Supplement 7 Table – Predictors of Lower Acute Postoperative Pain (mean <=4/10) after TKA.

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| --- | --- | --- | --- |
| Predictive Factors | Outcome =  Pain Scores <=4/10 Averaged over Hospital Days 1-3. | | |
| OR | 95% Cl | p-value |
| PREOPERATIVE OPIOID USE |  |  |  |
| Late (vs Early) Start | 1.08 | 1-1.17 | 0.048 |
| Dose > (vs <) 15 mg/day | 0.51 | 0.48-0.54 | <0.001 |
| Tramadol (vs not) | 1.12 | 1.04-1.22 | 0.005 |
| PREOPERATIVE PAIN SCORES | | | |
| 5-7 (vs 0-4) | 0.61 | 0.58-0.64 | <0.001 |
| 8-10 (vs 0-4) | 0.48 | 0.44-0.52 | <0.001 |
| DEMOGRAPHICS |  |  |  |
| Year of Operation |  |  |  |
| 2012-13 (vs 2010-2011) | 0.86 | 0.81-0.91 | <0.001 |
| 2014-15 (vs 2010-2011) | 0.80 | 0.75-0.84 | <0.001 |
| Region (versus Pacific) |  |  |  |
| Midwest | 0.85 | 0.78-0.93 | <0.001 |
| Southeast | 1.15 | 1.06-1.26 | 0.001 |
| Central | 1.15 | 1.05-1.25 | 0.002 |
| Northeast | 0.91 | 0.82-1 | 0.062 |
| Race (versus White) |  |  |  |
| Black | 0.85 | 0.79-0.92 | <0.001 |
| Hispanic | 1.40 | 1.26-1.55 | <0.001 |
|  |  |  |  |
| Age (versus <60) |  |  |  |
| 60-70 | 1.71 | 1.61-1.82 | <0.001 |
| >70 | 2.98 | 2.76-3.22 | <0.001 |
| BMI (versus <35) |  |  |  |
| 35-40 | 1.07 | 1-1.14 | 0.042 |
| >40 | 1.11 | 1.01-1.23 | 0.031 |
| Gender |  |  |  |
| Male (vs Female) | 1.05 | 0.95-1.16 | 0.35 |
| COMORBIDITIES |  |  |  |
| 3-5 (vs <=2) | 1.00 | 0.94-1.06 | 0.986 |
| >5 (vs <=2) | 1.02 | 0.93-1.11 | 0.724 |
| Chronic Pulmonary | 0.89 | 0.83-0.95 | 0.001 |
| Liver Disease | 0.81 | 0.72-0.9 | <0.001 |
| Rheumatoid Arthritis | 0.94 | 0.82-1.08 | 0.385 |
| Tobacco | 0.88 | 0.82-0.94 | <0.001 |
| Alcohol | 0.92 | 0.84-1.01 | 0.071 |
| Substance Abuse | 0.78 | 0.69-0.87 | <0.001 |
| Anxiety | 0.88 | 0.81-0.95 | 0.002 |
| Depression | 0.88 | 0.83-0.94 | <0.001 |
| Back Pain | 0.84 | 0.79-0.89 | <0.001 |
| Pain Visit | 0.92 | 0.84-1.02 | 0.114 |
| HOSPITAL VOLUME |  |  |  |
| Low (vs intermediate) | 1.28 | 1.21-1.37 | <0.001 |
| High (vs intermediate) | 0.84 | 0.79-0.9 | <0.001 |
| SURGICAL VOLUME |  |  |  |
| Low (vs intermediate) | 1.21 | 1.14-1.28 | <0.001 |
| High (vs intermediate) | 1.22 | 1.15-1.3 | <0.001 |
| PERIOPERATIVE TREATMENTS |  |  |  |
| General (vs not) | 0.69 | 0.65-0.74 | <0.001 |
| Nerve Block (vs not) | 1.10 | 1.02-1.19 | 0.01 |
| PCA (vs not) | 1.09 | 1-1.19 | 0.046 |