

SECTION VI. SUPPLEMENTARY TABLES

Tables 8a-e: Risk Model Estimates using Adjusted Model

Table 8a. Risk Estimate Adjusted Model- 7 Day								
	Estimate	Std Dev	P-Value	Estimate LCL	Estimate UCL	OR	OR LCL	OR UCL
Intercept	-3.8957	0.0501	<.0001	-3.9939	-3.7975			
Weeks of Gestation (Reference Group: 35-36 Weeks)								
<24	0.8497	0.2511	0.0007	0.3575	1.342	2.339	1.43	3.827
24	1.2288	0.164	<.0001	0.9073	1.5503	3.417	2.478	4.713
25-26	1.2326	0.096	<.0001	1.0444	1.4208	3.43	2.842	4.14
27-28	0.9776	0.0831	<.0001	0.8148	1.1403	2.658	2.259	3.128
29-30	0.8217	0.0732	<.0001	0.6783	0.9652	2.274	1.97	2.625
31-32	0.5137	0.0633	<.0001	0.3897	0.6378	1.672	1.476	1.892
33-34	0.029	0.058	0.6176	-0.0848	0.1427	1.029	0.919	1.153
>=37	-0.7604	0.1763	<.0001	-1.106	-0.4148	0.467	0.331	0.66
Race/Ethnicity (Reference Group: White)								
Black	-0.0908	0.0534	0.0891	-0.1955	0.0139	0.913	0.822	1.014
Hispanic	-0.00775	0.0587	0.8949	-0.1228	0.1073	0.992	0.884	1.113
Other	-0.029	0.0629	0.6445	-0.1524	0.0943	0.971	0.859	1.099
Male	0.116	0.0423	0.0061	0.0332	0.1988	1.123	1.034	1.22
Data Description: MAX data 2006-2008								

Table 8b. Risk Estimate Adjusted Model- 14 Day								
	Estimate	Std Dev	P-Value	Estimate LCL	Estimate UCL	OR	OR LCL	OR UCL
Intercept	-3.5677	0.0423	<.0001	-3.6506	-3.4849			
Weeks of Gestation (Reference Group: 35-36 Weeks)								
<24	1.0034	0.2025	<.0001	0.6066	1.4002	2.728	1.834	4.056
24	1.3836	0.1339	<.0001	1.1211	1.646	3.989	3.068	5.186
25-26	1.2554	0.0824	<.0001	1.094	1.4169	3.509	2.986	4.124
27-28	1.0788	0.069	<.0001	0.9435	1.2141	2.941	2.569	3.367
29-30	0.8621	0.062	<.0001	0.7406	0.9836	2.368	2.097	2.674
31-32	0.6484	0.052	<.0001	0.5464	0.7503	1.912	1.727	2.118
33-34	0.1494	0.0478	0.0018	0.0557	0.2431	1.161	1.057	1.275
>=37	-0.709	0.1459	<.0001	-0.995	-0.423	0.492	0.37	0.655
Race/Ethnicity (Reference Group: White)								
Black	-0.078	0.0443	0.0786	-0.1649	0.00893	0.925	0.848	1.009
Hispanic	0.0157	0.0486	0.746	-0.0795	0.111	1.016	0.924	1.117
Other	-0.0156	0.0522	0.7655	-0.118	0.0868	0.985	0.889	1.091
Male	0.1145	0.0351	0.0011	0.0458	0.1832	1.121	1.047	1.201
Data Description: MAX data 2006-2008								

Table 8c. Risk Estimate Adjusted Model- 30 Day								
	Estimate	Std Dev	P-Value	Estimate LCL	Estimate UCL	OR	OR LCL	OR UCL
Intercept	-3.0995	0.0338	<.0001	-3.1658	-3.0332			
Weeks of Gestation (Reference Group: 35-36 Weeks)								
<24	0.8485	0.1732	<.0001	0.509	1.188	2.336	1.664	3.28
24	1.3322	0.1118	<.0001	1.113	1.5513	3.789	3.044	4.717
25-26	1.2724	0.0666	<.0001	1.1419	1.4029	3.569	3.133	4.067
27-28	1.0235	0.0565	<.0001	0.9127	1.1343	2.783	2.491	3.109
29-30	0.8295	0.05	<.0001	0.7315	0.9275	2.292	2.078	2.528
31-32	0.5714	0.0421	<.0001	0.4889	0.654	1.771	1.63	1.923
33-34	0.1469	0.0376	<.0001	0.0732	0.2207	1.158	1.076	1.247
>=37	-0.625	0.1091	<.0001	-0.8388	-0.4111	0.535	0.432	0.663
Race/Ethnicity (Reference Group: White)								
Black	-0.0175	0.0354	0.6206	-0.087	0.0519	0.983	0.917	1.053
Hispanic	0.047	0.039	0.2282	-0.0295	0.1235	1.048	0.971	1.131
Other	0.0375	0.0418	0.3698	-0.0444	0.1193	1.038	0.957	1.127
Male	0.1621	0.0281	<.0001	0.107	0.2172	1.176	1.113	1.243
Data Description: MAX data 2006-2008								

Table 8d. Risk Estimate Adjusted Model- 90 Day								
	Estimate	Std Dev	P-Value	Estimate LCL	Estimate UCL	OR	OR LCL	OR UCL
Intercept	-2.4826	0.0258	<.0001	-2.5332	-2.4319			
Weeks of Gestation (Reference Group: 35-36 Weeks)								
<24	0.7023	0.1426	<.0001	0.4229	0.9817	2.018	1.526	2.669
24	1.1408	0.096	<.0001	0.9527	1.3289	3.129	2.593	3.777
25-26	1.1751	0.055	<.0001	1.0672	1.283	3.238	2.907	3.607
27-28	0.9401	0.0455	<.0001	0.8509	1.0294	2.56	2.342	2.799
29-30	0.6889	0.0403	<.0001	0.61	0.7678	1.991	1.84	2.155
31-32	0.4788	0.0329	<.0001	0.4143	0.5433	1.614	1.513	1.722
33-34	0.1989	0.0279	<.0001	0.1442	0.2536	1.22	1.155	1.289
>=37	-0.5399	0.0773	<.0001	-0.6914	-0.3885	0.583	0.501	0.678
Race/Ethnicity (Reference Group: White)								
Black	0.0196	0.0272	0.4714	-0.0338	0.073	1.02	0.967	1.076
Hispanic	0.06	0.0301	0.0461	0.00104	0.1189	1.062	1.001	1.126
Other	0.0612	0.0323	0.0579	-	0.1244	1.063	0.998	1.133
Male	0.2286	0.0217	<.0001	0.1861	0.2711	1.257	1.205	1.311
Data Description: MAX data 2006-2008								

Table 8e. Risk Estimate Adjusted Model- 365 Day								
	Estimate	Std Dev	P-Value	Estimate LCL	Estimate UCL	OR	OR LCL	OR UCL
Intercept	-1.8858	0.0208	<.0001	-1.9267	-1.845			
Weeks of Gestation (Reference Group: 35-36 Weeks)								
<24	0.6528	0.1208	<.0001	0.4161	0.8895	1.921	1.516	2.434
24	1.086	0.0847	<.0001	0.9199	1.2521	2.962	2.509	3.498
25-26	1.0847	0.0487	<.0001	0.9893	1.1801	2.959	2.689	3.255
27-28	0.8428	0.0393	<.0001	0.7658	0.9198	2.323	2.151	2.509
29-30	0.5721	0.0341	<.0001	0.5053	0.639	1.772	1.657	1.895
31-32	0.3642	0.0273	<.0001	0.3106	0.4178	1.439	1.364	1.519
33-34	0.1251	0.0226	<.0001	0.0808	0.1694	1.133	1.084	1.185
>=37	-0.5745	0.0604	<.0001	-0.6928	-0.4562	0.563	0.5	0.634
Race/Ethnicity (Reference Group: White)								
Black	0.0642	0.0224	0.0041	0.0204	0.108	1.066	1.021	1.114
Hispanic	0.0624	0.0248	0.0119	0.0138	0.1111	1.064	1.014	1.118
Other	0.086	0.0266	0.0012	0.0338	0.1382	1.09	1.034	1.148
Male	0.2313	0.0178	<.0001	0.1963	0.2663	1.26	1.217	1.305
Data Description: MAX data 2006-2008								

Tables 9a-e: Risk Model Estimates using Adjusted Model with complications of prematurity

Table 9a. Risk Estimate Adjusted Model with complications of prematurity- 7 Day								
	Estimate	Std Dev	P-Value	Estimate LCL	Estimate UCL	OR	OR LCL	OR UCL
Intercept	-3.8934	0.0501	<.0001	-3.9915	-3.7952			
Weeks of Gestation (Reference Group: 35-36 Weeks)								
<24	0.7421	0.2587	0.0041	0.2352	1.2491	2.1	1.265	3.487
24	1.0686	0.1801	<.0001	0.7157	1.4216	2.911	2.046	4.144
25-26	1.1027	0.1167	<.0001	0.8741	1.3314	3.012	2.397	3.786
27-28	0.9075	0.0949	<.0001	0.7215	1.0936	2.478	2.057	2.985
29-30	0.8032	0.0781	<.0001	0.6502	0.9562	2.233	1.916	2.602
31-32	0.511	0.064	<.0001	0.3856	0.6364	1.667	1.47	1.89
33-34	0.0284	0.058	0.625	-0.0854	0.1421	1.029	0.918	1.153
>=37	-0.7592	0.1763	<.0001	-1.1048	-0.4136	0.468	0.331	0.661
Race/Ethnicity (Reference Group: White)								
Black	-0.0954	0.0535	0.0744	-0.2002	0.00939	0.909	0.819	1.009
Hispanic	-0.007	0.0587	0.9052	-0.1221	0.1081	0.993	0.885	1.114
Other	-0.0314	0.0629	0.6179	-0.1548	0.092	0.969	0.857	1.096
Male	0.1105	0.0423	0.009	0.0276	0.1933	1.117	1.028	1.213
BPD	0.2562	0.0931	0.0059	0.0738	0.4386	1.292	1.077	1.551
ROP	-0.0525	0.0745	0.481	-0.1986	0.0936	0.949	0.82	1.098
NEC	0.3761	0.1113	0.0007	0.1579	0.5943	1.457	1.171	1.812
IVH Any	-0.0613	0.0852	0.4714	-0.2282	0.1056	0.941	0.796	1.111
Data Description: MAX data 2006-2008								

Table 9b. Risk Estimate Adjusted Model with complications of prematurity- 14 Day								
	Estimate	Std Dev	P-Value	Estimate LCL	Estimate UCL	OR	OR LCL	OR UCL
Intercept	-3.5657	0.0422	<.0001	-3.6485	-3.483			
Weeks of Gestation (Reference Group: 35-36 Weeks)								
<24	0.8506	0.2092	<.0001	0.4406	1.2605	2.341	1.554	3.527
24	1.1728	0.1477	<.0001	0.8834	1.4623	3.231	2.419	4.316
25-26	1.0755	0.0994	<.0001	0.8808	1.2703	2.932	2.413	3.562
27-28	0.9671	0.0792	<.0001	0.812	1.1223	2.63	2.252	3.072
29-30	0.8133	0.0662	<.0001	0.6834	0.9431	2.255	1.981	2.568
31-32	0.6352	0.0526	<.0001	0.532	0.7384	1.887	1.702	2.092
33-34	0.1477	0.0478	0.002	0.0539	0.2414	1.159	1.055	1.273
>=37	-0.7075	0.1459	<.0001	-0.9935	-0.4215	0.493	0.37	0.656
Race/Ethnicity (Reference Group: White)								
Black	-0.082	0.0444	0.0646	-0.169	0.00498	0.921	0.845	1.005
Hispanic	0.0153	0.0486	0.7526	-0.08	0.1106	1.015	0.923	1.117
Other	-0.0182	0.0523	0.7278	-0.1206	0.0842	0.982	0.886	1.088
Male	0.1094	0.0351	0.0018	0.0406	0.1781	1.116	1.041	1.195
BPD	0.2376	0.078	0.0023	0.0848	0.3905	1.268	1.089	1.478
ROP	0.0344	0.0613	0.5751	-0.0858	0.1546	1.035	0.918	1.167
NEC	0.3426	0.0941	0.0003	0.1582	0.527	1.409	1.171	1.694
IVH Any	-0.0243	0.0698	0.7277	-0.1612	0.1126	0.976	0.851	1.119
Data Description: MAX data 2006-2008								

Table 9c. Risk Estimate Adjusted Model with complications of prematurity- 30 Day								
	Estimate	Std Dev	P-Value	Estimate LCL	Estimate UCL	OR	OR LCL	OR UCL
Intercept	-3.098	0.0338	<.0001	-3.1643	-3.0318			
Weeks of Gestation (Reference Group: 35-36 Weeks)								
<24	0.6517	0.1787	0.0003	0.3015	1.002	1.919	1.352	2.724
24	1.0765	0.1231	<.0001	0.8353	1.3177	2.934	2.306	3.735
25-26	1.0528	0.0807	<.0001	0.8946	1.2111	2.866	2.446	3.357
27-28	0.8794	0.0649	<.0001	0.7521	1.0066	2.409	2.121	2.736
29-30	0.7566	0.0537	<.0001	0.6514	0.8618	2.131	1.918	2.367
31-32	0.5483	0.0427	<.0001	0.4646	0.632	1.73	1.591	1.881
33-34	0.1437	0.0376	0.0001	0.0699	0.2175	1.155	1.072	1.243
>=37	-0.623	0.1091	<.0001	-0.8368	-0.4091	0.536	0.433	0.664
Race/Ethnicity (Reference Group: White)								
Black	-0.0211	0.0355	0.5516	-0.0906	0.0484	0.979	0.913	1.05
Hispanic	0.0458	0.039	0.2403	-0.0307	0.1224	1.047	0.97	1.13
Other	0.0344	0.0418	0.41	-0.0475	0.1164	1.035	0.954	1.123
Male	0.1573	0.0281	<.0001	0.1021	0.2124	1.17	1.108	1.237
BPD	0.2211	0.0642	0.0006	0.0953	0.347	1.247	1.1	1.415
ROP	0.0747	0.0501	0.1354	-0.0234	0.1728	1.078	0.977	1.189
NEC	0.3538	0.0774	<.0001	0.2021	0.5056	1.425	1.224	1.658
IVH Any	0.0517	0.056	0.3561	-0.0581	0.1615	1.053	0.944	1.175
Data Description: MAX data 2006-2008								

Table 9d. Risk Estimate Adjusted Model with complications of prematurity- 90 Day								
	Estimate	Std Dev	P-Value	Estimate LCL	Estimate UCL	OR	OR LCL	OR UCL
Intercept	-2.4815	0.0258	<.0001	-2.5322	-2.4309			
Weeks of Gestation (Reference Group: 35-36 Weeks)								
<24	0.4751	0.1472	0.0013	0.1866	0.7637	1.608	1.205	2.146
24	0.8487	0.1049	<.0001	0.6431	1.0543	2.337	1.902	2.87
25-26	0.9199	0.0665	<.0001	0.7895	1.0502	2.509	2.202	2.858
27-28	0.7716	0.0525	<.0001	0.6687	0.8744	2.163	1.952	2.398
29-30	0.6031	0.0433	<.0001	0.5182	0.688	1.828	1.679	1.99
31-32	0.4526	0.0334	<.0001	0.3872	0.518	1.572	1.473	1.679
33-34	0.1956	0.0279	<.0001	0.1409	0.2504	1.216	1.151	1.285
>=37	-0.538	0.0773	<.0001	-0.6894	-0.3865	0.584	0.502	0.679
Race/Ethnicity (Reference Group: White)								
Black	0.0169	0.0273	0.535	-0.0365	0.0703	1.017	0.964	1.073
Hispanic	0.0585	0.0301	0.0516	- 0.00041	0.1175	1.06	1	1.125
Other	0.0584	0.0323	0.0707	- 0.00493	0.1217	1.06	0.995	1.129
Male	0.2243	0.0217	<.0001	0.1818	0.2669	1.251	1.199	1.306
BPD	0.2624	0.0528	<.0001	0.1589	0.366	1.3	1.172	1.442
ROP	0.1151	0.0407	0.0047	0.0354	0.1949	1.122	1.036	1.215
NEC	0.3045	0.065	<.0001	0.177	0.432	1.356	1.194	1.54
IVH Any	0.0433	0.0456	0.3419	-0.046	0.1327	1.044	0.955	1.142
Data Description: MAX data 2006-2008								

Table 9e. Risk Estimate Adjusted Model with complications of prematurity- 365 Day								
	Estimate	Std Dev	P-Value	Estimate LCL	Estimate UCL	OR	OR LCL	OR UCL
Intercept	-1.8852	0.0208	<.0001	-1.926	-1.8443			
Weeks of Gestation (Reference Group: 35-36 Weeks)								
<24	0.3893	0.1251	0.0019	0.1441	0.6345	1.476	1.155	1.886
24	0.7522	0.0923	<.0001	0.5713	0.9332	2.122	1.77	2.543
25-26	0.791	0.0583	<.0001	0.6766	0.9053	2.206	1.967	2.473
27-28	0.6508	0.0452	<.0001	0.5621	0.7394	1.917	1.754	2.095
29-30	0.4761	0.0368	<.0001	0.404	0.5482	1.61	1.498	1.73
31-32	0.3352	0.0278	<.0001	0.2808	0.3896	1.398	1.324	1.476
33-34	0.1216	0.0226	<.0001	0.0773	0.1659	1.129	1.08	1.18
>=37	-0.5724	0.0604	<.0001	-0.6907	-0.4541	0.564	0.501	0.635
Race/Ethnicity (Reference Group: White)								
Black	0.0621	0.0224	0.0055	0.0182	0.106	1.064	1.018	1.112
Hispanic	0.061	0.0249	0.0142	0.0122	0.1097	1.063	1.012	1.116
Other	0.0832	0.0267	0.0018	0.031	0.1355	1.087	1.031	1.145
Male	0.2271	0.0179	<.0001	0.1921	0.2621	1.255	1.212	1.3
BPD	0.3242	0.0463	<.0001	0.2335	0.4148	1.383	1.263	1.514
ROP	0.1331	0.0352	0.0002	0.0642	0.202	1.142	1.066	1.224
NEC	0.2719	0.0578	<.0001	0.1586	0.3852	1.313	1.172	1.47
IVH Any	0.0556	0.0393	0.157	-0.0214	0.1327	1.057	0.979	1.142
Data Description: MAX data 2006-2008								

Table 10: State Data-Volume Associations

Table 10. State Data- Volume Associations										
	Unadjusted					Adjusted				
Quartile	7 day	14 day	30 day	90 day	365 day	7 day	14 day	30 day	90 day	365 day
Lowest	0.037	0.050	0.072	0.122	0.185	0.037	0.051	0.074	0.126	0.192
2	0.021	0.033	0.055	0.099	0.169	0.022	0.034	0.057	0.102	0.175
3	0.023	0.036	0.060	0.106	0.171	0.022	0.035	0.059	0.105	0.170
Highest	0.028	0.041	0.065	0.116	0.184	0.029	0.041	0.065	0.116	0.183
P-value	0.57	0.70	0.97	0.51	0.68	0.58	0.89	0.54	0.55	0.60
	Unadjusted					Adjusted				
Quintile	7 day	14 day	30 day	90 day	365 day	7 day	14 day	30 day	90 day	365 day
Lowest	0.033	0.046	0.067	0.113	0.172	0.035	0.049	0.071	0.120	0.183
2	0.023	0.035	0.058	0.103	0.174	0.024	0.036	0.059	0.106	0.178
3	0.021	0.036	0.060	0.115	0.199	0.020	0.034	0.058	0.113	0.196
4	0.021	0.034	0.059	0.107	0.172	0.021	0.034	0.059	0.107	0.171
Highest	0.030	0.043	0.066	0.115	0.181	0.031	0.043	0.066	0.115	0.180
P-value	0.73	0.97	0.73	0.56	0.72	0.69	0.63	0.66	0.59	0.72

Table 11: Correlation with complications of premature birth

Table 11. Correlation with complications of premature birth					
Unadjusted results (Spearman)					
	7 day	14 day	30 day	90 day	365 day
7 day					
14 day	0.9148				
30 day	0.7811	0.9052			
90 day	0.6649	0.7691	0.9107		
365 day	0.4984	0.6151	0.7414	0.8835	
BPD	0.3792	0.3723	0.4759	0.4340	0.2507
ROP	0.0900	0.0769	0.0303	0.0188	-0.0845
NEC	-0.1203	-0.0793	-0.0931	-0.1131	-0.1075
IVH	-0.2245	-0.1731	-0.1047	0.0345	0.0567
Adjusted results (Spearman)					
	7 day	14 day	30 day	90 day	365 day
7 day					
14 day	0.9148				
30 day	0.7803	0.9052			
90 day	0.6643	0.7691	0.9103		
365 day	0.4972	0.6136	0.7393	0.8821	
BPD	0.0108	0.0144	0.1680	0.2341	0.1946
ROP	-0.0124	-0.0225	0.0037	0.0648	0.0859
NEC	-0.1375	-0.0655	-0.0170	-0.0050	0.0484
IVH	-0.0787	-0.0529	-0.0076	0.0761	0.0011