

**Supplementary Material 1.** Questionnaire on the perception of intensivists on the appropriateness of intensive care unit admission**Term Definitions**

- 1) Non-beneficial admission is defined when one of the following three conditions is satisfied: (1) serious underlying disease and irreversibility; (2) serious neurologic condition; and (3) imminent death within 7 days, which are defined as follows. First, “serious underlying disease and irreversibility” refers to end-stage disease with no further treatment available. For example, the “serious underlying disease” is stage IV lung cancer, and “irreversibility” refers to a condition in which there are no more drugs to use to improve lung cancer or a patient is no longer in a condition to be treated for a disease. Second, a “serious neurologic condition” is a condition evaluated to have difficulties in achieving recovery of meaningful consciousness in the future owing to serious neurological damage, such as severe brain injury. Third, “imminent death within 7 days” is defined as a condition in which death is predicted within a week because the current condition is very severe, and resuscitation is difficult even if intensive care is received.
- 2) Beneficial admission is defined when one of the following three conditions is satisfied: (1) a case that does not belong to any of the three abovementioned non-beneficial states, (2) when it is not expected that the patient would be dependent on life-sustaining treatment, and (3) when the patient is expected to recover after receiving intensive care and discharge from the intensive care unit (ICU) or the hospital.
- 3) Indeterminate state is defined when the decision is withheld when a patient’s overall status remains at the boundary between non-beneficial and beneficial admissions and it is difficult to determine either state.

**I. Day 1 (ICU admission)**

Question 1) According to the abovementioned definitions, do you think this patient’s ICU admission will be beneficial or non-beneficial? If it is difficult to decide based on the current state alone, please select indeterminate.

- 1) Non-beneficial
- 2) Beneficial
- 3) Indeterminate

Question 2) If you perceived it as non-beneficial, why did you judge it that way?

- 1) Serious underlying disease and its irreversibility
- 2) Serious neurologic condition
- 3) Imminent death within 7 days

**II. Day 3 (48–72 hours after ICU admission)**

Question 1) According to the abovementioned definitions, do you think this patient’s ICU admission will be beneficial or non-beneficial? If it is difficult to decide based on the current state alone, please select indeterminate.

- 1) Non-beneficial
- 2) Beneficial
- 3) Indeterminate

Question 2) If you perceived it as non-beneficial, why did you judge it that way?

- 1) Serious underlying disease and its irreversibility
- 2) Serious neurologic condition
- 3) Imminent death within 7 days