

Supplementary Online Content

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This supplementary material has been provided by the authors to give readers additional information about their work.

eTable 1. Logistic Regression Model of Postoperative Complication (Primary Model)

Variable	Coefficient	S.E.	Odds Ratio	Odds Ratio 95% C.I.	P Value
Intercept	-5.189	0.245	0.006	0.003-0.009	<.001
Patient Age (years)	0.009	0.002	1.009	1.005-1.013	<.001
Patient Sex ¹ =Male	0.126	0.057	1.135	1.015-1.268	.026
Patient Race ² =Black	-0.224	0.130	0.800	0.615-1.026	.086
Patient Race=Other	-0.137	0.108	0.872	0.703-1.072	.202
Patient Race=Unknown	0.078	0.085	1.081	0.914-1.274	.358
Functional Status ³ =Partially Dependent	0.895	0.196	2.446	1.655-3.569	<.001
Functional Status=Totally Dependent	0.757	0.405	2.131	0.94-4.65	.062
Functional Status=Unknown	1.040	1.068	2.829	0.306-26.393	.330
ASA Class ⁴ =ASA 2 - Mild Disturbance	0.914	0.226	2.493	1.639-3.995	<.001
ASA Class=ASA 3 - Severe Disturbance	1.517	0.226	4.560	3.003-7.298	<.001
ASA Class=ASA 4 - Life Threatening	2.321	0.249	10.186	6.375-16.973	<.001
ASA Class=ASA 5 - Moribund	3.581	0.735	35.913	8.665-164.47	<.001
ASA Class=None assigned	1.864	0.734	6.452	1.295-24.99	.011
Wound Class ⁵ =Clean/Contaminated	1.301	0.076	3.671	3.17-4.265	<.001
Wound Class=Contaminated	1.681	0.097	5.369	4.439-6.495	<.001
Wound Class=Dirty/Infected	1.895	0.105	6.655	5.42-8.167	<.001
Long Operative Time ⁶	0.716	0.060	2.045	1.82-2.298	<.001
Surgeon Complaint Category=1-3 Prior CORS Complaints ⁷	0.151	0.072	1.163	1.01-1.337	.035
Surgeon Complaint Category=4+ Prior CORS Complaints ⁷	0.127	0.076	1.135	0.977-1.315	.094

¹Reference Level = Female Sex

²Reference Level = White Race

³Reference Level = Independent Functional Status

⁴Reference Level = ASA 1 – No Disturbance

⁵Reference Level = Clean Wound Class

⁶Defined as procedure time > 75th percentile procedure time for CPT code grouping

⁷Defined as total number of CORS complaints attributed to patient's surgeon in the 1095 day period prior to operation. Reference Level = 0 Prior CORS Complaints

eTable 2. Sensitivity Model 1: Logistic Regression Model of Postoperative Complication Adjusting for Surgeon Years Since Graduation

Variable	Coefficient	S.E.	Odds Ratio	Odds Ratio 95% C.I.	P Value
Intercept	-5.186	0.256	0.006	0.003-0.009	< .001
Patient Age (years)	0.009	0.002	1.009	1.005-1.013	< .001
Patient Sex ¹ =Male	0.126	0.057	1.135	1.015-1.268	.026
Patient Race ² =Black	-0.224	0.130	0.800	0.615-1.026	.086
Patient Race=Other	-0.137	0.108	0.872	0.703-1.072	.202
Patient Race=Unknown	0.078	0.085	1.081	0.914-1.274	.359
Functional Status ³ =Partially Dependent	0.894	0.196	2.446	1.655-3.569	< .001
Functional Status=Totally Dependent	0.757	0.405	2.131	0.94-4.65	.062
Functional Status=Unknown	1.041	1.068	2.833	0.307-26.423	.330
ASA Class ⁴ =ASA 2 - Mild Disturbance	0.913	0.226	2.493	1.638-3.995	< .001
ASA Class=ASA 3 - Severe Disturbance	1.517	0.226	4.560	3.002-7.297	< .001
ASA Class=ASA 4 - Life Threatening	2.321	0.249	10.184	6.374-16.971	< .001
ASA Class=ASA 5 - Moribund	3.581	0.735	35.895	8.658-164.419	< .001
ASA Class=None assigned	1.864	0.734	6.449	1.295-24.983	.011
Wound Class ⁵ =Clean/Contaminated	1.300	0.076	3.671	3.168-4.266	< .001
Wound Class=Contaminated	1.680	0.097	5.367	4.435-6.496	< .001
Wound Class=Dirty/Infected	1.895	0.105	6.652	5.414-8.17	< .001
Long Operative Time ⁶	0.715	0.060	2.045	1.819-2.298	< .001
Surgeon Time Since Graduation (years)	0.000	0.003	1.000	0.994-1.006	.967
Surgeon Complaint Category=1-3 Prior CORS Complaints ⁷	0.151	0.072	1.163	1.009-1.337	.035
Surgeon Complaint Category=4+ Prior CORS Complaints ⁷	0.127	0.076	1.135	0.977-1.315	.094

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⁶Defined as procedure time > 75th percentile procedure time for CPT code grouping

⁷Defined as total number of CORS complaints attributed to patient's surgeon in the 1095 day period prior to operation. Reference Level = 0 Prior CORS Complaints

eTable 3. Sensitivity Analysis 2: Logistic Regression Model of Postoperative Complication Adjusting for Site

Variable	Coefficient	S.E.	Odds Ratio	Odds Ratio 95% C.I.	P Value
Intercept	-5.130	0.246	0.006	0.004-0.009	< .001
Patient Age (years)	0.010	0.002	1.010	1.006-1.014	< .001
Patient Sex ¹ =Male	0.131	0.057	1.140	1.02-1.274	.021
Patient Race ² =Black	-0.248	0.130	0.780	0.6-1.001	.057
Patient Race=Other	-0.050	0.112	0.952	0.762-1.181	.658
Patient Race=Unknown	0.170	0.090	1.185	0.991-1.412	.060
Functional Status ³ =Partially Dependent	0.908	0.196	2.480	1.677-3.621	< .001
Functional Status=Totally Dependent	0.722	0.405	2.058	0.907-4.499	.075
Functional Status=Unknown	1.150	1.066	3.158	0.343-29.385	.281
ASA Class ⁴ =ASA 2 - Mild Disturbance	0.880	0.227	2.411	1.584-3.867	< .001
ASA Class=ASA 3 - Severe Disturbance	1.460	0.226	4.305	2.829-6.9	< .001
ASA Class=ASA 4 - Life Threatening	2.252	0.250	9.508	5.938-15.875	< .001
ASA Class=ASA 5 - Moribund	3.508	0.736	33.387	8.041-153.11	< .001
ASA Class=None assigned	1.887	0.735	6.600	1.322-25.639	.010
Wound Class ⁵ =Clean/Contaminated	1.317	0.076	3.734	3.222-4.339	< .001
Wound Class=Contaminated	1.668	0.097	5.302	4.383-6.415	< .001
Wound Class=Dirty/Infected	1.871	0.105	6.495	5.287-7.976	< .001
Long Operative Time ⁶	0.714	0.060	2.041	1.816-2.293	< .001
Study Site 2 ⁷	-0.196	0.065	0.822	0.724-0.933	.003
Surgeon Complaint Category=1-3 Prior CORS Complaints ⁸	0.155	0.072	1.168	1.014-1.342	.031
Surgeon Complaint Category=4+ Prior CORS Complaints ⁸	0.118	0.076	1.126	0.969-1.304	.118

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⁷Study site is a two level de-identified factor. Reference level is study site 1.

⁸Defined as total number of CORS complaints attributed to patient's surgeon in the 1095 day period prior to operation. Reference Level = 0 Prior CORS Complaints

eTable 4. Sensitivity Analysis 3: Logistic Regression Model of Postoperative Complication Excluding Patients With Incomplete Follow-up

Variable	Coefficient	S.E.	Odds Ratio	Odds Ratio 95% C.I.	P Value
Intercept	-5.155	0.250	0.006	0.003-0.009	< .001
Patient Age (years)	0.008	0.002	1.008	1.004-1.012	< .001
Patient Sex ¹ =Male	0.114	0.057	1.121	1.003-1.253	.045
Patient Race ² =Black	-0.228	0.131	0.796	0.612-1.023	.083
Patient Race=Other	-0.141	0.108	0.869	0.7-1.07	.193
Patient Race=Unknown	0.083	0.085	1.086	0.917-1.281	.332
Functional Status ³ =Partially Dependent	0.868	0.199	2.382	1.602-3.495	< .001
Functional Status=Totally Dependent	0.681	0.414	1.976	0.851-4.376	.100
Functional Status=Unknown	1.045	1.067	2.844	0.309-26.507	.327
ASA Class ⁴ =ASA 2 - Mild Disturbance	0.930	0.231	2.534	1.651-4.106	< .001
ASA Class=ASA 3 - Severe Disturbance	1.529	0.230	4.613	3.011-7.465	< .001
ASA Class=ASA 4 - Life Threatening	2.293	0.254	9.906	6.139-16.71	< .001
ASA Class=ASA 5 - Moribund	3.589	0.737	36.203	8.704-166.487	< .001
ASA Class=None assigned	1.855	0.735	6.395	1.282-24.856	.012
Wound Class ⁵ =Clean/Contaminated	1.316	0.076	3.729	3.216-4.338	< .001
Wound Class=Contaminated	1.721	0.098	5.589	4.615-6.77	< .001
Wound Class=Dirty/Infected	1.908	0.105	6.740	5.48-8.287	< .001
Long Operative Time ⁶	0.708	0.060	2.029	1.804-2.281	< .001
Surgeon Complaint Category=1-3 Prior CORS Complaints ⁷	0.158	0.072	1.171	1.016-1.347	.028
Surgeon Complaint Category=4+ Prior CORS Complaints ⁷	0.125	0.076	1.133	0.975-1.314	.101

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⁷Defined as total number of CORS complaints attributed to patient's surgeon in the 1095 day period prior to operation. Reference Level = 0 Prior CORS Complaints