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Lack of Humoral Immunity Against Glucosaminidase Is Associated with Postoperative Complications in Staphylococcus aureus Osteomyelitis

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Supplemental Table 1 Anti Gmd Titers versus Outcomes

Age	Sex	Charlson score	Diabetes	BMI	anti-Gmd level	Diagnosis	Outcome	Result reported
91	F	NR	NR	23	1278	PJI	Adverse	Died, cause unknown
79	M	4	yes	31	643	OM	Adverse	Amputation - infection
84	M	1	No	30	1046	PJI	Adverse	Died septic shock
60	M	1	No	30	284	Fx	Adverse	Refractured
58	M	0	No	22	415	Fx	Adverse	Pseudarthrosis
75	F	2	No	38	378	Fx	Adverse	Reinfected
73	F	1	No	37	632	Fx	Adverse	Non union
83	F	4	Yes	25	848	Fx	Adverse	Reinfected
48	M	0	No	31	1319	Fx	Adverse	Amputation
63	M	2	no	40	945	Fx	Adverse	Reinfection arthrodesis
63	F	6	no	33	1539	Fx	Adverse	Amputated
21	F	0	no	19	1162	Fx	Adverse	Amputated
57	F	0	no	29	544	PJI	Adverse	Amputated
65	F	0	no	41	540	PJI	Adverse	Died -Amputation, sepsis
65	F	1	yes	38	1472	PJI	Adverse	Died septic shock
63	F	2	no	27	729	PJI	Adverse	Reinfected fungus
41	M	2	yes	33	752	Fx	Adverse	Continued infection
61	M	NR	NR	26	4748	PJI	Adverse	Continued infection
70	M	NR	NR	31	3536	РЛ	Adverse	Amputation - infection
60	M	NR	NR	35	5045	PJI	Adverse	Amputation
77	F	NR	NR	31	3102	РЛ	Adverse	Died - aortic dissection
25	M	1	no	17	3928	Fx	Adverse	Healing
69	M	6	yes	22	8678	Fx	Adverse	Died CHF
58	M	0	no	30	5486	fx	Adverse	Healing
75	M	6	yes	27	4142	РЛ	Adverse	AK Amputation
24	M	0	no	25	5422	Fx	Adverse	BK Amputation
39	M	2	yes	39	3738	PJI	Adverse	Died resp. failure
63	M	4	yes	38	1956	OM	Adverse	Died CHF
57	M	0	no	29	4395	Fx	Adverse	Nonunion
36	M	0	no	26	8266	Fx	Adverse	Infected
29	M	0	no	26	2396	Fx	Adverse	Died drug overdose
65	F	1	yes	27	4240	Fx	Adverse	Amputation

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72	M	6	no	31	6556	PJI	Adverse	Died
34	M	0	no	31	2664	fx	Adverse	Pseudarthrosis
34	M	0	no	24	2886	Fx	Adverse	Pseudarthrosis
48	M	2	no	42	4845	OM	Adverse	Died
69	M	0	no	31	8356	Fx	Adverse	Fistula
27	M	0	no	25	1386	Fx	Adverse	Pseudarthrosis
64	M	1	yes	33	2104	Fx	Adverse	Pseudarthrosis
34	F	1	yes	33	1968	OM	Adverse	Reinfected
44	M	0	no	27	2129	Fx	Adverse	Healing w drainage
83	f	4	no	24	2338	PJI	Adverse	Died MOF
68	F	1	no	39	1020	Fx	Adverse	Amputation
47	F	1	no	46	14231	PJI	Adverse	Wound breakdown
80	M	0	no	33	10985	PJI	Adverse	Died CHF
78	F	NR	NR	NR	325	PJI	Control	Cured
35	M	0	no	42	856	Fx	Control	Cured
41	M	0	no	23	371	OM	Control	Cured
68	M	0	No	25	964	fx	Control	Cured
49	M	0	No	31	777	fx	Control	Cured
69	F	1	No	42	179	fx	Control	Cured
26	M	0	No	24	1478	Fx	Control	Cured
70	M	1	no	20	558	PJI	Control	Cured
77	M	1	yes	28	1076	fx	Control	Cured
34	M	0	no	24	917	fx	Control	cured
23	M	0	no	24	643	Fx	Control	Cured
60	M	0	no	25	593	OM	Control	Cured
50	M	0	no	35	1280	fx	Control	Cured
76	F	2	yes	46	1191	PJI	Control	Cured
29	M	0	no	29	677	PJI	Control	cured
76	F	NR	NR	36	3219	PJI	Control	Cured
60	F	NR	NR	29	1551	PJI	Control	Cured
25	F	1	no	29	2483	PJI	Control	Cured
67	F	0	no	34	4487	PJI	Control	Cured
43	M	0	no	29	1613	OM	Control	Cured
29	M	0	no	19	2307	Fx	Control	Cured
43	F	0	no	20	2383	OM	Control	Cured
65	F	1	no	19	1612	Fx	Control	Cured
80	F	3	no	23	4411	PJI	Control	Cured
66	M	0	no	30	2270	PJI	Control	Cured
46	M	0	no	25	1747	Fx	Control	Cured
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65	F	0	no	39	6102	Fx	Control	Cured
40	M	0	no	34	1225	Fx	Control	Cured
48	M	0	no	20	1093	Fx	Control	Cured
61	M	1	no	50	9803	Fx	Control	Cured
50	M	0	no	24	1999	Fx	Control	Cured
61	M	0	no	32	5140	fx	Control	Cured
58	F	0	no	26	4704	fx	Control	Cured
51	M	1	yes	39	5466	FX	Control	Cured
37	F	0	no	20	3912	OM	Control	Cured
64	F	1	no	20	3704	OM	Control	Cured
58	M	0	no	25	1104	Fx	Control	Cured
65	M	0	no	20	6160	Fx	Control	Cured
52	M	0	no	25	1669	Fx	Control	Cured
27	M	0	no	21	4865	Fx	Control	Cured
55	M	1	yes	28	6627	Fx	Control	Cured
86	M	1	no	25	3631	fx	Control	Cured
63	M	4	no	26	4181	Fx	Control	Cured
52	M	1	yes	29	7383	OM	Control	Cured
61	M	0	no	25	1962	fx	Control	Cured
51	M	0	no	29	2738	Fx	Control	Cured
58	M	1	yes	31	1667	Fx	Control	Cured
18	M	0	no	33	5177	Fx	Control	Cured
45	M	0	no	29	6479	Fx	Control	Cured
58	F	0	no	19	3145	fx	Control	Cured
70	F	0	no	20	4535	Fx	Control	Cured
38	F	0	no	29	2611	OM	Control	Cured
41	M	0	no	25	1805	fx	Control	Cured
36	M	0	no	39	1659	Fx	Control	Cured
57	M	0	no	30	2169	Fx	Control	Cured
48	M	0	no	28	1617	Fx	Control	Cured
74	M	2	yes	29	2074	Fx	Control	Cured
73	M	3	yes	25	1989	PJI	Control	Cured
32	M	0	no	35	6750	OM	Control	Cured
57	F	1	no	47	2207	PJI	Control	Cured
48	M	0	no	28	1881	fx	Control	Cured
79	M	1	no	37	2932	OM	Control	Cured
52	M	2	yes	34	1520	OM	Control	Cured
49	M	0	no	27	1875	Fx	Control	Cured
53	M	1	no	24	5434	Fx	Control	Cured
56	M	5	yes	27	3345	PJI	Control	Cured
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52	M	0	no	23	1550	FX	Control	Cured
51	M	0	no	32	2265	Fx	Control	Cured
39	M	0	no	27	2737	Fx	Control	Cured
51	F	0	no	23	2087	Fx	Control	Cured
76	M	6	yes	33	1568	PJI	Control	Cured
52	F	0	no	32	2242	PJI	Control	Cured
48	M	0	no	31	3465	OM	Control	Cured
59	M	1	no	32	5682	OM	Control	Cured
73	F	0	no	24	1843	PJI	Control	Cured
50	M	0	no	34	4207	Fx	Control	Cured
49	M	0	no	23	2818	Fx	Control	Cured
64	F	4	yes	28	7218	Fx	Control	Cured
78	M	4	yes	38	3968	PJI	Control	Cured
54	M	0	no	35	7222	PJI	Control	Cured
44	M	0	no	24	4997	PJI	Control	Cured
65	M	NR	NR	26	12574	PJI	Control	Cured
49	M	4	yes	39	25766	Fx	Control	Cured
86	F	0	no	28	9057	Fx	Control	Cured
32	M	1	yes	33	12158	PJI	Control	Cured
55	F	0	no	20	10924	PJI	Control	Cured
51	M	0	no	27	11237	Fx	Control	Cured
60	M	1	yes	32	10177	Fx	Control	Cured
61	M	0	no	30	19166	OM	Control	Cured
61	F	0	no	24	9581	PJI	Control	Cured
60	M	2	no	34	15982	PJI	Control	Cured
60	F	1	yes	40	14198	OM	Control	Cured
64	F	0	No	30	747	Fx	Control	Cured
75	M	NR	NR	24	2398	PJI	Control	Cured
56	M	0	no	29	941	Fx	Control	Cured
21	F	0	no	23	1259	OM	Inconclusive	Healing
29	F	0	No	25	1354	Fx	Inconclusive	Healing
57	F	0	No	37	742	PJI	Inconclusive	Healing
42	F	2	No	28	240	PJI	Inconclusive	Healing with pain
33	M	0	no	24	986	Fx	Inconclusive	Healing
59	F	2	no	22	1439	PJI	Inconclusive	Healing
36	M	0	no	20	530	OM	Inconclusive	Healing
76	M	0	no	40	485	PJI	Inconclusive	Healing
67	M	5	no	25	882	PJI	Inconclusive	Healing after flap
75	M	1	no	32	890	PJI	Inconclusive	Healing
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57	M	0	no	29	735	Fx	Inconclusive	Healing
58	F	4	yes	32	924	Fx	Inconclusive	Healing, with pain
59	M	NR	NR	35	2703	PJI	Inconclusive	Healing
85	M	NR	NR	22	1803	PJI	Inconclusive	Spacer in, no further surgery
29	M	0	no	19	5505	OM	Inconclusive	Healing
74	M	2	no	30	2670	OM	Inconclusive	Healing
49	M	1	no	18	1626	Fx	Inconclusive	Healing
55	M	0	no	26	4393	Fx	Inconclusive	Healing
61	M	0	no	35	1721	Fx	Inconclusive	Suppressive antibiotic
39	M	0	no	20	1698	Fx	Inconclusive	Healing
62	F	2	no	46	1847	Fx	Inconclusive	Healing
43	M	1	no	30	1817	Fx	Inconclusive	Healing
54	F	0	no	37	1991	Fx	Inconclusive	Healing
50	F	3	yes	40	1598	Fx	Inconclusive	Healing
58	M	0	no	24	6256	OM	Inconclusive	Healing
46	F	0	no	46	2105	PJI	Inconclusive	Healing
51	M	3	yes	44	3653	PJI	Inconclusive	Healing
58	M	1	yes	68	4349	PJI	Inconclusive	Healing
58	M	2	no	37	6446	PJI	Inconclusive	Healing
41	M	0	no	33	6457	OM	Inconclusive	Healing
86	F	0	no	26	1754	PJI	Inconclusive	Healing
46	M	0	no	25	6544	Fx	Inconclusive	Healing
67	M	1	yes	30	3783	Fx	Inconclusive	Healing
64	M	0	no	23	2168	Fx	Inconclusive	Healing arthrodesis
63	F	1	no	35	2451	PJI	Inconclusive	Healing
45	M	1	no	24	1804	Fx	Inconclusive	Healing
26	M	0	no	25	7350	Fx	Inconclusive	Healing
65	M	0	no	28	5343	OM	Inconclusive	Healing
76	M	1	no	33	1845	PJI	Inconclusive	Healing arthrodesis
44	M	0	no	36	1835	Fx	Inconclusive	Healing
38	F	0	no	44	4346	Fx	Inconclusive	Healing arthrodesis
61	M	0	no	29	7455	Fx	Inconclusive	Healing
52	F	0	no	22	4694	Fx	Inconclusive	Healing
45	M	1	no	30	2398	PJI	Inconclusive	Healing
65	F	3	no	23	3004	PJI	Inconclusive	Healing
64	F	3	no	44	4835	PJI	Inconclusive	Healing
43	F	0	no	38	1254	PJI	Inconclusive	Healing
56	M	1	no	32	3353	PJI	Inconclusive	Healing

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52	M	0	no	37	4226	PJI	Inconclusive	Healing
93	F	0	no	21	1710	PJI	Inconclusive	Healing
59	F	2	yes	38	15380	PJI	Inconclusive	Healing
76	M	3	no	36	23018	PJI	Inconclusive	Arthrodesis knee
48	M	1	no	27	17419	Fx	Inconclusive	Healing
52	F	0	no	21	11663	PJI	Inconclusive	Healing

 $Abbreviations: BMI-body\ mass\ index,\ Fx-fracture,\ PJI-\ prosthetic\ joint\ infection,\ OM-osteomyelitis,\ NR-not\ recorded$

Resp failure- respiratory failure

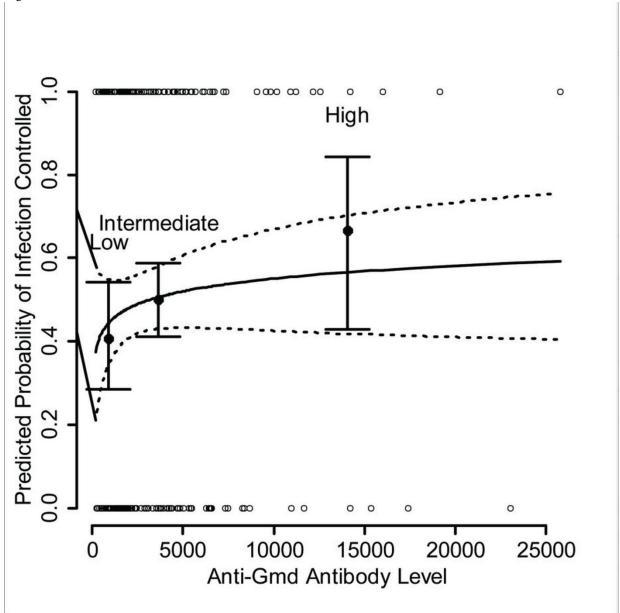
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Supplemental Figure 1. Predicted probability of infection controlled from logistic regression models treating anti-Gmd levels as categorical (low, intermediate, or high) or continuous (solid curve). Bars are centered at mean anti-Gmd level for each category. Whiskers and dashed curves represent 95% Cl's. Open circles represent individual patient data (0=infection not controlled, 1=infection controlled).

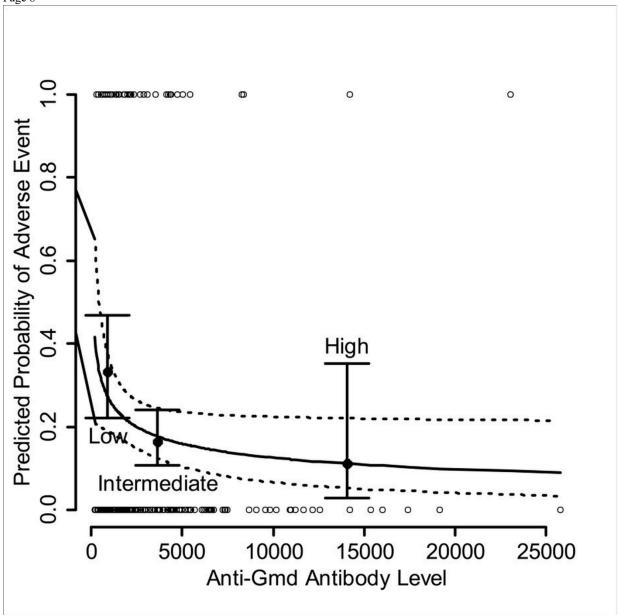
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Supplemental Figure 2. Predicted probability of adverse event from logistic regression models treating anti-Gmd levels as categorical (low, intermediate, or high) or continuous (solid curve). Bars are centered at mean anti-Gmd level for each category. Whiskers and dashed curves represent 95% Cl's. Open circles represent individual patient data (0=no adverse event, 1=adverse event).