Diagnosis of postoperative new neurologic events is based on the International Statistical Classification of Diseases and Related Health Problems, 10th Revision (ICD-10).1 The following are examples of criteria of neurological events diagnosed in the patients involved this study.

References:

1. World Health Organization. (2017). International Classification of Diseases. [online]. Available from <http://www.who.int/classifications/icd/en/>

**Table S1 Definitions of postoperative new neurologic events**

|  |  |
| --- | --- |
| **Category** | **Diagnosis** |
| Focal seizure | EEG evidence + clinical symptoms and signs |
| Muscle weakness | Muscle grade assessment for four limbs according to the Medical Research Council scale2 |
| Disorientation | A decrease of Glasgow Coma Scale (GCS) comparing to preoperative status  A mental state marked by confusion about time (temporal), place (spatial), or who one is.  Agitation, hallucination (visual or hearing) |
| Aphasia | A cognitive disorder marked by an impaired ability to comprehend or express language in its written or spoken form. |
| Visual disturbance | Anopsia, amblyopia…etc. |