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**Supplementary Figure 1:** Flowchart of population inclusion and exclusion. CPR: Cardiopulmonary resuscitation; IHCA: In-hospital cardiac arrest; ROSC: Return of spontaneous circulation.



**Supplementary Figure 2:** Predictors for ROSC (A) and survival to hospital discharge (B) after IHCA by using logistic regression analysis. ACCI: Age-adjusted Charlson Comorbidity index; CA: Cardiac arrest; CI: Confidence interval; CPR: Cardiopulmonary resuscitation; HR: Hazard ratio; IHCA: In-hospital cardiac arrest; ROSC: Return of spontaneous circulation.



**Supplementary Figure 3:** Kaplan-Meier curves of survival rate for the discharged patients with different CPC. CPC: Cerebral performance category.

**Supplementary Table 1: Characteristics of subjects who underwent in-hospital cardiac arrest between September 2019 and September 2020 at Tianjin Medical University General Hospital (*n*=324).**

|  |  |  |
| --- | --- | --- |
| **Characteristics** | **Number (*n*)** | **Percentage (%)** |
| Male | 207 | 63.89 |
| Smoking history |  |  |
| Never | 174 | 53.70 |
| Previous | 102 | 31.48 |
| Current  | 48 | 14.81 |
| Drinking history |  |  |
| Never | 212 | 65.43 |
| Previous | 62 | 19.14 |
| Current  | 50 | 15.43 |
| BMI (kg/m2) |  |  |
| ＜18.5 | 12 | 3.70 |
| ≥18.5 and ＜24.0 | 253 | 78.09 |
| ≥24.0 | 59 | 18.21 |
| Comorbidity  |  |  |
| Cardiovascular disease | 304 | 93.83 |
| Hypertension | 173 | 53.40 |
| Chronic obstructive pulmonary disease | 122 | 37.65 |
| Diabetes mellitus | 113 | 34.88 |
| Central nervous system | 114 | 35.19 |
| Cause of CA |  |  |
| Cardiogenic diseases | 154 | 47.53 |
| Neural diseases | 71 | 21.91 |
| Respiratory diseases | 32 | 9.88 |
| Digestive diseases | 17 | 5.25 |
| Traumatism  | 15 | 4.63 |
| Others  | 35 | 10.80 |
| Initial rhythm |  |  |
| Shockable | 40 | 12.35 |
| Non-shockable | 284 | 87.65 |
| CPC grade at discharge\* |  |  |
| 1 | 21 | 70.00 |
| 2 | 5 | 16.67 |
| 3 | 3 | 10.00 |
| 4 | 1 | 3.33 |
| 5 | 0 | 0 |

∗There were 30 patients who survived to hospital discharge. BMI: Body mass index; CA: Cardiac arrest; CPC: Cerebral performance category.