Admission B-Type Natriuretic Peptide Levels Are Associated with In-hospital Cardiac Events in Patients with Intracranial Hemorrhage

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**Methods**

**Definition of ECG abnormality**

Pathologic Q wave (duration > 40 ms and > 25% depth of the R wave of QRS complex), QT prolongation (QTc interval > 450 msec), U wave (presence of negative U wave excluding aVR and positive U wave > 0.2 mV), ST elevation (ST segment elevation ≥ 0.1 mV), ST depression (ST segment depression ≥ 0.1 mV, 80 ms post-J point), T wave inversion (pathologic T wave inversion excluding aVL, III, aVR, V1), peaked T-wave (T-wave > 1 mV in precordial leads), giant T-wave inversions (T-wave inversions > 10 mV in depth), and nonspecific ST- or T-wave abnormalities (NSSTTWA) not meeting above criteria. Abnormal rhythm disturbance were classified sinus tachycardia (> 100 beats/min), sinus bradycardia (< 60 beat/min), supraventricular tachycardia, including atrial fibrillation, ventricular tachycardia or ventricular fibrillation. Atrial and ventricular premature beat and atrioventricular (AV) conduction disturbance (first degree AV block; PR interval > 200 ms, second- or third-degree AV block) were also determined. To be considered abnormal, a morphological abnormality was required to be present in at least one of ECG distribution in two or more leads. The lateral distribution included ECG changes in the leads I and aVL. The anterior distribution included ECG changes in the precordial leads V1 to V3.