**Supplemental Digit Content 1.**

**Calculation of time-weighted averages (TWAs)**

1. TWA-SBP >160 mmHg =

mmHg

\* If and only if SPBn greater than 160 mmHg will be included in this formula.

† In the formula, the number “10” refers to time interval between each set of recording (in seconds).

‡ Anesthesia duration was in unit of second.

1. TWA-SBP <90 mmHg =

mmHg

\* If and only if SPBn lower than 90 mmHg will be included in this formula.

† In the formula, the number “10” refers to time interval between each set of recording (in seconds).

‡ Anesthesia duration was in unit of second.

1. TWA-SBP >100 bpm =

bpm

\* If and only if HRn greater than 100 bpm will be included in this formula.

† In the formula, the number “10” refers to time interval between each set of recording (in seconds).

‡ Anesthesia duration was in unit of second.

**Supplemental Digital Content 2.**

**Postoperative individual complications during hospitalization in matched patients a**

|  |  |  |  |
| --- | --- | --- | --- |
| **Variables** | **Non-selective α-blockade b** **(n=89)** | **Selectiveα-blockade c** **(n=89)** | **P value** |
| Acute kidney injury d | 15 (16.9%) | 14 (15.7%) | 0.839 |
| Hypoglycemia e | 7 (7.9%) | 8 (9.0%) | 0.787 |
| Pulmonary infection f | 1 (1.1%) | 4 (4.5%) | 0.368 |
| Surgical bleeding g | 1 (1.1%) | 0 (0.0%) | >0.999 |
| New onset arrhythmia h | 0 (0.0%) | 2 (2.2%) | 0.497 |
| Urinary tract infection i | 2 (2.2%) | 0 (0.0%) | 0.497 |
| Deep vein thrombosis j | 1 (1.1%) | 0 (0.0%) | >0.999 |
| Pulmonary embolism k | 0 (0.0%) | 1 (1.1%) | >0.999 |

Data are presented as number of patients (percentage).

a The following covariates were used for matching: age, sex, body mass index, preoperative comorbidities, with typical symptoms, catecholamine-producing tumor, maximal tumor diameter, origin of tumor, peak SBP before α-blockade, other antihypertensive therapy, SBP before surgery, HR before surgery, year of surgery, duration of anesthesia, type of anesthesia, anesthesia induction, anesthesia maintenance, use of N2O during anesthesia, duration of surgery, type of surgery,and equivalent dose vasopressor.

b Indicates phenoxybenzamine.

c Includes doxazosin (85 cases) and terazosin (4 cases).

d Diagnosed according to KDIGO criteria: serum creatinine increase ≥0.3 mg/dl within 48 hours or ≥1.5 times baseline within 7 days or urine output <0.5 ml/kg/h ≥6 hours.

e Defined as a documented serum blood glucose level of less than 55 mg/dL postoperatively.

f Presence of at least one of the following manifestations (increased or color-changed sputum, new or changed pulmonary infiltrates, fever, leukocyte count >12,000/mm3) and required antibiotic therapy.

g Bleeding after surgery that required secondary surgical hemostasis.

h New onset atrial fibrillation or paroxysmal supraventricular tachycardia that necessitated medical treatment.

i Confirmed by urinalysis and urine culture and necessitated antibiotic therapy.

j Confirmed by deep venous ultrasonography.

k Confirmed by computed tomography pulmonary angiography.