**Appendix table 2:**Demographic and baseline characteristics before and after the inverse probability of treatment weighting (IPTW).\*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Variables** | **Sugammadex N = 13065** | **neostigmine N = 63558** | **Unadjusted ASD †** | **ASD after IPTW †** |
| Age – yrs. | 59 ± 16 | 57 ± 16 | 0.121 | 0.031 |
| Sex (female) – % | 53 % | 53 % | 0.001 | 0.026 |
| Race (Caucasian) – % | 81 % | 83 % | 0.051 | 0.004 |
| ASA status – % |  |  | 0.231 | 0.055 |
| I | 1 % | 2 % |  |  |
| II | 15 % | 22 % |  |  |
| III | 68 % | 66 % |  |  |
| IV | 16 % | 10 % |  |  |
| V | 0 % | 0 % |  |  |
| Emergency -% | 4 % | 3 % | 0.051 | 0.009 |
| Smoking -% | 54 % | 50 % | 0.084 | 0.018 |
|  |  |  |  |  |
| Medical history - % |  |  |  |  |
| Congestive heart failure | 7 % | 5% | 0.046 | 0.010 |
| Vascular disease | 5 % | 4 % | 0.034 | 0.005 |
| Pulmonary circulation disease | 1 % | 1 % | 0.020 | 0.020 |
| Peripheral vascular disease | 4 % | 3 % | 0.035 | 0.012 |
| Hypertension | 53 % | 49 % | 0.083 | 0.014 |
| Paralysis | 2 % | 2 % | 0.042 | 0.027 |
| Other neurological disorders | 7 % | 6 % | 0.056 | 0.006 |
| Chronic pulmonary disease | 16 % | 11 % | 0.138 | 0.016 |
| Diabetes | 21 % | 18 % | 0.068 | 0.024 |
| Hypothyroidism | 14 % | 13 % | 0.021 | 0.013 |
| Renal failure | 10 % | 10 % | 0.032 | 0.007 |
| Liver disease | 5 % | 5 % | 0.019 | 0.014 |
| Peptic ulcer Disease (bleeding) | 1 % | 1 % | 0.013 | 0.007 |
| AIDS | 0 % | 0 % | 0.010 | 0.000 |
| Lymphoma | 1 % | 1 % | 0.008 | 0.001 |
| Metastatic cancer | 8 % | 7 % | 0.040 | 0.009 |
| Solid tumour w/out metastasis | 14 % | 12 % | 0.054 | 0.018 |
| Rheumatoid arthritis/collagen vas | 4 % | 4 % | 0.031 | 0.002 |
| Coagulopathy | 4 % | 4 % | 0.026 | 0.018 |
| Obesity | 21 % | 20 % | 0.020 | 0.018 |
| Weight loss | 11 % | 10 % | 0.050 | 0.029 |
| Fluid and electrolyte disorders | 14 % | 13 % | 0.024 | 0.028 |
| Chronic blood loss anaemia | 1 % | 1 % | 0.005 | 0.009 |
| Deficiency anaemia | 9 % | 8 % | 0.004 | 0.003 |
| Alcohol abuse | 1 % | 1 % | 0.008 | 0.006 |
| Drug abuse | 1 % | 1 % | 0.007 | 0.004 |
| Psychoses | 3 % | 3 % | 0.001 | 0.003 |
| Depression | 15 % | 15 % | 0.006 | 0.009 |
| Duration of surgery, hrs. | 2.1 [1.2, 3.7] | 3.1 [2.0, 4.5] |  |  |
|  |  |  |  |  |
| Type of surgery – top 10 (column %) |  |  | 0.636 | 0.112 |
| - Diagnostic bronchoscopy and biopsy of bronchus | 10 % | 5 % |  |  |
| - Colorectal resection | 4 % | 5 % |  |  |
| - Other OR therapeutic procedures on respiratory system | 10 % | 3 % |  |  |
| - Laminectomy, excision intervertebral disc | 3 % | 5 % |  |  |
| - Other OR lower GI therapeutic procedures | 4 % | 4 % |  |  |
| - Conversion of cardiac rhythm | 2 % | 4 % |  |  |
| - Other hernia repair | 3 % | 3 % |  |  |
| - Hysterectomy, abdominal and vaginal | 2 % | 3 % |  |  |
| - Other OR therapeutic procedures on skin and breast | 1 % | 3 % |  |  |
| - Spinal fusion | 2 % | 3 % |  |  |
| Summary statistics (presented as % of patients, mean ± SD, or median [Q1, Q3], respectively, for factors, symmetric continuous variables, and skewed continuous variables; Duration of surgery was summarized by median (10th, 90th percentiles)). AIDS = Acquired immune deficiency syndrome.  **†** IPTW = inverse probability of treatment weighting: First, we estimated the probability of receiving sugammadex (i.e., the propensity score) for each patient using logistic regression with receiving sugammadex as the outcome using the following pre-specified potential confounding variables (listed in Table 1). Then, we calculated the stabilized weights as follows: for the sugammadex group, weight was the proportion of sugammadex patients divided by the propensity score; for the neostigmine group, weight was the proportion of neostigmine patients divided by (1- propensity score). We also truncated the stabilized weights at 1st and 99th percentiles.  †Absolute standardized difference: absolute difference in means or proportions divided by the pooled standard deviation after weighting each observation with IPTW. Any covariables with an ASD > 0.10 was considered to be imbalanced and would be adjusted for in the analysis. | | | | |