**Supplement 2**

For: Ya-Wei Li, Huai-Jin Li, Hui-Juan Li, et al. Delirium in older patients after combined epidural-general anesthesia or general anesthesia for major surgery: A randomized trial

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# Authors’ affiliations

Department of Anesthesiology and Critical Care Medicine, Peking University First Hospital, Beijing, China (Y-WL, H-JL, HK, YZ, DH, C-MD, D-XW).

Peking University Clinical Research Institute, Peking University Health Science Centre, Beijing, China (H-JL, Y-PY, M-RW, Y-FW).

Department of Anesthesiology, Beijing Shijitan Hospital, Capital Medical University, Beijing, China (B-JZ, X-YH, P-FL).

Department of Anesthesiology, Peking University Third Hospital, Beijing, China (X-YG, YL).

Department of Anesthesiology, Peking University People’s Hospital, Beijing, China (YF, H-YA).

Department of Anesthesiology, Beijing Hospital, National Centre of Gerontology; Institute of Geriatric Medicine, Chinese Academy of Medical Sciences, Beijing, China (M-ZZ, H-YZ).

Outcomes Research Consortium, Cleveland, Ohio, USA (D-XW).

Department of **O**utcomes **R**esearch, Cleveland Clinic, Cleveland, Ohio, USA (DIS).

# List of data monitoring committee members

Yang-Feng Wu, MD, PhD (chair); Hui-Juan Li, PhD; Mei-Rong Wang, MD; Ping Ji, PhD; Qin Liu, MPH; Shu-Qian Fu, MPH; Xian Su, MPH.

Peking University Clinical Research Institute, Peking University Health Science Centre, Beijing, China

# Additional members of the PUCRP Study Group

Yuan Zeng, MD, Dong-Liang Mu, MD, Ya-Fei Liu, MD, Wei-Jie Zhou, MD, Guo-Jin Shan, Qiong Ma, Xue-Yi Zheng, MD, Cong Fu, MD, Yue Zhang, MD, PhD, Run Wang, MD, Li Xiao, MD, Jing Zhang, MD, Wen-Zheng Yang, MD,Wei-Ping Liu, MD, Wen-Yong Han, MD, Yao Yu, MD, Zhen Hua, MD, Jing-Jing Zhang, MD, Xin-Quan Liang, MD, Chao Liu, MD, Shu-Ting He, MD, Tong Cheng, MD, Si-Ming Huang, MD, Ya-Ting Du, MD, and Si-Chao Xu, MD.

Department of Anesthesiology and Critical Care Medicine, Peking University First Hospital, Beijing, China (YZ, D-LM, Y-FL, W-JZ, G-JS, QM, X-YZ, CF, YZ, X-QL, CL, S-TH, TC, S-MH, Y-TD, and S-CX).

Department of Anesthesiology, Beijing Shijitan Hospital, Capital Medical University, Beijing, China (RW, LX, JZ, W-ZY).

Department of Anesthesiology, Peking University Third Hospital, Beijing, China (W-PL, W-YH).

Department of Anesthesiology, Peking University People’s Hospital, Beijing, China (YY).

Department of Anesthesiology, Beijing Hospital, National Centre of Gerontology; Institute of Geriatric Medicine, Chinese Academy of Medical Sciences, Beijing, China (ZH, J-JZ).

# Table S1. Details of surgical procedures a

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Combined epidural-general anesthesia (n=857)** | **General anesthesia (n=863)** | ***P* value** |
| Surgical procedures, n (%) |  |  | 0.571 |
| Gastro-intestinal | 82 (9.6) | 89 (10.3) |  |
| Colorectal | 225 (26.3) | 218 (25.3) |  |
| Hepatic-biliary-pancreatic  | 99 (11.6) | 93 (10.8) |  |
| Bladder  | 79 (9.2) | 83 (9.6) |  |
| Renal | 84 (9.8) | 91 (10.5) |  |
| Prostatic | 57 (6.7) | 77 (8.9) |  |
| Gynecological | 10 (1.2) | 6 (0.7) |  |
| Lung | 154 (18.0) | 133 (15.4) |  |
| Esophageal | 47 (5.5) | 57 (6.6) |  |
| Mediastinal | 6 (0.7) | 7 (0.8) |  |
| Retroperitoneal b | 14 (1.6) | 9 (1.0) |  |

a For patients who underwent two procedures during the same period of anesthesia, the main procedure was recorded.

b Includes liposarcoma, malignant fibrous tumor, ectopic pheochromocytoma, schwannoma,

and lymphoma.

# Table S2. Individual non-delirium complications within 30 days after surgery

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Combined epidural-general anesthesia (n=857)** | **General anesthesia (n=863)** | ***P* value** |
| Ischemic stroke a, n (%) | 2 (0.2) | 5 (0.6) | 0.452 |
| Cardiovascular complications, n (%) | 34 (4.0) | 36 (4.2) | 0.830 |
|  Acute coronary syndrome b | 4 (0.5) | 9 (1.0) |  |
|  New onset arrhythmia c | 17 (2.0) | 21 (2.4) |  |
|  Circulatory insufficiency d  | 7 (0.8) | 8 (0.9) |  |
|  Congestive heart failure e  | 4 (0.5) | 4 (0.5) |  |
|  Cardiac arrest f | 7 (0.8) | 2 (0.2) |  |
| Respiratory complications, n (%) | 53 (6.2) | 58 (6.7) | 0.651 |
|  Pulmonary infection g | 19 (2.2) | 19 (2.2) |  |
|  Atelectasis h | 5 (0.6) | 2 (0.2) |  |
|  Respiratory failure i | 21 (2.5) | 29 (3.4) |  |
|  Pneumothorax j | 2 (0.2) | 3 (0.3) |  |
|  Asthma k | 0 (0.0) | 1 (0.1) |  |
|  Pleural effusion l | 20 (2.3) | 18 (2.1) |  |
| Thrombotic complications, n (%) | 9 (1.1) | 7 (0.8) | 0.606 |
|  Pulmonary embolism m | 1 (0.1) | 3 (0.3) |  |
|  Deep venous thrombosis n | 6 (0.7) | 4 (0.5) |  |
|  Disseminated intravascular coagulation o | 2 (0.2) | 2 (0.2) |  |
| Urinary complications, n (%) | 55 (6.4) | 63 (7.3) | 0.469 |
|  Acute kidney injury p | 51 (6.0) | 62 (7.2) |  |
|  Urinary tract infection q | 5 (0.6) | 1 (0.1) |  |
| Surgical Infection, n (%) | 44 (5.1) | 51 (5.9) | 0.481 |
|  Severe sepsis r | 28 (3.3) | 38 (4.4) |  |
|  Surgical wound infection s | 13 (1.5) | 11 (1.3) |  |
|  Body cavity infection t | 6 (0.7) | 8 (0.9) |  |
| Other surgery-related complications, n (%) | 48 (5.6) | 54 (6.3) | 0.564 |
|  Ileus u  | 12 (1.4) | 20 (2.3) |  |
|  Delayed gastric emptying v | 6 (0.7) | 10 (1.2) |  |
|  Postoperative bleeding w | 13 (1.5) | 11 (1.3) |  |
|  Anastomotic leak x | 19 (2.2) | 16 (1.9) |  |
|  Anastomotic stenosis y | 1 (0.1) | 1 (0.1) |  |
|  Biliary pancreatitis z | 1 (0.1) | 0 (0.0) |  |
|  Fracture of drainage tube aa  | 0 (0.0) | 1 (0.1) |  |

a Persisted (more than 24 hours) new focal neurologic deficit and confirmed by neurologic imaging.

b Included acute myocardial infarction and unstable angina, which were confirmed by clinical symptoms, electrocardiographic changes and serum cardiac troponin I concentration.

c Diagnosed by electrocardiogram and required antiarrhythmic therapy.

d Requirement of inotropic agents and/or vasopressors for more than 24 hours after surgery.

e Diagnosed by the presence of symptoms (i.e. shortness of breathing) and signs (i.e. chest X-rays findings) suggesting heart failure, a serum B-type natriuretic peptide >400 pg/ml, and a typical clinical response to diuretic therapy.

f Diagnosed by electrocardiographic monitoring and required cardiopulmonary resuscitation.

g New infiltrate on chest radiograph combined with temperature over 38°C and leukocytosis, and required antibiotic therapy.

h Diagnosed by the presence of hypoxia and signs (chest X-ray, chest CT or bronchoscopy) suggesting atelectasis, and required oxygen supply and physical therapy.

i Arterial blood partial pressure of oxygen (PaO2) <60 mmHg on room air, a ratio of PaO2 to inspired oxygen fraction <300 or pulse oxygen saturation <90%, and required oxygen therapy or mechanical ventilation for more than 24 hours.

j Diagnosed by chest X-ray and required closed drainage of thoracic cavity.

k Diagnosed according to clinical signs and required inhaled bronchodilator therapy.

l Diagnosed by chest X-ray and required chest drainage, including chylothorax.

#### m Diagnosed by echocardiography or CT angiography, and required anticoagulant therapy.

n Confirmed by lower limbs venous ultrasonography and required anticoagulant therapy.

o Diagnosed according to the scoring system of the International Society of Thrombosis and Hemostasis, with a score ≥5 (Br J Haematol. 2009;145:24-33).

p Diagnosed according to Kidney Disease Improving Global Outcomes (KDIGO) criteria, i.e., serum creatinine increased for more than 1.5 times baseline or ≥26.5 µmol/L.

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

r Two or more criteria of systemic inflammatory response syndrome, with known infection and new onset dysfunction of at least one organ/system.

s Pus expressed from the incision, and bacteria cultured from the pus.

t Included peritonitis or intra-abdominal infection, as confirmed by bacteria culture and required antibiotic therapy and/or drainage of the body cavity.

u Lack of bowel movement, flatulence, and requirement of intravenous fluid therapy for more than 1 week after surgery.

v Required gastric tube drainage and duodenal nutrition for more than 1 week after surgery.

w Continued decrease of hemoglobin level after surgery that required transfusion of 2 units or more of blood.

x Extravasation of contrast agent in the body cavity or retroperitoneal space that required percutaneous drainage.

y Stenosis of the pancreato-enteric anastomosis following pancreatoduodenectomy, as confirmed by magnetic resonance cholangiopancreatography.

z Diagnosed according to symptoms, ultrasound and laboratory test results, treated with endoscopic papillotomy.

aa Abdominal cavity drainage tube fractured after surgery and was then removed under local anesthesia.