

**Table F-4. Dependent Variable-Covariate Associations for the Psychology Assessment
(Continued)**

Dependent Variable	Level	Occupation			p-Value
		Officer	Enlisted Flyer	Enlisted Groundcrew	
Psychoses		(n=834)	(n=338)	(n=944)	
	Yes	2.5%	5.0%	4.7%	0.032
Alcohol Dependence		(n=834)	(n=338)	(n=943)	
	Yes	4.9%	8.9%	7.9%	0.014
Drug Dependence		(n=834)	(n=338)	(n=944)	
	Yes	0.1%	0.0%	0.5%	0.152
Anxiety		(n=833)	(n=337)	(n=939)	
	Yes	17.3%	30.9%	33.9%	0.001
Other Neuroses		(n=829)	(n=334)	(n=932)	
	Yes	43.7%	61.4%	60.1%	0.001
SCL-90-R Anxiety		(n=834)	(n=337)	(n=944)	
	High	5.0%	13.4%	14.3%	0.001
SCL-90-R Depression		(n=834)	(n=337)	(n=944)	
	High	9.0%	17.5%	19.3%	0.001
SCL-90-R Hostility		(n=834)	(n=337)	(n=944)	
	High	4.1%	9.5%	11.2%	0.001
SCL-90-R Interpersonal Sensitivity		(n=834)	(n=337)	(n=944)	
	High	7.8%	19.0%	20.4%	0.001
SCL-90-R Obsessive-Compulsive Behavior		(n=834)	(n=337)	(n=944)	
	High	9.2%	20.5%	19.1%	0.001
SCL-90-R Paranoid Ideation		(n=834)	(n=337)	(n=944)	
	High	2.8%	7.4%	10.4%	0.001
SCL-90-R Phobic Anxiety		(n=834)	(n=337)	(n=944)	
	High	4.6%	12.5%	14.4%	0.001
SCL-90-R Psychoticism		(n=834)	(n=337)	(n=944)	
	High	7.9%	14.8%	18.3%	0.001
SCL-90-R Somatization		(n=834)	(n=337)	(n=944)	
	High	7.3%	25.2%	21.0%	0.001
SCL-90-R Global Severity Index		(n=834)	(n=337)	(n=944)	
	High	7.2%	18.7%	20.1%	0.001
SCL-90-R Positive Symptom Total		(n=834)	(n=337)	(n=944)	
	High	8.5%	20.2%	20.9%	0.001
SCL-90-R Positive Symptom Distress Index		(n=834)	(n=337)	(n=944)	
	High	3.7%	9.5%	9.5%	0.001

Table F-4. Dependent Variable-Covariate Associations for the Psychology Assessment (Continued)

Dependent Variable	Level	Education		p-Value
		College	High School	
Psychoses		(n=1,139)	(n=976)	
	Yes	3.3%	4.6%	0.132
Alcohol Dependence		(n=1,139)	(n=975)	
	Yes	6.0%	7.9%	0.097
Drug Dependence		(n=1,139)	(n=976)	
	Yes	0.4%	0.2%	0.826
Anxiety		(n=1,136)	(n=972)	
	Yes	23.1%	31.3%	0.001
Other Neuroses		(n=1,133)	(n=961)	
	Yes	47.8%	60.9%	0.001
SCL-90-R Anxiety		(n=1,139)	(n=975)	
	High	7.5%	14.1%	0.001
SCL-90-R Depression		(n=1,139)	(n=975)	
	High	11.2%	19.4%	0.001
SCL-90-R Hostility		(n=1,139)	(n=975)	
	High	5.4%	11.3%	0.001
SCL-90-R Interpersonal Sensitivity		(n=1,139)	(n=975)	
	High	10.8%	20.4%	0.001
SCL-90-R Obsessive-Compulsive Behavior		(n=1,139)	(n=975)	
	High	11.8%	19.7%	0.001
SCL-90-R Paranoid Ideation		(n=1,139)	(n=975)	
	High	4.5%	9.7%	0.001
SCL-90-R Phobic Anxiety		(n=1,139)	(n=975)	
	High	6.6%	14.5%	0.001
SCL-90-R Psychoticism		(n=1,139)	(n=975)	
	High	10.7%	17.1%	0.001
SCL-90-R Somatization		(n=1,139)	(n=975)	
	High	11.2%	22.3%	0.001
SCL-90-R Global Severity Index		(n=1,139)	(n=975)	
	High	11.1%	19.2%	0.001
SCL-90-R Positive Symptom Total		(n=1,139)	(n=975)	
	High	11.7%	20.8%	0.001
SCL-90-R Positive Symptom Distress Index		(n=1,139)	(n=975)	
	High	5.3%	9.5%	0.001

Table F-4. Dependent Variable-Covariate Associations for the Psychology Assessment (Continued)

Dependent Variable	Level	Current Alcohol Use (drinks/day)			p-Value
		0-1	>1-4	≥4	
Alcohol Dependence		--	--	--	--
Drug Dependence		--	--	--	--
Anxiety		--	--	--	--
Other Neuroses		--	--	--	--
SCL-90-R Anxiety		(n=1,694)	(n=370)	(n=50)	
	High	10.6%	8.9%	20.0%	0.055
SCL-90-R Depression		(n=1,694)	(n=370)	(n=50)	
	High	14.9%	13.2%	28.0%	0.023
SCL-90-R Hostility		(n=1,694)	(n=370)	(n=50)	
	High	8.2%	6.8%	18.0%	0.024
SCL-90-R Interpersonal Sensitivity		(n=1,694)	(n=370)	(n=50)	
	High	15.8%	11.6%	22.0%	0.051
SCL-90-R Obsessive-Compulsive Behavior		(n=1,694)	(n=370)	(n=50)	
	High	15.5%	13.8%	26.0%	0.080
SCL-90-R Paranoid Ideation		(n=1,694)	(n=370)	(n=50)	
	High	7.0%	6.0%	12.0%	0.278
SCL-90-R Phobic Anxiety		(n=1,694)	(n=370)	(n=50)	
	High	10.0%	10.5%	14.0%	0.643
SCL-90-R Psychoticism		(n=1,694)	(n=370)	(n=50)	
	High	13.5%	13.0%	24.0%	0.095
SCL-90-R Somatization		(n=1,694)	(n=370)	(n=50)	
	High	17.1%	11.9%	20.0%	0.037
SCL-90-R Global Severity Index		(n=1,694)	(n=370)	(n=50)	
	High	14.9%	12.7%	28.0%	0.017
SCL-90-R Positive Symptom Total		(n=1,694)	(n=370)	(n=50)	
	High	16.1%	14.1%	22.0%	0.302
SCL-90-R Positive Symptom Distress Index		(n=1,694)	(n=370)	(n=50)	
	High	7.7%	4.3%	12.0%	0.030

Table F-4. Dependent Variable-Covariate Associations for the Psychology Assessment (Continued)

Dependent Variable	Level	Lifetime Alcohol History (drink-years)			p-Value
		0	>0-10	>10	
Psychoses		(n=118)	(n=1,375)	(n=615)	
	Yes	3.4%	3.3%	5.4%	0.080
Alcohol Dependence		--	--	--	--
Drug Dependence		(n=118)	(n=1,375)	(n=615)	
	Yes	0.0%	0.2%	0.5%	0.485
Anxiety		(n=118)	(n=1,371)	(n=612)	
	Yes	27.1%	26.4%	27.6%	0.851
Other Neuroses		(n=118)	(n=1,364)	(n=605)	
	Yes	50.9%	50.2%	62.8%	0.001
SCL-90-R Anxiety		(n=118)	(n=1,374)	(n=615)	
	High	11.0%	9.1%	13.7%	0.009
SCL-90-R Depression		(n=118)	(n=1,374)	(n=615)	
	High	17.0%	12.9%	19.4%	0.001
SCL-90-R Hostility		(n=118)	(n=1,374)	(n=615)	
	High	3.4%	7.4%	10.9%	0.004
SCL-90-R Interpersonal Sensitivity		(n=118)	(n=1,374)	(n=615)	
	High	14.4%	14.1%	18.2%	0.056
SCL-90-R Obsessive-Compulsive Behavior		(n=118)	(n=1,374)	(n=615)	
	High	14.4%	13.6%	19.8%	0.002
SCL-90-R Paranoid Ideation		(n=118)	(n=1,374)	(n=615)	
	High	5.1%	6.3%	8.8%	0.089
SCL-90-R Phobic Anxiety		(n=118)	(n=1,374)	(n=615)	
	High	5.9%	9.4%	13.0%	0.014
SCL-90-R Psychoticism		(n=118)	(n=1,374)	(n=615)	
	High	11.9%	12.2%	17.6%	0.004
SCL-90-R Somatization		(n=118)	(n=1,374)	(n=615)	
	High	12.7%	15.6%	18.7%	0.121
SCL-90-R Global Severity Index		(n=118)	(n=1,374)	(n=615)	
	High	15.3%	12.7%	19.5%	0.001
SCL-90-R Positive Symptom Total		(n=118)	(n=1,374)	(n=615)	
	High	16.1%	14.0%	20.3%	0.002
SCL-90-R Positive Symptom Distress Index		(n=118)	(n=1,374)	(n=615)	
	High	7.6%	7.1%	7.6%	0.887

**Table F-4 Dependent Variable-Covariate Associations for the Psychology Assessment
(Continued)**

Dependent Variable	Level	Current Total Household Income			Current Employment		
		≤\$65,000	>\$65,000	p-Value	Yes	No	p-Value
Psychoses		(n=1,062)	(n=1,030)		(n=1,385)	(n=730)	
	Yes	5.0%	2.7%	0.010	3.3%	5.1%	0.052
Alcohol Dependence		(n=1,061)	(n=1,030)		(n=1,384)	(n=730)	
	Yes	8.8%	5.0%	0.001	6.0%	8.5%	0.039
Drug Dependence		(n=1,062)	(n=1,030)		(n=1,385)	(n=730)	
	Yes	0.4%	0.2%	0.710	0.4%	0.0%	0.177
Anxiety		(n=1,059)	(n=1,027)		(n=1,381)	(n=727)	
	Yes	32.8%	20.9%	0.001	26.5%	27.5%	0.657
Other Neuroses		(n=1,048)	(n=1,023)		(n=1,373)	(n=721)	
	Yes	61.6%	45.7%	0.001	52.4%	56.3%	0.101
SCL-90-R Anxiety		(n=1,062)	(n=1,029)		(n=1,384)	(n=730)	
	High	14.5%	6.2%	0.001	10.3%	11.0%	0.672
SCL-90-R Depression		(n=1,062)	(n=1,029)		(n=1,384)	(n=730)	
	High	19.7%	9.8%	0.001	14.7%	15.3%	0.760
SCL-90-R Hostility		(n=1,062)	(n=1,029)		(n=1,384)	(n=730)	
	High	10.6%	5.4%	0.001	8.2%	8.0%	0.881
SCL-90-R Interpersonal Sensitivity		(n=1,062)	(n=1,029)		(n=1,384)	(n=730)	
	High	20.0%	10.2%	0.001	15.2%	15.3%	0.969
SCL-90-R Obsessive-Compulsive Behavior		(n=1,062)	(n=1,029)		(n=1,384)	(n=730)	
	High	20.8%	9.8%	0.001	14.3%	17.5%	0.059
SCL-90-R Paranoid Ideation		(n=1,062)	(n=1,029)		(n=1,384)	(n=730)	
	High	9.7%	3.8%	0.001	7.4%	6.0%	0.286
SCL-90-R Phobic Anxiety		(n=1,062)	(n=1,029)		(n=1,384)	(n=730)	
	High	14.1%	5.9%	0.001	9.5%	11.5%	0.178
SCL-90-R Psychoticism		(n=1,062)	(n=1,029)		(n=1,384)	(n=730)	
	High	18.1%	8.9%	0.001	13.5%	14.0%	0.821
SCL-90-R Somatization		(n=1,062)	(n=1,029)		(n=1,384)	(n=730)	
	High	21.8%	10.5%	0.001	14.9%	18.9%	0.020
SCL-90-R Global Severity Index		(n=1,062)	(n=1,029)		(n=1,384)	(n=730)	
	High	19.9%	9.5%	0.001	14.2%	15.9%	0.340
SCL-90-R Positive Symptom Total		(n=1,062)	(n=1,029)		(n=1,384)	(n=730)	
	High	21.0%	10.5%	0.001	15.5%	16.7%	0.493
SCL-90-R Positive Symptom Distress Index		(n=1,062)	(n=1,029)		(n=1,384)	(n=730)	
	High	8.7%	5.7%	0.012	6.8%	8.1%	0.317

Table F-4 Dependent Variable-Covariate Associations for the Psychology Assessment (Continued)

Dependent Variable	Level	Current Marital Status			Current Parental Status		
		Married	Not Married	p-Value	Child<18 Years Old	No Child<18 Years Old	p-Value
Psychoses		(n=1,745)	(n=370)		(n=290)	(n=1,825)	
	Yes	3.0%	7.8%	0.001	3.5%	4.0%	0.808
Alcohol Dependence		(n=1,745)	(n=369)		(n=290)	(n=1,824)	
	Yes	5.3%	14.4%	0.001	3.1%	7.5%	0.009
Drug Dependence		(n=1,745)	(n=370)		(n=290)	(n=1,825)	
	Yes	0.1%	1.1%	0.008	0.3%	0.3%	0.999
Anxiety		(n=1,740)	(n=368)		(n=290)	(n=1,818)	
	Yes	25.3%	34.0%	0.001	23.8%	27.3%	0.233
Other Neuroses		(n=1,730)	(n=364)		(n=288)	(n=1,806)	
	Yes	51.9%	62.9%	0.001	56.3%	53.4%	0.398
SCL-90-R Anxiety		(n=1,745)	(n=369)		(n=290)	(n=1,824)	
	High	9.8%	13.8%	0.028	10.7%	10.5%	0.992
SCL-90-R Depression		(n=1,745)	(n=369)		(n=290)	(n=1,824)	
	High	13.8%	20.3%	0.002	16.6%	14.7%	0.462
SCL-90-R Hostility		(n=1,745)	(n=369)		(n=290)	(n=1,824)	
	High	8.5%	6.5%	0.247	9.3%	8.0%	0.502
SCL-90-R Interpersonal Sensitivity		(n=1,745)	(n=369)		(n=290)	(n=1,824)	
	High	14.4%	19.2%	0.023	14.5%	15.4%	0.769
SCL-90-R Obsessive-Compulsive Behavior		(n=1,745)	(n=369)		(n=290)	(n=1,824)	
	High	14.8%	18.4%	0.093	13.8%	15.7%	0.460
SCL-90-R Paranoid Ideation		(n=1,745)	(n=369)		(n=290)	(n=1,824)	
	High	6.1%	10.8%	0.002	7.9%	6.7%	0.538
SCL-90-R Phobic Anxiety		(n=1,745)	(n=369)		(n=290)	(n=1,824)	
	High	9.6%	13.0%	0.064	8.6%	10.5%	0.389
SCL-90-R Psychoticism		(n=1,745)	(n=369)		(n=290)	(n=1,824)	
	High	12.5%	19.2%	0.001	14.8%	13.5%	0.599
SCL-90-R Somatization		(n=1,745)	(n=369)		(n=290)	(n=1,824)	
	High	15.6%	19.5%	0.075	14.8%	16.5%	0.527
SCL-90-R Global Severity Index		(n=1,745)	(n=369)		(n=290)	(n=1,824)	
	High	13.9%	19.0%	0.016	14.5%	14.9%	0.938
SCL-90-R Positive Symptom Total		(n=1,745)	(n=369)		(n=290)	(n=1,824)	
	High	15.2%	19.2%	0.063	16.2%	15.8%	0.944
SCL-90-R Positive Symptom Distress Index		(n=1,745)	(n=369)		(n=290)	(n=1,824)	
	High	7.0%	8.4%	0.402	9.0%	7.0%	0.271

--: Covariate not applicable for dependent variable.

Table F-5. Dependent Variable-Covariate Associations for the Gastrointestinal Assessment

Dependent Variable	Level	Age			Race		
		Born ≥1942	Born <1942	p-Value	Black	Non-Black	p-Value
Uncharacterized Hepatitis	Yes	(n=928) 2.3%	(n=1,179) 1.4%	0.215	(n=128) 2.3%	(n=1,979) 1.8%	0.896
Jaundice (Unspecified)	Yes	(n=914) 2.0%	(n=1,152) 2.5%	0.494	(n=127) 1.6%	(n=1,938) 2.3%	0.810
Chronic Liver Disease and Cirrhosis of the Liver (Alcohol-related)	Yes	(n=880) 4.2%	(n=1,118) 5.2%	0.358	(n=116) 9.5%	(n=1,882) 4.5%	0.025
Chronic Liver Disease and Cirrhosis of the Liver (Non-alcohol-related)	Yes	(n=933) 1.7%	(n=1,187) 1.0%	0.223	(n=128) 1.6%	(n=1,992) 1.3%	0.999
Liver Abscess and Sequelae of Chronic Liver Disease	Yes	(n=933) 0.0%	(n=1,188) 0.2%	0.588	(n=128) 0.0%	(n=1,993) 0.1%	0.999
Enlarged Liver (Hepatomegaly)	Yes	(n=932) 1.2%	(n=1,186) 2.5%	0.038	(n=127) 2.4%	(n=1,991) 1.9%	0.978
Other Liver Disorders	Yes	(n=927) 27.2%	(n=1,179) 26.2%	0.650	(n=128) 43.0%	(n=1,978) 25.6%	0.001
Current Hepatomegaly	Yes	(n=914) 0.5%	(n=1,177) 1.0%	0.343	(n=120) 0.0%	(n=1,971) 0.9%	0.618
AST		(n=913)	(n=1,177)		(n=120)	(n=1,970)	
(continuous) ^a		r=-0.025		0.247	$\bar{x}$ =23.44	$\bar{x}$ =22.90	0.454
(discrete)	High	7.8%	6.3%	0.214	6.7%	7.0%	0.999
ALT		(n=913)	(n=1,177)		(n=120)	(n=1,970)	
(continuous) ^a		r=-0.204		<0.001	$\bar{x}$ =41.94	$\bar{x}$ =42.54	0.596
(discrete)	High	10.0%	5.4%	0.001	7.5%	7.4%	0.999
GGT		(n=913)	(n=1,177)		(n=120)	(n=1,970)	
(continuous) ^a		r=-0.103		<0.001	$\bar{x}$ =48.65	$\bar{x}$ =42.70	0.012
(discrete)	High	12.6%	8.3%	0.002	13.3%	10.0%	0.309
Alkaline Phosphatase		(n=913)	(n=1,177)		(n=120)	(n=1,970)	
(continuous) ^a		r=0.003		0.909	$\bar{x}$ =82.64	$\bar{x}$ =80.40	0.274
(discrete)	High	2.5%	1.9%	0.435	3.3%	2.1%	0.582
Total Bilirubin		(n=913)	(n=1,177)		(n=120)	(n=1,970)	
(continuous) ^a		r=0.061		0.005	$\bar{x}$ =0.489	$\bar{x}$ =0.521	0.153
(discrete)	High	6.1%	5.6%	0.678	6.7%	5.8%	0.843
Direct Bilirubin	High	(n=913) 0.1%	(n=1,177) 0.4%	0.355	(n=120) 0.8%	(n=1,970) 0.3%	0.785

Table F-5. Dependent Variable-Covariate Associations for the Gastrointestinal Assessment (Continued)

Dependent Variable	Level	Age			Race		
		Born ≥1942	Born <1942	p-Value	Black	Non-Black	p-Value
Lactic Dehydrogenase		(n=913)	(n=1,175)		(n=119)	(n=1,969)	
(continuous) ^a		r=0.078		<0.001	$\bar{x}$ =157.5	$\bar{x}$ =153.7	0.131
(discrete)	High	9.9%	10.2%	0.846	12.6%	9.9%	0.427
Cholesterol		(n=913)	(n=1,177)		(n=120)	(n=1,970)	
(continuous) ^b		r=-0.049		0.025	$\bar{x}$ =212.7	$\bar{x}$ =211.5	0.726
(discrete)	High	16.2%	13.9%	0.166	12.5%	15.1%	0.524
HDL Cholesterol		(n=912)	(n=1,176)		(n=120)	(n=1,968)	
(continuous) ^a		r=0.035		0.114	$\bar{x}$ =48.17	$\bar{x}$ =44.70	0.002
(discrete)	Low	7.2%	8.1%	0.527	3.3%	8.0%	0.094
Cholesterol-HDL Ratio		(n=912)	(n=1,176)		(n=120)	(n=1,968)	
(continuous) ^a		r=-0.066		0.003	$\bar{x}$ =4.39	$\bar{x}$ =4.69	0.011
(discrete)	High	44.5%	38.7%	0.008	28.3%	42.0%	0.004
Triglycerides		(n=913)	(n=1,176)		(n=120)	(n=1,969)	
(continuous) ^a		r=-0.073		0.001	$\bar{x}$ =93.0	$\bar{x}$ =123.5	<0.001
(discrete)	High	24.0%	18.6%	0.003	6.7%	21.8%	0.001
Creatine Phosphokinase		(n=913)	(n=1,177)		(n=120)	(n=1,970)	
(continuous) ^a		r=-0.090		<0.001	$\bar{x}$ =195.9	$\bar{x}$ =102.0	<0.001
(discrete)	High	11.0%	7.4%	0.006	34.2%	7.1%	0.001
Serum Amylase		(n=913)	(n=1,177)		(n=120)	(n=1,970)	
(continuous) ^a		r=0.037		0.094	$\bar{x}$ =72.71	$\bar{x}$ =56.04	<0.001
(discrete)	High	2.7%	3.2%	0.602	10.8%	2.5%	0.001
Antibodies for Hepatitis A	Yes	(n=933)	(n=1,187)		(n=128)	(n=1,992)	
		23.5%	40.9%	0.001	43.8%	32.5%	0.012
Serological Evidence of Prior Hepatitis B Infection	Yes	(n=931)	(n=1,187)		(n=127)	(n=1,991)	
		11.2%	12.0%	0.579	26.8%	10.7%	0.001
Current Hepatitis B	Yes	(n=933)	(n=1,188)		(n=128)	(n=1,993)	
		0.2%	0.1%	0.834	1.6%	0.1%	0.001
Antibodies for Hepatitis C	Yes	(n=933)	(n=1,188)		(n=128)	(n=1,993)	
		1.8%	0.8%	0.071	4.7%	1.1%	0.002
Stool Hemocult	Yes	(n=878)	(n=1,152)		(n=111)	(n=1,919)	
		2.6%	5.1%	0.006	5.4%	4.0%	0.614
Prealbumin		(n=913)	(n=1,177)		(n=120)	(n=1,970)	
(continuous)		r=-0.146		<0.001	$\bar{x}$ =29.53	$\bar{x}$ =29.59	0.901
(discrete)	Low	0.7%	1.5%	0.099	0.8%	1.2%	0.999

Table F-5. Dependent Variable-Covariate Associations for the Gastrointestinal Assessment (Continued)

Dependent Variable	Level	Age			Race		
		Born ≥1942 (n=913)	Born <1942 (n=1,177)	p-Value	Black (n=120)	Non-Black (n=1,970)	p-Value
Albumin							
(continuous)		r=-0.140		<0.001	$\bar{x}$ =4,161.4	$\bar{x}$ =4,201.2	0.209
(discrete)	Low	0.3%	0.8%	0.222	1.7%	0.6%	0.367
α-1-Acid Glycoprotein							
(continuous) ^a		r=-0.012		0.586	$\bar{x}$ =81.87	$\bar{x}$ =84.51	0.131
(discrete)	High	3.2%	4.1%	0.333	4.2%	3.7%	0.969
α-1-Antitrypsin							
(continuous) ^b		r=0.087		<0.001	$\bar{x}$ =141.8	$\bar{x}$ =148.3	0.006
(discrete)	Abn. Low	1.3%	1.4%	0.620	0.0%	1.5%	0.271
	Normal	98.2%	97.8%		100.0%	97.9%	
	Abn. High	0.4%	0.8%		0.0%	0.7%	
α-2-Macroglobulin							
(continuous) ^a		r=0.299		<0.001	$\bar{x}$ =152.1	$\bar{x}$ =172.2	<0.001
(discrete)	High	1.2%	5.1%	0.001	0.0%	3.6%	0.063
Apolipoprotein B							
(continuous) ^b		r=-0.050		0.023	$\bar{x}$ =111.0	$\bar{x}$ =111.1	0.951
(discrete)	High	53.6%	49.9%	0.103	50.0%	51.6%	0.810
C3 Complement							
(continuous) ^a		r=-0.048		0.027	$\bar{x}$ =124.0	$\bar{x}$ =118.4	0.002
(discrete)	Low	2.2%	2.0%	0.824	0.0%	2.2%	0.192
C4 Complement							
(continuous) ^a		r=-0.020		0.371	$\bar{x}$ =29.00	$\bar{x}$ =25.65	<0.001
(discrete)	Low	0.1%	0.3%	0.803	0.0%	0.2%	0.999
Haptoglobin							
(continuous) ^b		r=0.032		0.139	$\bar{x}$ =119.8	$\bar{x}$ =130.7	0.057
(discrete)	High	29.0%	30.5%	0.494	25.8%	30.1%	0.374
Transferrin							
(continuous) ^a		r=-0.050		0.022	$\bar{x}$ =237.8	$\bar{x}$ =251.7	<0.001
(discrete)	Low	8.2%	11.0%	0.043	20.8%	9.1%	0.001

Table F-5. Dependent Variable-Covariate Associations for the Gastrointestinal Assessment (Continued)

Dependent Variable	Level	Occupation			p-Value
		Officer	Enlisted Flyer	Enlisted Groundcrew	
Uncharacterized Hepatitis		(n=826)	(n=338)	(n=943)	
	Yes	1.5%	2.1%	2.0%	0.622
Jaundice (Unspecified)		(n=807)	(n=330)	(n=928)	
	Yes	3.1%	1.2%	1.9%	0.100
Chronic Liver Disease and Cirrhosis (Alcohol-related)		(n=798)	(n=318)	(n=882)	
	Yes	3.6%	6.0%	5.3%	0.142
Chronic Liver Disease and Cirrhosis (Non-alcohol-related)		(n=834)	(n=338)	(n=948)	
	Yes	1.0%	1.5%	1.6%	0.497
Liver Abscess and Sequelae of Chronic Liver Disease		(n=835)	(n=338)	(n=948)	
	Yes	0.1%	0.0%	0.1%	0.823
Enlarged Liver (Hepatomegaly)		(n=833)	(n=338)	(n=947)	
	Yes	1.7%	2.7%	1.9%	0.540
Other Liver Disorders		(n=824)	(n=338)	(n=944)	
	Yes	26.0%	26.0%	27.4%	0.756
Current Hepatomegaly		(n=830)	(n=335)	(n=926)	
	Yes	0.7%	0.6%	1.0%	0.753
AST		(n=830)	(n=335)	(n=925)	
(continuous) ^a		$\bar{x}$ =23.37	$\bar{x}$ =22.34	$\bar{x}$ =22.76	0.073
(discrete)	High	6.7%	7.8%	6.8%	0.810
ALT		(n=830)	(n=335)	(n=925)	
(continuous) ^a		$\bar{x}$ =41.96	$\bar{x}$ =41.97	$\bar{x}$ =43.19	0.069
(discrete)	High	5.4%	10.1%	8.2%	0.009
GGT		(n=830)	(n=335)	(n=925)	
(continuous) ^a		$\bar{x}$ =41.38	$\bar{x}$ =44.91	$\bar{x}$ =43.87	0.026
(discrete)	High	8.2%	14.3%	10.5%	0.007
Alkaline Phosphatase		(n=830)	(n=335)	(n=925)	
(continuous) ^a		$\bar{x}$ =77.43	$\bar{x}$ =83.60	$\bar{x}$ =82.29	<0.001
(discrete)	High	1.9%	3.0%	2.2%	0.535
Total Bilirubin		(n=830)	(n=335)	(n=925)	
(continuous) ^a		$\bar{x}$ =0.544	$\bar{x}$ =0.502	$\bar{x}$ =0.504	0.001
(discrete)	High	6.9%	5.1%	5.2%	0.264
Direct Bilirubin		(n=830)	(n=335)	(n=925)	
	High	0.5%	0.0%	0.2%	0.328
Lactic Dehydrogenase		(n=829)	(n=334)	(n=925)	
(continuous) ^a		$\bar{x}$ =154.2	$\bar{x}$ =152.4	$\bar{x}$ =154.2	0.531
(discrete)	High	10.3%	8.4%	10.5%	0.533

Table F-5. Dependent Variable-Covariate Associations for the Gastrointestinal Assessment.(Continued)

Dependent Variable	Level	Occupation			p-Value
		Officer	Enlisted Flyer	Enlisted Groundcrew	
Cholesterol		(n=830)	(n=335)	(n=925)	
(continuous) ^b		$\bar{x}$ =208.5	$\bar{x}$ =215.7	$\bar{x}$ =212.9	0.004
(discrete)	High	12.9%	14.9%	16.8%	0.076
HDL Cholesterol		(n=829)	(n=334)	(n=925)	
(continuous) ^a		$\bar{x}$ =46.67	$\bar{x}$ =44.24	$\bar{x}$ =43.59	<0.001
(discrete)	Low	5.2%	10.2%	9.1%	0.002
Cholesterol-HDL Ratio		(n=829)	(n=334)	(n=925)	
(continuous) ^a		$\bar{x}$ =4.43	$\bar{x}$ =4.84	$\bar{x}$ =4.85	<0.001
(discrete)	High	32.6%	43.4%	48.2%	0.001
Triglycerides		(n=829)	(n=335)	(n=925)	
(continuous) ^a		$\bar{x}$ =113.0	$\bar{x}$ =131.3	$\bar{x}$ =126.1	<0.001
(discrete)	High	17.1%	24.2%	23.2%	0.002
Creatine Phosphokinase		(n=830)	(n=335)	(n=925)	
(continuous) ^a		$\bar{x}$ =104.9	$\bar{x}$ =99.2	$\bar{x}$ =109.2	0.038
(discrete)	High	8.4%	6.6%	10.3%	0.101
Serum Amylase		(n=830)	(n=335)	(n=925)	
(continuous) ^a		$\bar{x}$ =56.62	$\bar{x}$ =57.03	$\bar{x}$ =57.06	0.906
(discrete)	High	3.5%	2.1%	2.9%	0.436
Antibodies for Hepatitis A		(n=834)	(n=338)	(n=948)	
	Yes	27.0%	47.3%	33.6%	0.001
Serological Evidence of Prior Hepatitis B		(n=834)	(n=338)	(n=946)	
	Yes	6.0%	16.6%	14.9%	0.001
Current Hepatitis B		(n=835)	(n=338)	(n=948)	
	Yes	0.0%	0.0%	0.3%	0.156
Antibodies for Hepatitis C		(n=835)	(n=338)	(n=948)	
	Yes	0.6%	0.9%	2.0%	0.024
Stool Hemocult		(n=815)	(n=325)	(n=890)	
	Yes	4.4%	2.8%	4.2%	0.431
Prealbumin		(n=830)	(n=335)	(n=925)	
(continuous)		$\bar{x}$ =29.78	$\bar{x}$ =29.44	$\bar{x}$ =29.46	0.353
(discrete)	Low	1.4%	0.6%	1.1%	0.454
Albumin		(n=830)	(n=335)	(n=925)	
(continuous)		$\bar{x}$ =4,191.6	$\bar{x}$ =4,173.4	$\bar{x}$ =4,214.6	0.115
(discrete)	Low	0.8%	0.3%	0.5%	0.516

Table F-5. Dependent Variable-Covariate Associations for the Gastrointestinal Assessment (Continued)

Dependent Variable	Level	Occupation			p-Value
		Officer	Enlisted Flyer	Enlisted Groundcrew	
α -1-Acid Glycoprotein		(n=830)	(n=335)	(n=925)	
(continuous) ^a		$\bar{x}$ =81.68	$\bar{x}$ =85.71	$\bar{x}$ =86.34	<0.001
(discrete)	High	2.8%	4.8%	4.1%	0.170
α -1-Antitrypsin		(n=830)	(n=335)	(n=925)	
(continuous) ^b		$\bar{x}$ =143.4	$\bar{x}$ =153.0	$\bar{x}$ =150.2	<0.001
(discrete)	Abnormal Low	2.3%	0.6%	0.9%	0.022
	Normal	97.5%	98.5%	98.3%	
	Abnormal High	0.2%	0.9%	0.9%	
α -2-Macroglobulin		(n=830)	(n=335)	(n=925)	
(continuous) ^a		$\bar{x}$ =170.8	$\bar{x}$ =177.2	$\bar{x}$ =169.0	0.013
(discrete)	High	3.1%	4.8%	3.1%	0.315
Apolipoprotein B		(n=830)	(n=335)	(n=925)	
(continuous) ^b		$\bar{x}$ =108.3	$\bar{x}$ =114.3	$\bar{x}$ =112.4	<0.001
(discrete)	High	47.1%	56.1%	53.7%	0.004
C3 Complement		(n=830)	(n=335)	(n=925)	
(continuous) ^a		$\bar{x}$ =114.7	$\bar{x}$ =120.5	$\bar{x}$ =121.6	<0.001
(discrete)	Low	2.4%	1.8%	1.8%	0.654
C4 Complement		(n=830)	(n=335)	(n=925)	
(continuous) ^a		$\bar{x}$ =25.21	$\bar{x}$ =25.95	$\bar{x}$ =26.35	<0.001
(discrete)	Low	0.4%	0.3%	0.0%	0.199
Haptoglobin		(n=830)	(n=335)	(n=925)	
(continuous) ^b		$\bar{x}$ =118.7	$\bar{x}$ =142.0	$\bar{x}$ =136.3	<0.001
(discrete)	High	22.9%	36.1%	33.8%	0.001
Transferrin		(n=830)	(n=335)	(n=925)	
(continuous) ^a		$\bar{x}$ =249.1	$\bar{x}$ =252.8	$\bar{x}$ =251.8	0.139
(discrete)	Low	9.2%	10.7%	9.9%	0.688

Dependent Variable	Level	Current Alcohol Use (drinks/day)			p-Value
		0-1	>1-4	≥ 4	
Uncharacterized Hepatitis		--	--	--	--
Jaundice (Unspecified)		--	--	--	--
Chronic Liver Disease and Cirrhosis (Alcohol-related)		--	--	--	--
Chronic Liver Disease and Cirrhosis (Non-alcohol-related)		--	--	--	--

Table F-5. Dependent Variable-Covariate Associations for the Gastrointestinal Assessment (Continued)

Dependent Variable	Level	Current Alcohol Use (drinks/day)			p-Value
		0-1	>1-4	>4	
Liver Abscess and Sequelae of Chronic Liver Disease		--	--	--	--
Enlarged Liver (Hepatomegaly)		--	--	--	--
Other Liver Disorders		--	--	--	--
Current Hepatomegaly	Yes	(n=1,676) 0.7%	(n=369) 1.6%	(n=46) 0.0%	0.141
AST (continuous) ^a		(n=1,675)	(n=369)	(n=46)	
(discrete)	High	6.3%	r=0.114 8.1%	21.7%	<0.001 0.001
ALT (continuous) ^a		(n=1,675)	(n=369)	(n=46)	
(discrete)	High	7.3%	r=0.057 7.9%	8.7%	0.009 0.879
GGT (continuous) ^a		(n=1,675)	(n=369)	(n=46)	
(discrete)	High	7.3%	r=0.255 20.1%	34.8%	<0.001 0.001
Total Bilirubin (continuous) ^a		(n=1,675)	(n=369)	(n=46)	
(discrete)	High	5.7%	r=0.093 5.4%	15.2%	<0.001 0.023
Direct Bilirubin	High	(n=1,675) 0.1%	(n=369) 0.8%	(n=46) 2.2%	0.004
Lactic Dehydrogenase (continuous) ^a		(n=1,675)	(n=368)	(n=45)	
(discrete)	High	10.4%	r=-0.031 9.0%	6.7%	0.159 0.533
Cholesterol (continuous) ^b		(n=1,675)	(n=369)	(n=46)	
(discrete)	High	13.7%	r=0.080 19.8%	19.6%	<0.001 0.009
HDL Cholesterol (continuous) ^a		(n=1,673)	(n=369)	(n=46)	
(discrete)	Low	9.0%	r=0.215 2.4%	4.3%	<0.001 0.001
Cholesterol-HDL Ratio (continuous) ^a		(n=1,673)	(n=369)	(n=46)	
(discrete)	High	44.2%	r=-0.152 29.3%	28.3%	<0.001 0.001
Triglycerides (continuous) ^a		(n=1,675)	(n=368)	(n=46)	
(discrete)	High	20.6%	r=0.015 21.7%	28.3%	0.493 0.417
Creatine Phosphokinase (continuous) ^a		(n=1,675)	(n=369)	(n=46)	
(discrete)	High	9.7%	r=-0.054 5.1%	10.9%	0.013 0.018

Table F-5. Dependent Variable-Covariate Associations for the Gastrointestinal Assessment (Continued)

Dependent Variable	Level	Current Alcohol Use (drinks/day)			p-Value
		0-1	>1-4	>4	
Serum Amylase (continuous) ^a (discrete)	High	(n=1,675) 3.0%	(n=369) 3.3%	(n=46) 0.0%	0.001 0.471
Antibodies for Hepatitis A	Yes	(n=1,698) 33.5%	(n=371) 32.3%	(n=50) 30.0%	0.808
Serological Evidence of Prior Hepatitis B	Yes	(n=1,696) 12.0%	(n=371) 9.7%	(n=50) 14.0%	0.393
Current Hepatitis B	Yes	(n=1,699) 0.1%	(n=371) 0.0%	(n=50) 2.0%	0.002
Antibodies for Hepatitis C	Yes	(n=1,699) 1.2%	(n=371) 0.5%	(n=50) 6.0%	0.004
Stool Hemocult	Yes	(n=1,633) 3.7%	(n=355) 5.4%	(n=42) 4.8%	0.364
Prealbumin (continuous) (discrete)	Low	(n=1,675) 0.8%	(n=369) 2.4%	(n=46) 4.3%	<0.001 0.003
Albumin (continuous) (discrete)	Low	(n=1,675) 0.4%	(n=369) 1.4%	(n=46) 2.2%	0.506 0.047
α -1-Acid Glycoprotein (continuous) ^a (discrete)	High	(n=1,675) 3.0%	(n=369) 6.5%	(n=46) 6.5%	<0.001 0.003
α -2-Macroglobulin (continuous) ^a (discrete)	High	(n=1,675) 3.7%	(n=369) 2.2%	(n=46) 2.2%	0.031 0.304
Apolipoprotein B (continuous) ^b (discrete)	High	(n=1,675) 51.0%	(n=369) 53.1%	(n=46) 54.3%	0.472 0.714
C3 Complement (continuous) ^a (discrete)	Low	(n=1,675) 1.6%	(n=369) 4.6%	(n=46) 0.0%	<0.001 0.001
C4 Complement (continuous) ^a (discrete)	Low	(n=1,675) 0.1%	(n=369) 0.5%	(n=46) 0.0%	0.752 0.233
Haptoglobin (continuous) ^b (discrete)	High	(n=1,675) 28.3%	(n=369) 35.5%	(n=46) 41.3%	0.013 0.005
Transferrin (continuous) ^a (discrete)	Low	(n=1,675) 10.2%	(n=369) 8.7%	(n=46) 2.2%	0.022 0.143

Table F-5. Dependent Variable-Covariate Associations for the Gastrointestinal Assessment (Continued)

Dependent Variable	Level	Lifetime Alcohol History (drink-years)			p-Value
		0	>0-40	>40	
Uncharacterized Hepatitis		(n=117)	(n=1,370)	(n=612)	
	Yes	3.4%	2.3%	0.5%	0.010
Jaundice (Unspecified)		(n=115)	(n=1,339)	(n=603)	
	Yes	4.3%	2.3%	1.8%	0.250
Chronic Liver Disease and Cirrhosis (Alcohol-related)		--	(n=1,378)	(n=612)	
	Yes	--	1.3%	12.6%	0.001
Chronic Liver Disease and Cirrhosis (Non-alcohol-related)		(n=118)	(n=1,378)	(n=616)	
	Yes	1.7%	1.8%	0.2%	0.011
Liver Abscess and Sequelae of Chronic Liver Disease		(n=118)	(n=1,379)	(n=616)	
	Yes	0.0%	0.1%	0.2%	0.786
Enlarged Liver (Hepatomegaly)		(n=118)	(n=1,377)	(n=615)	
	Yes	0.8%	1.0%	4.2%	0.001
Other Liver Disorders		(n=117)	(n=1,368)	(n=613)	
	Yes	23.9%	25.1%	30.3%	0.043
Current Hepatomegaly		(n=118)	(n=1,363)	(n=603)	
	Yes	0.0%	0.7%	1.3%	0.190
AST		(n=118)	(n=1,362)	(n=603)	
(continuous) ^a			r=0.068		0.002
(discrete)	High	6.8%	6.1%	9.0%	0.071
ALT		(n=118)	(n=1,362)	(n=603)	
(continuous) ^a			r=-0.007		0.737
(discrete)	High	10.2%	7.3%	7.0%	0.474
GGT		(n=118)	(n=1,362)	(n=603)	
(continuous) ^a			r=0.096		<0.001
(discrete)	High	4.2%	8.7%	14.9%	0.001
Total Bilirubin		(n=118)	(n=1,362)	(n=603)	
(continuous) ^a			r=0.016		0.459
(discrete)	High	3.4%	5.7%	6.5%	0.415
Direct Bilirubin		(n=118)	(n=1,362)	(n=603)	
	High	0.0%	0.1%	0.8%	0.013
Lactic Dehydrogenase		(n=118)	(n=1,362)	(n=601)	
(continuous) ^a			r=0.001		0.952
(discrete)	High	14.4%	10.4%	8.3%	0.096
Cholesterol		(n=118)	(n=1,362)	(n=603)	
(continuous) ^b			r=0.035		0.108
(discrete)	High	11.9%	14.0%	17.9%	0.047
HDL Cholesterol		(n=118)	(n=1,360)	(n=603)	
(continuous) ^a			r=0.127		<0.001
(discrete)	Low	14.4%	8.4%	4.8%	0.001
Cholesterol-HDL Ratio		(n=118)	(n=1,360)	(n=603)	
(continuous) ^a			r=-0.098		<0.001
(discrete)	High	53.4%	43.3%	34.2%	0.001

Table F-5. Dependent Variable-Covariate Associations for the Gastrointestinal Assessment (Continued)

Dependent Variable	Level	Lifetime Alcohol History (drink-years)			p-Value
		0	>0-40	>40	
Triglycerides (continuous) ^a (discrete)	High	(n=118) 20.3%	(n=1,361) r=-0.006 21.0%	(n=603) 21.2%	0.797 0.976
Creatine Phosphokinase (continuous) ^a (discrete)	High	(n=118) 6.8%	(n=1,362) r=-0.029 9.7%	(n=603) 7.3%	0.188 0.163
Serum Amylase (continuous) ^a (discrete)	High	(n=118) 5.1%	(n=1,362) r=-0.022 2.8%	(n=603) 3.2%	0.323 0.369
Antibodies for Hepatitis A	Yes	(n=118) 45.8%	(n=1,378) 30.9%	(n=616) 35.9%	0.001
Serological Evidence of Prior Hepatitis B	Yes	(n=118) 5.9%	(n=1,376) 10.2%	(n=616) 16.1%	0.001
Current Hepatitis B	Yes	(n=118) 0.0%	(n=1,379) 0.1%	(n=616) 0.2%	0.911
Antibodies for Hepatitis C	Yes	(n=118) 0.0%	(n=1,379) 1.0%	(n=616) 1.9%	0.100
Stool Hemocult	Yes	(n=107) 4.7%	(n=1,331) 3.6%	(n=585) 5.0%	0.364
Prealbumin (continuous) (discrete)	Low	(n=118) 1.7%	(n=1,362) r=0.030 0.6%	(n=603) 2.3%	0.170 0.003
Albumin (continuous) (discrete)	Low	(n=118) 0.8%	(n=1,362) r=-0.030 0.5%	(n=603) 0.8%	0.176 0.680
α -1-Acid Glycoprotein (continuous) ^a (discrete)	High	(n=118) 3.4%	(n=1,362) r=0.094 3.1%	(n=603) 5.1%	<0.001 0.082
α -1-Antitrypsin (continuous) ^b (discrete)	Abn. Low Normal Abn. High	(n=118) 0.8% 97.5% 1.7%	(n=1,362) r=0.077 1.3% 98.3% 0.4%	(n=603) 1.5% 97.5% 1.0%	0.001 0.259
α -2-Macroglobulin (continuous) ^a (discrete)	High	(n=118) 9.3%	(n=1,362) r=0.015 2.9%	(n=603) 3.3%	0.501 0.001
Apolipoprotein B (continuous) ^b (discrete)	High	(n=118) 50.8%	(n=1,362) r=-0.002 51.8%	(n=603) 50.9%	0.919 0.921
C3 Complement (continuous) ^a (discrete)	Low	(n=118) 0.0%	(n=1,362) r=-0.046 1.9%	(n=603) 2.8%	0.034 0.114

Table F-5. Dependent Variable-Covariate Associations for the Gastrointestinal Assessment (Continued)

Dependent Variable	Level	Lifetime Alcohol History (drink-years)			p-Value
		0	>0-40	>40	
C4 Complement (continuous) ^a (discrete)	Low	(n=118) 0.0%	(n=1,362) r=0.009 0.2%	(n=603) 0.2%	0.668 0.858
Haptoglobin (continuous) ^b (discrete)	High	(n=118) 30.5%	(n=1,362) r=0.082 27.8%	(n=603) 34.2%	<0.001 0.018
Transferrin (continuous) ^a (discrete)	Low	(n=118) 11.9%	(n=1,362) r=0.003 9.0%	(n=603) 11.1%	0.893 0.265

Dependent Variable	Level	Industrial Chemical Exposure			Degreasing Chemical Exposure		
		No	Yes	p-Value	No	Yes	p-Value
Uncharacterized Hepatitis	Yes	(n=797) 1.3%	(n=1,310) 2.1%	0.191	(n=748) 1.6%	(n=1,359) 1.9%	0.735
Jaundice (Unspecified)	Yes	(n=778) 2.7%	(n=1,287) 2.0%	0.395	(n=734) 2.0%	(n=1,331) 2.4%	0.710
Chronic Liver Disease and Cirrhosis of the Liver (Alcohol-related)	Yes	(n=756) 3.3%	(n=1,242) 5.6%	0.024	(n=711) 4.2%	(n=1,287) 5.1%	0.468
Chronic Liver Disease and Cirrhosis of the Liver (Non-alcohol-related)	Yes	(n=804) 1.1%	(n=1,316) 1.4%	0.661	(n=755) 1.2%	(n=1,365) 1.4%	0.851
Liver Abscess and Sequelae of Chronic Liver Disease	Yes	(n=804) 0.1%	(n=1,317) 0.1%	0.999	(n=755) 0.1%	(n=1,366) 0.1%	0.999
Enlarged Liver (Hepatomegaly)	Yes	(n=803) 1.9%	(n=1,315) 2.0%	0.988	(n=754) 1.9%	(n=1,364) 2.0%	0.975
Other Liver Disorders	Yes	(n=796) 26.0%	(n=1,310) 27.0%	0.644	(n=750) 25.5%	(n=1,356) 27.3%	0.394
Current Hepatomegaly	Yes	(n=799) 1.1%	(n=1,292) 0.6%	0.315	(n=749) 0.5%	(n=1,342) 1.0%	0.420
AST (continuous) ^a (discrete)	High	(n=799) $\bar{x}$ =23.33 7.1%	(n=1,291) $\bar{x}$ =22.69 6.8%	0.063 0.850	(n=749) $\bar{x}$ =23.17 7.2%	(n=1,341) $\bar{x}$ =22.80 6.8%	0.294 0.783
ALT (continuous) ^a (discrete)	High	(n=799) $\bar{x}$ =42.58 7.8%	(n=1,291) $\bar{x}$ =42.45 7.2%	0.805 0.700	(n=749) $\bar{x}$ =42.33 7.1%	(n=1,341) $\bar{x}$ =42.60 7.6%	0.619 0.721

Table F-5. Dependent Variable-Covariate Associations for the Gastrointestinal Assessment (Continued)

Dependent Variable	Level	Industrial Chemical Exposure			Degreasing Chemical Exposure		
		No (n=799)	Yes (n=1,291)	p-Value	No (n=749)	Yes (n=1,341)	p-Value
GGT							
(continuous) ^a		$\bar{x}$ =43.27	$\bar{x}$ =42.88	0.717	$\bar{x}$ =42.55	$\bar{x}$ =43.29	0.494
(discrete)	High	10.0%	10.3%	0.890	8.9%	10.9%	0.183
Alkaline Phosphatase							
(continuous) ^a		$\bar{x}$ =79.87	$\bar{x}$ =80.94	0.266	$\bar{x}$ =79.91	$\bar{x}$ =80.88	0.324
(discrete)	High	2.6%	1.9%	0.371	2.8%	1.9%	0.212
Total Bilirubin							
(continuous) ^a		$\bar{x}$ =0.533	$\bar{x}$ =0.511	0.052	$\bar{x}$ =0.536	$\bar{x}$ =0.510	0.020
(discrete)	High	5.6%	6.0%	0.827	5.6%	6.0%	0.812
Direct Bilirubin							
(discrete)	High	0.4%	0.2%	0.862	0.3%	0.3%	0.999
Lactic Dehydrogenase							
(continuous) ^a		$\bar{x}$ =153.8	$\bar{x}$ =154.0	0.856	$\bar{x}$ =153.9	$\bar{x}$ =153.9	0.962
(discrete)	High	9.5%	10.4%	0.584	9.8%	10.2%	0.805
Cholesterol							
(continuous) ^b		$\bar{x}$ =210.2	$\bar{x}$ =212.4	0.193	$\bar{x}$ =210.0	$\bar{x}$ =212.5	0.157
(discrete)	High	14.0%	15.5%	0.392	13.5%	15.7%	0.187
HDL Cholesterol							
(continuous) ^a		$\bar{x}$ =45.81	$\bar{x}$ =44.33	0.005	$\bar{x}$ =46.07	$\bar{x}$ =44.25	0.001
(discrete)	Low	6.0%	8.8%	0.028	5.9%	8.7%	0.023
Cholesterol-HDL Ratio							
(continuous) ^a		$\bar{x}$ =4.55	$\bar{x}$ =4.75	<0.001	$\bar{x}$ =4.52	$\bar{x}$ =4.76	<0.001
(discrete)	High	35.7%	44.7%	0.001	36.2%	44.1%	0.001
Triglycerides							
(continuous) ^a		$\bar{x}$ =116.4	$\bar{x}$ =124.9	0.013	$\bar{x}$ =114.7	$\bar{x}$ =125.6	0.002
(discrete)	High	18.5%	22.5%	0.035	17.9%	22.7%	0.012
Creatine Phosphokinase							
(continuous) ^a		$\bar{x}$ =104.8	$\bar{x}$ =106.5	0.568	$\bar{x}$ =107.7	$\bar{x}$ =104.8	0.321
(discrete)	High	8.0%	9.5%	0.270	9.5%	8.7%	0.578
Serum Amylase							
(continuous) ^a		$\bar{x}$ =56.47	$\bar{x}$ =57.14	0.489	$\bar{x}$ =56.75	$\bar{x}$ =56.95	0.839
(discrete)	High	3.4%	2.8%	0.525	3.3%	2.8%	0.608
Antibodies for Hepatitis A							
(discrete)	Yes	33.2%	33.2%	0.999	34.0%	32.7%	0.578

Table F-5. Dependent Variable-Covariate Associations for the Gastrointestinal Assessment (Continued)

Dependent Variable	Level	Industrial Chemical Exposure			Degreasing Chemical Exposure		
		No	Yes	p-Value	No	Yes	p-Value
Serological Evidence of Prior Hepatitis B Infection	Yes	(n=803) 10.1%	(n=1,315) 12.6%	0.090	(n=755) 10.6%	(n=1,363) 12.3%	0.286
Current Hepatitis B	Yes	(n=804) 0.1%	(n=1,317) 0.2%	0.999	(n=755) 0.1%	(n=1,366) 0.1%	0.999
Antibodies for Hepatitis C	Yes	(n=804) 0.5%	(n=1,317) 1.7%	0.022	(n=755) 0.7%	(n=1,366) 1.6%	0.096
Stool Hemocult	Yes	(n=781) 5.4%	(n=1,249) 3.2%	0.021	(n=726) 4.8%	(n=1,304) 3.6%	0.224
Prealbumin		(n=799)	(n=1,291)		(n=749)	(n=1,341)	
(continuous)		$\bar{x}$ =29.80	$\bar{x}$ =29.45	0.130	$\bar{x}$ =29.69	$\bar{x}$ =29.52	0.452
(discrete)	High	1.3%	1.1%	0.891	1.1%	1.2%	0.966
Albumin		(n=799)	(n=1,291)		(n=749)	(n=1,341)	
(continuous)		$\bar{x}$ =4,207.4	$\bar{x}$ =4,193.6	0.364	$\bar{x}$ =4,222.3	$\bar{x}$ =4,185.8	0.017
(discrete)	High	0.8%	0.5%	0.761	0.5%	0.7%	0.927
α -1-Acid Glycoprotein		(n=799)	(n=1,291)		(n=749)	(n=1,341)	
(continuous) ^a		$\bar{x}$ =83.38	$\bar{x}$ =84.97	0.061	$\bar{x}$ =83.46	$\bar{x}$ =84.86	0.103
(discrete)	High	3.4%	3.9%	0.643	3.9%	3.6%	0.826
α -1-Antitrypsin		(n=799)	(n=1,291)		(n=749)	(n=1,341)	
(continuous) ^b		$\bar{x}$ =145.7	$\bar{x}$ =149.3	0.001	$\bar{x}$ =146.2	$\bar{x}$ =148.9	0.023
(discrete)	Abn. Low	2.1%	0.9%	0.037	1.6%	1.3%	0.805
	Normal	97.0%	98.6%		97.7%	98.1%	
	Abn. High	0.9%	0.5%		0.7%	0.6%	
α -2-Macroglobulin		(n=799)	(n=1,291)		(n=749)	(n=1,341)	
(continuous) ^a		$\bar{x}$ =171.7	$\bar{x}$ =170.6	0.560	$\bar{x}$ =171.8	$\bar{x}$ =170.6	0.529
(discrete)	High	2.6%	3.9%	0.161	3.2%	3.5%	0.812
Apolipoprotein B		(n=799)	(n=1,291)		(n=749)	(n=1,341)	
(continuous) ^b		$\bar{x}$ =110.4	$\bar{x}$ =111.5	0.319	$\bar{x}$ =110.0	$\bar{x}$ =111.7	0.131
(discrete)	High	50.8%	51.9%	0.662	49.3%	52.7%	0.141
C3 Complement		(n=799)	(n=1,291)		(n=749)	(n=1,341)	
(continuous) ^a		$\bar{x}$ =116.7	$\bar{x}$ =119.9	<0.001	$\bar{x}$ =116.6	$\bar{x}$ =119.9	<0.001
(discrete)	Low	1.9%	2.2%	0.766	2.4%	1.9%	0.502
C4 Complement		(n=799)	(n=1,291)		(n=749)	(n=1,341)	
(continuous) ^a		$\bar{x}$ =25.51	$\bar{x}$ =26.02	0.029	$\bar{x}$ =25.63	$\bar{x}$ =25.94	0.204
(discrete)	Low	0.4%	0.1%	0.317	0.5%	0.0%	0.031
Haptoglobin		(n=799)	(n=1,291)		(n=749)	(n=1,341)	
(continuous) ^b		$\bar{x}$ =125.8	$\bar{x}$ =132.7	0.013	$\bar{x}$ =124.2	$\bar{x}$ =133.4	0.001
(discrete)	High	26.5%	31.9%	0.010	25.8%	32.1%	0.003

Table F-5. Dependent Variable-Covariate Associations for the Gastrointestinal Assessment (Continued)

Dependent Variable	Level	Industrial Chemical Exposure			Degreasing Chemical Exposure		
		No	Yes	p-Value	No	Yes	p-Value
Transferrin		(n=799)	(n=1,291)		(n=749)	(n=1,341)	
(continuous) ^a		$\bar{x}$ =250.3	$\bar{x}$ =251.2	0.568	$\bar{x}$ =248.2	$\bar{x}$ =252.4	0.009
(discrete)	Low	8.8%	10.4%	0.256	9.5%	9.9%	0.805

Dependent Variable	Level	Current Wine Consumption (drinks of wine/day)			Lifetime Wine History (drink-years of wine)		
		0	>0	p-Value	0	>0	p-Value
Alkaline Phosphatase		(n=1,199)	(n=891)		(n=585)	(n=1,500)	
(continuous) ^a		r =-0.095		<0.001	r =-0.091		<0.001
(discrete)	High	2.6%	1.7%	0.215	2.2%	2.2%	0.999
α -1-Antitrypsin		(n=1,199)	(n=891)		--	--	--
(continuous) ^b		r =-0.077		<0.001	--	--	--
(discrete)	Abn. Low	1.0%	1.9%	0.031	--	--	--
	Normal	98.1%	97.9%		--	--	--
	Abn. High	0.9%	0.2%		--	--	--

^a Analysis performed on natural logarithm scale; means transformed from natural logarithm scale.

^b Analysis performed on square root scale; means transformed from square root scale.

--: Covariate or covariate category not applicable for dependent variable.

Note: Correlations (r) are based on total sample size and are not category-specific.

Table F-6. Dependent Variable-Covariate Associations for the Cardiovascular Assessment

Dependent Variable	Level	Age			Race		
		Born ≥1942	Born <1942	p-Value	Black	Non-Black	p-Value
Essential Hypertension	Yes	(n=919) 32.9%	(n=1,151) 48.0%	0.001	(n=123) 47.2%	(n=1,947) 40.9%	0.202
Heart Disease (Excluding Essential Hypertension)	Yes	(n=925) 52.3%	(n=1,166) 71.4%	0.001	(n=124) 69.4%	(n=1,967) 62.6%	0.156
Myocardial Infarction	Yes	(n=925) 3.7%	(n=1,166) 12.2%	0.001	(n=124) 5.6%	(n=1,967) 8.6%	0.327
Stroke or Transient Ischemia Attack	Yes	(n=925) 0.8%	(n=1,166) 1.5%	0.149	(n=124) 1.6%	(n=1,967) 1.2%	0.988
Systolic Blood Pressure (mm Hg)		(n=925)	(n=1,166)		(n=124)	(n=1,967)	
(continuous) ^a		r=0.214			$\bar{x}$ =126.7	$\bar{x}$ =125.2	0.377
(discrete)	High	13.9%	26.9%	0.001	20.2%	21.3%	0.861
Diastolic Blood Pressure (mm Hg)		(n=925)	(n=1,166)		(n=124)	(n=1,967)	
(continuous) ^b		r=-0.057			$\bar{x}$ =76.69	$\bar{x}$ =74.46	0.010
(discrete)	High	5.3%	4.9%	0.747	8.9%	4.8%	0.075
Heart Sounds	Abnormal	(n=925) 2.4%	(n=1,166) 6.1%	0.001	(n=124) 4.8%	(n=1,967) 4.4%	0.999
Overall Electrocardiograph (ECG)	Abnormal	(n=925) 19.1%	(n=1,166) 40.7%	0.001	(n=124) 35.5%	(n=1,967) 30.9%	0.334
ECG: Right Bundle Branch Block	Yes	(n=925) 0.9%	(n=1,166) 3.9%	0.001	(n=124) 3.2%	(n=1,967) 2.5%	0.862
ECG: Left Bundle Branch Block	Yes	(n=925) 0.4%	(n=1,166) 1.1%	0.139	(n=124) 0.0%	(n=1,967) 0.9%	0.600
ECG: Non-specific ST- and T-Wave Changes	Yes	(n=925) 11.8%	(n=1,166) 23.4%	0.001	(n=124) 22.6%	(n=1,967) 18.0%	0.245
ECG: Bradycardia	Yes	(n=925) 3.1%	(n=1,166) 3.8%	0.503	(n=124) 1.6%	(n=1,967) 3.6%	0.356
ECG: Tachycardia	Yes	(n=925) 0.3%	(n=1,166) 0.6%	0.555	(n=124) 0.8%	(n=1,967) 0.5%	0.999
ECG: Arrhythmia	Yes	(n=925) 2.4%	(n=1,166) 8.3%	0.001	(n=124) 5.6%	(n=1,967) 5.7%	0.999
ECG: Evidence of Prior Myocardial Infarction	Yes	(n=925) 1.8%	(n=1,166) 6.0%	0.001	(n=124) 1.6%	(n=1,967) 4.3%	0.218
ECG: Other Diagnoses	Yes	(n=925) 0.2%	(n=1,166) 0.2%	0.999	(n=124) 0.8%	(n=1,967) 0.2%	0.578

Table F-6. Dependent Variable-Covariate Associations for the Cardiovascular Assessment (Continued)

Dependent Variable	Level	Age			Race		
		Born ≥1942	Born <1942	p-Value	Black	Non-Black	p-Value
Funduscopy Examination	Abnormal	(n=925) 6.4%	(n=1,164) 17.4%	0.001	(n=124) 16.1%	(n=1,965) 12.3%	0.262
Carotid Bruits	Present	(n=925) 1.1%	(n=1,166) 3.9%	0.001	(n=124) 3.2%	(n=1,967) 2.6%	0.918
Radial Pulses	Abnormal	(n=925) 0.5%	(n=1,166) 0.5%	0.999	(n=124) 2.4%	(n=1,967) 0.4%	0.018
Femoral Pulses	Abnormal	(n=925) 0.8%	(n=1,165) 2.3%	0.009	(n=124) 3.2%	(n=1,966) 1.5%	0.278
Popliteal Pulses	Abnormal	(n=925) 1.1%	(n=1,164) 3.5%	0.001	(n=124) 4.0%	(n=1,965) 2.3%	0.377
Dorsalis Pedis Pulses	Abnormal	(n=925) 4.4%	(n=1,164) 10.6%	0.001	(n=124) 11.3%	(n=1,965) 7.6%	0.195
Posterior Tibial Pulses	Abnormal	(n=925) 3.0%	(n=1,162) 8.1%	0.001	(n=124) 6.5%	(n=1,963) 5.8%	0.921
Leg Pulses	Abnormal	(n=925) 5.6%	(n=1,162) 14.2%	0.001	(n=124) 14.5%	(n=1,963) 10.1%	0.162
Peripheral Pulses	Abnormal	(n=925) 5.8%	(n=1,162) 14.5%	0.001	(n=124) 16.1%	(n=1,963) 10.3%	0.061
Intermittent Claudication and Vascular Insufficiency (ICVI) Index	Abnormal	(n=924) 3.0%	(n=1,166) 4.3%	0.164	(n=124) 3.2%	(n=1,966) 3.8%	0.950

Dependent Variable	Level	Occupation			p-Value
		Officer	Enlisted Flyer	Enlisted Groundcrew	
Essential Hypertension	Yes	(n=809) 40.4%	(n=333) 45.3%	(n=928) 40.5%	0.254
Heart Disease (Excluding Essential Hypertension)	Yes	(n=818) 68.7%	(n=335) 66.6%	(n=938) 56.7%	0.001
Myocardial Infarction	Yes	(n=818) 8.6%	(n=335) 9.3%	(n=938) 8.0%	0.763
Stroke or Transient Ischemia Attack	Yes	(n=818) 1.2%	(n=335) 0.9%	(n=938) 1.3%	0.854
Systolic Blood Pressure (mm Hg)		(n=818)	(n=335)	(n=938)	
(continuous) ^a		$\bar{x}$ = 126.1	$\bar{x}$ = 127.1	$\bar{x}$ = 123.9	0.005
(discrete)	High	23.2%	23.6%	18.6%	0.029
Diastolic Blood Pressure (mm Hg)		(n=818)	(n=335)	(n=938)	
(continuous) ^b		$\bar{x}$ = 74.19	$\bar{x}$ = 75.16	$\bar{x}$ = 74.74	0.224
(discrete)	High	5.1%	4.8%	5.1%	0.965

Table F-6. Dependent Variable-Covariate Associations for the Cardiovascular Assessment (Continued)

Dependent Variable	Level	Occupation			p-Value
		Officer	Enlisted Flyer	Enlisted Groundcrew	
Heart Sounds		(n=818)	(n=335)	(n=938)	
	Abnormal	4.5%	5.4%	4.1%	0.597
Overall Electrocardiograph (ECG)		(n=818)	(n=335)	(n=938)	
	Abnormal	34.6%	36.4%	26.3%	0.001
ECG: Right Bundle Branch Block		(n=818)	(n=335)	(n=938)	
	Yes	2.6%	4.5%	1.9%	0.040
ECG: Left Bundle Branch Block		(n=818)	(n=335)	(n=938)	
	Yes	1.0%	0.3%	0.9%	0.498
ECG: Non-specific ST- and T-Wave Changes		(n=818)	(n=335)	(n=938)	
	Yes	20.2%	20.0%	16.0%	0.052
ECG: Bradycardia		(n=818)	(n=335)	(n=938)	
	Yes	5.6%	3.0%	1.8%	0.001
ECG: Tachycardia		(n=818)	(n=335)	(n=938)	
	Yes	0.2%	0.9%	0.5%	0.329
ECG: Arrhythmia		(n=818)	(n=335)	(n=938)	
	Yes	6.1%	7.5%	4.7%	0.137
ECG: Evidence of Prior Myocardial Infarction		(n=818)	(n=335)	(n=938)	
	Yes	4.6%	4.8%	3.5%	0.412
ECG: Other Diagnoses		(n=818)	(n=335)	(n=938)	
	Yes	0.1%	0.0%	0.3%	0.436
Funduscopy Examination		(n=817)	(n=334)	(n=938)	
	Abnormal	11.1%	18.6%	11.5%	0.001
Carotid Bruits		(n=818)	(n=335)	(n=938)	
	Present	2.2%	3.9%	2.7%	0.276
Radial Pulses		(n=818)	(n=335)	(n=938)	
	Abnormal	0.5%	0.0%	0.7%	0.264
Femoral Pulses		(n=818)	(n=334)	(n=938)	
	Abnormal	1.8%	2.4%	1.2%	0.265
Popliteal Pulses		(n=817)	(n=334)	(n=938)	
	Abnormal	2.3%	2.7%	2.5%	0.934
Dorsalis Pedis Pulses		(n=817)	(n=334)	(n=938)	
	Abnormal	7.2%	10.5%	7.5%	0.147
Posterior Tibial Pulses		(n=817)	(n=332)	(n=938)	
	Abnormal	5.5%	8.1%	5.3%	0.151
Leg Pulses		(n=817)	(n=332)	(n=938)	
	Abnormal	9.3%	14.2%	10.0%	0.044
Peripheral Pulses		(n=817)	(n=332)	(n=938)	
	Abnormal	9.7%	14.2%	10.3%	0.075
ICVI Index		(n=818)	(n=335)	(n=937)	
	Abnormal	3.4%	5.7%	3.3%	0.123

Table F-6. Dependent Variable-Covariate Associations for the Cardiovascular Assessment (Continued)

Dependent Variable	Level	Lifetime Alcohol History (drink-years)			p-Value
		0	>0-40	>40	
Essential Hypertension	Yes	(n=118) 39.0%	(n=1,348) 38.5%	(n=596) 48.2%	0.001
Heart Disease (Excluding Essential Hypertension)	Yes	(n=118) 62.7%	(n=1,360) 63.0%	(n=605) 63.1%	0.996
Myocardial Infarction	Yes	(n=118) 10.2%	(n=1,360) 7.9%	(n=605) 9.4%	0.410
Stroke or Transient Ischemia Attack	Yes	(n=118) 1.7%	(n=1,360) 1.0%	(n=605) 1.7%	0.373
Systolic Blood Pressure (mm Hg) (continuous) ^a (discrete)	High	(n=118) 19.5%	(n=1,360) 19.9%	(n=605) 24.6%	<0.001 0.051
Diastolic Blood Pressure (mm Hg) (continuous) ^b (discrete)	High	(n=118) 3.4%	(n=1,360) 4.8%	(n=605) 6.1%	0.126 0.317
Heart Sounds	Abnormal	(n=118) 4.2%	(n=1,360) 4.0%	(n=605) 5.5%	0.374
Overall Electrocardiograph (ECG)	Abnormal	(n=118) 39.0%	(n=1,360) 29.9%	(n=605) 32.6%	0.082
ECG: Right Bundle Branch Block	Yes	(n=118) 1.7%	(n=1,360) 2.7%	(n=605) 2.5%	0.781
ECG: Left Bundle Branch Block	Yes	(n=118) 0.8%	(n=1,360) 1.0%	(n=605) 0.5%	0.578
ECG: Non-specific ST- and T-Wave Changes	Yes	(n=118) 26.3%	(n=1,360) 18.5%	(n=605) 15.9%	0.024
ECG: Bradycardia	Yes	(n=118) 0.8%	(n=1,360) 3.2%	(n=605) 4.6%	0.072
ECG: Tachycardia	Yes	(n=118) 1.7%	(n=1,360) 0.2%	(n=605) 0.8%	0.029
ECG: Arrhythmia	Yes	(n=118) 9.3%	(n=1,360) 6.0%	(n=605) 4.5%	0.093
ECG: Evidence of Prior Myocardial Infarction	Yes	(n=118) 5.1%	(n=1,360) 4.3%	(n=605) 3.8%	0.786
ECG: Other Diagnoses	Yes	(n=118) 0.0%	(n=1,360) 0.2%	(n=605) 0.2%	0.857
Fundusoscopic Examination	Abnormal	(n=118) 14.4%	(n=1,359) 11.2%	(n=604) 14.9%	0.057
Carotid Bruits	Present	(n=118) 2.5%	(n=1,360) 2.3%	(n=605) 3.6%	0.228
Radial Pulses	Abnormal	(n=118) 0.0%	(n=1,360) 0.2%	(n=605) 1.3%	0.006

Table F-6. Dependent Variable-Covariate Associations for the Cardiovascular Assessment (Continued)

Dependent Variable	Level	Lifetime Alcohol History (drink-years)			p-Value
		0	>0-40	>40	
Femoral Pulses		(n=118)	(n=1,359)	(n=605)	
	Abnormal	0.0%	1.1%	3.1%	0.002
Popliteal Pulses		(n=118)	(n=1,358)	(n=605)	
	Abnormal	0.8%	1.9%	4.0%	0.013
Dorsalis Pedis Pulses		(n=118)	(n=1,358)	(n=605)	
	Abnormal	8.5%	6.6%	10.6%	0.009
Posterior Tibial Pulses		(n=118)	(n=1,356)	(n=605)	
	Abnormal	3.4%	5.2%	7.9%	0.027
Leg Pulses		(n=118)	(n=1,356)	(n=605)	
	Abnormal	11.0%	9.0%	13.4%	0.013
Peripheral Pulses		(n=118)	(n=1,356)	(n=605)	
	Abnormal	11.0%	9.1%	14.0%	0.005
ICVI Index		(n=118)	(n=1,360)	(n=605)	
	Abnormal	1.7%	3.5%	4.6%	0.239

Dependent Variable	Level	Current Alcohol Use (drinks/day)			p-Value
		0-1	>1-4	>4	
Essential Hypertension		--	--	--	--
Heart Disease (Excluding Essential Hypertension)		--	--	--	--
Myocardial Infarction		--	--	--	--
Stroke or Transient Ischemia Attack		--	--	--	--
Systolic Blood Pressure (mm Hg)		(n=1,673)	(n=367)	(n=50)	
(continuous) ^a			r=0.008		0.715
(discrete)	High	20.8%	24.0%	14.0%	0.182
Diastolic Blood Pressure (mm Hg)		(n=1,673)	(n=367)	(n=50)	
(continuous) ^b			r=0.025		0.253
(discrete)	High	4.8%	5.7%	8.0%	0.497
Heart Sounds		(n=1,673)	(n=367)	(n=50)	
	Abnormal	4.7%	3.5%	4.0%	0.634
Overall Electrocardiograph (ECG)		(n=1,673)	(n=367)	(n=50)	
	Abnormal	30.6%	34.6%	26.0%	0.236
ECG: Right Bundle Branch Block		(n=1,673)	(n=367)	(n=50)	
	Yes	2.7%	2.2%	2.0%	0.827
ECG: Left Bundle Branch Block		(n=1,673)	(n=367)	(n=50)	
	Yes	0.8%	0.8%	2.0%	0.638
ECG: Non-specific ST- and T-Wave Changes		(n=1,673)	(n=367)	(n=50)	
	Yes	18.7%	17.4%	10.0%	0.263

Table F-6. Dependent Variable-Covariate Associations for the Cardiovascular Assessment (Continued)

Dependent Variable	Level	Current Alcohol Use (drinks/day)			p-Value
		0-1	>1-4	>4	
ECG: Bradycardia	Yes	(n=1,673) 3.2%	(n=367) 5.2%	(n=50) 2.0%	0.139
ECG: Tachycardia	Yes	(n=1,673) 0.5%	(n=367) 0.5%	(n=50) 0.0%	0.872
ECG: Arrhythmia	Yes	(n=1,673) 5.5%	(n=367) 6.8%	(n=50) 4.0%	0.538
ECG: Evidence of Prior Myocardial Infarction	Yes	(n=1,673) 4.4%	(n=367) 3.3%	(n=50) 4.0%	0.636
ECG: Other Diagnoses	Yes	(n=1,673) 0.2%	(n=367) 0.3%	(n=50) 0.0%	0.889
Funduscopy Examination	Abnormal	(n=1,671) 12.6%	(n=367) 11.7%	(n=50) 14.0%	0.846
Carotid Bruits	Present	(n=1,673) 2.6%	(n=367) 3.3%	(n=50) 0.0%	0.390
Radial Pulses	Abnormal	(n=1,673) 0.3%	(n=367) 1.6%	(n=50) 0.0%	0.005
Femoral Pulses	Abnormal	(n=1,672) 1.0%	(n=367) 4.4%	(n=50) 4.0%	0.001
Popliteal Pulses	Abnormal	(n=1,672) 1.9%	(n=366) 4.9%	(n=50) 4.0%	0.002
Dorsalis Pedis Pulses	Abnormal	(n=1,672) 7.3%	(n=366) 10.1%	(n=50) 10.0%	0.165
Posterior Tibial Pulses	Abnormal	(n=1,670) 5.0%	(n=366) 9.3%	(n=50) 10.0%	0.003
Leg Pulses	Abnormal	(n=1,670) 9.6%	(n=366) 13.4%	(n=50) 14.0%	0.073
Peripheral Pulses	Abnormal	(n=1,670) 9.8%	(n=366) 14.2%	(n=50) 14.0%	0.036
ICVI Index	Abnormal	(n=1,673) 3.5%	(n=367) 4.1%	(n=50) 8.0%	0.239

Dependent Variable	Level	Lifetime Cigarette Smoking History (pack-years)			p-Value
		0	>0-10	>10	
Essential Hypertension	Yes	(n=582) 38.0%	(n=543) 43.1%	(n=942) 42.3%	0.155
Heart Disease (Excluding Essential Hypertension)	Yes	(n=587) 61.2%	(n=550) 62.9%	(n=951) 64.2%	0.474
Myocardial Infarction	Yes	(n=587) 4.9%	(n=550) 5.6%	(n=951) 12.2%	0.001
Stroke or Transient Ischemia Attack	Yes	(n=587) 0.9%	(n=550) 1.1%	(n=951) 1.4%	0.647

Table F-6. Dependent Variable-Covariate Associations for the Cardiovascular Assessment (Continued)

Dependent Variable	Level	Lifetime Cigarette Smoking History (pack-years)			p-Value
		0	>0-10	>10	
Systolic Blood Pressure (mm Hg)		(n=587)	(n=550)	(n=951)	
(continuous) ^a			r=0.044		0.045
(discrete)	High	19.9%	20.0%	22.6%	0.338
Diastolic Blood Pressure (mm Hg)		(n=587)	(n=550)	(n=951)	
(continuous) ^b			r=-0.066		0.003
(discrete)	High	4.1%	7.8%	4.1%	0.003
Heart Sounds		(n=587)	(n=550)	(n=951)	
	Abnormal	2.9%	4.5%	5.4%	0.074
Overall Electrocardiograph (ECG)		(n=587)	(n=550)	(n=951)	
	Abnormal	28.3%	27.6%	35.0%	0.002
ECG: Right Bundle Branch Block		(n=587)	(n=550)	(n=951)	
	Yes	2.2%	1.5%	3.5%	0.048
ECG: Left Bundle Branch Block		(n=587)	(n=550)	(n=951)	
	Yes	0.5%	1.1%	0.8%	0.549
ECG: Non-specific ST- and T-Wave Changes		(n=587)	(n=550)	(n=951)	
	Yes	17.9%	15.6%	20.0%	0.107
ECG: Bradycardia		(n=587)	(n=550)	(n=951)	
	Yes	4.3%	4.0%	2.7%	0.216
ECG: Tachycardia		(n=587)	(n=550)	(n=951)	
	Yes	0.5%	0.5%	0.4%	0.936
ECG: Arrhythmia		(n=587)	(n=550)	(n=951)	
	Yes	4.1%	5.5%	6.7%	0.091
ECG: Evidence of Prior Myocardial Infarction		(n=587)	(n=550)	(n=951)	
	Yes	2.9%	2.7%	5.8%	0.003
ECG: Other Diagnoses		(n=587)	(n=550)	(n=951)	
	Yes	0.2%	0.4%	0.1%	0.539
Funduscopy Examination		(n=587)	(n=550)	(n=949)	
	Abnormal	8.9%	11.6%	15.2%	0.001
Carotid Bruits		(n=587)	(n=550)	(n=951)	
	Present	1.0%	2.4%	3.9%	0.003
Radial Pulses		(n=587)	(n=550)	(n=951)	
	Abnormal	0.2%	0.5%	0.7%	0.329
Femoral Pulses		(n=587)	(n=550)	(n=950)	
	Abnormal	0.3%	1.3%	2.6%	0.002
Popliteal Pulses		(n=587)	(n=549)	(n=950)	
	Abnormal	0.5%	2.0%	3.9%	0.001
Dorsalis Pedis Pulses		(n=587)	(n=549)	(n=950)	
	Abnormal	2.9%	6.2%	11.9%	0.001
Posterior Tibial Pulses		(n=587)	(n=549)	(n=948)	
	Abnormal	3.1%	3.6%	8.8%	0.001

Table F-6. Dependent Variable-Covariate Associations for the Cardiovascular Assessment (Continued)

Dependent Variable	Level	Lifetime Cigarette Smoking History (pack-years)				p-Value
		0	>0-10	>10		
Leg Pulses	Abnormal	(n=587) 5.1%	(n=549) 7.5%	(n=948) 15.3%		0.001
Peripheral Pulses	Abnormal	(n=587) 5.3%	(n=549) 7.7%	(n=948) 15.7%		0.001
ICVI Index	Abnormal	(n=587) 1.4%	(n=550) 2.5%	(n=951) 5.9%		0.001

Dependent Variable	Level	Current Cigarette Smoking (cigarettes/day)				p-Value
		0-Never	0-Former	>0-20	>20	
Essential Hypertension		--	--	--	--	--
Heart Disease (Excluding Essential Hypertension)		--	--	--	--	--
Myocardial Infarction		--	--	--	--	--
Stroke or Transient Ischemia Attack		--	--	--	--	--
Systolic Blood Pressure (mm Hg) (continuous) ^a		(n=587)	(n=1,101)	(n=266)	(n=136)	
(discrete)	High	19.9%	22.7%	20.3%	16.2%	0.236
Diastolic Blood Pressure (mm Hg) (continuous) ^b		(n=587)	(n=1,101)	(n=266)	(n=136)	
(discrete)	High	4.1%	5.7%	5.3%	3.7%	0.438
Heart Sounds	Abnormal	(n=587) 2.9%	(n=1,101) 5.7%	(n=266) 3.4%	(n=136) 2.9%	0.030
Overall Electrocardiograph (ECG)	Abnormal	(n=587) 28.3%	(n=1,101) 32.8%	(n=266) 35.0%	(n=136) 23.5%	0.028
ECG: Right Bundle Branch Block	Yes	(n=587) 2.2%	(n=1,101) 2.9%	(n=266) 2.3%	(n=136) 2.2%	0.810
ECG: Left Bundle Branch Block	Yes	(n=587) 0.5%	(n=1,101) 1.2%	(n=266) 0.0%	(n=136) 0.7%	0.195
ECG: Non-specific ST- and T- Wave Changes	Yes	(n=587) 17.9%	(n=1,101) 19.2%	(n=266) 19.2%	(n=136) 11.0%	0.135
ECG: Bradycardia	Yes	(n=587) 4.3%	(n=1,101) 3.1%	(n=266) 4.1%	(n=136) 2.2%	0.466
ECG: Tachycardia	Yes	(n=587) 0.5%	(n=1,101) 0.5%	(n=266) 0.4%	(n=136) 0.7%	0.965
ECG: Arrhythmia	Yes	(n=587) 4.1%	(n=1,101) 6.8%	(n=266) 5.3%	(n=136) 4.4%	0.117
ECG: Evidence of Prior Myocardial Infarction	Yes	(n=587) 2.9%	(n=1,101) 4.7%	(n=266) 4.5%	(n=136) 4.4%	0.344

Table F-6. Dependent Variable-Covariate Associations for the Cardiovascular Assessment (Continued)

Dependent Variable	Level	Current Cigarette Smoking (cigarettes/day)				p-Value
		0-Never	0-Former	>0-20	>20	
ECG: Other Diagnoses		(n=587)	(n=1,101)	(n=266)	(n=136)	
	Yes	0.2%	0.2%	0.0%	0.7%	0.451
Funduscopy Examination		(n=587)	(n=1,100)	(n=266)	(n=135)	
	Abnormal	8.9%	14.0%	13.5%	14.1%	0.019
Carotid Bruits		(n=587)	(n=1,101)	(n=266)	(n=136)	
	Present	1.0%	3.1%	4.1%	3.7%	0.023
Radial Pulses		(n=587)	(n=1,101)	(n=266)	(n=136)	
	Abnormal	0.2%	0.4%	1.9%	0.7%	0.010
Femoral Pulses		(n=587)	(n=1,100)	(n=266)	(n=136)	
	Abnormal	0.3%	1.2%	4.9%	4.4%	0.001
Popliteal Pulses		(n=587)	(n=1,099)	(n=266)	(n=136)	
	Abnormal	0.5%	2.0%	7.1%	5.1%	0.001
Dorsalis Pedis Pulses		(n=587)	(n=1,099)	(n=266)	(n=136)	
	Abnormal	2.9%	8.0%	13.9%	16.2%	0.001
Posterior Tibial Pulses		(n=587)	(n=1,098)	(n=265)	(n=136)	
	Abnormal	3.1%	5.6%	10.6%	11.0%	0.001
Leg Pulses		(n=587)	(n=1,098)	(n=265)	(n=136)	
	Abnormal	5.1%	10.7%	16.2%	19.9%	0.001
Peripheral Pulses		(n=587)	(n=1,098)	(n=265)	(n=136)	
	Abnormal	5.3%	10.8%	17.4%	19.9%	0.001
ICVI Index		(n=587)	(n=1,101)	(n=266)	(n=136)	
	Abnormal	1.4%	3.5%	7.9%	8.1%	0.001

Dependent Variable	Level	Cholesterol (mg/dl)			p-Value
		≤200	>200-239	>239	
Essential Hypertension		(n=785)	(n=838)	(n=447)	
	Yes	41.0%	42.7%	38.9%	0.415
Heart Disease (Excluding Essential Hypertension)		(n=794)	(n=848)	(n=449)	
	Yes	66.6%	63.3%	55.9%	0.001
Myocardial Infarction		(n=794)	(n=848)	(n=449)	
	Yes	11.5%	8.0%	3.8%	0.001
Stroke or Transient Ischemia Attack		(n=794)	(n=848)	(n=449)	
	Yes	1.4%	1.3%	0.7%	0.503
Systolic Blood Pressure (mm Hg)		(n=794)	(n=848)	(n=449)	
(continuous) ^a			r=0.055		0.012
(discrete)	High	18.1%	22.6%	23.8%	0.025
Diastolic Blood Pressure (mm Hg)		(n=794)	(n=848)	(n=449)	
(continuous) ^b			r=0.096		<0.001
(discrete)	High	4.0%	5.3%	6.5%	0.159
Heart Sounds		(n=794)	(n=848)	(n=449)	
	Abnormal	4.2%	4.5%	4.9%	0.828

Table F-6. Dependent Variable-Covariate Associations for the Cardiovascular Assessment (Continued)

Dependent Variable	Level	Cholesterol (mg/dl)			p-Value
		≤200	>200-239	>239	
Overall Electrocardiograph (ECG)		(n=794)	(n=848)	(n=449)	
	Abnormal	34.4%	29.7%	28.3%	0.041
ECG: Right Bundle Branch Block		(n=794)	(n=848)	(n=449)	
	Yes	3.0%	2.1%	2.7%	0.512
ECG: Left Bundle Branch Block		(n=794)	(n=848)	(n=449)	
	Yes	0.9%	0.7%	0.9%	0.906
ECG: Non-specific ST- and T-Wave Changes		(n=794)	(n=848)	(n=449)	
	Yes	19.8%	17.0%	18.0%	0.339
ECG: Bradycardia		(n=794)	(n=848)	(n=449)	
	Yes	4.0%	3.5%	2.4%	0.344
ECG: Tachycardia		(n=794)	(n=848)	(n=449)	
	Yes	0.3%	0.6%	0.7%	0.493
ECG: Arrhythmia		(n=794)	(n=848)	(n=449)	
	Yes	6.4%	5.3%	5.1%	0.523
ECG: Evidence of Prior Myocardial Infarction		(n=794)	(n=848)	(n=449)	
	Yes	5.8%	3.7%	2.2%	0.007
ECG: Other Diagnoses		(n=794)	(n=848)	(n=449)	
	Yes	0.4%	0.0%	0.2%	0.213
Fundusoscopic Examination		(n=792)	(n=848)	(n=449)	
	Abnormal	13.1%	11.4%	13.4%	0.480
Carotid Bruits		(n=794)	(n=848)	(n=449)	
	Present	2.6%	2.7%	2.7%	0.996
Radial Pulses		(n=794)	(n=848)	(n=449)	
	Abnormal	0.5%	0.6%	0.4%	0.938
Femoral Pulses		(n=793)	(n=848)	(n=449)	
	Abnormal	1.5%	1.7%	1.8%	0.935
Popliteal Pulses		(n=793)	(n=847)	(n=449)	
	Abnormal	2.1%	2.6%	2.7%	0.786
Dorsalis Pedis Pulses		(n=793)	(n=847)	(n=449)	
	Abnormal	7.2%	8.3%	8.2%	0.678
Posterior Tibial Pulses		(n=793)	(n=845)	(n=449)	
	Abnormal	4.9%	6.9%	5.6%	0.235
Leg Pulses		(n=793)	(n=845)	(n=449)	
	Abnormal	9.0%	11.4%	11.1%	0.237
Peripheral Pulses		(n=793)	(n=845)	(n=449)	
	Abnormal	9.2%	11.7%	11.4%	0.226
ICVI Index		(n=793)	(n=848)	(n=449)	
	Abnormal	3.8%	3.5%	4.0%	0.909

Table F-6. Dependent Variable-Covariate Associations for the Cardiovascular Assessment (Continued)

Dependent Variable	Level	HDL Cholesterol (mg/dl)			Cholesterol-HDL Ratio		
		0-35	>35	p-Value	0-5	>5	p-Value
Essential Hypertension	Yes	(n=369) 45.0%	(n=1,700) 40.5%	0.124	(n=1,217) 38.7%	(n=852) 45.0%	0.005
Heart Disease (Excluding Essential Hypertension)	Yes	(n=372) 61.3%	(n=1,718) 63.4%	0.484	(n=1,230) 64.6%	(n=860) 60.7%	0.074
Myocardial Infarction	Yes	(n=372) 11.8%	(n=1,718) 7.7%	0.012	(n=1,230) 8.1%	(n=860) 8.8%	0.622
Stroke or Transient Ischemia Attack	Yes	(n=372) 1.3%	(n=1,718) 1.2%	0.979	(n=1,230) 1.2%	(n=860) 1.2%	0.999
Systolic Blood Pressure (mm Hg) (continuous) ^a		(n=372)	(n=1,718)	$r=-0.025$ 0.245	(n=1,230)	(n=860)	$r=0.062$ 0.005
(discrete)	High	21.5%	21.1%	0.928	19.5%	23.6%	0.028
Diastolic Blood Pressure (mm Hg) (continuous) ^b		(n=372)	(n=1,718)	$r=-0.008$ 0.707	(n=1,230)	(n=860)	$r=0.063$ 0.004
(discrete)	High	5.4%	5.0%	0.869	4.7%	5.6%	0.432
Heart Sounds	Abnormal	(n=372) 5.6%	(n=1,718) 4.2%	0.274	(n=1,230) 4.2%	(n=860) 4.8%	0.630
Overall Electrocardiograph (ECG)	Abnormal	(n=372) 33.6%	(n=1,718) 30.7%	0.297	(n=1,230) 31.9%	(n=860) 30.2%	0.455
ECG: Right Bundle Branch Block	Yes	(n=372) 3.2%	(n=1,718) 2.4%	0.496	(n=1,230) 2.7%	(n=860) 2.4%	0.840
ECG: Left Bundle Branch Block	Yes	(n=372) 1.3%	(n=1,718) 0.7%	0.348	(n=1,230) 0.9%	(n=860) 0.7%	0.806
ECG: Non-specific ST- and T-Wave Changes	Yes	(n=372) 21.5%	(n=1,718) 17.6%	0.089	(n=1,230) 17.8%	(n=860) 19.0%	0.541
ECG: Bradycardia	Yes	(n=372) 1.6%	(n=1,718) 3.9%	0.043	(n=1,230) 4.5%	(n=860) 2.1%	0.005
ECG: Tachycardia	Yes	(n=372) 0.5%	(n=1,718) 0.5%	0.999	(n=1,230) 0.3%	(n=860) 0.7%	0.372
ECG: Arrhythmia	Yes	(n=372) 4.3%	(n=1,718) 6.0%	0.248	(n=1,230) 6.3%	(n=860) 4.9%	0.215
ECG: Evidence of Prior Myocardial Infarction	Yes	(n=372) 5.4%	(n=1,718) 3.9%	0.250	(n=1,230) 4.2%	(n=860) 4.1%	0.947
ECG: Other Diagnoses	Yes	(n=372) 0.0%	(n=1,718) 0.2%	0.782	(n=1,230) 0.2%	(n=860) 0.1%	0.882
Funduscopy Examination	Abnormal	(n=372) 11.3%	(n=1,716) 12.8%	0.489	(n=1,228) 13.4%	(n=860) 11.2%	0.139
Carotid Bruits	Present	(n=372) 1.9%	(n=1,718) 2.9%	0.382	(n=1,230) 2.5%	(n=860) 2.9%	0.688

Table F-6. Dependent Variable-Covariate Associations for the Cardiovascular Assessment (Continued)

Dependent Variable	Level	HDL Cholesterol (mg/dl)			Cholesterol-HDL Ratio		
		0-35	>35	p-Value	0-5	>5	p-Value
Radial Pulses	Abnormal	(n=372) 0.5%	(n=1,718) 0.5%	0.999	(n=1,230) 0.5%	(n=860) 0.6%	0.999
Femoral Pulses	Abnormal	(n=371) 1.6%	(n=1,718) 1.6%	0.999	(n=1,230) 1.5%	(n=859) 1.7%	0.855
Popliteal Pulses	Abnormal	(n=371) 2.4%	(n=1,717) 2.4%	0.999	(n=1,229) 2.1%	(n=859) 2.9%	0.311
Dorsalis Pedis Pulses	Abnormal	(n=371) 8.6%	(n=1,717) 7.7%	0.615	(n=1,229) 7.1%	(n=859) 9.0%	0.135
Posterior Tibial Pulses	Abnormal	(n=371) 5.1%	(n=1,715) 6.0%	0.592	(n=1,229) 5.8%	(n=857) 6.0%	0.943
Leg Pulses	Abnormal	(n=371) 10.5%	(n=1,715) 10.4%	0.999	(n=1,229) 9.8%	(n=857) 11.3%	0.284
Peripheral Pulses	Abnormal	(n=371) 10.5%	(n=1,715) 10.7%	0.976	(n=1,229) 10.1%	(n=857) 11.6%	0.321
ICVI Index	Abnormal	(n=372) 5.1%	(n=1,717) 3.4%	0.164	(n=1,229) 3.6%	(n=860) 4.0%	0.745

Dependent Variable	Level	Body Fat			Personality Type		
		Lean/Normal	Obese	p-Value	Type A	Type B	p-Value
Essential Hypertension	Yes	(n=1,472) 35.2%	(n=598) 56.2%	0.001	(n=803) 38.4%	(n=1,264) 43.0%	0.039
Heart Disease (Excluding Essential Hypertension)	Yes	(n=1,482) 62.7%	(n=609) 63.7%	0.696	(n=812) 62.8%	(n=1,276) 63.0%	0.963
Myocardial Infarction	Yes	(n=1,482) 8.6%	(n=609) 8.0%	0.760	(n=812) 8.9%	(n=1,276) 8.1%	0.577
Stroke or Transient Ischemia Attack	Yes	(n=1,482) 1.1%	(n=609) 1.3%	0.923	(n=812) 0.9%	(n=1,276) 1.4%	0.359
Systolic Blood Pressure (mm Hg)		(n=1,482)	(n=609)		(n=812)	(n=1,276)	
(continuous) ^a		r=0.185		<0.001	$\bar{x}$ = 124.4	$\bar{x}$ = 125.9	0.061
(discrete)	High	18.6%	27.4%	0.001	19.2%	22.5%	0.083
Diastolic Blood Pressure (mm Hg)		(n=1,482)	(n=609)		(n=812)	(n=1,276)	
(continuous) ^b		r=0.122		<0.001	$\bar{x}$ = 74.40	$\bar{x}$ = 74.71	0.457
(discrete)	High	4.5%	6.6%	0.058	4.3%	5.5%	0.273
Heart Sounds	Abnormal	(n=1,482) 4.1%	(n=609) 5.3%	0.303	(n=812) 4.1%	(n=1,276) 4.7%	0.562
Overall Electrocardiograph (ECG)	Abnormal	(n=1,482) 29.4%	(n=609) 35.5%	0.008	(n=812) 27.8%	(n=1,276) 33.2%	0.011

Table F-6. Dependent Variable-Covariate Associations for the Cardiovascular Assessment (Continued)

Dependent Variable	Level	Body Fat			Personality Type		
		Lean/Normal	Obese	p-Value	Type A	Type B	p-Value
ECG: Right Bundle Branch Block	Yes	(n=1,482) 2.4%	(n=609) 3.0%	0.591	(n=812) 2.6%	(n=1,276) 2.6%	0.999
ECG: Left Bundle Branch Block	Yes	(n=1,482) 0.7%	(n=609) 1.0%	0.769	(n=812) 0.9%	(n=1,276) 0.8%	0.999
ECG: Non-specific ST- and T-Wave Changes	Yes	(n=1,482) 16.3%	(n=609) 23.0%	0.001	(n=812) 16.9%	(n=1,276) 19.2%	0.199
ECG: Bradycardia	Yes	(n=1,482) 4.5%	(n=609) 1.0%	0.001	(n=812) 3.8%	(n=1,276) 3.3%	0.606
ECG: Tachycardia	Yes	(n=1,482) 0.3%	(n=609) 0.8%	0.268	(n=812) 0.2%	(n=1,276) 0.6%	0.366
ECG: Arrhythmia	Yes	(n=1,482) 5.6%	(n=609) 5.9%	0.861	(n=812) 5.7%	(n=1,276) 5.6%	0.999
ECG: Evidence of Prior Myocardial Infarction	Yes	(n=1,482) 3.8%	(n=609) 5.1%	0.213	(n=812) 3.7%	(n=1,276) 4.5%	0.454
ECG: Other Diagnoses	Yes	(n=1,482) 0.3%	(n=609) 0.0%	0.464	(n=812) 0.2%	(n=1,276) 0.2%	0.999
Funduscopy Examination	Abnormal	(n=1,481) 11.1%	(n=608) 15.8%	0.004	(n=811) 9.2%	(n=1,275) 14.4%	0.001
Carotid Bruits	Present	(n=1,482) 2.8%	(n=609) 2.3%	0.589	(n=812) 2.3%	(n=1,276) 2.8%	0.596
Radial Pulses	Abnormal	(n=1,482) 0.6%	(n=609) 0.3%	0.640	(n=812) 0.6%	(n=1,276) 0.5%	0.890
Femoral Pulses	Abnormal	(n=1,481) 1.6%	(n=609) 1.6%	0.999	(n=811) 1.0%	(n=1,276) 1.9%	0.150
Popliteal Pulses	Abnormal	(n=1,480) 2.5%	(n=609) 2.3%	0.909	(n=810) 1.6%	(n=1,276) 2.8%	0.101
Dorsalis Pedis Pulses	Abnormal	(n=1,480) 8.2%	(n=609) 6.9%	0.342	(n=810) 6.4%	(n=1,276) 8.6%	0.081
Posterior Tibial Pulses	Abnormal	(n=1,478) 6.5%	(n=609) 4.3%	0.062	(n=809) 4.2%	(n=1,275) 6.7%	0.020
Leg Pulses	Abnormal	(n=1,478) 11.2%	(n=609) 8.4%	0.062	(n=809) 8.2%	(n=1,275) 11.7%	0.012
Peripheral Pulses	Abnormal	(n=1,478) 11.6%	(n=609) 8.4%	0.034	(n=809) 8.7%	(n=1,275) 11.8%	0.026
ICVI Index	Abnormal	(n=1,481) 3.6%	(n=609) 3.9%	0.845	(n=811) 4.2%	(n=1,276) 3.4%	0.394

Table F-6. Dependent Variable-Covariate Associations for the Cardiovascular Assessment (Continued)

Dependent Variable	Level	Family History of Heart Disease			Family History of Heart Disease Before Age 45		
		Yes	No	p-Value	Yes	No	p-Value
Essential Hypertension	Yes	(n=1,246) 45.3%	(n=808) 35.3%	0.001	(n=243) 50.2%	(n=1,784) 40.1%	0.003
Heart Disease (Excluding Essential Hypertension)	Yes	(n=1,262) 66.6%	(n=813) 57.4%	0.001	(n=249) 69.9%	(n=1,798) 62.0%	0.018
Myocardial Infarction	Yes	(n=1,262) 9.4%	(n=813) 6.9%	0.058	(n=249) 10.8%	(n=1,798) 8.0%	0.154
Stroke or Transient Ischemia Attack	Yes	(n=1,262) 1.2%	(n=813) 1.2%	0.999	(n=249) 1.2%	(n=1,798) 1.2%	0.999
Systolic Blood Pressure (mm Hg)		(n=1,262)	(n=813)		(n=249)	(n=1,798)	
(continuous) ^a		$\bar{x}$ =125.8	$\bar{x}$ =124.6	0.130	$\bar{x}$ =125.2	$\bar{x}$ =125.3	0.938
(discrete)	High	23.3%	18.3%	0.008	20.1%	21.2%	0.734
Diastolic Blood Pressure (mm Hg)		(n=1,262)	(n=813)		(n=249)	(n=1,798)	
(continuous) ^b		$\bar{x}$ =74.71	$\bar{x}$ =74.47	0.557	$\bar{x}$ =74.06	$\bar{x}$ =74.60	0.384
(discrete)	High	5.3%	4.7%	0.588	4.4%	4.9%	0.835
Heart Sounds	Abnormal	(n=1,262) 4.9%	(n=813) 3.7%	0.226	(n=249) 6.4%	(n=1,798) 4.1%	0.133
Overall Electrocardiograph (ECG)	Abnormal	(n=1,262) 35.3%	(n=813) 24.6%	0.001	(n=249) 36.1%	(n=1,798) 30.4%	0.076
ECG: Right Bundle Branch Block	Yes	(n=1,262) 3.2%	(n=813) 1.7%	0.060	(n=249) 2.8%	(n=1,798) 2.6%	0.999
ECG: Left Bundle Branch Block	Yes	(n=1,262) 0.6%	(n=813) 1.1%	0.251	(n=249) 0.4%	(n=1,798) 0.8%	0.732
ECG: Non-specific ST- and T-Wave Changes	Yes	(n=1,262) 21.1%	(n=813) 14.0%	0.001	(n=249) 22.5%	(n=1,798) 17.6%	0.076
ECG: Bradycardia	Yes	(n=1,262) 3.4%	(n=813) 3.7%	0.826	(n=249) 2.4%	(n=1,798) 3.6%	0.430
ECG: Tachycardia	Yes	(n=1,262) 0.7%	(n=813) 0.1%	0.116	(n=249) 0.8%	(n=1,798) 0.4%	0.783
ECG: Arrhythmia	Yes	(n=1,262) 6.4%	(n=813) 4.6%	0.090	(n=249) 7.2%	(n=1,798) 5.3%	0.284
ECG: Evidence of Prior Myocardial Infarction	Yes	(n=1,262) 4.4%	(n=813) 3.7%	0.525	(n=249) 4.4%	(n=1,798) 4.0%	0.890
ECG: Other Diagnoses	Yes	(n=1,262) 0.1%	(n=813) 0.4%	0.339	(n=249) 0.0%	(n=1,798) 0.2%	0.999

Table F-6. Dependent Variable-Covariate Associations for the Cardiovascular Assessment (Continued)

Dependent Variable	Level	Family History of Heart Disease			Family History of Heart Disease Before Age 45		
		Yes	No	p-Value	Yes	No	p-Value
Funduscopy Examination	Abnormal	(n=1,262) 12.8%	(n=811) 12.1%	0.700	(n=249) 14.5%	(n=1,796) 12.2%	0.376
Carotid Bruits	Present	(n=1,262) 2.9%	(n=813) 2.5%	0.689	(n=249) 3.6%	(n=1,798) 2.6%	0.484
Radial Pulses	Abnormal	(n=1,262) 0.6%	(n=813) 0.5%	0.999	(n=249) 0.8%	(n=1,798) 0.5%	0.881
Femoral Pulses	Abnormal	(n=1,261) 1.8%	(n=813) 1.4%	0.517	(n=249) 1.2%	(n=1,797) 1.7%	0.736
Popliteal Pulses	Abnormal	(n=1,260) 2.6%	(n=813) 2.2%	0.663	(n=249) 2.8%	(n=1,796) 2.4%	0.900
Dorsalis Pedis Pulses	Abnormal	(n=1,260) 8.1%	(n=813) 7.6%	0.762	(n=249) 8.4%	(n=1,796) 7.9%	0.846
Posterior Tibial Pulses	Abnormal	(n=1,258) 6.0%	(n=813) 5.7%	0.790	(n=248) 6.0%	(n=1,795) 5.8%	0.987
Leg Pulses	Abnormal	(n=1,258) 10.6%	(n=813) 10.3%	0.920	(n=248) 9.7%	(n=1,795) 10.5%	0.784
Peripheral Pulses	Abnormal	(n=1,258) 10.8%	(n=813) 10.7%	0.995	(n=248) 10.1%	(n=1,795) 10.8%	0.833
ICVI Index	Abnormal	(n=1,262) 4.0%	(n=813) 3.2%	0.433	(n=249) 2.8%	(n=1,798) 3.8%	0.533

Table F-6. Dependent Variable-Covariate Associations for the Cardiovascular Assessment (Continued)

Dependent Variable	Level	Diabetic Class			p-Value	Blood Pressure Medication		
		Normal	Impaired	Diabetic		Yes	No	p-Value
Essential Hypertension	Yes	(n=1,429) 34.6%	(n=271) 52.4%	(n=345) 59.4%	0.001	--	--	--
Heart Disease (Excluding Essential Hypertension)	Yes	(n=1,441) 60.8%	(n=273) 64.1%	(n=351) 69.5%	0.009	--	--	--
Myocardial Infarction	Yes	(n=1,441) 6.8%	(n=273) 9.9%	(n=351) 14.2%	0.001	--	--	--
Stroke or Transient Ischemia Attack	Yes	(n=1,441) 1.0%	(n=273) 1.1%	(n=351) 1.4%	0.828	--	--	--
Systolic Blood Pressure (mm Hg)		(n=1,441)	(n=273)	(n=351)		(n=617)	(n=1,474)	
(continuous) ^a		$\bar{x}$ = 123.0	$\bar{x}$ = 129.3	$\bar{x}$ = 131.8	<0.001	$\bar{x}$ = 128.6	$\bar{x}$ = 123.9	<0.001
(discrete)	High	17.1%	28.6%	31.9%	0.001	27.6%	18.5%	0.001
Diastolic Blood Pressure (mm Hg)		(n=1,441)	(n=273)	(n=351)		(n=617)	(n=1,474)	
(continuous) ^b		$\bar{x}$ = 74.32	$\bar{x}$ = 75.94	$\bar{x}$ = 74.41	0.030	$\bar{x}$ = 74.86	$\bar{x}$ = 74.48	0.392
(discrete)	High	4.5%	7.3%	5.4%	0.140	7.3%	4.1%	0.004
Heart Sounds	Abnormal	(n=1,441) 3.7%	(n=273) 5.5%	(n=351) 6.0%	0.113	--	--	--
Overall Electrocardiograph (ECG)	Abnormal	(n=1,441) 26.4%	(n=273) 37.0%	(n=351) 46.7%	0.001	--	--	--
ECG: Right Bundle Branch Block	Yes	(n=1,441) 1.9%	(n=273) 2.6%	(n=351) 5.4%	0.001	--	--	--
ECG: Left Bundle Branch Block	Yes	(n=1,441) 0.7%	(n=273) 1.1%	(n=351) 1.1%	0.613	--	--	--
ECG: Non-specific ST- and T-Wave Changes	Yes	(n=1,441) 14.6%	(n=273) 24.5%	(n=351) 29.3%	0.001	--	--	--
ECG: Bradycardia	Yes	(n=1,441) 4.5%	(n=273) 0.4%	(n=351) 1.7%	0.001	--	--	--
ECG: Tachycardia	Yes	(n=1,441) 0.2%	(n=273) 0.4%	(n=351) 1.4%	0.008	--	--	--
ECG: Arrhythmia	Yes	(n=1,441) 5.2%	(n=273) 5.1%	(n=351) 8.0%	0.121	--	--	--
ECG: Evidence of Prior Myocardial Infarction	Yes	(n=1,441) 2.8%	(n=273) 5.1%	(n=351) 9.4%	0.001	--	--	--
ECG: Other Diagnoses	Yes	(n=1,441) 0.3%	(n=273) 0.0%	(n=351) 0.0%	0.420	--	--	--

Table F-6. Dependent Variable-Covariate Associations for the Cardiovascular Assessment (Continued)

Dependent Variable	Level	Diabetic Class				Blood Pressure Medication		
		Normal	Impaired	Diabetic	p-Value	Yes	No	p-Value
Funduscopy Examination	Abnormal	(n=1,440) 10.3%	(n=273) 14.3%	(n=350) 20.0%	0.001	--	--	--
Carotid Bruits	Present	(n=1,441) 2.1%	(n=273) 2.9%	(n=351) 5.1%	0.007	--	--	--
Radial Pulses	Abnormal	(n=1,441) 0.3%	(n=273) 0.4%	(n=351) 1.1%	0.152	--	--	--
Femoral Pulses	Abnormal	(n=1,440) 1.2%	(n=273) 1.1%	(n=351) 3.7%	0.003	--	--	--
Popliteal Pulses	Abnormal	(n=1,439) 1.7%	(n=273) 1.8%	(n=351) 6.0%	0.001	--	--	--
Dorsalis Pedis Pulses	Abnormal	(n=1,439) 6.7%	(n=273) 5.5%	(n=351) 14.0%	0.001	--	--	--
Posterior Tibial Pulses	Abnormal	(n=1,437) 4.1%	(n=273) 5.5%	(n=351) 13.4%	0.001	--	--	--
Leg Pulses	Abnormal	(n=1,437) 8.7%	(n=273) 8.4%	(n=351) 18.8%	0.001	--	--	--
Peripheral Pulses	Abnormal	(n=1,437) 8.9%	(n=273) 8.4%	(n=351) 19.4%	0.001	--	--	--
ICVI Index	Abnormal	(n=1,440) 2.6%	(n=273) 2.9%	(n=351) 9.1%	0.001	--	--	--

^a Analysis performed on natural logarithm scale; means transformed from natural logarithm scale.

^b Analysis performed on square root scale; means transformed from square root scale.

--: Covariate not applicable for dependent variable.

Note: Correlations (r) are based on total sample size and are not category-specific.

Table F-7. Dependent Variable-Covariate Associations for the Hematology Assessment

Dependent Variable	Level	Age			Race		
		Born ≥1942	Born <1942	p-Value	Black	Non-Black	p-Value
RBC Count (million/mm ³)		(n=928)	(n=1,187)		(n=128)	(n=1,987)	
(continuous)		r=-0.181		<0.001	$\bar{x}$ =4.99	$\bar{x}$ =4.95	0.291
(discrete)	Abn. Low	2.1%	7.0%	0.001	7.8%	4.6%	0.001
	Normal	97.2%	91.8%		86.7%	94.7%	
	Abn. High	0.7%	1.2%		5.5%	0.7%	
WBC Count (thousand/mm ³)		(n=928)	(n=1,187)		(n=128)	(n=1,987)	
(continuous) ^a		r=-0.010		0.658	$\bar{x}$ =5.94	$\bar{x}$ =6.71	<0.001
(discrete)	Abn. Low	5.9%	4.9%	0.456	18.8%	4.5%	0.001
	Normal	90.2%	91.7%		78.9%	91.8%	
	Abn. High	3.9%	3.4%		2.3%	3.7%	
Hemoglobin (gm/dl)		(n=928)	(n=1,187)		(n=128)	(n=1,987)	
(continuous)		r=-0.137		<0.001	$\bar{x}$ =14.77	$\bar{x}$ =15.36	<0.001
(discrete)	Abn. Low	4.5%	8.3%	0.002	17.2%	6.0%	0.001
	Normal	95.0%	91.3%		82.8%	93.5%	
	Abn. High	0.5%	0.4%		0.0%	0.5%	
Hematocrit (percent)		(n=928)	(n=1,187)		(n=128)	(n=1,987)	
(continuous)		r=-0.121		<0.001	$\bar{x}$ =44.49	$\bar{x}$ =45.65	<0.001
(discrete)	Abn. Low	1.3%	3.2%	0.014	4.7%	2.2%	0.169
	Normal	98.5%	96.5%		95.3%	97.5%	
	Abn. High	0.2%	0.3%		0.0%	0.3%	
Platelet Count (thousand/mm ³)		(n=926)	(n=1,179)		(n=127)	(n=1,978)	
(continuous) ^b		r=-0.120		<0.001	$\bar{x}$ =203.7	$\bar{x}$ =205.3	0.723
(discrete)	Abn. Low	1.9%	3.7%	0.022	1.6%	3.0%	0.526
	Normal	97.9%	95.7%		97.6%	96.6%	
	Abn. High	0.2%	0.6%		0.8%	0.4%	
Prothrombin Time (seconds)		(n=793)	(n=911)		(n=110)	(n=1,594)	
(continuous) ^a		r=0.096		<0.001	$\bar{x}$ =10.49	$\bar{x}$ =10.49	0.947
(discrete)	High	0.8%	1.9%	0.077	2.7%	1.3%	0.386
RBC Morphology		(n=928)	(n=1,187)		(n=128)	(n=1,987)	
	Abnormal	5.2%	8.0%	0.013	14.1%	6.3%	0.001

Table F-7. Dependent Variable-Covariate Associations for the Hematology Assessment (Continued)

Dependent Variable	Level	Age			Race		
		Born ≥1942	Born <1942	p-Value	Black	Non-Black	p-Value
Absolute Neutrophils (segs)		(n=2,115)			(n=128)	(n=1,987)	
(thousand/mm ³) ^a		r=0.006		0.767	$\bar{x}$ = 3.13	$\bar{x}$ = 3.88	<0.001
Absolute Neutrophils (bands)		(n=1,757)			(n=97)	(n=1,660)	
(thousand/mm ³)							
(continuous) ^a	Nonzero	r=0.071		0.003	$\bar{x}$ = 0.120	$\bar{x}$ = 0.200	<0.001
(discrete)		(n=928)	(n=1,187)		(n=128)	(n=1,987)	
	Zero	17.1%	16.8%	0.868	24.2%	16.5%	0.032
Absolute Lymphocytes		(n=2,115)			(n=128)	(n=1,987)	
(thousand/mm ³) ^a		r=-0.116		<0.001	$\bar{x}$ = 1.87	$\bar{x}$ = 1.75	0.035
Absolute Monocytes		(n=2,115)			(n=128)	(n=1,987)	
(thousand/mm ³) ^b		r=0.044		0.043	$\bar{x}$ = 0.466	$\bar{x}$ = 0.480	0.455
Absolute Eosinophils		(n=1,856)			(n=109)	(n=1,747)	
(thousand/mm ³)							
(continuous) ^a	Nonzero	r=0.026		0.256	$\bar{x}$ = 0.145	$\bar{x}$ = 0.161	0.132
(discrete)		(n=928)	(n=1,187)		(n=128)	(n=1,987)	
	Zero	12.8%	11.8%	0.516	14.8%	12.1%	0.432
Absolute Basophils		(n=953)			(n=54)	(n=899)	
(thousand/mm ³)							
(continuous) ^a	Nonzero	r=0.017		0.610	$\bar{x}$ = 0.068	$\bar{x}$ = 0.080	0.006
(discrete)		(n=928)	(n=1,187)		(n=128)	(n=1,987)	
	Zero	56.9%	53.4%	0.120	57.8%	54.8%	0.561

Table F-7. Dependent Variable-Covariate Associations for the Hematology Assessment (Continued)

Dependent Variable	Level	Occupation			p-Value
		Officer	Enlisted Flyer	Enlisted Groundcrew	
RBC Count (million/mm ³)		(n=834)	(n=338)	(n=943)	
(continuous)		$\bar{x}$ = 4.90	$\bar{x}$ = 4.95	$\bar{x}$ = 5.01	<0.001
(discrete)	Abnormal Low	5.6%	5.3%	3.9%	0.502
	Normal	93.6%	93.5%	95.1%	
	Abnormal High	0.8%	1.2%	1.0%	
WBC Count (thousand/mm ³)		(n=834)	(n=338)	(n=943)	
(continuous) ^a		$\bar{x}$ = 6.33	$\bar{x}$ = 6.80	$\bar{x}$ = 6.91	<0.001
(discrete)	Abnormal Low	6.1%	4.7%	4.9%	0.056
	Normal	91.6%	90.0%	91.0%	
	Abnormal High	2.3%	5.3%	4.1%	
Hemoglobin (gm/dl)		(n=834)	(n=338)	(n=943)	
(continuous)		$\bar{x}$ = 15.26	$\bar{x}$ = 15.34	$\bar{x}$ = 15.37	0.076
(discrete)	Abnormal Low	6.5%	8.6%	6.2%	0.609
	Normal	93.0%	91.1%	93.3%	
	Abnormal High	0.5%	0.3%	0.5%	
Hematocrit (percent)		(n=834)	(n=338)	(n=943)	
(continuous)		$\bar{x}$ = 45.38	$\bar{x}$ = 45.62	$\bar{x}$ = 45.74	0.050
(discrete)	Abnormal Low	2.4%	3.0%	2.1%	0.930
	Normal	97.4%	96.7%	97.6%	
	Abnormal High	0.2%	0.3%	0.3%	
Platelet Count (thousand/mm ³)		(n=828)	(n=336)	(n=941)	
(continuous) ^b		$\bar{x}$ = 201.6	$\bar{x}$ = 205.5	$\bar{x}$ = 208.2	0.015
(discrete)	Abnormal Low	3.0%	3.6%	2.7%	0.860
	Normal	96.5%	95.8%	97.0%	
	Abnormal High	0.5%	0.6%	0.3%	
Prothrombin Time (seconds)		(n=667)	(n=271)	(n=766)	
(continuous) ^a		$\bar{x}$ = 10.53	$\bar{x}$ = 10.48	$\bar{x}$ = 10.46	0.215
(discrete)	High	2.0%	0.4%	1.2%	0.140
RBC Morphology		(n=834)	(n=338)	(n=943)	
	Abnormal	5.8%	9.5%	6.7%	0.072

Table F-7. Dependent Variable-Covariate Associations for the Hematology Assessment (Continued)

Dependent Variable	Level	Occupation			p-Value
		Officer	Enlisted Flyer	Enlisted Groundcrew	
Absolute Neutrophils (segs) (thousand/mm ³) ^a		(n=834) $\bar{x}$ = 3.60	(n=338) $\bar{x}$ = 3.94	(n=943) $\bar{x}$ = 4.00	<0.001
Absolute Neutrophils (bands) (thousand/mm ³) (continuous) ^a (discrete)	Nonzero	(n=700) $\bar{x}$ = 0.186	(n=275) $\bar{x}$ = 0.198	(n=782) $\bar{x}$ = 0.201	0.179
	Zero	(n=834) 16.1%	(n=338) 18.6%	(n=943) 17.1%	0.561
Absolute Lymphocytes (thousand/mm ³) ^a		(n=834) $\bar{x}$ = 1.68	(n=338) $\bar{x}$ = 1.75	(n=943) $\bar{x}$ = 1.82	<0.001
Absolute Monocytes (thousand/mm ³) ^b		(n=834) $\bar{x}$ = 0.468	(n=338) $\bar{x}$ = 0.491	(n=943) $\bar{x}$ = 0.486	0.119
Absolute Eosinophils (thousand/mm ³) (continuous) ^a (discrete)	Nonzero	(n=753) $\bar{x}$ = 0.156	(n=299) $\bar{x}$ = 0.163	(n=804) $\bar{x}$ = 0.163	0.395
	Zero	(n=834) 9.7%	(n=338) 11.5%	(n=943) 14.7%	0.005
Absolute Basophils (thousand/mm ³) (continuous) ^a (discrete)	Nonzero	(n=381) $\bar{x}$ = 0.076	(n=162) $\bar{x}$ = 0.081	(n=410) $\bar{x}$ = 0.081	0.114
	Zero	(n=834) 54.3%	(n=338) 52.1%	(n=943) 56.5%	0.332

Table F-7. Dependent Variable-Covariate Associations for the Hematology Assessment (Continued)

Dependent Variable	Level	Current Cigarette Smoking (cigarettes/day)				p-Value
		0-Never	0-Former	>0-20	>20	
RBC Count (million/mm ³) (continuous) (discrete)		(n=593)	(n=1,116)	(n=268)	(n=137)	
			r=0.064			0.003
	Abnormal Low	4.1%	5.3%	6.0%	2.2%	0.627
	Normal	94.9%	93.8%	92.9%	97.1%	
	Abnormal High	1.0%	0.9%	1.1%	0.7%	
WBC Count (thousand/mm ³) (continuous) ^a (discrete)		(n=593)	(n=1,116)	(n=268)	(n=137)	
			r=0.395			<0.001
	Abnormal Low	7.9%	5.2%	1.9%	1.5%	0.001
	Normal	90.7%	93.0%	88.4%	82.4%	
	Abnormal High	1.4%	1.8%	9.7%	16.1%	
Hemoglobin (gm/dl) (continuous) (discrete)		(n=593)	(n=1,116)	(n=268)	(n=137)	
			r=0.213			<0.001
	Abnormal Low	6.2%	8.1%	4.1%	2.2%	0.031
	Normal	93.5%	91.5%	94.8%	97.1%	
	Abnormal High	0.3%	0.4%	1.1%	0.7%	
Hematocrit (percent) (continuous) (discrete)		(n=593)	(n=1,116)	(n=268)	(n=137)	
			r=0.209			<0.001
	Abnormal Low	1.7%	3.0%	1.9%	1.5%	0.292
	Normal	98.1%	96.8%	97.3%	97.8%	
	Abnormal High	0.2%	0.2%	0.8%	0.7%	
Platelet Count (thousand/mm ³) (continuous) ^b (discrete)		(n=589)	(n=1,113)	(n=267)	(n=135)	
			r=0.062			0.005
	Abnormal Low	2.9%	3.0%	3.4%	2.2%	0.070
	Normal	96.9%	96.6%	96.2%	95.6%	
	Abnormal High	0.2%	0.4%	0.4%	2.2%	
Prothrombin Time (seconds) (continuous) ^a (discrete)			(n=1,703)			
			r=-0.025			0.298
	High	(n=496)	(n=889)	(n=208)	(n=110)	0.862
		1.2%	1.4%	1.9%	0.9%	
RBC Morphology	Abnormal	(n=593)	(n=1,116)	(n=268)	(n=137)	0.001
		3.7%	7.3%	9.7%	10.2%	
Absolute Neutrophils (segs) (thousand/mm ³) ^a			(n=2,114)			<0.001
			r=0.347			

Table F-7. Dependent Variable-Covariate Associations for the Hematology Assessment (Continued)

Dependent Variable	Level	Current Cigarette Smoking (cigarettes/day)				p-Value
		0-Never	0-Former	>0-20	>20	
Absolute Neutrophils (bands) (thousand/mm ³) (continuous) ^a (discrete)	Nonzero		(n=1,756) r=0.188			<0.001
	Zero	(n=593) 16.0%	(n=1,116) 17.8%	(n=268) 18.3%	(n=137) 11.0%	0.185
Absolute Lymphocytes (thousand/mm ³) ^a	Nonzero		(n=2,114) r=0.195			<0.001
	Zero					
Absolute Monocytes (thousand/mm ³) ^b	Nonzero		(n=2,114) r=0.160			<0.001
	Zero					
Absolute Eosinophils (thousand/mm ³) (continuous) ^a (discrete)	Nonzero		(n=1,855) r=0.134			<0.001
	Zero	(n=593) 12.8%	(n=1,116) 11.8%	(n=268) 11.6%	(n=137) 14.6%	0.758
Absolute Basophils (thousand/mm ³) (continuous) ^a (discrete)	Nonzero		(n=953) r=0.267			<0.001
	Zero	(n=593) 59.2%	(n=1,116) 52.5%	(n=268) 53.0%	(n=137) 59.9%	0.033

Table F-7. Dependent Variable-Covariate Associations for the Hematology Assessment (Continued)

Dependent Variable	Level	Lifetime Cigarette Smoking History (pack-years)			p-Value
		0	>0-10	>10	
RBC Count (million/mm ³) (continuous) (discrete)		(n=593)	(n=555)	(n=964)	
			r=-0.047		0.031
	Abnormal Low	4.1%	4.5%	5.5%	0.684
	Normal	94.9%	94.8%	93.5%	
	Abnormal High	1.0%	0.7%	1.0%	
WBC Count (thousand/mm ³) (continuous) ^a (discrete)		(n=593)	(n=555)	(n=964)	
			r=0.236		<0.001
	Abnormal Low	7.9%	5.8%	3.4%	0.001
	Normal	90.7%	91.1%	91.3%	
	Abnormal High	1.4%	3.1%	5.3%	
Hemoglobin (gm/dl) (continuous) (discrete)		(n=593)	(n=555)	(n=964)	
			r=0.036		0.102
	Abnormal Low	6.2%	5.2%	7.8%	0.304
	Normal	93.5%	94.4%	91.6%	
	Abnormal High	0.3%	0.4%	0.6%	
Hematocrit (percent) (continuous) (discrete)		(n=593)	(n=555)	(n=964)	
			r=0.037		0.085
	Abnormal Low	1.7%	2.0%	3.0%	0.134
	Normal	98.1%	98.0%	96.5%	
	Abnormal High	0.2%	0.0%	0.5%	
Platelet Count (thousand/mm ³) (continuous) ^b (discrete)		(n=589)	(n=553)	(n=960)	
			r=0.094		<0.001
	Abnormal Low	2.9%	2.7%	3.1%	0.123
	Normal	96.9%	97.3%	96.1%	
	Abnormal High	0.2%	0.0%	0.8%	
Prothrombin Time (seconds) (continuous) ^a (discrete)			(n=1,702)		
			r=0.000		0.998
		(n=496)	(n=438)	(n=768)	
	High	1.2%	1.1%	1.6%	0.788
RBC Morphology	Abnormal	(n=593) 3.7%	(n=555) 7.0%	(n=964) 8.5%	0.001
Absolute Neutrophils (segs) (thousand/mm ³) ^a			(n=2,112) r=0.214		<0.001

Table F-7. Dependent Variable-Covariate Associations for the Hematology Assessment (Continued)

Dependent Variable	Level	Lifetime Cigarette Smoking History (pack-years)			p-Value
		0	>0-10	>10	
Absolute Neutrophils (bands) (thousand/mm ³) (continuous) ^a (discrete)	Nonzero		(n=1,754) r=0.133		<0.001
	Zero	(n=593) 16.0%	(n=555) 19.1%	(n=964) 16.3%	0.288
Absolute Lymphocytes (thousand/mm ³) ^a	Nonzero		(n=2,112) r=0.067		0.002
	Zero				
Absolute Monocytes (thousand/mm ³) ^b	Nonzero		(n=2,112) r=0.142		<0.001
	Zero				
Absolute Eosinophils (thousand/mm ³) (continuous) ^a (discrete)	Nonzero		(n=1,853) r=0.086		<0.001
	Zero	(n=593) 12.8%	(n=555) 10.6%	(n=964) 12.9%	0.393
Absolute Basophils (thousand/mm ³) (continuous) ^a (discrete)	Nonzero		(n=952) r=0.168		<0.001
	Zero	(n=593) 59.2%	(n=555) 54.4%	(n=964) 52.6%	0.038

^a Analysis performed on natural logarithm scale; means transformed from natural logarithm scale.

^b Analysis performed on square root scale; means transformed from square root scale.

Note: Correlations (r) are based on total sample size and are not category-specific.

Table F-8. Dependent Variable-Covariate Associations for the Endocrine Assessment

Dependent Variable	Level	Age			Race		
		Born ≥ 1942	Born < 1942	p-Value	Black	Non-Black	p-Value
Past Thyroid Disease		(n=930)	(n=1,179)		(n=128)	(n=1,981)	
	Yes	6.5%	9.3%	0.020	6.3%	8.2%	0.543
Composite Diabetes Indicator	Diabetic	(n=920) 10.8%	(n=1,171) 21.8%	0.001	(n=125) 25.6%	(n=1,966) 16.4%	0.011
Diabetic Severity	Nondiabetic	(n=920) 90.5%	(n=1,171) 81.2%	0.001	(n=125) 76.0%	(n=1,966) 85.9%	0.023
	No Treat.	4.6%	6.2%		7.2%	5.4%	
	Diet Only	0.8%	2.5%		2.4%	1.7%	
	Oral Hypo.	2.9%	7.5%		11.2%	5.1%	
	Req. Insl.	1.2%	2.6%		3.2%	1.9%	
Time to Diabetes Onset		(n=2,091) $\beta = -0.014$		< 0.001	(n=125) $\beta = -0.161^a$	(n=1,966)	0.007
Thyroid Gland	Abnormal	(n=911) 0.7%	(n=1,135) 1.4%	0.155	(n=127) 0.0%	(n=1,919) 1.1%	0.442
Testicular Examination	Abnormal	(n=923) 1.4%	(n=1,175) 6.2%	0.001	(n=127) 3.1%	(n=1,971) 4.2%	0.744
TSH ($\mu\text{IU/ml}$)		(n=910)	(n=1,130)		(n=127)	(n=1,913)	
(continuous) ^b (discrete)		$r = 0.133$		< 0.001	$\bar{x} = 1.38$	$\bar{x} = 1.87$	< 0.001
	Abn. Low	0.8%	1.1%	0.543	2.4%	0.8%	0.105
	Normal	96.0%	95.0%		96.1%	95.5%	
	Abn. High	3.2%	3.9%		1.6%	3.7%	
Thyroxine ($\mu\text{g/dl}$)		(n=910)	(n=1,130)		(n=127)	(n=1,913)	
(continuous) ^c (discrete)		$r = 0.004$		0.870	$\bar{x} = 6.87$	$\bar{x} = 7.07$	0.102
	Low	2.4%	2.9%	0.576	3.9%	2.6%	0.543
Anti-Thyroid Antibodies	Present	(n=910) 0.7%	(n=1,130) 0.5%	0.932	(n=127) 0.0%	(n=1,913) 0.6%	0.767
Fasting Glucose (mg/dl)		(n=933)	(n=1,185)		(n=128)	(n=1,990)	
(continuous) ^b (discrete)		$r = 0.142$		< 0.001	$\bar{x} = 104.0$	$\bar{x} = 101.5$	0.217
	High	11.4%	21.8%	0.001	24.2%	16.7%	0.040
2-Hour Postprandial Glucose ($\mu\text{g/dl}$)		(n=821)	(n=916)		(n=93)	(n=1,644)	
(continuous) ^b (discrete)		$r = 0.155$		< 0.001	$\bar{x} = 101.8$	$\bar{x} = 105.2$	0.265
	Impaired	10.1%	20.9%	0.001	5.4%	16.4%	0.007
Fasting Urinary Glucose	Present	(n=933) 4.0%	(n=1,185) 4.4%	0.710	(n=128) 7.0%	(n=1,990) 4.0%	0.156
2-Hour Postprandial Urinary Glucose	Present	(n=821) 22.0%	(n=912) 24.3%	0.283	(n=93) 18.3%	(n=1,640) 23.5%	0.298

Table F-8. Dependent Variable-Covariate Associations for the Endocrine Assessment (Continued)

Dependent Variable	Level	Age			Race		
		Born ≥1942	Born <1942	p-Value	Black	Non-Black	p-Value
Serum Insulin (μIU/ml) (continuous) ^b (discrete)		(n=821)	(n=916)		(n=93)	(n=1,644)	
		r=0.088		<0.001	$\bar{x}$ =47.11	$\bar{x}$ =47.98	0.847
	Abn. Low	14.5%	11.5%	0.003	9.7%	13.1%	0.553
	Normal	47.9%	43.0%		49.5%	45.1%	
	Abn. High	37.6%	45.5%		40.9%	41.8%	
α-1-C Hemoglobin (percent) (continuous) ^b (discrete)		(n=933)	(n=1,185)		(n=128)	(n=1,990)	
		r=0.098		<0.001	$\bar{x}$ =7.07	$\bar{x}$ =6.45	<0.001
	High	8.1%	12.7%	0.001	25.8%	9.7%	0.001
Total Testosterone (ng/dl) (continuous) ^c (discrete)		(n=916)	(n=1,161)		(n=126)	(n=1,951)	
		r=-0.131		<0.001	$\bar{x}$ =418.2	$\bar{x}$ =423.1	0.764
	Low	7.2%	8.3%	0.415	7.1%	7.8%	0.911
Free Testosterone (pg/ml) (continuous) ^c (discrete)		(n=916)	(n=1,611)		(n=126)	(n=1,951)	
		r=-0.368		<0.001	$\bar{x}$ =13.83	$\bar{x}$ =13.94	0.797
	Low	0.5%	2.6%	0.001	2.4%	1.6%	0.788
Estradiol (pg/ml) (continuous) ^c (discrete)		(n=933)	(n=1,188)		(n=128)	(n=1,993)	
		r=0.010		0.632	$\bar{x}$ =44.26	$\bar{x}$ =40.15	0.008
	High	26.9%	28.2%	0.539	37.5%	27.0%	0.013
LH (mIU/ml) (continuous) ^b (discrete)		(n=933)	(n=1,188)		(n=128)	(n=1,993)	
		r=0.185		<0.001	$\bar{x}$ =3.82	$\bar{x}$ =3.86	0.856
	High	3.1%	7.6%	0.001	5.5%	5.6%	0.999
FSH (mIU/ml) (continuous) ^b (discrete)		(n=933)	(n=1,188)		(n=128)	(n=1,993)	
		r=0.256		<0.001	$\bar{x}$ =5.65	$\bar{x}$ =6.03	0.255
	High	4.0%	11.2%	0.001	8.6%	8.0%	0.936

Table F-8. Dependent Variable-Covariate Associations for the Endocrine Assessment (Continued)

Dependent Variable	Level	Occupation			p-Value
		Officer	Enlisted Flyer	Enlisted Groundcrew	
Past Thyroid Disease		(n=830)	(n=337)	(n=942)	
	Yes	9.0%	8.6%	7.0%	0.271
Composite Diabetes Indicator		(n=827)	(n=332)	(n=932)	
	Diabetic	14.9%	19.6%	17.8%	0.097
Diabetic Severity		(n=827)	(n=332)	(n=932)	
	Nondiabetic	86.5%	83.4%	85.0%	0.659
	No Treatment	5.0%	6.9%	5.5%	
	Diet Only	1.7%	1.2%	1.9%	
	Oral Hypoglycemic	4.6%	6.3%	6.0%	
	Requiring Insulin	2.3%	2.1%	1.6%	
Time to Diabetes Onset		(n=932)	(n=332)	(n=827)	
			$\beta = -0.038^d$	$\beta = -0.052^d$	0.159
Thyroid Gland		(n=798)	(n=326)	(n=922)	
	Abnormal	1.9%	0.6%	0.5%	0.019
Testicular Examination		(n=826)	(n=332)	(n=940)	
	Abnormal	5.2%	5.1%	2.8%	0.021
TSH (μ IU/ml)		(n=794)	(n=326)	(n=920)	
(continuous) ^b		$\bar{x} = 1.94$	$\bar{x} = 1.77$	$\bar{x} = 1.78$	0.007
(discrete)	Abnormal Low	0.8%	1.5%	0.9%	0.659
	Normal	95.3%	95.7%	95.5%	
	Abnormal High	3.9%	2.8%	3.6%	
Thyroxine (μ g/dl)		(n=794)	(n=326)	(n=920)	
(continuous) ^c		$\bar{x} = 6.81$	$\bar{x} = 7.26$	$\bar{x} = 7.20$	<0.001
(discrete)	Low	3.7%	1.8%	2.2%	0.099
Anti-Thyroid Antibodies		(n=794)	(n=326)	(n=920)	
	Present	0.8%	0.9%	0.3%	0.354
Fasting Glucose (mg/dl)		(n=833)	(n=338)	(n=947)	
(continuous) ^b		$\bar{x} = 100.4$	$\bar{x} = 104.1$	$\bar{x} = 101.8$	0.039
(discrete)	High	15.7%	19.2%	17.7%	0.295
2-Hour Postprandial Glucose (mg/dl)		(n=704)	(n=267)	(n=766)	
(continuous) ^b		$\bar{x} = 103.5$	$\bar{x} = 109.7$	$\bar{x} = 104.8$	0.014
(discrete)	Impaired	15.1%	19.9%	15.0%	0.139
Fasting Urinary Glucose		(n=833)	(n=338)	(n=947)	
	Present	2.8%	5.0%	5.2%	0.029
2-Hour Postprandial Urinary Glucose		(n=701)	(n=266)	(n=766)	
	Present	20.1%	26.7%	24.9%	0.033

Table F-8. Dependent Variable-Covariate Associations for the Endocrine Assessment (Continued)

Dependent Variable	Level	Occupation			p-Value
		Officer	Enlisted Flyer	Enlisted Groundcrew	
Serum Insulin (μ IU/ml)		(n=704)	(n=267)	(n=766)	
(continuous) ^b		$\bar{x}$ =43.67	$\bar{x}$ =52.55	$\bar{x}$ =50.58	0.001
(discrete)	Abnormal Low	14.9%	10.9%	11.7%	0.024
	Normal	47.7%	42.7%	44.0%	
	Abnormal High	37.4%	46.4%	44.3%	
α -1-C Hemoglobin (percent)		(n=833)	(n=338)	(n=947)	
(continuous) ^b		$\bar{x}$ =6.33	$\bar{x}$ =6.61	$\bar{x}$ =6.58	<0.001
(discrete)	High	7.8%	13.6%	12.2%	0.002
Total Testosterone (ng/dl)		(n=815)	(n=328)	(n=934)	
(continuous) ^c		$\bar{x}$ =410.7	$\bar{x}$ =433.4	$\bar{x}$ =429.7	0.043
(discrete)	Low	7.7%	7.0%	8.1%	0.804
Free Testosterone (pg/ml)		(n=815)	(n=328)	(n=934)	
(continuous) ^c		$\bar{x}$ =13.12	$\bar{x}$ =13.99	$\bar{x}$ =14.65	<0.001
(discrete)	Low	2.1%	2.1%	1.2%	0.267
Estradiol (pg/ml)		(n=835)	(n=338)	(n=948)	
(continuous) ^c		$\bar{x}$ =40.39	$\bar{x}$ =41.66	$\bar{x}$ =39.96	0.271
(discrete)	High	26.2%	30.5%	27.8%	0.331
LH (mIU/ml)		(n=835)	(n=338)	(n=948)	
(continuous) ^b		$\bar{x}$ =3.93	$\bar{x}$ =3.86	$\bar{x}$ =3.80	0.553
(discrete)	High	6.2%	4.1%	5.6%	0.372
FSH (mIU/ml)		(n=835)	(n=338)	(n=948)	
(continuous) ^b		$\bar{x}$ =6.31	$\bar{x}$ =6.00	$\bar{x}$ =5.75	0.008
(discrete)	High	10.4%	9.2%	5.5%	0.001

Table F-8. Dependent Variable-Covariate Associations for the Endocrine Assessment (Continued)

Dependent Variable	Level	Personality Type			Body Fat		
		Type A	Type B	p-Value	Obese	Lean/Normal	p-Value
Past Thyroid Disease	Yes	(n=816) 7.8%	(n=1,290) 8.2%	0.822	--	--	--
Composite Diabetes Indicator	Diabetic	(n=809) 13.0%	(n=1,279) 19.5%	0.001	(n=609) 28.6%	(n=1,482) 12.1%	0.001
Diabetic Severity	Nondiabetic	(n=809) 89.0%	(n=1,279) 83.0%	0.001	(n=609) 75.7%	(n=1,482) 89.3%	0.001
	No Treat.	4.3%	6.3%		9.9%	3.7%	
	Diet Only	1.1%	2.1%		2.1%	1.6%	
	Oral Hypo.	3.5%	6.8%		10.2%	3.6%	
	Req. Insulin	2.1%	1.9%		2.1%	1.9%	
Time to Diabetes Onset		(n=809) $\beta=0.129^c$	(n=1,279)	<0.001	(n=2,091) $\beta=-0.024$		<0.001
Thyroid Gland	Abnormal	(n=791) 0.9%	(n=1,252) 1.2%	0.654	--	--	--
Testicular Examination	Abnormal	(n=810) 3.8%	(n=1,285) 4.3%	0.692	(n=612) 2.8%	(n=1,486) 4.6%	0.066
TSH (μ IU/ml)		(n=789)	(n=1,248)				
(continuous) ^b		$\bar{x}=1.81$	$\bar{x}=1.85$	0.423	--	--	--
(discrete)	Abn. Low	1.3%	0.7%	0.449	--	--	--
	Normal	95.1%	95.8%				
	Abn. High	3.7%	3.5%				
Thyroxine (μ g/dl)		(n=789)	(n=1,248)				
(continuous) ^c		$\bar{x}=7.02$	$\bar{x}=7.08$	0.368	--	--	--
(discrete)	Low	2.2%	3.0%	0.286	--	--	--
Anti-Thyroid Antibodies	Present	(n=789) 0.6%	(n=1,248) 0.6%	0.999	--	--	--
Fasting Glucose (mg/dl)		(n=817)	(n=1,298)		(n=620)	(n=1,498)	
(continuous) ^b		$\bar{x}=99.6$	$\bar{x}=102.9$	0.001	$r=0.212$		<0.001
(discrete)	High	13.6%	19.4%	0.001	26.8%	13.2%	0.001
2-Hour Postprandial Glucose (mg/dl)		(n=704)	(n=1,030)		(n=435)	(n=1,302)	
(continuous) ^b		$\bar{x}=103.3$	$\bar{x}=106.3$	0.035	$r=0.282$		<0.001
(discrete)	Impaired	16.1%	15.6%	0.866	27.4%	11.9%	0.001
Fasting Urinary Glucose	Present	(n=817) 2.6%	(n=1,298) 5.2%	0.004	(n=620) 6.8%	(n=1,498) 3.1%	0.001
2-Hour Postprandial Urinary Glucose	Present	(n=703) 23.0%	(n=1,027) 23.5%	0.884	(n=433) 24.7%	(n=1,300) 22.8%	0.446