

APPENDIX R

Conclusions

TABLE R-1.

Summary of Unadjusted Group Contrast Results for Dichotomous Variables

Clinical Parameter	Reference Chapter	Percent Abnormal Group		Est. Relative Risk (95% C.I.)
		Ranch Hand	Comparison	
Self-Perception of Health Appearance of Illness or Distress	9	6.7	6.7	1.01 (0.72,1.40)
Relative Age	9	0.9	0.5	1.68 (0.62,4.54)
Percent Body Fat	9	5.5	5.8	0.94 (0.66,1.35)
Sedimentation Rate	9	19.3	22.0	0.85 (0.69,1.04)
	9	7.0	4.2	1.74 (1.21,2.51)
Malignant Skin (V)	10	9.7	7.2	1.38 (1.02,1.88)
Malignant Skin (VS)	10	9.8	7.7	1.30 (0.96,1.76)
Benign Skin (V,VS)	10	7.0	5.8	1.22 (0.87,1.73)
Uncertain Behavior or Unspecified Nature-- Skin (V)	10	0.3	0.1	3.91 (0.41,37.63)
Uncertain Behavior or Unspecified Nature-- Skin (VS)	10	0.3	0.2	1.95 (0.33,11.71)
All Skin (V)	10	16.7	12.8	1.37 (1.08,1.74)
All Skin (VS)	10	16.8	13.4	1.31 (1.04,1.66)
Basal Cell Carcinoma (V)	10	8.3	6.2	1.36 (0.98,1.89)
Basal Cell Carcinoma (VS)	10	8.4	6.6	1.29 (0.94,1.78)
Squamous Cell Carcinoma (V,VS)	10	0.6	0.4	1.56 (0.48,5.14)
Melanoma (V,VS)	10	0.4	0.3	1.30 (0.32,5.22)
Sun Exposure-Related (V)	10	9.4	6.9	1.40 (1.02,1.91)
Sun Exposure-Related (VS)	10	9.5	7.3	1.33 (0.98,1.81)
<u>Basal Cell Carcinoma</u>				
Ear, Face, Head, and Neck (V)	10	5.7	4.8	1.18 (0.80,1.72)
Ear, Face, Head, and Neck (VS)	10	5.8	5.1	1.14 (0.78,1.66)
Trunk (V)	10	2.3	1.6	1.44 (0.78,2.65)
Trunk (VS)	10	2.3	1.7	1.37 (0.75,2.51)
Upper Extremities (V,VS)	10	1.0	0.4	2.35 (0.79,7.04)
Lower Extremities (V,VS)	10	0.0	0.0	--
Other Sites (V)	10	0.4	0.2	2.61 (0.48,14.26)
Other Sites (VS)	10	0.4	0.2	1.74 (0.39,7.78)
<u>Melanoma</u>				
Ear, Face, Head, and Neck (V,VS)	10	0.1	0.0	--
Trunk (V,VS)	10	0.3	0.3	0.98 (0.22,4.37)
Upper Extremities (V,VS)	10	0.0	0.0	--
Lower Extremities (V,VS)	10	0.0	0.0	--
Other Sites (V,VS)	10	0.0	0.0	--

TABLE R-1. (continued)

Summary of Unadjusted Group Contrast Results for Dichotomous Variables

Clinical Parameter	Reference Chapter	Percent Abnormal Group		Est. Relative Risk (95% C.I.)
		Ranch Hand	Comparison	
<u>Sun Exposure-Related</u>				
Ear, Face, Head, and Neck (V)	10	6.4	5.2	1.25 (0.87,1.81)
Ear, Face, Head, and Neck (VS)	10	6.5	5.4	1.22 (0.85,1.74)
Trunk (V)	10	2.8	2.1	1.36 (0.78,2.37)
Trunk (VS)	10	2.8	2.1	1.31 (0.75,2.27)
Upper Extremities (V,VS)	10	1.3	0.4	3.15 (1.11,8.96)
Lower Extremities (V,VS)	10	0.0	0.0	--
Other Sites (V)	10	0.4	0.2	2.61 (0.48,14.26)
Other Sites (VS)	10	0.4	0.2	1.74 (0.39,7.78)
Malignant Systemic (V)	10	2.1	1.6	1.31 (0.71,2.42)
Malignant Systemic (VS)	10	2.1	1.8	1.20 (0.66,2.17)
Benign Systemic (V)	10	5.5	5.3	1.04 (0.73,1.50)
Benign Systemic (VS)	10	5.5	5.5	1.01 (0.71,1.45)
Uncertain Behavior or Unspecified Nature-- Systemic (V)	10	0.5	0.6	0.82 (0.27,2.50)
Uncertain Behavior or Unspecified Nature-- Systemic (VS)	10	0.7	0.9	0.83 (0.32,2.15)
All Systemic (V)	10	8.0	7.5	1.08 (0.80,1.48)
All Systemic (VS)	10	8.2	8.0	1.03 (0.76,1.40)
<u>Systemic Neoplasm: Location/Site</u>				
Oral Cavity, Pharynx, and Larynx (V,VS)	10	0.3	0.1	3.93 (0.41,37.79)
Thyroid (V,VS)	10	0.0	0.1	--
Bronchus and Lung (V)	10	0.3	0.2	1.31 (0.26,6.49)
Bronchus and Lung (VS)	10	0.3	0.3	0.98 (0.22,4.39)
Colon and Rectum (V,VS)	10	0.1	0.2	0.44 (0.05,4.18)
Kidney and Bladder (V,VS)	10	0.5	0.2	2.18 (0.52,9.15)
Prostate (V,VS)	10	0.2	0.4	0.52 (0.10,2.69)
Testicles (V,VS)	10	0.3	0.0	--
Hodgkin's Disease (V,VS)	10	0.0	0.1	--
Ill-Defined Sites (VS)	10	0.0	0.1	--
Thymus and Mediastinum (V,VS)	10	0.2	0.0	--
Head, Face, and Neck (V,VS)	10	0.0	0.1	--
Brain (V,VS)	10	0.0	0.1	--

TABLE R-1. (continued)

Summary of Unadjusted Group Contrast Results for Dichotomous Variables

Clinical Parameter	Reference Chapter	Percent Abnormal Group		Est. Relative Risk (95% C.I.)
		Ranch Hand	Comparison	
Other Malignant Neoplasms of Lymphoid and Histiocytic Tissue (V,VS)	10	0.2	0.1	2.61 (0.24,28.87)
Leukemia (V,VS)	10	0.1	0.0	--
Carcinoma In Situ of Penis (V,VS)	10	0.0	0.1	--
Carcinoma In Situ of Other Specified Sites (V,VS)	10	0.1	0.0	--
All Skin and Systemic Neoplasms (V)	10	22.5	18.8	1.26 (1.03,1.54)
All Skin and Systemic Neoplasms (VS)	10	22.8	19.7	1.20 (0.98,1.47)
Inflammatory Disease Hereditary and Degenerative Disease	11	0.5	0.2	3.24 (0.63,16.76)
Peripheral Disorders	11	5.4	3.5	1.60 (1.07,2.39)
Disorders of the Eye	11	14.2	14.7	0.96 (0.76,1.21)
Tympanic Membrane Disorder of the Ear	11	17.5	15.2	1.19 (0.95,1.48)
Other Neurological Disorders	11	5.0	4.5	1.11 (0.75,1.64)
Smell	11	21.5	20.4	1.07 (0.87,1.31)
Visual Fields	11	0.7	1.0	0.70 (0.28,1.76)
Light Reaction	11	0.2	0.5	0.37 (0.08,1.78)
Ocular Movement	11	0.7	0.7	1.01 (0.38,2.72)
Facial Sensation	11	0.7	0.4	1.83 (0.58,5.77)
Corneal Reflex	11	0.5	0.5	0.93 (0.29,2.94)
Jaw Clench	11	0.0	0.0	--
Smile	11	0.2	0.0	--
Palpebral Fissure	11	0.7	0.8	0.91 (0.35,2.40)
Balance	11	1.4	1.4	1.01 (0.50,2.05)
Gag Reflex	11	0.4	0.0	--
Speech	11	0.1	0.0	--
Tongue Position Relative to Midline	11	0.3	0.2	1.96 (0.33,11.73)
Palate and Uvula Movement	11	0.2	0.0	--
Neck Range of Motion	11	0.1	0.1	1.30 (0.08,20.86)
Cranial Nerve Index	11	12.1	10.7	1.14 (0.88,1.48)
	11	15.5	14.5	1.08 (0.85,1.36)

TABLE R-1. (continued)

Summary of Unadjusted Group Contrast Results for Dichotomous Variables

Clinical Parameter	Reference Chapter	Percent Abnormal Group		Est. Relative Risk (95% C.I.)
		Ranch Hand	Comparison	
Cranial Nerve Index Without Range of Motion	11	4.3	4.5	0.95 (0.63,1.43)
Pin Prick	11	6.4	6.2	1.04 (0.74,1.46)
Light Touch	11	4.5	4.5	1.00 (0.67,1.50)
Muscle Status	11	2.4	2.0	1.21 (0.69,2.12)
Vibration	11	1.9	1.3	1.38 (0.71,2.70)
Patellar Reflex	11	1.6	1.6	0.99 (0.51,1.91)
Achilles Reflex	11	5.8	6.0	0.95 (0.67,1.35)
Biceps Reflex	11	0.2	1.2	0.17 (0.04,0.75)
Babinski Reflex	11	0.5	0.3	1.63 (0.44,6.08)
Tremor	11	3.5	2.5	1.44 (0.89,2.34)
Coordination	11	1.5	0.6	2.46 (1.04,5.83)
Romberg Sign*	11	0.4	0.0	--
Gait	11	3.2	2.6	1.23 (0.76,2.01)
CNS Index	11	6.7	5.0	1.37 (0.96,1.95)
Psychoses	12	2.2	2.5	0.87 (0.50,1.50)
Alcohol Dependence	12	8.1	6.1	1.37 (0.99,1.89)
Drug Dependence	12	0.1	0.4	0.26 (0.03,2.23)
Anxiety	12	16.1	15.0	1.09 (0.87,1.37)
Other Neuroses	12	40.6	36.6	1.19 (1.00,1.41)
Trouble Falling Asleep	12	10.5	11.8	0.87 (0.67,1.14)
Waking Up During Night	12	13.8	14.8	0.92 (0.73,1.17)
Waking Up Too Early and Can't Go Back to Sleep	12	11.4	10.7	1.07 (0.82,1.39)
Waking Up Unrefreshed	12	10.1	8.9	1.14 (0.86,1.51)
Involuntarily Falling Asleep During the Day	12	4.2	3.8	1.12 (0.74,1.71)
Great or Disabling Fatigue During the Day	12	3.8	2.2	1.80 (1.10,2.96)
Frightening Dreams	12	5.0	4.0	1.27 (0.85,1.89)
Talking in Sleep	12	4.8	3.1	1.60 (1.04,2.45)
Sleepwalking	12	2.3	1.5	1.51 (0.83,2.77)
Abnormal Movement/Activity During the Night	12	3.7	3.2	1.16 (0.74,1.81)
Sleep Problems Requiring Medication	12	2.6	1.8	1.43 (0.81,2.50)
Snore Loudly in All Sleeping Positions	12	7.6	6.9	1.12 (0.82,1.55)
Insomnia	12	23.5	24.1	0.97 (0.80,1.18)
Overall Sleep Disorder Index	12	35.3	33.9	1.06 (0.90,1.27)

TABLE R-1. (continued)

Summary of Unadjusted Group Contrast Results for Dichotomous Variables

Clinical Parameter	Reference Chapter	Percent Abnormal Group		Est. Relative Risk (95% C.I.)
		Ranch Hand	Comparison	
SCL-90-R				
Anxiety	12	7.6	5.9	1.31 (0.93,1.86)
Depression	12	9.8	7.6	1.33 (0.97,1.81)
Hostility	12	5.2	4.6	1.14 (0.76,1.72)
Interpersonal Sensitivity	12	6.6	6.4	1.03 (0.72,1.47)
Obsessive-Compulsive Behavior	12	8.4	7.6	1.11 (0.80,1.53)
Paranoid Ideation	12	4.5	3.7	1.23 (0.79,1.91)
Phobic Anxiety	12	6.9	7.0	0.99 (0.70,1.39)
Psychoticism	12	9.3	8.6	1.09 (0.80,1.49)
Somatization	12	10.7	8.2	1.33 (0.99,1.80)
GSI	12	8.9	6.7	1.36 (0.98,1.89)
PSDI	12	10.0	9.1	1.11 (0.82,1.49)
PST	12	8.3	6.8	1.25 (0.89,1.74)
Viral Hepatitis Acute and Subacute	13	38.7	40.6	0.93 (0.78,1.10)
Necrosis of the Liver	13	0.0	0.2	--
Chronic Liver Disease and Cirrhosis (Alcohol Related)	13	4.6	3.9	1.18 (0.79,1.78)
Chronic Liver Disease and Cirrhosis (Nonalcohol Related)	13	1.1	0.7	1.60 (0.66,3.88)
Liver Abscess and Sequelae of Chronic Liver Disease	13	0.0	0.1	--
Other Disorders of the Liver	13	9.1	7.4	1.26 (0.93,1.70)
Jaundice (Unspecified)	13	1.8	2.5	0.69 (0.38,1.24)
Hepatomegaly	13	1.6	1.9	0.83 (0.44,1.57)
Verified Ulcer	13	7.1	7.3	0.98 (0.71,1.35)
Skin Patches, Bruises, or Sensitivity	13	18.5	15.9	1.20 (0.96,1.49)
Diagnosed Hepatomegaly (Physical Examination)	13	1.1	1.2	0.96 (0.44,2.10)
AST	13	4.9	4.2	1.17 (0.78,1.74)
ALT	13	12.2	11.2	1.10 (0.85,1.42)
GGT	13	8.4	8.1	1.05 (0.77,1.41)
Alkaline Phosphatase	13	4.9	4.8	1.01 (0.69,1.49)

TABLE R-1. (continued)

Summary of Unadjusted Group Contrast Results for Dichotomous Variables

Clinical Parameter	Reference Chapter	Percent Abnormal Group		Est. Relative Risk (95% C.I.)
		Ranch Hand	Comparison	
Total Bilirubin	13	2.8	3.7	0.75 (0.47,1.21)
Direct Bilirubin	13	3.5	4.4	0.79 (0.52,1.22)
LDH	13	1.2	1.2	0.98 (0.46,2.08)
Cholesterol	13	14.3	12.3	1.19 (0.93,1.52)
HDL	13	0.9	1.0	0.90 (0.38,2.12)
Cholesterol-HDL Ratio	13	43.8	41.8	1.09 (0.92,1.29)
Triglycerides	13	6.7	5.4	1.25 (0.88,1.76)
Creatine Kinase	13	5.8	7.5	0.75 (0.54,1.06)
Fasting Glucose	13	12.2	13.0	0.93 (0.72,1.19)
Lifetime Occurrence				
of Acne	14	42.0	37.3	1.22 (1.03,1.44)
Comedones	14	21.4	22.9	0.92 (0.75,1.12)
Acneiform Lesions	14	10.2	11.2	0.90 (0.69,1.18)
Acneiform Scars	14	11.9	10.7	1.12 (0.87,1.46)
Depigmentation	14	6.6	6.4	1.04 (0.75,1.45)
Inclusion Cysts	14	10.6	10.5	1.01 (0.77,1.32)
Hyperpigmentation	14	14.7	16.8	0.85 (0.68,1.07)
Other Abnormalities	14	76.3	74.6	1.10 (0.90,1.33)
Reported/Verified				
Essential Hypertension	15	33.8	32.3	1.07 (0.89,1.29)
Reported Heart Disease	15	38.7	37.2	1.07 (0.89,1.28)
Verified Heart Disease	15	38.4	37.1	1.06 (0.88,1.26)
Reported/Verified				
Myocardial Infarction	15	4.4	4.6	0.96 (0.63,1.47)
Systolic Blood Pressure	15	19.4	20.5	0.93 (0.75,1.16)
Heart Sounds	15	4.0	4.6	0.86 (0.56,1.33)
ECG-Overall	15	15.7	17.8	0.86 (0.68,1.09)
RBBB	15	0.5	0.7	0.65 (0.20,2.18)
LBBB	15	0.1	0.4	0.33 (0.04,2.93)
Nonspecific T-Waves	15	10.6	11.3	0.93 (0.70,1.23)
Bradycardia	15	4.2	6.2	0.67 (0.44,1.00)
Tachycardia	15	0.0	0.1	--
Arrhythmia	15	4.7	3.4	1.40 (0.89,2.18)
ECG-Other Diagnosis	15	18.0	19.0	0.93 (0.74,1.17)
Diastolic Blood Pressure	15	4.9	4.3	1.16 (0.76,1.76)
Funduscopy Examination	15	0.7	0.8	0.87 (0.31,2.46)
Carotid Bruits	15	1.0	0.4	2.97 (0.91,9.67)
Radial Pulses	15	0.2	0.8	0.29 (0.06,1.34)
Femoral Pulses	15	2.2	0.9	2.52 (1.16,5.44)
Popliteal Pulses	15	3.4	2.6	1.32 (0.78,2.22)

TABLE R-1. (continued)

Summary of Unadjusted Group Contrast Results for Dichotomous Variables

Clinical Parameter	Reference Chapter	Percent Abnormal Group		Est. Relative Risk (95% C.I.)
		Ranch Hand	Comparison	
Dorsalis Pedis Pulses	15	12.4	9.8	1.30 (0.98,1.72)
Posterior Tibial Pulses	15	3.5	2.6	1.18 (0.81,2.29)
Leg Pulses	15	15.3	12.2	1.30 (1.00,1.67)
Peripheral Pulses	15	15.4	12.7	1.26 (0.97,1.62)
All Pulses	15	15.4	12.7	1.26 (0.97,1.62)
RBC (Low vs. Normal)	16	3.7	3.7	1.00 (0.64,1.55)
RBC (High vs. Normal)	16	0.8	1.3	0.61 (0.26,1.42)
WBC (Low vs. Normal)	16	5.5	7.0	0.77 (0.54,1.09)
WBC (High vs. Normal)	16	5.1	5.8	0.86 (0.60,1.25)
Hemoglobin (Low vs. Normal)	16	4.0	3.9	1.04 (0.68,1.59)
Hemoglobin (High vs. Normal)	16	1.4	1.5	0.96 (0.48,1.93)
Hematocrit ^b	16	2.0	2.1	0.96 (0.54,1.73)
MCV (Low vs. Normal)	16	1.2	1.2	0.99 (0.46,2.10)
MCV (High vs. Normal)	16	11.1	10.1	1.10 (0.84,1.44)
MCH (Low vs. Normal)	16	0.7	0.5	1.30 (0.46,3.74)
MCH (High vs. Normal)	16	8.0	7.9	1.01 (0.74,1.37)
MCHC (Low vs. Normal)	16	0.0	0.0	--
MCHC (High vs. Normal)	16	0.0	0.0	--
Platelet Count ^c	16	2.9	1.6	1.92 (1.08,3.41)
History of Kidney Disease/Stones	17	10.9	11.0	0.98 (0.75,1.28)
Urinary Protein	17	4.7	4.6	1.02 (0.69,1.51)
Urinary Occult Blood	17	8.3	7.2	1.17 (0.86,1.59)
Urinary White Blood Cell Count	17	7.1	7.1	1.01 (0.73,1.39)
Current Thyroid Function (Self-Administered)	18	4.1	4.2	0.98 (0.65,1.47)
History of Thyroid Disease (Interviewer-Administered)	18	4.5	4.5	1.02 (0.68,1.51)
Thyroid Gland (Physical Examination)	18	26.2	25.9	1.02 (0.84,1.23)
Testes	18	3.3	3.4	0.98 (0.62,1.56)
T ₃ % Uptake	18	4.0	3.5	1.14 (0.73,1.76)
TSH	18	2.1	1.9	1.09 (0.60,1.99)
Testosterone	18	1.9	1.5	1.25 (0.67,2.36)
Composite Diabetes Indicator	18	9.3	8.8	1.07 (0.80,1.43)

TABLE R-1. (continued)

Summary of Unadjusted Group Contrast Results for Dichotomous Variables

Clinical Parameter	Reference Chapter	Percent Abnormal Group		Est. Relative Risk (95% C.I.)
		Ranch Hand	Comparison	
Skin Test	19	6.8	4.2	1.69 (1.11,2.58)
Asthma	20	5.8	4.8	1.23 (0.85,1.78)
Bronchitis	20	18.8	18.5	1.02 (0.83,1.26)
Pleurisy	20	6.0	5.9	1.03 (0.73,1.46)
Pneumonia	20	22.1	24.7	0.86 (0.71,1.05)
Tuberculosis	20	0.9	0.6	1.47 (0.57,3.83)
Thorax and Lungs	20	7.4	5.0	1.53 (1.08,2.15)
Asymmetric Expansion	20	0.0	0.1	--
Hyperresonance	20	4.0	2.7	1.51 (0.96,2.40)
Dullness	20	0.2	0.1	2.61 (0.24,28.87)
Wheezes	20	3.0	1.9	1.58 (0.93,2.71)
Rales	20	1.4	1.2	1.14 (0.56,2.36)
X Ray	20	4.8	5.5	0.88 (0.60,1.28)

V: Verified neoplastic conditions only.

VS: Verified and suspected neoplastic conditions combined.

^aBalance same as Romberg sign.

^bLow vs. normal/high.

^cHigh vs. normal/low.

TABLE R-2.

Summary of Unadjusted Group Contrast Results for Continuous Variables

Clinical Parameter	Reference Chapter	Group Mean		Percent Relative Difference	p-Value
		Ranch Hand	Comparison		
Percent Body Fat	9	21.46	21.67	-1.0	0.335
Sedimentation Rate (mm/hr) ^a	9	5.30	5.09	4.1	0.255
Average Sleep Each Night (hours)	12	6.91	6.95	-0.6	0.421
MMPI					
Schizoid Score ^a	12	24.7	24.2	2.1	0.408
Avoidant Score ^b	12	16.8	16.6	1.2	0.812
Dependent Score ^c	12	40.4	42.0	-3.8	0.048
Histrionic Score ^d	12	63.3	63.9	-0.9	0.318
Narcissistic Score	12	64.6	63.4	1.9	0.090
Antisocial Score ^d	12	61.9	59.1	4.7	<0.001
Compulsive Score ^d	12	68.3	68.6	-0.4	0.408
Passive-Aggressive Score ^c	12	19.6	18.7	4.8	0.170
Schizotypal Score	12	34.3	34.4	-0.3	0.949
Borderline Score	12	32.7	33.4	-2.1	0.278
Paranoid Score	12	53.2	51.5	3.3	0.011
Anxiety Score	12	46.5	47.6	-2.3	0.200
Somatoform Score	12	50.9	51.5	-1.2	0.370
Hypomania Score ^c	12	21.4	21.1	1.4	0.736
Dysthymia Score	12	49.4	50.5	-2.2	0.242
Alcohol Abuse Score	12	31.5	30.8	2.3	0.376
Drug Abuse Score	12	47.9	47.1	1.7	0.353
Psychotic Thinking Score	12	32.1	32.1	0.0	0.952
Psychotic Depression Score	12	23.5	23.3	0.9	0.797
Psychotic Delusion Score	12	43.8	42.2	3.8	0.061
AST (U/L) ^a	13	25.8	25.6	0.8	0.695
ALT (U/L) ^a	13	20.6	20.7	-0.5	0.817
GGT (U/L) ^a	13	33.2	32.6	1.8	0.552
Alkaline Phosphatase (U/L) ^a	13	93.7	90.3	3.8	<0.001
Total Bilirubin (mg/dl) ^a	13	0.780	0.785	-0.6	0.611
Direct Bilirubin (mg/dl) ^a	13	0.158	0.158	0.0	0.969
LDH (U/L) ^a	13	128.1	127.8	0.2	0.692
Cholesterol (mg/dl) ^a	13	214.8	213.4	0.7	0.379
HDL (mg/dl)	13	49.08	49.18	-0.2	0.847
Cholesterol/HDL Ratio	13	4.75	4.70	1.1	0.357
Triglycerides (mg/dl) ^a	13	119.5	116.5	2.6	0.355
Creatine Kinase (U/L) ^a	13	110.0	108.8	1.1	0.611
Fasting Glucose (mg/dl) ^a	13	100.6	100.1	0.5	0.504
Systolic Blood Pressure (mm Hg)	15	127.06	126.87	0.1	0.809
Diastolic Blood Pressure (mm Hg)	15	75.18	74.50	0.9	0.099

TABLE R-2. (continued)

Summary of Unadjusted Group Contrast Results for Continuous Variables

Clinical Parameter	Reference Chapter	Group Mean		Percent Relative Difference	p-Value
		Ranch Hand	Comparison		
RBC (million/cubic mm)	16	4.939	4.954	-0.3	0.333
WBC (thousand/cubic mm) ^a	16	6.875	6.703	2.6	0.038
Hemoglobin (gm/dl)	16	15.677	15.662	0.1	0.741
Hematocrit (percent)	16	45.201	45.175	0.1	0.850
MCV (cubic micra)	16	91.613	91.315	0.3	0.151
MCH (micromicrogram)	16	31.795	31.686	0.3	0.150
MCHC (gm/dl)	16	34.681	34.672	0.03	0.715
Platelet Count (thousand/cubic mm)	16	265.47	259.62	2.3	0.017
Blood Urea Nitrogen (mg/dl) ^c	17	14.6	14.7	-0.7	0.339
Urine Specific Gravity	17	1.0198	1.0200	-0.02	0.477
T ₃ % Uptake ^a	18	30.5	30.5	0.0	0.930
TSH (μIU/ml) ^f	18	1.01	0.97	4.1	0.099
FSH (mIU/ml) ^a	18	7.85	7.60	3.3	0.289
Testosterone (ng/dl) ^c	18	533.1	526.1	1.3	0.304
2-Hour Postprandial Glucose (mg/dl) ^a	18	110.7	110.3	0.4	0.758
CD2 Cells (cells/cubic mm) ^a	19	1,604.4	1,597.3	0.4	0.857
CD4 Cells (cells/cubic mm) ^a	19	904.0	893.6	1.2	0.683
CD8 Cells (cells/cubic mm) ^a	19	485.7	477.7	1.7	0.632
CD20 Cells (cells/cubic mm) ^a	19	155.2	151.8	2.2	0.576
CD14 Cells (cells/cubic mm) ^a	19	31.2	31.7	-1.6	0.731
CD25 Cells (cells/cubic mm) ^{a, g}	19	12.0	12.9	-7.0	0.362
HLA-DR Cells (cells/cubic mm) ^a	19	435.6	423.4	2.9	0.327
CD4/CD8 Ratio ^a	19	1.84	1.88	-2.1	0.537
TLC (cpm)	19	2,008	1,983	1.3	0.790
IgA (mg/dl)	19	207.29	210.55	-1.5	0.406
IgG (mg/dl)	19	1,036.1	1,048.8	-1.2	0.205
IgM (mg/dl)	19	111.20	110.79	0.4	0.855
Unstimulated PHA Response (cpm) ^a	19	1,965	1,979	-0.7	0.840
PHA Net Responses (cpm)					
Day 1, Concentration 1	19	100,142	100,483	-0.3	0.915
Day 1, Concentration 2	19	160,626	160,741	-0.1	0.976
Day 1, Concentration 3	19	147,511	145,368	1.5	0.538
Day 2, Concentration 1	19	159,602	162,849	-2.0	0.337
Day 2, Concentration 2	19	179,173	181,369	-1.2	0.511
Day 2, Concentration 3	19	127,510	127,034	0.4	0.886
Overall PHA Net Response (cpm)	19	145,509	146,038	-0.4	0.841
Maximum PHA Net Response (cpm)	19	205,322	205,072	0.1	0.506

TABLE R-2. (continued)

Summary of Unadjusted Group Contrast Results for Continuous Variables

Clinical Parameter	Reference Chapter	Group Mean		Percent Relative Difference	p-Value
		Ranch Hand	Comparison		
Fresh MLC Net Response (cpm)	19	87,966	86,693	1.5	0.647
NKCA 50/1 Ratio Net Response (cpm)	19	410.6	420.9	-2.4	0.435
NKCA 50/1 Ratio					
Percent Release	19	35.2	35.8	-1.7	0.569
NKCI 50/1 Ratio Net Response (cpm)	19	807.5	813.2	-0.7	0.462
NKCI 50/1 Ratio					
Percent Release	19	66.4	67.1	-1.0	0.270
Unstimulated Fresh MLC Response (cpm) ^a	19	4,067	3,813	6.7	0.221
FVC (% of predicted)	20	96.5	97.0	-0.5	0.368
FEV ₁ (% of predicted)	20	97.3	97.9	-0.6	0.329
FEV ₂ (% of predicted)	20	95.4	96.0	-0.6	0.330
FEV ₃ (% of predicted)	20	95.3	95.9	-0.6	0.336
FEF _{max} (% of predicted)	20	136.6	137.5	-0.7	0.344
Ratio of Observed FEV ₁ to Observed FVC ^b	20	0.813	0.814	-0.1	0.816

Note: Relative Difference= 100 * (Ranch Hand mean - Comparison mean)/Comparison mean.

^aTransformed from natural logarithm scale.

^bTransformed from natural logarithm (X+1) scale.

^cTransformed from square root scale.

^dTransformed from square scale.

^eTransformed from natural logarithm (X+0.1) scale.

^fTransformed from natural logarithm (X-0.4) scale; data ≥ 0.5 μ IU only.

^gData > 0 cells/cubic mm only.

^hTransformed from natural logarithm (1-X) scale.

TABLE R-3.

Summary of Adjusted Group Contrast Results for Dichotomous Variables

Clinical Parameter	Reference Chapter	Percent Abnormal Group		Adj. Relative Risk (95% C.I.)
		Ranch Hand	Comparison	
Self-Perception of Health Appearance of Illness or Distress	9	6.7	6.7	1.01 (0.72,1.42)
Relative Age	9	0.9	0.5	1.67 (0.62,4.52)
Percent Body Fat	9	5.5	5.8	0.94 (0.66,1.34)
Sedimentation Rate	9	19.3	22.0	0.84 (0.69,1.04)
	9	7.0	4.2	1.70 (1.17,2.48)
Basal Cell Carcinoma (V)	10	8.3	6.2	1.46 (1.04,2.06)
Basal Cell Carcinoma (VS)	10	8.4	6.6	1.39 (1.00,1.95)
Sun Exposure-Related (V)	10	9.4	6.9	1.48 (1.07,2.04)
Sun Exposure-Related (VS)	10	9.5	7.3	1.39 (1.01,1.91)
Malignant Systemic (V)	10	2.1	1.6	1.23 (0.66,2.29)
Malignant Systemic (VS)	10	2.1	1.8	1.11 (0.60,2.06)
Palpebral Fissure	11	1.4	1.4	0.97 (0.47,1.99)**
Neck Range of Motion	11	12.1	10.7	1.13 (0.86,1.49)
Cranial Nerve Index	11	15.5	14.5	1.05 (0.82,1.34)
Cranial Nerve Index Without Range of Motion	11	4.3	4.5	****
Prick	11	6.4	6.2	1.01 (0.71,1.43)
Light Touch	11	4.5	4.5	0.98 (0.65,1.48)
Muscle Status	11	2.4	2.0	1.17 (0.66,2.07)
Vibration	11	1.9	1.3	1.44 (0.73,2.86)**
Patellar Reflex	11	1.6	1.6	0.97 (0.50,1.89)
Achilles Reflex	11	5.8	6.0	0.84 (0.58,1.22)
Tremor	11	3.5	2.5	1.50 (0.91,2.47)
Coordination	11	1.5	0.6	2.49 (1.04,6.00)**

TABLE R-3. (continued)

Summary of Adjusted Group Contrast Results for Dichotomous Variables

Clinical Parameter	Reference Chapter	Percent Abnormal Group		Adj. Relative Risk (95% C.I.)
		Ranch Hand	Comparison	
Gait	11	3.2	2.6	1.21 (0.72,2.01)
CNS Index	11	6.7	5.0	1.34 (0.94,1.93)
Trouble Falling Asleep	12	10.5	11.8	0.81 (0.61,1.08)
Waking Up During Night	12	13.8	14.8	****
Waking Up Too Early and Can't Go Back to Sleep	12	11.4	10.7	1.02 (0.77,1.34)
Waking Up Unrefreshed	12	10.1	8.9	1.07 (0.79,1.44)
Involuntarily Falling Asleep During the Day	12	4.2	3.8	1.09 (0.69,1.70)
Great or Disabling Fatigue During the Day	12	3.8	2.2	1.65 (0.97,2.81)
Frightening Dreams	12	5.0	4.0	1.23 (0.80,1.90)
Talking in Sleep	12	4.8	3.1	****
Sleepwalking	12	2.3	1.5	1.48 (0.78,2.80)
Abnormal Movement/Activ- ity During the Night	12	3.7	3.2	1.16 (0.71,1.88)**
Sleep Problems Requiring Medication	12	2.6	1.8	1.02 (0.55,1.89)
Snore Loudly in All Sleeping Positions	12	7.6	6.9	1.05 (0.75,1.48)
Insomnia	12	23.5	24.1	0.96 (0.78,1.18)**
Overall Sleep Disorder Index	12	35.3	33.9	1.06 (0.88,1.27)**

TABLE R-3. (continued)

Summary of Adjusted Group Contrast Results for Dichotomous Variables

Clinical Parameter	Reference Chapter	Percent Abnormal Group		Adj. Relative Risk (95% C.I.)
		Ranch Hand	Comparison	
SCL-90-R				
Anxiety	12	7.6	5.9	1.20 (0.81,1.77)
Depression	12	9.8	7.6	1.17 (0.83,1.65)
Hostility	12	5.2	4.6	****
Interpersonal Sensitivity	12	6.6	6.4	0.90 (0.61,1.33)
Obsessive-Compulsive Behavior	12	8.4	7.6	1.07 (0.76,1.51)
Paranoid Ideation	12	4.5	3.7	0.99 (0.61,1.61)
Phobic Anxiety	12	6.9	7.0	0.87 (0.59,1.27)
Psychoticism	12	9.3	8.6	1.01 (0.72,1.40)
Somatization	12	10.7	8.2	1.21 (0.88,1.67)**
GSI	12	8.9	6.7	1.20 (0.84,1.73)
PSDI	12	10.0	9.1	0.97 (0.71,1.32)**
PST	12	8.3	6.8	1.13 (0.78,1.62)
Verified Ulcer	13	7.1	7.3	0.98 (0.71,1.35)
Diagnosed Hepatomegaly (Physical Examination)	13	1.1	1.2	0.95 (0.43,2.07)**
AST	13	4.9	4.2	1.23 (0.82,1.84)
ALT	13	12.2	11.2	1.14 (0.88,1.49)
GGT	13	8.4	8.1	1.07 (0.78,1.46)
Alkaline Phosphatase	13	4.9	4.8	1.03 (0.70,1.52)
Total Bilirubin	13	2.8	3.7	0.75 (0.47,1.21)**
Direct Bilirubin	13	3.5	4.4	****
LDH	13	1.2	1.2	0.98 (0.46,2.08)

TABLE R-3. (continued)

Summary of Adjusted Group Contrast Results for Dichotomous Variables

Clinical Parameter	Reference Chapter	Percent Abnormal Group		Adj. Relative Risk (95% C.I.)
		Ranch Hand	Comparison	
Cholesterol	13	14.3	12.3	1.18 (0.93,1.51)
HDL	13	0.9	1.0	1.01 (0.42,2.45)
Cholesterol-HDL Ratio	13	43.8	41.8	1.07 (0.90,1.27)
Triglycerides	13	6.7	5.4	1.28 (0.90,1.82)
Creatine Kinase	13	5.8	7.5	0.76 (0.53,1.08)
Fasting Glucose	13	12.2	13.0	0.93 (0.72,1.20)
Comedones	14	21.4	22.9	0.92 (0.75,1.12)**
Acneiform Lesions	14	10.2	11.2	0.90 (0.68,1.18)
Acneiform Scars	14	11.9	10.7	1.10 (0.84,1.43)
Depigmentation	14	6.6	6.4	1.04 (0.74,1.45)
Inclusion Cysts	14	10.6	10.5	1.00 (0.76,1.31)
Hyperpigmentation	14	14.7	16.8	0.86 (0.68,1.09)
Other Abnormalities	14	76.3	74.6	1.08 (0.89,1.32)
Reported/Verified				
Essential Hypertension	15	33.8	32.3	1.09 (0.90,1.33)
Reported Heart Disease	15	38.7	37.2	1.08 (0.90,1.30)
Verified Heart Disease	15	38.4	37.1	1.07 (0.89,1.29)
Reported/Verified				
Myocardial Infarction	15	4.4	4.6	0.92 (0.59,1.43)**
Systolic Blood Pressure	15	19.4	20.5	0.94 (0.75,1.19)**
Heart Sounds	15	4.0	4.6	0.86 (0.56,1.34)
ECG-Overall	15	15.7	17.8	0.86 (0.67,1.09)
RBBB	15	0.5	0.7	0.66 (0.20,2.21)
Nonspecific T-Waves	15	10.6	11.3	****
Bradycardia	15	4.2	6.2	0.69 (0.46,1.04)

TABLE R-3. (continued)

Summary of Adjusted Group Contrast Results for Dichotomous Variables

Clinical Parameter	Reference Chapter	Percent Abnormal Group		Adj. Relative Risk (95% C.I.)
		Ranch Hand	Comparison	
Arrhythmia	15	4.7	3.4	1.56 (0.98,2.49)
ECG-Other Diagnosis	15	18.0	19.0	0.93 (0.74,1.17)
Diastolic Blood Pressure	15	4.9	4.3	1.12 (0.74,1.72)**
Femoral Pulses	15	2.2	0.9	2.52 (1.15,5.56)
Popliteal Pulses	15	3.4	2.6	1.24 (0.73,2.11)
Dorsalis Pedis Pulses	15	12.4	9.8	1.29 (0.97,1.72)
Posterior Tibial Pulses	15	3.5	2.6	****
Leg Pulses	15	15.3	12.2	1.27 (0.97,1.66)
Peripheral Pulses	15	15.4	12.7	1.23 (0.94,1.60)
All Pulses	15	15.4	12.7	1.23 (0.94,1.60)
RBC (Low vs. Normal)	16	3.7	3.7	1.02 (0.67,1.54)
RBC (High vs. Normal)	16	0.8	1.3	0.77 (0.38,1.55)
WBC (Low vs. Normal)	16	5.5	7.0	0.80 (0.57,1.12)
WBC (High vs. Normal)	16	5.1	5.8	0.87 (0.62,1.24)
Hemoglobin (Low vs. Normal)	16	4.0	3.9	1.08 (0.72,1.62)
Hemoglobin (High vs. Normal)	16	1.4	1.5	1.03 (0.56,1.90)
Hematocrit ^a	16	2.0	2.1	1.03 (0.60,1.75)
MCV (Low vs. Normal)	16	1.2	1.2	1.09 (0.57,2.11)
MCV (High vs. Normal)	16	11.1	10.1	1.10 (0.84,1.44)
MCH (Low vs. Normal)	16	0.7	0.5	1.34 (0.60,3.01)
MCH (High vs. Normal)	16	8.0	7.9	1.01 (0.75,1.37)
Platelet Count ^b	16	2.9	1.6	1.92 (1.08,3.41)
History of Kidney Disease/Stones	17	10.9	11.0	0.98 (0.75,1.27)
Urinary Protein	17	4.7	4.6	1.02 (0.68,1.52)**

TABLE R-3. (continued)

Summary of Adjusted Group Contrast Results for Dichotomous Variables

Clinical Parameter	Reference Chapter	Percent Abnormal Group		Adj. Relative Risk (95% C.I.)
		Ranch Hand	Comparison	
Urinary Occult Blood	17	8.3	7.2	1.17 (0.86,1.59)**
Urinary White Blood Cell Count	17	7.1	7.1	1.01 (0.73,1.39)
T ₃ Uptake	18	4.0	3.5	1.14 (0.73,1.77)
TSH	18	2.1	1.9	1.09 (0.60,1.98)
Testosterone	18	1.9	1.5	****
Composite Diabetes Indicator	18	9.3	8.8	1.10 (0.81,1.49)**
Skin Test	19	6.8	4.2	1.73 (1.13,2.64)**
Asthma	20	5.8	4.8	1.29 (0.89,1.87)
Bronchitis	20	18.8	18.5	1.01 (0.82,1.25)
Pleurisy	20	6.0	5.9	1.02 (0.72,1.44)
Pneumonia	20	22.1	24.7	****
Thorax and Lungs	20	7.4	5.0	1.39 (0.97,2.00)
Hyperresonance	20	4.0	2.7	1.36 (0.84,2.20)**
Wheezes	20	3.0	1.9	1.37 (0.79,2.38)
Rales	20	1.4	1.2	1.05 (0.50,2.21)
X Ray	20	4.8	5.5	0.84 (0.57,1.23)**

V: Verified neoplastic conditions only.

VS: Verified and suspected neoplastic conditions combined.

^aLow vs. normal/high.

^bHigh vs. normal/low.

**Group-by-covariate interaction ($0.01 < p < 0.05$); adjusted relative risk and confidence interval derived from a model fitted after deletion of the interaction.

****Group-by-covariate interaction ($p < 0.01$); adjusted relative risk and confidence interval not presented.

TABLE R-4.

Summary of Adjusted Group Contrast Results for Continuous Variables

Clinical Parameter	Reference Chapter	Adjusted Mean Group		Percent Relative Difference	p-Value
		Ranch Hand	Comparison		
Percent Body Fat	9	21.58	21.80	-1.0	0.314
Sedimentation Rate (mm/hr) ^a	9	5.32	5.16	3.1	0.413
Average Sleep Each Night (hours)	12	6.39	6.42	-0.5	0.509
MCMJ					
Schizoid Score ^a	12	44.2	43.9	0.7	0.788
Avoidant Score ^b	12	****	****	****	****
Dependent Score ^c	12	46.2	48.3	-4.3	0.020**
Histrionic Score ^d	12	62.4	62.7	-0.5	0.607**
Narcissistic Score	12	57.5	53.9	6.7	0.015
Antisocial Score	12	61.9	59.1	4.7	0.001
Compulsive Score ^d	12	58.6	58.8	-0.3	0.791**
Passive-Aggressive Score ^c	12	46.6	45.5	2.4	0.270**
Schizotypal Score	12	51.7	52.3	-1.1	0.446**
Borderline Score	12	51.1	52.6	-2.9	0.050**
Paranoid Score	12	55.0	53.4	3.0	0.014
Anxiety Score	12	****	****	****	****
Somatoform Score	12	68.6	69.4	-1.2	0.321
Hypomania Score ^c	12	30.7	30.1	2.0	0.646
Dysthymia Score	12	68.6	70.0	-2.0	0.166
Alcohol Abuse Score	12	49.6	49.1	1.0	0.475**
Drug Abuse Score	12	65.3	64.1	1.9	0.131
Psychotic Thinking Score	12	49.7	50.4	-1.4	0.443
Psychotic Depression Score	12	****	****	****	****
Psychotic Delusion Score	12	50.9	49.3	3.2	0.062

TABLE R-4. (continued)

Summary of Adjusted Group Contrast Results for Continuous Variables

Clinical Parameter	Reference Chapter	Adjusted Mean Group		Percent Relative Difference	p-Value
		Ranch Hand	Comparison		
AST (U/L) ^a	13	26.7	26.5	0.8	0.453
ALT (U/L) ^a	13	20.8	20.7	0.5	0.915**
GGT (U/L) ^a	13	37.6	36.7	2.5	0.365
Alkaline Phosphatase (U/L) ^a	13	93.4	89.9	3.9	<0.001
Total Bilirubin (mg/dl) ^b	13	0.778	0.784	-0.8	0.622
Direct Bilirubin (mg/dl) ^b	13	0.156	0.156	0.0	0.985**
LDH (U/L) ^a	13	127.3	127.1	0.2	0.804
Cholesterol (mg/dl) ^a	13	216.2	215.0	0.6	0.437
HDL (mg/dl)	13	48.31	47.71	1.3	0.648**
Cholesterol-HDL Ratio	13	4.77	4.89	-2.5	0.509
Triglycerides (mg/dl) ^a	13	107.8	105.6	2.1	0.459
Creatine Kinase (U/L) ^a	13	145.4	143.4	1.4	0.500
Fasting Glucose (mg/dl) ^a	13	102.5	102.0	0.5	0.534
Systolic Blood Pressure (mm Hg)	15	128.60	128.18	0.3	0.579
Diastolic Blood Pressure (mm Hg)	15	75.19	74.51	0.9	0.100**
RBC (million/cubic mm)	16	4.935	4.952	-0.3	0.284
WBC (thousand/cubic mm) ^a	16	6.567	6.485	1.3	0.214
Hemoglobin (gm/dl)	16	15.556	15.566	-0.1	0.810
Hematocrit (percent)	16	45.086	45.142	-0.1	0.662
MCV (cubic micra)	16	90.502	90.316	0.2	0.342
MCH (micromicrogram)	16	31.170	31.096	0.2	0.305
MCHC (gm/dl)	16	34.484	34.472	0.03	0.588
Platelet Count (thousand/cubic mm)	16	264.77	259.06	2.2	0.018

TABLE R-4. (continued)

Summary of Adjusted Group Contrast Results for Continuous Variables

Clinical Parameter	Reference Chapter	Adjusted Mean Group		Percent Relative Difference	p-Value
		Ranch Hand	Comparison		
Blood Urea Nitrogen (mg/dl) ^c	17	14.1	14.3	-1.4	0.229**
Urine Specific Gravity	17	1.0198	1.0196	0.02	0.497
T ₃ % Uptake ^a	18	30.6	30.6	0.0	0.941
TSH (μU/ml) ^f	18	0.96	0.93	3.2	0.092
FSH (μIU/ml) ^a	18	7.82	7.62	2.6	0.290
Testosterone (ng/dl) ^c	18	532.4	526.2	1.2	0.345
2-Hour Postprandial Glucose (mg/dl) ^a	18	111.1	110.5	0.5	0.643
CD2 Cells (cells/cubic mm) ^a	19	1,621.4	1,602.0	1.2	0.610
CD4 Cells (cells/cubic mm) ^a	19	910.8	891.2	2.2	0.411
CD8 Cells (cells/cubic mm) ^a	19	487.2	476.4	2.3	0.512
CD20 Cells (cells/cubic mm) ^a	19	174.3	170.7	2.1	0.569
CD14 Cells (cells/cubic mm) ^a	19	28.0	28.6	-2.1	0.690
CD25 Cells (cells/cubic mm) ^{a, g}	19	12.0	12.9	-7.0	0.350
HLA-DR Cells (cells/cubic mm) ^a	19	436.2	423.2	3.1	0.268
CD4/CD8 Ratio ^a	19	1.84	1.87	-1.6	0.707
TLC (cpm)	19	2,006	1,982	1.2	0.597
IgG (mg/dl)	19	1,115.3	1,123.3	-0.7	0.406
IgA (mg/dl)	19	216.76	219.52	-1.3	0.499
IgM (mg/dl)	19	108.23	103.91	4.2	0.876
Unstimulated PHA Response (cpm) ^a	19	2,182	2,176	0.3	0.933
PHA Net Responses (cpm)					
Day 1, Concentration 1	19	107,678	106,996	0.6	0.817**
Day 1, Concentration 2	19	169,663	167,524	1.3	0.540
Day 1, Concentration 3	19	152,113	147,780	2.9	0.185

TABLE R-4. (continued)

Summary of Adjusted Group Contrast Results for Continuous Variables

Clinical Parameter	Reference Chapter	Adjusted Mean Group		Percent Relative Difference	p-Value
		Ranch Hand	Comparison		
Day 2, Concentration 1	19	160,389	162,777	-1.5	0.474
Day 2, Concentration 2	19	179,568	180,306	-0.4	0.820
Day 2, Concentration 3	19	136,095	134,758	1.0	0.683
Overall PHA Net Response (cpm)	19	151,983	151,085	0.6	0.720
MLC Net Response (cpm)	19	93,751	92,383	1.5	0.617**
Maximum PHA Net Response (cpm)	19	203,157	203,488	-0.2	0.914
NKCA 50/1 Net Response (cpm)	19	409.5	418.4	-2.1	0.494**
NKCA 50/1 Percent Release	19	35.1	35.5	-1.1	0.710**
NKCI 50/1 Net Response (cpm)	19	****	****	****	****
NKCI 50/1 Percent Release	19	****	****	****	****
Unstimulated MLC Response (cpm) ^a	19	4,971	4,590	8.3	0.116
FVC (% of predicted)	20	91.4	91.7	-0.3	0.580
FEV ₁ (% of predicted)	20	92.9	93.2	-0.3	0.721**
FEV ₂ (% of predicted)	20	90.7	90.9	-0.2	0.652**
FEV ₃ (% of predicted)	20	90.4	90.6	-0.2	0.621
PEFmax (% of predicted)	20	137.4	137.7	-0.2	0.778
Ratio of Observed FEV ₁ to Observed FVC ^h	20	0.818	0.817	0.1	0.645

Note: Relative Difference = 100 * (Ranch Hand mean - Comparison mean)/Comparison mean.

^aTransformed from natural logarithm scale.

^bTransformed from natural logarithm (X+1) scale.

^cTransformed from square root scale.

^dTransformed from square scale.

^eTransformed from natural logarithm (X+0.1) scale.

TABLE R-4. (continued)

Summary of Adjusted Group Contrast Results for Continuous Variables

^fTransformed from natural logarithm (X-0.4) scale; data >0.5 μ IU only.

^gData >0 cells/cubic mm only.

^hTransformed from natural logarithm (1-X) scale.

**Group-by-covariate interaction ($0.01 < p < 0.05$); adjusted mean, confidence interval, percent relative difference, and p-value derived from a model fitted after deletion of the interaction.

***Group-by-covariate interaction ($p < 0.01$); adjusted mean, confidence interval, percent relative difference, and p-value not presented.