

Table. Potential Associated Factors by Categorical 25(OH)D Serum Levels, Univariate Analysis, N=202						
	Total, N (%)	25(OH)D (ng/mL)			p ^a	p ^b
		Deficient <20	Insufficient 20-29	Sufficient ≥30		
Age, N (%)						
<7	95 (47)	19 (20.0)	37 (38.9)	39(41.1)	<.001	<.001
7-12	47 (23.3)	17 (36.2)	18 (38.3)	12 (25.5)		
13-22	60 (29.7)	38 (63.3)	15 (25.0)	7 (11.7)		
Race, N (%)						
Caucasian and other	105 (52)	20 (19.0)	49 (46.7)	36 (34.3)	<.001	0.069
African-American	97 (48)	54 (55.7)	21 (21.6)	22 (22.7)		
Gender, N (%)						
Male	95 (47)	38 (40.0)	32 (33.7)	25 (26.3)	0.618	0.478
Female	107 (53)	36 (33.6)	38 (35.5)	33 (30.8)		
Time of Year (season), N (%)						
April-September	120 (59.4)	33 (27.5)	43 (35.8)	44 (36.7)	0.001	0.003
October-March	82 (40.6)	41 (50.0)	27 (32.9)	14 (17.1)		
Study Arm, N (%)						
Primary skin infection	86 (42.6)	32 (37.2)	27 (31.4)	27 (31.4)	0.310	0.624
Recurrent skin infection	62 (30.7)	19 (30.6)	28 (45.2)	15 (24.2)		
Invasive infection	54 (26.7)	23 (42.6)	15 (27.8)	16 (29.6)		
Study Arm, N (%)						
SSTI ^c	148 (73.3)	51 (34.5)	55 (37.2)	42 (28.4)	0.419	0.862

Invasive Infection	54 (26.7)	23 (42.6)	15 (27.8)	16 (29.6)		
BMI Percentile Categories, N (%) ^d						
Underweight (<5 th %)	5 (4.3)	1 (20)	0 (0)	4 (80)	0.229	0.062
Healthy weight (5-85 th %)	71 (60.7)	23 (32.4)	24 (33.8)	24 (33.8)		
Overweight (85-95 th %)	9 (7.7)	4 (44.4)	3 (33.3)	2 (22.2)		
Obese (>95 th %)	32 (27.4)	11 (34.4)	14 (43.8)	7 (21.9)		
Weight for age Percentile Categories, N (%)						
Underweight (<5 th %)	10 (5)	3 (30)	4 (40)	3 (30)	0.428	0.184
Healthy weight (5-90 th %)	129 (63.9)	48 (37.2)	42 (32.6)	39 (30.2)		
Overweight (90-95 th %)	15 (7.4)	5 (33.3)	3 (20)	7 (46.7)		
Obese (>95 th %)	48 (23.8)	18 (37.5)	21 (43.8)	9 (18.8)		
Antibiotics in Past Year ^e , N (%)						
Yes	120 (60)	39 (32.5)	46 (38.3)	35 (29.2)	0.254	0.653
No	80 (40)	35 (43.8)	24 (30.0)	21 (26.2)		
Hospitalization (overnight) in Past Year, N (%)						
Yes	21 (10.4)	6 (28.6)	9 (42.9)	6 (28.6)	0.663	0.976
No	180 (89.6)	67 (37.2)	61 (33.9)	52 (28.9)		
S. aureus Colonization, N (%)						
Yes	142 (71)	47 (33.1)	54 (38.0)	41 (28.9)	0.149	0.855
No	58 (29)	27 (46.6)	15 (25.9)	16 (27.6)		
Infecting Organism						
MRSA	163 (80.7)	59 (36.2)	56 (34.4)	48 (29.4)	0.894	0.637
MSSA	39 (19.3)	15 (38.5)	14 (35.9)	10 (25.6)		

Abbreviations: SSTI, skin or soft tissue infection; MRSA, methicillin-resistant *S. aureus*; MSSA, methicillin-sensitive *S. aureus*

^a Chi-square test comparing all 3 groups.

^b Chi-square test comparing patients with sufficient 25(OH)D levels (≥ 30 ng/mL) and those with insufficient or deficient levels (< 30 ng/mL).

^c Combining primary and recurrent skin infection groups.

^d Data available for 117 (58%) of participants.

^e Includes antibiotics with and without activity against *S. aureus*