	—	0.496
		>10	n	63	63	77			
			Adj. Mean	1,219.3	1,178.3	1,149.7	M vs. L	—	0.334
			95% C.I.	(1,150.2, 1,288.4)	(1,110.3, 1,246.3)	(1.084.1, 1,215.3)	H vs. L	—	0.086

TABLE P-4. (continued)

Exposure Index-by-Covariate Interactions for Immunologic Variables

Variable	Interaction (Occupation)	Stratification	Statistic	Exposure Index			Exposure Index Contrast	Adj. Relative Risk (95% C.I.)	p-Value
				Low	Medium	High			
IgA	Exposure Index-by-Current Cigarette Smoking (Officer)	0-Never	n	50	40	42			
			Adj. Mean[a]	232.97	196.15	184.98	M vs. L	—	0.085
			95% C.I.[a]	(203.99, 266.06)	(169.25, 227.31)	(160.21, 213.58)	H vs. L	—	0.019
		0-Former	n	49	54	49			
			Adj. Mean[a]	193.38	215.54	191.50	M vs. L	—	0.242
			95% C.I.[a]	(169.17, 221.06)	(189.84, 244.73)	(167.58, 218.84)	H vs. L	—	0.918
		>0-20	n	15	12	15			
			Adj. Mean[a]	183.69	221.82	222.53	M vs. L	—	0.300
			95% C.I.[a]	(144.34, 233.77)	(169.31, 290.62)	(174.95, 283.04)	H vs. L	—	0.261
		>20	n	11	13	12			
			Adj. Mean[a]	228.23	125.91	185.50	M vs. L	—	0.002
			95% C.I.[a]	(172.34, 302.25)	(97.24, 163.04)	(141.69, 242.87)	H vs. L	—	0.288

TABLE P-4. (continued)

Exposure Index-by-Covariate Interactions for Immunologic Variables

Variable	Interaction (Occupation)	Stratification	Statistic	Exposure Index			Exposure Index Contrast	Adj. Relative Risk (95% C.I.)	p-Value
				Low	Medium	High			
IgA	Exposure Index-by-Lifetime Alcohol History (Enlisted Groundcrew)	0	n	14	16	20			
			Adj. Mean[a]	185.66	176.66	211.80	M vs. L	—	0.756
			95% C.I.[a]	(147.07, 234.38)	(142.01, 219.75)	(174.24, 257.46)	H vs. L	—	0.386
		>0-40	n	99	106	87			
			Adj. Mean[a]	207.80	219.25	210.06	M vs. L	—	0.382
			95% C.I.[a]	(190.36, 226.85)	(201.17, 238.94)	(191.22, 230.76)	H vs. L	—	0.867
		>40	n	29	28	29			
			Adj. Mean[a]	217.97	256.64	206.75	M vs. L	—	0.159
			95% C.I.[a]	(185.17, 256.58)	(217.64, 302.63)	(175.77, 243.19)	H vs. L	—	0.645
Unstimulated PHA Response	Exposure Index-by-Lifetime Alcohol History	0 dr.-yrs. 0-1 dr./day.	n	4	4	8			
			Adj. Mean[a]	2,353	2,562	2,307	M vs. L	—	0.812
			95% C.I.[a]	(1,405, 3,940)	(1,553, 4,227)	(1,603, 3,320)	H vs. L	—	0.950
		>0-40 dr.-yrs. 0-1 dr./day.	n	26	36	27			
			Adj. Mean[a]	2,569	2,547	2,628	M vs. L	—	0.948
			95% C.I.[a]	(2,059, 3,206)	(2,055, 3,158)	(2,119, 3,259)	H vs. L	—	0.870
	Exposure Index-by-Current Alcohol Use (Enlisted Groundcrew)	>0-40 dr.-yrs. >1-4 dr./day.	n	1	9	1			
			Adj. Mean[a]	5,937	2,805	2,216	M vs. L	—	0.160
			95% C.I.[a]	—	(1,971, 3,991)	—	H vs. L	—	0.167

TABLE P-4. (continued)

Exposure Index-by-Covariate Interactions for Immunologic Variables

Variable	Interaction (Occupation)	Stratification	Statistic	Exposure Index			Exposure Index Contrast	Adj. Relative Risk (95% C.I.)	p-Value
				Low	Medium	High			
Unstimulated PHA Response (continued)		>40 dr.-yrs. 0-1 dr./day.	n	5	8	7			
			Adj. Mean[a]	3,708	1,767	3,112	M vs. L	—	0.012
			95% C.I.[a]	(2,310, 5,954)	(1,231, 2,536)	(2,083, 4,621)	H vs. L	—	0.556
		>40 dr.-yrs. >1-4 dr./day.	n	2	5	3			
			Adj. Mean[a]	1,890	2,369	1,712	M vs. L	—	0.598
			95% C.I.[a]	(926, 3,860)	(1,482, 3,787)	(948, 3,090)	H vs. L	—	0.831
		>40 dr.-yrs. >4 dr./day.	n	2	1	1			
			Adj. Mean[a]	3,003	6,747	3,822	M vs. L	—	0.194
			95% C.I.[a]	(1,490, 6,053)	—	—	H vs. L	—	0.700
PHA Net Response (day 2, conc. 1)	Exposure Index-by-Age (Enlisted Groundcrew)	Born ≥1942	n	22	49	28			
			Adj. Mean	177,023	154,723	173,610	M vs. L	—	0.238
			95% C.I.	(142,562, 211,520)	(127,613, 181,834)	(143,098, 207,069)	H vs. L	—	0.871
		Born <1942	n	18	14	18			
			Adj. Mean	153,835	175,083	150,914	M vs. L	—	0.414
			95% C.I.	(114,760, 192,909)	(132,610, 217,556)	(115,108, 186,719)	H vs. L	—	0.908

TABLE P-4. (continued)

Exposure Index-by-Covariate Interactions for Immunologic Variables

Variable	Interaction (Occupation)	Stratification	Statistic	Exposure Index			Exposure Index Contrast	Adj. Relative Risk (95% C.I.)	p-Value
				Low	Medium	High			
PHA Net Response (day 2, conc. 3)	Exposure Index-by-Current Cigarette Smoking (Officer)	0-Never	n	20	19	18			
			Adj. Mean	100,898	98,354	114,124	M vs. L	—	0.877
			95% C.I.	(42,669, 159,126)	(40,827, 155,881)	(56,017, 172,231)	H vs. L	—	0.424
		0-Former	n	21	22	20			
			Adj. Mean	130,372	118,974	94,234	M vs. L	—	0.455
			95% C.I.	(73,175, 188,289)	(62,060, 175,888)	(36,641, 151,826)	H vs. L	—	0.023
		>0-20	n	5	7	6			
			Adj. Mean	122,091	135,500	99,796	M vs. L	—	0.659
			95% C.I.	(53,335, 190,847)	(82,666, 188,334)	(33,370, 166,222)	H vs. L	—	0.462
		>20	n	4	6	3			
			Adj. Mean	81,091	178,503	109,587	M vs. L	—	0.003
			95% C.I.	(8,692, 153,490)	(111,665, 245,340)	(31,780, 187,393)	H vs. L	—	0.462
Unstimulated MLC Response	Exposure Index-by-Age (Enlisted Flyer)	Born ≥1942	n	4	6	3			
			Adj. Mean[a]	5,781.4	3,994.9	3,997.6	M vs. L	—	0.514
			95% C.I.[a]	(2,205.5, 15,155.0)	(1,771.8, 9,007.3)	(1,440.6, 11,093.7)	H vs. L	—	0.554
		Born <1942	n	16	17	21			
			Adj. Mean[a]	2,598.5	2,089.1	3,312.0	M vs. L	—	0.441
			95% C.I.[a]	(1,484.4, 4,548.8)	(1,187.9, 3,674.0)	(1,897.8, 5,780.2)	H vs. L	—	0.374

TABLE P-4. (continued)

Exposure Index-by-Covariate Interactions for Immunologic Variables

Variable	Interaction (Occupation)	Stratification	Statistic	Exposure Index			Exposure Index Contrast	Adj. Relative Risk (95% C.I.)	p-Value
				Low	Medium	High			
NKCA 50/1 Net Response	Exposure Index-by-Lifetime Cigarette Smoking History (Enlisted Flyer)	0	n	2	5	4			
			Adj. Mean	589.2	589.4	316.3	M vs. L	—	0.999
			95% C.I.	(342.8, 835.6)	(409.7, 769.1)	(125.3, 507.3)	H vs. L	—	0.051
		>0-10	n	6	5	8			
			Adj. Mean	376.8	571.4	453.9	M vs. L	—	0.066
			95% C.I.	(206.7, 546.8)	(417.2, 725.5)	(316.3, 591.5)	H vs. L	—	0.409
		>10	n	11	14	13			
			Adj. Mean	475.1	402.9	500.0	M vs. L	—	0.289
			95% C.I.	(348.9, 601.3)	(275.2, 530.7)	(367.9, 632.1)	H vs. L	—	0.725
NKCA 50/1 Percent Release	Exposure Index-by-Age (Enlisted Groundcrew)	Born ≥1942	n	24	48	27			
			Adj. Mean	37.8	35.0	35.6	M vs. L	—	0.411
			95% C.I.	(31.5,44.2)	(29.8,40.1)	(29.5,41.8)	H vs. L	—	0.574
		Born <1942	n	17	14	19			
			Adj. Mean	32.8	43.1	38.6	M vs. L	—	0.041
			95% C.I.	(25.2,40.3)	(35.0,51.2)	(32.0,45.3)	H vs. L	—	0.224

TABLE P-4. (continued)

Exposure Index-by-Covariate Interactions for Immunologic Variables

Variable	Interaction (Occupation)	Stratification	Statistic	Exposure Index			Exposure Index Contrast	Adj. Relative Risk (95% C.I.)	p-Value
				Low	Medium	High			
NKCI 50/1 Percent Release	Exposure Index-by-Age (Enlisted Groundcrew)	Born ≥1942	n	24	50	28			
			Adj. Mean	66.8	65.2	68.0	M vs. L	—	0.537
			95% C.I.	(61.9,71.8)	(61.2,69.1)	(63.3,72.7)	H vs. L	—	0.692
		Born <1942	n	17	14	20			
			Adj. Mean	64.9	71.4	66.8	M vs. L	—	0.094
			95% C.I.	(59.1,70.8)	(65.2,77.7)	(61.7,71.8)	H vs. L	—	0.615

—Adjusted relative risk not applicable for continuous analysis of a variable; summary statistics not presented.

[a]Transformed from natural logarithm scale.

Note: Small sample sizes may affect validity of overall p-value. Unadjusted estimate of relative risk/confidence interval/p-value based on stratified tables for composite skin test diagnosis.