

Subject ID: \_\_\_\_\_ - \_\_\_\_\_

**STandard versus Accelerated initiation of Renal Replacement Therapy in Acute Kidney Injury  
(STARRT-AKI): A Multi-Centre, Randomized, Controlled Trial**



**CRF Version 4.0  
April 2, 2018**

Subject ID: \_\_\_\_\_ - \_\_\_\_\_

**PART I:**  
**ELIGIBILITY AND ENROLLMENT**

**FORM 1 – ELIGIBILITY**

| <b>INCLUSION CRITERIA (Each of criteria 1 through 5 must be fulfilled at the time of screening assessment)</b>  |   |
|---|---|
| 1. Age $\geq$ 18 years  | <input type="checkbox"/> Y <input type="checkbox"/> N   |
| 2. Admission to a critical care unit (ICU)  | <input type="checkbox"/> Y <input type="checkbox"/> N   |
| 3. Evidence of kidney dysfunction [serum creatinine $\geq$ 100 $\mu$ mol/L (1.1 mg/dL) in women and $\geq$ 130 $\mu$ mol/L (1.5 mg/dL) in men]  | <input type="checkbox"/> Y <input type="checkbox"/> N   |
| 4. Evidence of severe AKI, defined by at least ONE of the following three criteria:   |   |
| i) $\geq$ 2-fold increase in serum creatinine (sCR) from baseline <sup>§</sup> (see definition below) or during the current hospitalization; OR   | <input type="checkbox"/> Y <input type="checkbox"/> N   |
| ii) Achievement of a serum creatinine $\geq$ 354 $\mu$ mol/L (4.0 mg/dL) with evidence of a minimum increase of 27 $\mu$ mol/L (0.3 mg/dL) from a pre-morbid baseline <sup>§</sup> (see definition below) or during the current hospitalization OR  | <input type="checkbox"/> Y <input type="checkbox"/> N   |
| iii) Urine output $<$ 6.0 mL/kg over the preceding 12 hours   | <input type="checkbox"/> Y <input type="checkbox"/> N   |
| <i>§ Baseline serum creatinine will be defined as the outpatient (pre-morbid) serum creatinine closest to the date of hospitalization and within 365 days prior to index hospitalization or if unavailable, the lowest serum creatinine documented during the current hospitalization. Please insert value used</i> | <input type="text"/> <input type="text"/> <input type="text"/><br>$\mu$ mol/L   |
| <b>EXCLUSION CRITERIA (Any one criterion fulfilled and the patient is ineligible)</b>   |   |
| 1. Serum potassium $>$ 5.5 mmol/L   | <input type="checkbox"/> Y <input type="checkbox"/> N   |
| 2. Serum bicarbonate $<$ 15 mmol/L  | <input type="checkbox"/> Y <input type="checkbox"/> N   |
| 3. Presence of a drug overdose that necessitates initiation of RRT  | <input type="checkbox"/> Y <input type="checkbox"/> N   |
| 4. Lack of commitment to ongoing life support (including RRT)   | <input type="checkbox"/> Y <input type="checkbox"/> N   |
| 5. Any RRT within the previous 2 months (either acute or chronic RRT)   | <input type="checkbox"/> Y <input type="checkbox"/> N   |
| 6. Kidney transplant within the last 365 days   | <input type="checkbox"/> Y <input type="checkbox"/> N   |
| 7. Known pre-hospitalization advanced chronic kidney disease, defined by an eGFR $<$ 20 mL/min/1.73m <sup>2</sup>   | <input type="checkbox"/> Y <input type="checkbox"/> N   |
| 8. Presence or clinical suspicion of renal obstruction, rapidly progressive glomerulonephritis, vasculitis, thrombotic microangiopathy, or acute interstitial nephritis   | <input type="checkbox"/> Y <input type="checkbox"/> N   |
| 9. Clinician(s) caring for patient believe(s) that immediate RRT is absolutely mandated<br><i>(If YES, remember to complete Form 3)</i>   | <input type="checkbox"/> Y <input type="checkbox"/> N   |
| If YES, ask clinician(s) for the ONE main reason for their opinion that immediate RRT is mandated   | <input type="checkbox"/> Patient has life-threatening volume overload<br><input type="checkbox"/> Patient has a life-threatening acid-base disturbance<br><input type="checkbox"/> Patient has a life-threatening electrolyte abnormality<br><input type="checkbox"/> Patient has severe non-renal organ dysfunction<br><input type="checkbox"/> Patient has another compelling reason to initiate dialysis (please specify): _____ |
| 10. Clinician(s) caring for patient believe(s) that deferral of RRT initiation is mandated<br><i>(If YES, remember to complete Form 3)</i>  | <input type="checkbox"/> Y <input type="checkbox"/> N   |
| If YES, ask clinician(s) for the ONE main reason for their opinion that deferral of RRT is mandated   | <input type="checkbox"/> There is no evidence of volume overload<br><input type="checkbox"/> Vascular access would not be feasible  |

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- Patient will soon recover kidney function
- Patient is clinically improving in non-renal domains
- Patient has another compelling reason to defer RRT (please specify): \_\_\_\_\_

**ELIGIBILITY**

According to the screening criteria above, is the patient eligible for the study?  Y  N

If YES, date (dd/mmm/yyyy) of full eligibility: / /

Time (24h clock) of full eligibility: :

**PROVISIONAL ELIGIBILITY**

Date (dd/mmm/yyyy) of provisional eligibility: / /

Time (24h clock) of provisional eligibility: :

Eligibility reviewed by: \_\_\_\_\_ Signature: \_\_\_\_\_  
(print investigator name)

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_ Time (24h): \_\_\_\_:\_\_\_\_  
dd mmm yyyy)

**FORM 2 – CONSENT**

|  |   |  |  |
|--|---|--|--|
| <p><b>1a) Was consent of ANY approved type (from patient or substitute decision maker) <u>OR</u> was a decision taken to randomize the patient using a deferred/delayed) consent mechanism (at sites where permitted)?</b> <i>(If NO, remember to complete Form 3)</i></p>   | <p align="right"><input type="checkbox"/> Y <input type="checkbox"/> N</p>  |  |  |
| <p><b>1b) If NO, reason for inability to obtain consent within 12 hours</b></p>  | <p><input type="checkbox"/> Patient refusal</p> <p><input type="checkbox"/> Patient could not come to final decision within 12 hours of eligibility</p> <p><input type="checkbox"/> SDM refusal (when patient lacks capacity)</p> <p><input type="checkbox"/> SDM could not come to final decision within 12 hours of eligibility</p> <p><input type="checkbox"/> Inability to contact a SDM during the 12 hour period after fulfilling eligibility and deferred/delayed consent not an option</p> <p><input type="checkbox"/> Other, specify: _____</p>  |  |  |
| <p><b>2a) Date of initial consent (from patient or SDM), <u>OR</u> documentation for use of deferred/delayed consent</b></p>   | <p align="center"> <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/><br/> <i>(dd/mmm/yyyy)</i> </p>  |  |  |
| <p><b>2b) Time of initial consent (24h) <u>OR</u> documentation of use of deferred/delayed consent model</b></p>   | <p align="center"> <input type="text"/> <input type="text"/> : <input type="text"/> <input type="text"/><br/> <i>24 hour clock</i> </p>   |  |  |
| <p><b>3) What type of consent model was used for study entry (i.e., prior to randomization)?</b></p>   | <p><input type="checkbox"/> Patient consent <span style="margin-left: 150px;"><input type="checkbox"/> SDM consent (Go to Q4)</span></p> <p><input type="checkbox"/> Deferred/delayed consent model (Go to Q5) <span style="margin-left: 150px;"><input type="checkbox"/> Other, specify: _____</span></p>  |  |  |
| <p><b>4) If SDM consent (in person or via telephone) was obtained for study entry, was consent ultimately obtained from the patient to continue participation in STARRT-AKI post-randomization?</b></p>  | <table border="0"> <tr> <td style="vertical-align: top;"> <p><input type="checkbox"/> Yes</p> <p><b>Date of Patient Consent:</b><br/> <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/><br/> <i>(dd/mmm/yyyy)</i></p> <p><b>Time (24h):</b> <input type="text"/> <input type="text"/> : <input type="text"/> <input type="text"/></p> </td> <td style="vertical-align: top;"> <p><input type="checkbox"/> No; Why not?</p> <p><input type="checkbox"/> Patient did not regain capacity</p> <p><input type="checkbox"/> Patient refused</p> <p><input type="checkbox"/> N/A</p> </td> </tr> </table>  | <p><input type="checkbox"/> Yes</p> <p><b>Date of Patient Consent:</b><br/> <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/><br/> <i>(dd/mmm/yyyy)</i></p> <p><b>Time (24h):</b> <input type="text"/> <input type="text"/> : <input type="text"/> <input type="text"/></p> | <p><input type="checkbox"/> No; Why not?</p> <p><input type="checkbox"/> Patient did not regain capacity</p> <p><input type="checkbox"/> Patient refused</p> <p><input type="checkbox"/> N/A</p>   |
| <p><input type="checkbox"/> Yes</p> <p><b>Date of Patient Consent:</b><br/> <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/><br/> <i>(dd/mmm/yyyy)</i></p> <p><b>Time (24h):</b> <input type="text"/> <input type="text"/> : <input type="text"/> <input type="text"/></p> | <p><input type="checkbox"/> No; Why not?</p> <p><input type="checkbox"/> Patient did not regain capacity</p> <p><input type="checkbox"/> Patient refused</p> <p><input type="checkbox"/> N/A</p>  |  |  |
| <p><b>5) If a deferred/delayed consent model was used, was consent obtained to continue participation in STARRT-AKI post-randomization?</b></p>  | <table border="0"> <tr> <td style="vertical-align: top;"> <p><input type="checkbox"/> Yes</p> <p><b>By what method(s) was consent to continue participation in STARRT-AKI post-randomization obtained?</b><br/> <i>(Check all that apply)</i></p> <p><input type="checkbox"/> Patient consent</p> <p><input type="checkbox"/> SDM consent</p> <p><input type="checkbox"/> Other, specify: _____</p> </td> <td style="vertical-align: top;"> <p><input type="checkbox"/> No</p> <p><b>By what method(s) was consent to continue participation in STARRT-AKI post-randomization either declined or not obtained?</b><br/> <i>(Check all that apply)</i></p> <p><input type="checkbox"/> Patient declined</p> <p><input type="checkbox"/> SDM declined</p> <p><input type="checkbox"/> Patient died before consent encounter could take place</p> <p><input type="checkbox"/> Patient lost to follow-up</p> <p><input type="checkbox"/> Patient did not regain capacity and unable to contact a decision maker</p> <p><input type="checkbox"/> Language barrier and no translator available</p> <p><input type="checkbox"/> Other, specify: _____</p> </td> </tr> </table> | <p><input type="checkbox"/> Yes</p> <p><b>By what method(s) was consent to continue participation in STARRT-AKI post-randomization obtained?</b><br/> <i>(Check all that apply)</i></p> <p><input type="checkbox"/> Patient consent</p> <p><input type="checkbox"/> SDM consent</p> <p><input type="checkbox"/> Other, specify: _____</p>  | <p><input type="checkbox"/> No</p> <p><b>By what method(s) was consent to continue participation in STARRT-AKI post-randomization either declined or not obtained?</b><br/> <i>(Check all that apply)</i></p> <p><input type="checkbox"/> Patient declined</p> <p><input type="checkbox"/> SDM declined</p> <p><input type="checkbox"/> Patient died before consent encounter could take place</p> <p><input type="checkbox"/> Patient lost to follow-up</p> <p><input type="checkbox"/> Patient did not regain capacity and unable to contact a decision maker</p> <p><input type="checkbox"/> Language barrier and no translator available</p> <p><input type="checkbox"/> Other, specify: _____</p> |
| <p><input type="checkbox"/> Yes</p> <p><b>By what method(s) was consent to continue participation in STARRT-AKI post-randomization obtained?</b><br/> <i>(Check all that apply)</i></p> <p><input type="checkbox"/> Patient consent</p> <p><input type="checkbox"/> SDM consent</p> <p><input type="checkbox"/> Other, specify: _____</p>  | <p><input type="checkbox"/> No</p> <p><b>By what method(s) was consent to continue participation in STARRT-AKI post-randomization either declined or not obtained?</b><br/> <i>(Check all that apply)</i></p> <p><input type="checkbox"/> Patient declined</p> <p><input type="checkbox"/> SDM declined</p> <p><input type="checkbox"/> Patient died before consent encounter could take place</p> <p><input type="checkbox"/> Patient lost to follow-up</p> <p><input type="checkbox"/> Patient did not regain capacity and unable to contact a decision maker</p> <p><input type="checkbox"/> Language barrier and no translator available</p> <p><input type="checkbox"/> Other, specify: _____</p>  |  |  |

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**FORM 3 –PROVISIONALLY ELIGIBLE BUT NOT RANDOMIZED**

(Only complete this form for patients excluded from participation due to exclusion criterion 9, exclusion criterion 10, or an inability to document consent/deferral of consent within 12 hours of meeting full eligibility criteria)

|   |   |   |                                 |  |   |   |
|---|---|---|---------------------------------|--|---|---|
| <b>Screening ID</b>   |   |   |                                 |  |   |   |
| <b>Age (on the day of eligibility screening)</b>  |   | □□□   |                                 |  |   |   |
| <b>Patient Initials:</b>  |   | ____ - ____ - ____  |                                 |  |   |   |
| <b>Sex:</b>   |   | <input type="checkbox"/> Male <input type="checkbox"/> Female |                                 |  |   |   |
| <b>BLOODWORK</b> (last available value at the time of eligibility screening)  |   |   |                                 |  |   |   |
| <b>Arterial pH</b>  |   | □.□□  |                                 |  |   |   |
| <b>PaO<sub>2</sub>/FiO<sub>2</sub></b>  |   | □□□   |                                 |  |   |   |
| <b>Serum potassium</b>  |   | □.□ mmol/L  |                                 |  |   |   |
| <b>Serum bicarbonate</b>  |   | □□ mmol/L   |                                 |  |   |   |
| <b>Serum Urea or BUN</b>  |   | □□.□ mmol/L or □□ mg/dL                                       |                                 |  |   |   |
| <b>Serum creatinine</b>   |   | □□□□ μmol/L or □□.□ mg/dL                                     |                                 |  |   |   |
| <b>INTERVENTIONS</b> (at the time of eligibility assessment)  |   |   |                                 |  |   |   |
| <b>Receiving mechanical ventilation?</b> (invasive or non-invasive)   |   | <input type="checkbox"/> Y <input type="checkbox"/> N         |                                 |  |   |   |
| <b>Receiving vasopressor(s)</b> (norepinephrine, epinephrine, vasopressin, phenylephrine) and/or inotrope(s) (dobutamine, milrinone)? |   | <input type="checkbox"/> Y <input type="checkbox"/> N         |                                 |  |   |   |
| <b>SOFA</b> (most extreme result for each component in the 24 hours preceding eligibility assessment) – see appendix                  |   |   |                                 |  |   |   |
| <b>SOFA Score</b>   |   | <b>0</b>  | <b>1</b>                        | <b>2</b>   | <b>3</b>  | <b>4</b>  |
| <b>Respiration</b>  | PaO <sub>2</sub> /FiO <sub>2</sub>      | > 400   | ≤ 400<br>± resp support         | ≤ 300<br>± resp support  | ≤ 200<br>+ resp support   | < 100<br>+ resp support   |
|   | Score:                                  | □   | □                               | □  | □   | □   |
| <b>Coagulation</b>  | Platelets (x10 <sup>9</sup> /L)         | >150  | 101- 150                        | 50-100   | 20-49   | <20   |
|   | Score:                                  | □   | □                               | □  | □   | □   |
| <b>Liver</b>  | Bilirubin                               | <20 μmol/L<br>(<1.2 mg/dL)                                    | 20-32 μmol/L<br>(1.2-1.9 mg/dL) | 33-101 μmol/L<br>(2.0-5.9 mg/dL)   | 102-204 μmol/L<br>(6.0-11.9 mg/dL)  | >204 μmol/L<br>(>11.9 mg/dL)  |
|   | Score:                                  | □   | □                               | □  | □   | □   |
| <b>Cardiovascular</b>   | Blood Pressure and Support Requirements | MAP ≥ 70 mmHg   | MAP < 70 mmHg                   | DA ≤ 5 μg/kg/min or<br><b>Dobutamine</b> (any dose)<br>or<br><b>Milrinone</b> (any dose) | DA >5 μg/kg/min or<br><b>EPI</b> ≤ 0.1μg/kg/min or<br><b>NE</b> ≤ 0.1 μg/kg/min or<br><b>VP</b> ≤ 1.8 U/hr or<br><b>Phenylephrine</b> (any infusion dose but NOT bolus) | DA > 15 μg/kg/min or<br><b>EPI</b> > 0.1μg/kg/min or<br><b>NE</b> > 0.1 μg/kg/min or<br><b>VP</b> >1.8 U/hr |
|   | Score:                                  | □   | □                               | □  | □   | □   |

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|                          |                    |                          |                                |                                  |   |   |
|--------------------------|--------------------|--------------------------|--------------------------------|----------------------------------|---|---|
| <b>CNS</b>               | Glasgow Coma Scale | 15                       | 13-14                          | 10-12                            | 6-9   | <6  |
|                          | Score:             | <input type="checkbox"/> | <input type="checkbox"/>       | <input type="checkbox"/>         | <input type="checkbox"/>                                      | <input type="checkbox"/>  |
| <b>Renal</b>             | Creatinine         | ≤ 97 μmol/L (≤1.1 mg/dL) | 98 – 168 μmol/L (1.2-1.9mg/dL) | 169 – 299 μmol/L (2.0-3.4 mg/dL) | 300 – 433 μmol/L (3.5-4.9 mg/dL) or urine output ≤ 500 mL/day | ≥ 433 μmol/L (≥5.0 mg/dL) or urine output < 200 mL/d or patient receiving RRT |
|                          | Score:             | <input type="checkbox"/> | <input type="checkbox"/>       | <input type="checkbox"/>         | <input type="checkbox"/>                                      | <input type="checkbox"/>  |
| <b>Total SOFA score:</b> |                    |                          |                                |                                  | _____   |   |

| <b>OUTCOMES</b>   |  |
|---|--|
| <b>RRT administered in the hospital?</b>  | <input type="checkbox"/> Y <input type="checkbox"/> N  |
| <b>If YES, date started (dd/mmm/yyyy):</b>  | <input type="text"/> / <input type="text"/> / <input type="text"/>   |
| <b>Discharged alive from ICU?</b>   | <input type="checkbox"/> Y <input type="checkbox"/> N  |
| <b>If YES, date of ICU discharge (dd/mmm/yyyy):</b>   | <input type="text"/> / <input type="text"/> / <input type="text"/>   |
| <b>Discharged alive from hospital?</b>  | <input type="checkbox"/> Y <input type="checkbox"/> N  |
| <b>If YES:</b><br><b>Date of hospital discharge (dd/mmm/yyyy):</b><br><b>Final creatinine prior to hospital discharge:</b><br><b>RRT dependent at hospital discharge?</b> | <input type="text"/> / <input type="text"/> / <input type="text"/><br><input type="text"/> μmol/L<br><input type="checkbox"/> Y <input type="checkbox"/> N |
| <b>Death in hospital?</b>   | <input type="checkbox"/> Y <input type="checkbox"/> N  |
| <b>If YES, date of death (dd/mmm/yyyy):</b>   | <input type="text"/> / <input type="text"/> / <input type="text"/>   |

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### FORM 4 – RANDOMIZATION

|   |   |
|---|---|
| <b>RANDOMIZATION</b> (prior to randomizing ensure that patient is fully eligible and that consent or deferral of consent has been documented) |   |
| <b>Date of Randomization (dd-mmm-yyyy)</b>  | □□/□□□/□□□□   |
| <b>Time of Randomization (24 hr clock)</b>  | □□:□□   |
| <b>Randomization Arm</b>  | <input type="checkbox"/> Accelerated RRT initiation<br><input type="checkbox"/> Standard RRT initiation |
| <b>Is this patient randomized in the PLUS (Plasma-Lyte 148® versUs Saline) Study?</b>   | <input type="checkbox"/> Y <input type="checkbox"/> N   |
| <b>If YES:<br/>What is the PLUS Treatment Pack number for this patient?</b>   | □□□□□□□□  |



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# **PART II: BASELINE**

Subject ID: \_\_\_\_\_ - \_\_\_\_\_

**FORM 5: DEMOGRAPHICS & DETAILS OF HOSPITALIZATION**

| DEMOGRAPHICS   |  |   |
|--|--|---|
| <b>Date of Birth</b><br><i>If you ethics board does not permit collection of a full date of birth, please enter the day as 1, 15, or 30 as per your site requirements.</i> | <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/><br>(dd-mmm-yyyy)  |   |
| <b>Sex</b>   | <input type="checkbox"/> Male <input type="checkbox"/> Female  |   |
| <b>Race</b>  | <input type="checkbox"/> First Nations<br><input type="checkbox"/> Asian<br><input type="checkbox"/> Black<br><input type="checkbox"/> Hawaiian/Pacific Islander<br><input type="checkbox"/> White <input type="checkbox"/> Multi-race <input type="checkbox"/> Other  |   |
| <b>Ethnicity</b>   | <input type="checkbox"/> Non-Hispanic <input type="checkbox"/> Hispanic  |   |
| <b>Earliest available weight since admission</b>   | <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> kg <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> pounds  |   |
| DETAILS OF HOSPITALIZATION   |  |   |
| <b>Patient transferred from another acute care hospital?</b>   | <input type="checkbox"/> <b>Yes</b>  | <input type="checkbox"/> <b>No</b>  |
|  | <b>Date of original hospital admission (dd-mmm-yyyy):</b><br><input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>  | <b>Date of hospital admission at research site (dd-mmm-yyyy):</b><br><input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> |
|  | <b>Date of transfer to research site (date of hospital admission at research site - dd-mmm-yyyy):</b><br><input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>  | <b>Date of ICU admission (dd-mmm-yyyy):</b><br><input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>                       |
|  | <b>Date of ICU admission at research site (dd-mmm-yyyy):</b><br><input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>   | <b>Time of ICU admission (24hr clock):</b><br><input type="text"/> <input type="text"/> : <input type="text"/> <input type="text"/>   |
|  | <b>Time of ICU admission at research site (24hr clock):</b><br><input type="text"/> <input type="text"/> : <input type="text"/> <input type="text"/>   |   |
| <b>Diagnostic category (check the ONE category most responsible for admission):</b>  | <input type="checkbox"/> Cardiovascular <input type="checkbox"/> Respiratory<br><input type="checkbox"/> Gastrointestinal/hepatic <input type="checkbox"/> Neurologic<br><input type="checkbox"/> Metabolic <input type="checkbox"/> Hematologic<br><input type="checkbox"/> Septic <input type="checkbox"/> Trauma<br><input type="checkbox"/> Other, specify _____ |   |

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### FORM 6- RISK FACTORS

| <b>PRE-HOSPITALIZATION RISK FACTORS</b>   |  |
|---|--|
| <b>Baseline serum creatinine</b><br>(closest outpatient value prior to the present hospitalization that is obtained no more than 365 days before the admission date for the current hospitalization; if such a value is not available, the lowest serum creatinine obtained on the present hospitalization is the baseline) | <div style="text-align: right;"> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <math>\mu\text{mol/L}</math> <i>or</i> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <math>\text{mg/dL}</math> </div> <b>Value obtained from:</b><br><input type="checkbox"/> Outpatient setting<br><input type="checkbox"/> Inpatient setting   |
| <b>Baseline estimated GFR based on CKD-EPI formula</b><br>(online calculator at <a href="http://www.qxmd.com/calculate-online/nephrology/ckd-epi-egfr">http://www.qxmd.com/calculate-online/nephrology/ckd-epi-egfr</a> )   | <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> $\text{mL/min/1.73m}^2$  |
| <b>Pre-hospitalization urine albumin concentration</b><br>(closest outpatient value prior to the present hospitalization and no more than 365 days before the current admission date)   | <div style="display: flex; justify-content: space-between;"> <div style="width: 70%;"> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <math>\text{mg/L}</math> <i>or</i><br/> <input type="checkbox"/> Not available <i>or</i><br/> <input type="checkbox"/> Exceeds upper limit of detection                             </div> <div style="width: 25%;">                     Units:<br/> <input type="checkbox"/> <math>\text{mg/L}</math><br/> <input type="checkbox"/> <math>\text{g/L}</math> </div> </div>  |
| <b>Pre-hospitalization urine protein concentration (if urine albumin concentration not available)</b><br>(closest outpatient value prior to the present hospitalization and no more than 365 days before the current admission date)  | <div style="display: flex; justify-content: space-between;"> <div style="width: 70%;"> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <math>\text{mg/L}</math> <i>or</i><br/> <input type="checkbox"/> Not available <i>or</i><br/> <input type="checkbox"/> Exceeds upper limit of detection                             </div> <div style="width: 25%;">                     Units:<br/> <input type="checkbox"/> <math>\text{mg/L}</math><br/> <input type="checkbox"/> <math>\text{g/L}</math> </div> </div>  |
| <b>Pre-hospitalization urine creatinine concentration</b><br>(closest outpatient value prior to the present hospitalization and no more than 365 days before the current admission date)  | <div style="display: flex; justify-content: space-between;"> <div style="width: 70%;"> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <math>\text{mg/L}</math> <i>or</i><br/> <input type="checkbox"/> Not available <i>or</i><br/> <input type="checkbox"/> Exceeds upper limit of detection                             </div> <div style="width: 25%;">                     Units:<br/> <input type="checkbox"/> <math>\text{mmol/L}</math><br/> <input type="checkbox"/> <math>\text{mg/L}</math><br/> <input type="checkbox"/> <math>\text{g/L}</math> </div> </div> |
| <b>Pre-hospitalization urinalysis (if neither urine albumin concentration nor urine protein concentration are available)</b><br>(closest outpatient value prior to the present hospitalization and no more than 365 days before the current admission date)   | <div style="display: flex; justify-content: space-between;"> <div style="width: 60%;"> <input type="checkbox"/> None<br/> <input type="checkbox"/> 1+<br/> <input type="checkbox"/> 2+                             </div> <div style="width: 35%;"> <input type="checkbox"/> 3+<br/> <input type="checkbox"/> Not Available                             </div> </div>  |
| <b>Hypertension</b>   | <input type="checkbox"/> Y <input type="checkbox"/> N  |
| <b>Diabetes mellitus</b>  | <input type="checkbox"/> Y <input type="checkbox"/> N  |
| <b>Heart failure</b>  | <input type="checkbox"/> Y <input type="checkbox"/> N  |
| <b>Coronary artery disease</b>  | <input type="checkbox"/> Y <input type="checkbox"/> N  |
| <b>Liver disease</b>  | <input type="checkbox"/> Y <input type="checkbox"/> N  |
| <b>HOSPITAL-ACQUIRED RISK FACTORS FOR AKI</b>   |  |
| <b>Cardiopulmonary bypass in the preceding 7 days</b>   | <input type="checkbox"/> Y <input type="checkbox"/> N  |
| <b>Aortic aneurysm repair in the preceding 7 days</b>   | <input type="checkbox"/> Y <input type="checkbox"/> N  |
| <b>Other vascular surgery in the preceding 7 days</b>   | <input type="checkbox"/> Y <input type="checkbox"/> N  |
| <b>Trauma in the preceding 7 days</b>   | <input type="checkbox"/> Y <input type="checkbox"/> N  |
| <b>IV contrast exposure in the preceding 7 days</b>   | <input type="checkbox"/> Y <input type="checkbox"/> N  |

Subject ID: \_\_\_\_\_ - \_\_\_\_\_

|   |   |
|---|---|
| Receipt of aminoglycoside in the preceding 7 days                             | <input type="checkbox"/> Y <input type="checkbox"/> N |
| Receipt of amphotericin B in the preceding 7 days                             | <input type="checkbox"/> Y <input type="checkbox"/> N |
| Obstetric complications in the preceding 7 days                               | <input type="checkbox"/> Y <input type="checkbox"/> N |
| <b>SEPSIS</b>   |   |
| Has patient met criteria for sepsis (see appendix) in the preceding 72 hours? | <input type="checkbox"/> Y <input type="checkbox"/> N |

**FORM 7 – PRE-RANDOMIZATION SOFA**

| SOFA (most extreme result for each component in the 24 hours preceding randomization) – see appendix |   |  |                                 |   |  |  |
|--|---|--|---------------------------------|---|--|--|
| SOFA Score   |   | 0                                      | 1                               | 2   | 3  | 4  |
| <b>Respiration</b>   | PaO <sub>2</sub> /FiO <sub>2</sub>      | > 400                                  | ≤ 400<br>± resp support         | ≤ 300<br>± resp support   | ≤ 200<br>+ resp support  | < 100<br>+ resp support  |
|  | Score:                                  | <input type="checkbox"/>               | <input type="checkbox"/>        | <input type="checkbox"/>  | <input type="checkbox"/>   | <input type="checkbox"/>   |
| <b>Coagulation</b>   | Platelets (x10 <sup>9</sup> /L)         | >150                                   | 101-150                         | 50-100  | 20-49  | <20  |
|  | Score:                                  | <input type="checkbox"/>               | <input type="checkbox"/>        | <input type="checkbox"/>  | <input type="checkbox"/>   | <input type="checkbox"/>   |
| <b>Liver</b>   | Bilirubin                               | <20 μmol/L<br>(<1.2 mg/dL)             | 20-32 μmol/L<br>(1.2-1.9 mg/dL) | 33-101 μmol/L<br>(2.0-5.9 mg/dL)  | 102-204 μmol/L<br>(6.0-11.9 mg/dL)   | >204 μmol/L<br>(>11.9 mg/dL)   |
|  | Score:                                  | <input type="checkbox"/>               | <input type="checkbox"/>        | <input type="checkbox"/>  | <input type="checkbox"/>   | <input type="checkbox"/>   |
| <b>Cardiovascular</b>  | Blood Pressure and Support Requirements | Mean Arterial Pressure (MAP) ≥ 70 mmHg | MAP < 70 mmHg                   | Dopamine ≤ 5 μg/kg/min or Dobutamine (any dose) or Milrinone (any dose) | Dopamine >5 μg/kg/min or Epinephrine ≤ 0.1μg/kg/min or Norepinephrine ≤ 0.1 μg/kg/min or Vasopressin ≤ 1.8 U/hr or Phenylephrine (any infusion dose but NOT bolus) | Dopamine > 15 μg/kg/min or Epinephrine > 0.1μg/kg/min or Norepinephrine > 0.1 μg/kg/min or Vasopressin >1.8 U/hr |
|  | Score:                                  | <input type="checkbox"/>               | <input type="checkbox"/>        | <input type="checkbox"/>  | <input type="checkbox"/>   | <input type="checkbox"/>   |
| <b>CNS</b>   | Glasgow Coma Scale                      | 15                                     | 13-14                           | 10-12   | 6-9  | <6   |
|  | Score:                                  | <input type="checkbox"/>               | <input type="checkbox"/>        | <input type="checkbox"/>  | <input type="checkbox"/>   | <input type="checkbox"/>   |
| <b>Renal</b>   | Creatinine                              | ≤ 97 μmol/L (≤1.1 mg/dL)               | 98 – 168 μmol/L (1.2-1.9mg/dL)  | 169 – 299 μmol/L (2.0-3.4 mg/dL)  | 300 – 433 μmol/L (3.5-4.9 mg/dL) or urine output ≤ 500 mL/day  | ≥ 433 μmol/L (≥5.0 mg/dL) or urine output < 200 mL/d or patient receiving RRT                                    |
|  | Score:                                  | <input type="checkbox"/>               | <input type="checkbox"/>        | <input type="checkbox"/>  | <input type="checkbox"/>   | <input type="checkbox"/>   |
| <b>Total SOFA score:</b>   |   |  |                                 |   | _____  |  |

Subject ID: \_\_\_\_\_ - \_\_\_\_\_

**FORM 8 – PRE-RANDOMIZATION SEVERITY OF ILLNESS**

| <b>SAPS II (Worst value during the 24 hours preceding randomization)</b>  |   |  |
|---|---|--|
| <b>Heart rate</b>   | <input type="text"/> <input type="text"/> <input type="text"/> beats/min  | <input type="checkbox"/> Not Available |
| <b>Systolic blood pressure</b>  | <input type="text"/> <input type="text"/> <input type="text"/> mmHg   | <input type="checkbox"/> Not Available |
| <b>Temperature</b>  | <input type="text"/> <input type="text"/> . <input type="text"/> degrees Celsius<br><input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> degrees F | <input type="checkbox"/> Not Available |
| <b>Glasgow coma scale</b>   | <input type="text"/> <input type="text"/>   | <input type="checkbox"/> Not Available |
| <b>Mechanical ventilation or CPAP?</b>  | <input type="checkbox"/> Yes <input type="checkbox"/> No  |  |
| <b>If YES, PaO<sub>2</sub>/FiO<sub>2</sub></b>  | <input type="text"/> <input type="text"/> <input type="text"/>  | <input type="checkbox"/> Not Available |
| <b>Urine output in ICU over preceding 24 hours:</b><br>If patient has been in ICU for under 24 hours, record urine output and specify the duration of collection: | <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> mL<br><br><input type="text"/> <input type="text"/> hours                                       | <input type="checkbox"/> Not Available |
| <b>Blood urea nitrogen</b>  | <input type="text"/> <input type="text"/> . <input type="text"/> mmol/L or <input type="text"/> <input type="text"/> mg/dL  | <input type="checkbox"/> Not Available |
| <b>Serum urea</b>   | <input type="text"/> <input type="text"/> . <input type="text"/> mmol/L or <input type="text"/> <input type="text"/> mg/dL  | <input type="checkbox"/> Not Available |
| <b>Serum sodium</b>   | <input type="text"/> <input type="text"/> <input type="text"/> mmol/L <i>or</i>   | <input type="checkbox"/> Not Available |
| <b>Serum potassium</b>  | <input type="text"/> . <input type="text"/> mmol/L <i>or</i>  | <input type="checkbox"/> Not Available |
| <b>Serum bicarbonate</b>  | <input type="text"/> <input type="text"/> mmol/L <i>or</i>  | <input type="checkbox"/> Not Available |
| <b>Bilirubin</b>  | <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> μmol/L or <input type="text"/> <input type="text"/> . <input type="text"/> mg/dL              | <input type="checkbox"/> Not Available |
| <b>WBC count</b>  | <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> x10 <sup>9</sup> /L <i>or</i>   | <input type="checkbox"/> Not Available |
| <b>Metastatic cancer</b>  | <input type="checkbox"/> Yes <input type="checkbox"/> No  |  |
| <b>Hematologic malignancy</b>   | <input type="checkbox"/> Yes <input type="checkbox"/> No  |  |
| <b>AIDS</b>   | <input type="checkbox"/> Yes <input type="checkbox"/> No  |  |
| <b>Type of admission:</b>   | <input type="checkbox"/> Scheduled surgical<br><input type="checkbox"/> Unscheduled surgical<br><input type="checkbox"/> Medical  |  |
| <b>SAPS II Score (optional – will be calculated at the end of the study):</b>   | <input type="text"/> <input type="text"/> <input type="text"/>  |  |

Subject ID: \_\_\_\_\_ - \_\_\_\_\_

**FORM 9 – PRE-RANDOMIZATION DATA**

| <b>PHYSIOLOGIC PARAMETERS</b> (last available value from the 24 hours preceding randomization) |   |   |
|--|---|---|
| Respiratory rate (breaths/min)   | <input type="text"/> <input type="text"/> <i>or</i>   | <input type="checkbox"/> Not Available  |
| Arterial pH  | <input type="text"/> . <input type="text"/> <input type="text"/> <i>or</i>  | <input type="checkbox"/> Not Available  |
| Cumulative fluid balance since current ICU admission   | (Circle) + / - <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> mL <i>or</i>  | <input type="checkbox"/> Not Available  |
| <b>LABORATORY DATA</b> (last available value from the 24 hours preceding randomization)        |   |   |
| Serum creatinine   | <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> μmol/L <i>or</i> <input type="text"/> <input type="text"/> . <input type="text"/> mg/dL | <input type="checkbox"/> Not Available  |
| Hemoglobin   | <input type="text"/> <input type="text"/> <input type="text"/> g/L <i>or</i> <input type="text"/> <input type="text"/> . <input type="text"/> g/dL <i>or</i>                | <input type="checkbox"/> Not Available  |
| Platelet count   | <input type="text"/> <input type="text"/> <input type="text"/> x10 <sup>9</sup> /L <i>or</i>  | <input type="checkbox"/> Not Available  |
| <b>INTERVENTIONS AT TIME OF RANDOMIZATION</b>  |   |   |
| If receiving mechanical ventilation or CPAP  | Maximum PEEP : <input type="text"/> <input type="text"/> cmH <sub>2</sub> O <i>or</i> <input type="checkbox"/> Not Applicable   |   |
|  | Mean Airway Pressure <input type="text"/> <input type="text"/> cmH <sub>2</sub> O <i>or</i> <input type="checkbox"/> Not Applicable   |   |
| Max dose of norepinephrine   | <input type="text"/> . <input type="text"/> <input type="text"/> μg/kg/min <i>or</i>  | <input type="checkbox"/> Not Applicable |
| Max dose of epinephrine  | <input type="text"/> <input type="text"/> . <input type="text"/> μg/kg/min <i>or</i>  | <input type="checkbox"/> Not Applicable |
| Max dose of vasopressin  | <input type="text"/> . <input type="text"/> units/hour <i>or</i>  | <input type="checkbox"/> Not Applicable |
| Max dose of phenylephrine  | <input type="text"/> <input type="text"/> . <input type="text"/> μg/kg/min <i>or</i>  | <input type="checkbox"/> Not Applicable |
| Max dose of dopamine   | <input type="text"/> <input type="text"/> . <input type="text"/> μg/kg/min <i>or</i>  | <input type="checkbox"/> Not Applicable |
| Max dose of dobutamine   | <input type="text"/> <input type="text"/> . <input type="text"/> μg/kg/min <i>or</i>  | <input type="checkbox"/> Not Applicable |
| Max dose of levosimendan   | <input type="text"/> <input type="text"/> . <input type="text"/> μg/kg/min <i>or</i>  | <input type="checkbox"/> Not Applicable |
| Max dose of milrinone  | <input type="text"/> . <input type="text"/> <input type="text"/> <input type="text"/> μg/kg/min <i>or</i>   | <input type="checkbox"/> Not Applicable |
| Receipt of diuretic 24 hours preceding randomization?  | <input type="checkbox"/> Yes <input type="checkbox"/> No  |   |
| Receipt of total parenteral nutrition (TPN)?   | <input type="checkbox"/> Yes <input type="checkbox"/> No  |   |
| Receipt of enteral nutrition?  | <input type="checkbox"/> Yes <input type="checkbox"/> No  |   |
| <b>QUALITY OF LIFE ASSESSMENTS AT BASELINE</b> (see appendix)                                  |   |   |
| EQ-5D-5L Assessment completed by:  | <input type="checkbox"/> Patient <input type="checkbox"/> SDM/Other <input type="checkbox"/> Not done   |   |
| Mobility (score 1-5; missing 9)  | <input type="checkbox"/>  |   |
| Self-care (score 1-5; missing 9)   | <input type="checkbox"/>  |   |
| Usual activities (score 1-5; missing 9)  | <input type="checkbox"/>  |   |
| Pain/discomfort (score 1-5; missing 9)   | <input type="checkbox"/>  |   |
| Anxiety/depression (score 1-5; missing 9)  | <input type="checkbox"/>  |   |
| EQ-VAS score (score 0 – 100)   | <input type="text"/> <input type="text"/> <input type="text"/>  |   |

Subject ID: \_\_\_\_\_ - \_\_\_\_\_

**CLINICAL FRAILTY SCORE**

- 1- Very Fit – robust, active, energetic and motivated
- 2- Well –no active disease symptoms but are less fit, active occasionally
- 3- Managing Well –well controlled medical problems, not regularly active
- 4- Vulnerable – not dependent, symptoms limit activities
- 5- Mildly Frail – more evident slowing need help with high order independent activities of daily living
- 6- Moderately Frail – need help with all outside activities, keeping house, bathing, and often have problems with stairs
- 7- Severely Frail – complete dependence for personal care (physical or cognitive)
- 8- Very Severely Frail –approaching end of life, unlikely to recover from minor illness.
- 9- Terminally Ill – life expectancy <6 months who are not otherwise evidently frail

Subject ID: \_\_\_\_\_ - \_\_\_\_\_

## **PART III: DAILY DATA DAY 0 TO DAY 14**



Subject ID: \_\_\_\_\_ - \_\_\_\_\_

**FORM 10 – DAILY DATA: DAYS 0 TO 14**

*Note: Record the first value of the day. Daily Data is only collected when patient is in the ICU.*

|  |  |
|--|--|
| <b>Assessment Day</b><br>(Day 0=Day of Randomization )                                       | <input type="checkbox"/> Day 0 <input type="checkbox"/> Day 1 <input type="checkbox"/> Day 2 <input type="checkbox"/> Day 3<br><input type="checkbox"/> Day 4 <input type="checkbox"/> Day 5 <input type="checkbox"/> Day 6 <input type="checkbox"/> Day 7<br><br><input type="checkbox"/> Day 8 <input type="checkbox"/> Day 9 <input type="checkbox"/> Day 10 <input type="checkbox"/> Day 11<br><br><input type="checkbox"/> Day 12 <input type="checkbox"/> Day 13 <input type="checkbox"/> Day 14 |
| <b>Assessment Date</b><br>(dd-mmm-yyyy)  | <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>   |
| <b>LABORATORY AND PHYSIOLOGIC PARAMETERS</b>   |  |
| <b>Urine Output on study day</b>   | <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> mL   |
| <b>Hours of urine collection</b>   | <input type="text"/> <input type="text"/> : <input type="text"/> <input type="text"/> 24h  |
| <b>Total fluid balance</b>   | <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> mL   |
| <b>Serum Creatinine</b>  | <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> μmol/L or <input type="text"/> <input type="text"/> . <input type="text"/> mg/dL   |
| <b>Serum Potassium</b>   | <input type="text"/> . <input type="text"/> mmol/L<br><br><i>If serum potassium was &lt;3.0 at any time during the study day, and if this event was deemed to be related to study procedures, then please complete the AE form.</i>  |
| <b>Serum Phosphate</b>   | <input type="text"/> . <input type="text"/> mmol/L<br><br><i>If serum phosphate was &lt;0.5 at any time during the study day, and if this event was deemed to be related to study procedures, then please complete the AE form.</i>  |
| <b>Serum Bicarbonate</b>   | <input type="text"/> <input type="text"/> mmol/L   |
| <b>Arterial pH</b>   | <input type="text"/> . <input type="text"/> <input type="text"/>   |
| <b>Ionized calcium</b>   | <input type="text"/> . <input type="text"/> <input type="text"/> mmol/L<br><br><i>If ionized calcium was &lt;0.90 at any time during the study day, and if this event was deemed to be related to study procedures, then please complete the AE form.</i>  |
| <b>PaO<sub>2</sub>/FiO<sub>2</sub></b>   | <input type="text"/> <input type="text"/> <input type="text"/>   |
| <b>Haemoglobin</b>   | <input type="text"/> <input type="text"/> <input type="text"/> g/L <input type="text"/> <input type="text"/> . <input type="text"/> g/dL   |
| <b>RENAL REPLACEMENT THERAPY</b>   |  |
| <b>Receiving RRT on study day? (Y/N)</b>   | <input type="checkbox"/> Yes <input type="checkbox"/> No   |
| <b>If YES, was RRT <i>initiated</i> for the first time since randomization on study day?</b> | <input type="checkbox"/> Yes <input type="checkbox"/> N/A- initiated on previous study day   |
| <b>If receiving RRT on study day, RRT</b>  | <input type="checkbox"/> IHD <input type="checkbox"/> SLED   |

Subject ID: \_\_\_\_\_ - \_\_\_\_\_

|   |  |
|---|--|
| <b>modality</b>                               | <input type="checkbox"/> CRRT; dose prescribed _____ mL/kg/hr  |
| <b>Duration prescribed</b>                    | <input type="checkbox"/> <input type="checkbox"/> hours <input type="checkbox"/> <input type="checkbox"/> minutes  |
| <b>Anticoagulation</b>                        | <input type="checkbox"/> IV heparin <input type="checkbox"/> regional citrate <input type="checkbox"/> None<br><input type="checkbox"/> Other, specify: _____  |
| <b>Ultrafiltration achieved</b>               | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> mL  |
| <b>VASCULAR ACCESS</b>                        |  |
| <b>Vascular access inserted on study day?</b> | <input type="checkbox"/> Yes<br><br><b>SITE:</b> <input type="checkbox"/> IJ <input type="checkbox"/> Subclavian <input type="checkbox"/> Femoral<br><b>SIDE</b> <input type="checkbox"/> Right <input type="checkbox"/> Left<br><br><input type="checkbox"/> No |

**\*Criteria for RRT initiation in the standard arm:**

- a) Persistent severe AKI defined as sCr that remains > 50% of the value recorded at randomization

AND at least one of the following indications for RRT initiation:

- a) Serum potassium  $\geq$  6.0 mmol/L, or  
 b) pH < 7.20 or serum bicarbonate  $\leq$  12 mmol/L, or  
 c) Evidence of severe respiratory failure, based on a PaO<sub>2</sub>/FiO<sub>2</sub> < 200 and clinical perception of volume overload, or  
 d) Persistent severe AKI (sCr remains > 50% the value recorded at randomization) for > 72 hours from randomization

Subject ID: \_\_\_\_\_ - \_\_\_\_\_

### FORM 11 – RRT INITIATION DATA

| Date and Time of RRT Initiation (insert the <i>calendar</i> date and time of RRT initiation)  |   |  |                                   |  |   |  |
|---|---|--|-----------------------------------|--|---|--|
| Date of RRT Initiation<br>(dd/mmm/yyyy)   |   | □□/□□□/□□□□                            |                                   |  |   |  |
| Time of RRT Initiation  |   | □□:□□ 24h                              |                                   |  |   |  |
| SOFA at RRT Initiation (use last available result prior to RRT initiation for each component) |   |  |                                   |  |   |  |
| SOFA Score  |   | 0                                      | 1                                 | 2  | 3   | 4  |
| <b>Respiration</b>  | PaO <sub>2</sub> /FiO <sub>2</sub>      | > 400                                  | ≤ 400<br>± resp support           | ≤ 300<br>± resp support  | ≤ 200<br>+ resp support   | < 100<br>+ resp support  |
|   | Score:                                  | □                                      | □                                 | □  | □   | □  |
| <b>Coagulation</b>  | Platelets (x10 <sup>9</sup> /L)         | >150                                   | 101-150                           | 50-100   | 20-49   | <20  |
|   | Score:                                  | □                                      | □                                 | □  | □   | □  |
| <b>Liver</b>  | Bilirubin                               | <20 μmol/L<br>(<1.2 mg/dL)             | 20-32 μmol/L<br>(1.2-1.9 mg/dL)   | 33-101 μmol/L<br>(2.0-5.9 mg/dL)   | 102-204 μmol/L<br>(6.0-11.9 mg/dL)  | >204 μmol/L<br>(>11.9 mg/dL)   |
|   | Score:                                  | □                                      | □                                 | □  | □   | □  |
| <b>Cardiovascular</b>   | Blood Pressure and Support Requirements | Mean Arterial Pressure (MAP) ≥ 70 mmHg | MAP < 70 mmHg                     | Dopamine ≤ 5 μg/kg/min or<br>Dobutamine (any dose)<br>or<br>Milrinone (any dose) | Dopamine >5 μg/kg/min or<br>Epinephrine ≤ 0.1μg/kg/min or<br>Norpinephrine ≤ 0.1 μg/kg/min or<br>Vasopressin ≤ 1.8 U/hr or<br>Phenylephrine (any infusion dose but NOT bolus) | Dopamine > 15 μg/kg/min or<br>Epinephrine > 0.1μg/kg/min or<br>Norpinephrine > 0.1 μg/kg/min or<br>Vasopressin >1.8 U/hr |
|   |   |  |                                   | Score:   | □   | □  |
| <b>CNS</b>  | Glasgow Coma Scale                      | 15                                     | 13-14                             | 10-12  | 6-9   | <6   |
|   | Score:                                  | □                                      | □                                 | □  | □   | □  |
| <b>Renal</b>  | Creatinine                              | ≤ 97 μmol/L<br>(≤1.1 mg/dL)            | 98 – 168 μmol/L<br>(1.2-1.9mg/dL) | 169 – 299 μmol/L<br>(2.0-3.4 mg/dL)  | 300 – 433 μmol/L<br>(3.5-4.9 mg/dL) or urine output ≤ 500 mL/day  | ≥ 433 μmol/L<br>(≥5.0 mg/dL) or urine output < 200 mL/d or patient receiving RRT   |
|   |   | Score:                                 | □                                 | □  | □   | □  |
| <b>Total SOFA score:</b>  |   |  |                                   |  | _____   |  |
| PHYSIOLOGIC PARAMETERS at RRT INITIATION (use last available result prior to RRT initiation)  |   |  |                                   |  |   |  |
| Heart rate  |   |  | □□□ beats/min                     |  |   |  |

Subject ID: \_\_\_\_\_ - \_\_\_\_\_

|  |  |
|--|--|
| Systolic blood pressure  | <input type="text"/> <input type="text"/> <input type="text"/> mmHg  |
| Temperature  | <input type="text"/> <input type="text"/> . <input type="text"/> degrees Celsius or <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> degrees F                        |
| Respiratory rate   | <input type="text"/> <input type="text"/> breaths/min  |
| PaO <sub>2</sub> /FiO <sub>2</sub>   | <input type="text"/> <input type="text"/> <input type="text"/>   |
| Urine output in preceding 24h  | <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> mL   |
| Fluid balance up to time of RRT initiation   | (Circle + / -) <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> mL   |
| <b>LABORATORY DATA at RRT INITIATION</b> (use last available result prior to RRT initiation) |  |
| Serum creatinine   | <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> μmol/L or <input type="text"/> <input type="text"/> . <input type="text"/> mg/dL                                       |
| Blood urea nitrogen  | <input type="text"/> <input type="text"/> . <input type="text"/> mmol/L or <input type="text"/> <input type="text"/> mg/dL   |
| Serum urea   | <input type="text"/> <input type="text"/> . <input type="text"/> mmol/L or <input type="text"/> <input type="text"/> mg/dL   |
| Serum potassium  | <input type="text"/> . <input type="text"/> mmol/L   |
| Serum bicarbonate  | <input type="text"/> <input type="text"/> mmol/L   |
| Arterial pH  | <input type="text"/> <input type="text"/>  |
| Hemoglobin   | <input type="text"/> <input type="text"/> <input type="text"/> g/L or <input type="text"/> <input type="text"/> . <input type="text"/> g/dL  |
| <b>RRT INITIATION</b>  |  |
| If subject in the Standard arm, was criteria* for initiating RRT met?                        | <input type="checkbox"/> Yes<br><input type="checkbox"/> No<br><input type="checkbox"/> N/A Subject in the accelerated arm   |
| If NO, why was RRT initiated? (check all that apply):  | <input type="checkbox"/> Volume overload<br><input type="checkbox"/> Anuria / oliguria<br><input type="checkbox"/> Creatinine increasing / AKI worsening<br><input type="checkbox"/> Other, specify: _____ |

**\*Criteria for RRT initiation in the standard arm:**

- a. Persistent severe AKI defined as sCr that remains > 50% of the value recorded at randomization

**AND at least one of the following indications for RRT initiation:**

- a. Serum potassium ≥ 6.0 mmol/L, or
- b. pH < 7.20 or serum bicarbonate ≤ 12 mmol/L, or
- c. Evidence of severe respiratory failure, based on a PaO<sub>2</sub>/FiO<sub>2</sub> < 200 and clinical perception of volume overload, or
- d. Persistent severe AKI (sCr remains > 50% the value recorded at randomization) for > 72 hours from randomization

Subject ID: \_\_\_\_\_ - \_\_\_\_\_

**FORM 12 – ADVERSE EVENT DATA**

|   |  |
|---|--|
| <b>Did the patient experience any adverse events (as defined by protocol) within the 14 days following randomization?</b>   | <input type="checkbox"/> Y <input type="checkbox"/> N<br>If 'YES', complete the fields below for EACH adverse event that occurred in the 14 days following randomization   |
| <b>Event number (1, 2, 3, etc):</b>   | <input type="checkbox"/> <input type="checkbox"/>  |
| <b>Event Type (check only ONE):</b>   |  |
| <input type="checkbox"/> <b>RRT-associated hypotension</b><br><input type="checkbox"/> <b>Severe hypophosphatemia (&lt;0.5 mmol/L)</b><br><input type="checkbox"/> <b>Severe hypokalemia (&lt;3.0 mmol/L)</b><br><input type="checkbox"/> <b>Severe hypocalcemia (Ionized calcium &lt;0.90 mmol/L)</b><br><input type="checkbox"/> <b>Allergic reaction to RRT</b><br><input type="checkbox"/> <b>Arrhythmia during RRT</b><br><input type="checkbox"/> <b>Seizure</b><br><input type="checkbox"/> <b>Major Bleeding</b><br><input type="checkbox"/> <b>Hemorrhage at site of CVC insertion</b><br><input type="checkbox"/> <b>CVC-associated bloodstream infection</b><br><input type="checkbox"/> <b>Ultrasonographically confirmed thrombus attributed to CVC</b><br><input type="checkbox"/> <b>Pneumothorax following CVC insertion</b><br><input type="checkbox"/> <b>Hemothorax following CVC insertion</b><br><input type="checkbox"/> <b>Inadvertent arterial puncture at time of CVC insertion</b><br><input type="checkbox"/> <b>Other, specify: _____</b> |  |
| <b>Event Details</b>  |  |
| <b>Event onset date:</b>  | <input type="checkbox"/> <input type="checkbox"/> / <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> / <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>                                     |
| <b>Event stop date:</b>   | <input type="checkbox"/> <input type="checkbox"/> / <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> / <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> or <input type="checkbox"/> ongoing |
| <b>How was the event related to study procedures?</b>   | <input type="checkbox"/> RRT-associated<br><input type="checkbox"/> CVC-associated<br><input type="checkbox"/> Other, specify : _____  |
| <b>Was event classified as a serious adverse event (SAE)</b>  | <input type="checkbox"/> Yes <input type="checkbox"/> No<br><b>If YES, serious due to: (check all that apply)</b>  |

Subject ID: \_\_\_\_\_ - \_\_\_\_\_

|   |  |
|---|--|
| <p><i>For this study, a reportable SAE must be considered:</i></p> <p><i>i. an atypical event, defined as <b>clinically significant and unexpected in the context of critical illness and associated AKI, AND;</b></i></p> <p><i>ii. an event that is at least <b>possibly related</b> to study procedures.</i></p> | <p><input type="checkbox"/> Patient died</p> <p><input type="checkbox"/> Life-threatening</p> <p><input type="checkbox"/> Involved persistence of significant disability or incapacity</p> <p><input type="checkbox"/> Involved hospitalization or prolongation of existing hospitalization</p> <p><b>If YES, date when Investigator became aware of the SAE:</b></p> <p>□□/□□□/□□□□</p> |
| <p><b>Describe adverse event</b> (including any relevant tests / lab data, actions taken, and resolution)</p>   |  |
| <p><b>SAE Resolution</b></p>  | <p><input type="checkbox"/> Recovered</p> <p><input type="checkbox"/> Recovered to previous baseline</p> <p><input type="checkbox"/> Significant impairment</p> <p><input type="checkbox"/> Death</p> <p><input type="checkbox"/> Other; Specify: _____</p>  |

Subject ID: \_\_\_\_\_ - \_\_\_\_\_

# **PART IV: PROTOCOL VIOLATIONS**

Subject ID: \_\_\_\_\_ - \_\_\_\_\_

**FORM 13 – PROTOCOL VIOLATIONS REGARDING THE TIMING OF RRT INITIATION**

|  |  |
|--|--|
| <p><b>Was RRT initiated within the specified time intervals mandated by the protocol?</b><br/>The specified time intervals are:</p> <ul style="list-style-type: none"><li>• within 12 hours of determination of eligibility in the accelerated arm;</li><li>• &gt; 12 hours after determination of eligibility in the standard arm</li></ul> | <p><input type="checkbox"/> Y <input type="checkbox"/> N</p>   |
| <p><b>If NO and patient was randomized to <u>accelerated</u> RRT initiation, please clarify why RRT was not started within 12 hours of determination of eligibility?</b></p>   | <p><input type="checkbox"/> Problem with vascular access<br/><input type="checkbox"/> Dialysis machine not available<br/><input type="checkbox"/> Change in patient goals of care<br/><input type="checkbox"/> Clinical deterioration<br/><input type="checkbox"/> Other, specify: _____</p> |
| <p><b>If NO and patient was randomized to <u>standard</u> RRT initiation, please clarify why RRT was started within 12 hours of determination of eligibility?</b></p>  | <p><input type="checkbox"/> Volume overload<br/><input type="checkbox"/> Anuria / oliguria<br/><input type="checkbox"/> sCr increasing<br/><input type="checkbox"/> Severe acidosis<br/><input type="checkbox"/> Severe hyperkalemia<br/><input type="checkbox"/> Other, specify: _____</p>  |



Subject ID: \_\_\_\_\_ - \_\_\_\_\_

## **PART V: DISCHARGE & OUTCOMES**

Subject ID: \_\_\_\_\_ - \_\_\_\_\_

## FORM 14 – ICU AND HOSPITAL DISCHARGE DATA

| ICU DISCHARGE/DEATH – Complete for ALL patients  |  |
|--|--|
| <b>Alive at ICU discharge?</b>   | <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A, still in ICU at Day 90   |
| <b>If YES:</b>   |  |
| <b>Date of ICU discharge</b><br>(dd-mmm-yyyy):   | □□/□□□/□□□□  |
| <b>Disposition at time of ICU discharge:</b>   | <input type="checkbox"/> General Ward <input type="checkbox"/> Step-down unit<br><input type="checkbox"/> Chronic care facility <input type="checkbox"/> Palliative care ward<br><input type="checkbox"/> Other acute care hospital <input type="checkbox"/> Inpatient rehabilitation hospital or facility<br><input type="checkbox"/> Other, specify: _____ |
| <b>RRT administered (<math>\geq 1</math> session) in 7 days following ICU discharge?</b> | <input type="checkbox"/> Y <input type="checkbox"/> N  |
| <b>ICU readmission(s) during index hospitalization?</b>                                  | <input type="checkbox"/> Y <input type="checkbox"/> N  |
| HOSPITAL DISCHARGE/DEATH   |  |
| <b>Date of last RRT in hospital</b><br>(dd-mmm-yyyy):                                    | □□/□□□/□□□□ or <input type="checkbox"/> N/A, no RRT  |
| <b>Last serum creatinine recorded in the hospital</b>                                    | □□□□ $\mu\text{mol/L}$ or □□.□ $\text{mg/dL}$  |
| <b>Date of last serum creatinine recorded in the hospital</b> (dd-mmm-yyyy):             | □□/□□□/□□□□  |
| <b>Alive at hospital discharge?</b>  | <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A, still in hospital at Day 90  |
| <b>If YES:</b>   |  |
| <b>Date of hospital discharge</b><br>(dd-mmm-yyyy):                                      | □□/□□□/□□□□  |
| <b>Disposition at time of hospital discharge:</b>  | <input type="checkbox"/> Home <input type="checkbox"/> Palliative care hospital or facility<br><input type="checkbox"/> Chronic care facility <input type="checkbox"/> Inpatient rehabilitation hospital or facility<br><input type="checkbox"/> Other acute care hospital<br><input type="checkbox"/> Other, specify: _____                                 |
| <b>Plan for further RRT at the time of hospital discharge?</b>                           | <input type="checkbox"/> Y <input type="checkbox"/> N  |

Subject ID: \_\_\_\_\_ - \_\_\_\_\_

### FORM 15 – RESOURCE UTILIZATION THROUGH DAY 28

| HOSPITAL AND ICU RESOURCE USE (through Day 28: including the index hospitalization and any re-hospitalization up to day 28)   |  |                          |
|---|--|--------------------------|
| <b>Total number ICU days:</b><br>(≥ 2 hrs in ICU on any 24 hr day)  | <input type="text"/> <input type="text"/> days   |                          |
| <b>Total number of in-hospital RRT days:</b><br>(≥ 2 hrs of RRT in a 24 hr day)   | <input type="text"/> <input type="text"/> days   |                          |
| <b>Number of days of mechanical ventilation</b> (≥2 hrs of invasive or non-invasive ventilation in a 24hr day):   | <input type="text"/> <input type="text"/> days   |                          |
| <b>Number of days of vasoactive therapy</b> (≥2 hrs of continuous infusion in a 24hr day):  | <input type="text"/> <input type="text"/> days   |                          |
| <b>Was patient re-admitted to hospital following discharge from their index hospitalization?</b>  | <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A, not discharged from index hospitalization by day 28  |                          |
| <b>If YES: Record all hospital re-admissions from the date of index hospitalization discharge to day 28</b>   |  |                          |
| Re-admission Date   | Discharge Date   | Ongoing                  |
| 1. <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> | <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> | <input type="checkbox"/> |
| 2. <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> | <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> | <input type="checkbox"/> |
| 3. <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> | <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> | <input type="checkbox"/> |
| 4. <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> | <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> | <input type="checkbox"/> |
| 5. <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> | <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> | <input type="checkbox"/> |
| 6. <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> | <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> | <input type="checkbox"/> |
| 7. <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> | <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> | <input type="checkbox"/> |

Subject ID: \_\_\_\_\_ - \_\_\_\_\_

### FORM 16 – DAY 90 OUTCOMES DATA

| VITAL STATUS DATA AT 90 DAYS  |  |
|---|--|
| <b>How was 90 day vital status obtained?</b>  | <input type="checkbox"/> Medical record <input type="checkbox"/> Phone call to patient /SDM/ family member<br><input type="checkbox"/> Phone call to other hospital/ other care centre/ family doctor <input type="checkbox"/> Other, specify: _____<br><input type="checkbox"/> Not obtained, explain: _____  |
| <b>Vital status at 90 days following randomization:</b>   | <input type="checkbox"/> Alive <input type="checkbox"/> Deceased   |
| <b>If alive, disposition at 90 days:</b>  | <input type="checkbox"/> Home <input type="checkbox"/> Palliative care hospital or facility<br><input type="checkbox"/> Chronic care facility <input type="checkbox"/> Inpatient rehabilitation hospital or facility<br><input type="checkbox"/> Study hospital <input type="checkbox"/> Other, specify: _____<br><input type="checkbox"/> Other acute care hospital |
| KIDNEY FUNCTION AT 90 DAYS  |  |
| <b>Requirement for RRT at 90 days following randomization?</b> (If deceased at 90 days, select N/A) | <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Not Applicable <input type="checkbox"/> Not available/Unknown   |
| <b>Date of last RRT session prior to or on Day 90</b> (dd-mmm-yyyy)                                 | □□/□□□/□□□□ or <input type="checkbox"/> N/A, no RRT<br><br><input type="checkbox"/> Unknown  |
| <b>Date blood sample collected:</b> (dd-mmm-yyyy)   | □□/□□□/□□□□ or <input type="checkbox"/> N/A  |
| <b>Day 90 serum creatinine (µmol/L)</b>   | □□□□ µmol/L or □□.□ mg/dL or <input type="checkbox"/> N/A  |
| <b>Date urine sample collected:</b>   | □□/□□□/□□□□ or <input type="checkbox"/> N/A  |
| <b>Day 90 eGFR</b>  | □□□.□ mL/min/1.73m <sup>2</sup>  |
| <b>Day 90 urine albumin concentration</b>   | □□□□□.□□ Units: <input type="checkbox"/> mg/L<br><input type="checkbox"/> g/L<br><br><b>Or</b><br><input type="checkbox"/> N/A <input type="checkbox"/> Exceeds upper limit of detection   |
| <b>Day 90 urine creatinine concentration</b>  | □□□□□.□□ Units: <input type="checkbox"/> mmol/L<br><input type="checkbox"/> mg/L<br><input type="checkbox"/> g/L<br><br><b>Or</b><br><input type="checkbox"/> N/A <input type="checkbox"/> Exceeds upper limit of detection  |

Subject ID: \_\_\_\_\_ - \_\_\_\_\_

| HOSPITAL RE-ADMISSIONS (Day 29 to Day 90)  |  |                          |
|--|--|--------------------------|
| Was patient re-admitted to hospital between Day 29 and Day 90?   | <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A, not discharged from prior hospitalization by day 90<br><input type="checkbox"/> Not available/Unknown  |                          |
| If YES: <i>Record all hospital re-admissions from Day 29-Day 90</i>  |  |                          |
| Re-admission Date  | Discharge Date   | Ongoing                  |
| <input type="checkbox"/> <input type="checkbox"/> / <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> / <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>   | <input type="checkbox"/> <input type="checkbox"/> / <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> / <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> <input type="checkbox"/> / <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> / <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>   | <input type="checkbox"/> <input type="checkbox"/> / <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> / <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> <input type="checkbox"/> / <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> / <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>   | <input type="checkbox"/> <input type="checkbox"/> / <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> / <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> <input type="checkbox"/> / <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> / <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>   | <input type="checkbox"/> <input type="checkbox"/> / <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> / <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> <input type="checkbox"/> / <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> / <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>   | <input type="checkbox"/> <input type="checkbox"/> / <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> / <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> <input type="checkbox"/> / <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> / <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>   | <input type="checkbox"/> <input type="checkbox"/> / <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> / <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> <input type="checkbox"/> / <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> / <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>   | <input type="checkbox"/> <input type="checkbox"/> / <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> / <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | <input type="checkbox"/> |
| QUALITY OF LIFE ASSESSMENTS AT 90 DAYS (see appendix)  |  |                          |
| EQ-5D-5L Assessment completed by:  | <input type="checkbox"/> Patient <input type="checkbox"/> SDM/Other <input type="checkbox"/> Not done  |                          |
| Mobility (score 1-5; missing 9)  | <input type="checkbox"/>   |                          |
| Self-care (score 1-5; missing 9)   | <input type="checkbox"/>   |                          |
| Usual activities (score 1-5; missing 9)  | <input type="checkbox"/>   |                          |
| Pain/discomfort (score 1-5; missing 9)   | <input type="checkbox"/>   |                          |
| Anxiety/depression (score 1-5; missing 9)  | <input type="checkbox"/>   |                          |
| EQ-VAS score (score 0 – 100)   | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>   |                          |
| CLINICAL FRAILITY SCORE  |  |                          |
| <input type="checkbox"/> 1- Very Fit – robust, active, energetic and motivated<br><input type="checkbox"/> 2- Well –no active disease symptoms but are less fit, active occasionally<br><input type="checkbox"/> 3- Managing Well –well controlled medical problems, not regularly active<br><input type="checkbox"/> 4- Vulnerable – not dependent, symptoms limit activities<br><input type="checkbox"/> 5- Mildly Frail – more evident slowing need help with high order independent activities of daily living<br><input type="checkbox"/> 6- Moderately Frail – need help with all outside activities, keeping house, bathing, and often have problems with stairs<br><input type="checkbox"/> 7- Severely Frail – complete dependence for personal care (physical or cognitive)<br><input type="checkbox"/> 8- Very Severely Frail –approaching end of life, unlikely to recover from minor illness.<br><input type="checkbox"/> 9- Terminally Ill – life expectancy <6 months who are not otherwise evidently frail |  |                          |

Subject ID: \_\_\_\_\_ - \_\_\_\_\_

### FORM 17: DEATH

*(use this form only for patients that died between Day 0 to Day 90)*

|                       |   |
|-----------------------|---|
| <b>Date of Death</b>  | <input type="text"/> / <input type="text"/> / <input type="text"/><br><b>dd/ mmm/ yyyy</b>  |
| <b>Cause of Death</b> | <b>Cause of Death</b> (check one category and one cause)<br><input type="checkbox"/> Neurological<br><input type="checkbox"/> Brain death<br><input type="checkbox"/> Hypoxic encephalopathy<br><input type="checkbox"/> Intracranial haemorrhage<br><input type="checkbox"/> Ischaemic stroke<br><input type="checkbox"/> Other; specify _____<br><input type="checkbox"/> Cardiovascular<br><input type="checkbox"/> Primary arrhythmia<br><input type="checkbox"/> Refractory cardiogenic shock including pulmonary oedema<br><input type="checkbox"/> Cardiac tamponade<br><input type="checkbox"/> Hypovolaemia (uncontrollable bleeding)<br><input type="checkbox"/> Septic Shock<br><input type="checkbox"/> Massive pulmonary embolism<br><input type="checkbox"/> Anaphylaxis<br><input type="checkbox"/> Other; specify _____<br><input type="checkbox"/> Respiratory<br><input type="checkbox"/> Refractory hypoxia due to ARDS<br><input type="checkbox"/> COPD<br><input type="checkbox"/> Asthma<br><input type="checkbox"/> Pulmonary haemorrhage<br><input type="checkbox"/> Pneumothorax<br><input type="checkbox"/> Other; specify _____<br><input type="checkbox"/> Metabolic<br><input type="checkbox"/> Hypoglycaemia<br><input type="checkbox"/> Hyperkalaemia<br><input type="checkbox"/> Hypothermia<br><input type="checkbox"/> Liver failure<br><input type="checkbox"/> Other; specify _____ |

Subject ID: \_\_\_\_\_ - \_\_\_\_\_

**FORM 18 – RETROSPECTIVE AMENDMENT OF ELIGIBILITY**

|   |   |
|---|---|
| Date site 1 <sup>st</sup> became aware of change in eligibility   | <input type="text"/> / <input type="text"/> / <input type="text"/><br>dd/ mmm/ yyyy |
| <b>Please check the changed criteria (check all that apply):</b><br><br><b>INCLUSION CRITERIA :</b>   |   |
| 1. Age ≥ 18 years   | <input type="checkbox"/>  |
| <i>Please add additional comments (if any) for inclusion # 1:</i>   |   |
| 2. Admission to a critical care unit (ICU)  | <input type="checkbox"/>  |
| <i>Please add additional comments (if any) for inclusion # 2:</i>   |   |
| 3. Evidence of kidney dysfunction [serum creatinine ≥100 μmol/L (1.1 mg/dL) in women and ≥130 μmol/L (1.5 mg/dL) in men]  | <input type="checkbox"/>  |
| <i>Please add additional comments (if any) for inclusion # 3:</i>   |   |
| 4i. ≥2-fold increase in serum creatinine (sCR) from baseline <sup>§</sup> (see definition below) or during the current hospitalization; OR  | <input type="checkbox"/>  |
| <i>Please add additional comments (if any) for inclusion # 4i:</i>  |   |
| 4ii. Achievement of a serum creatinine ≥ 354 μmol/L (4.0 mg/dL) with evidence of a minimum increase of 27 μmol/L (0.3 mg/dL) from a pre-morbid baseline <sup>§</sup> (see definition below) or during the current hospitalization | <input type="checkbox"/>  |
| <i>Please add additional comments (if any) for inclusion # 4ii:</i>   |   |
| 4iii. Urine output < 6.0 mL/kg over the preceding 12 hours  | <input type="checkbox"/>  |
| <i>Please add additional comments (if any) for inclusion # 4iii:</i>  |   |

Subject ID: \_\_\_\_\_ - \_\_\_\_\_

| <b>EXCLUSION CRITERIA:</b>  |                          |
|---|--------------------------|
| 1. Serum potassium > 5.5 mmol/L                                       | <input type="checkbox"/> |
| <i>Please add additional comments (if any) for exclusion # 1:</i>     |                          |
| 2. Serum bicarbonate < 15 mmol/L                                      | <input type="checkbox"/> |
| <i>Please add additional comments (if any) for exclusion # 2:</i>     |                          |
| 3. Presence of a drug overdose that necessitates initiation of RRT    | <input type="checkbox"/> |
| <i>Please add additional comments (if any) for exclusion # 3:</i>     |                          |
| 4. Lack of commitment to ongoing life support (including RRT)         | <input type="checkbox"/> |
| <i>Please add additional comments (if any) for exclusion # 4:</i>     |                          |
| 5. Any RRT within the previous 2 months (either acute or chronic RRT) | <input type="checkbox"/> |
| <i>Please add additional comments (if any) for exclusion # 5:</i>     |                          |
| 6. Kidney transplant within the last 365 days                         | <input type="checkbox"/> |
| <i>Please add additional comments (if any) for exclusion # 6:</i>     |                          |



Subject ID: \_\_\_\_\_ - \_\_\_\_\_

|   |                          |
|---|--------------------------|
| 7. Known pre-hospitalization advanced chronic kidney disease, defined by an eGFR <20 mL/min/1.73m <sup>2</sup>  | <input type="checkbox"/> |
| <i>Please add additional comments (if any) for exclusion # 7:</i>   |                          |
| 8. Presence or clinical suspicion of renal obstruction, rapidly progressive glomerulonephritis, vasculitis, thrombotic microangiopathy, or acute interstitial nephritis | <input type="checkbox"/> |
| <i>Please add additional comments (if any) for exclusion # 8:</i>   |                          |
| 9. Clinician(s) caring for patient believe(s) that immediate RRT is absolutely mandated   | <input type="checkbox"/> |
| <i>Please add additional comments (if any) for exclusion # 9:</i>   |                          |
| 10. Clinician(s) caring for patient believe(s) that deferral of RRT initiation is mandated  | <input type="checkbox"/> |
| <i>Please add additional comments (if any) for exclusion # 10:</i>  |                          |

Subject ID: \_\_\_\_\_ - \_\_\_\_\_

**FORM 19 – STUDY TERMINATION/EARLY DISCONTINUATION**

|   |  |
|---|--|
| <b>Did the patient complete the full study to 90 days?</b>  | <input type="checkbox"/> YES<br><b>Date of Study Completion:</b><br>□□/□□□/□□□<br><br><input type="checkbox"/> NO<br><b>Date of Early Discontinuation:</b><br>□□/□□□/□□□   |
| <b>If no, reason for not completing the study:</b>  | <input type="checkbox"/> Patient or SDM withdrew consent<br>Date of withdrawal: □□/□□□/□□□□<br><input type="checkbox"/> Lost to follow-up<br>Date of last contact: □□/□□□/□□□□<br><input type="checkbox"/> Other, specify: _____ |
| <b>Was consent obtained for the linkage of personal information with administrative data for the purpose of long-term follow-up (vital status, RRT dependence) at 365 days?</b><br>(i.e., optional sub-study with follow-up to day 365) | <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Not Applicable, site not participating in sub-study   |

|  |                  |                                      |
|--|------------------|--------------------------------------|
| <b>Study Completion (Attestation)</b>            |                  |                                      |
| Forms completed by: _____<br>(please print name) | Signature: _____ | Date: ____/____/____<br>(dd mm yyyy) |

|  |                        |                      |
|--|------------------------|----------------------|
| Principal Investigator: _____<br>(please print name) | Signature of PI: _____ | Date: ____/____/____ |
|--|------------------------|----------------------|

Subject ID: \_\_\_\_\_ - \_\_\_\_\_

**FORM 20 – DAY 365 OUTCOMES DATA**

| VITAL STATUS DATA AT 365 DAYS  |                                |  |
|--|--------------------------------|--|
| Vital status at 365 days following randomization:  | <input type="checkbox"/> Alive | <input type="checkbox"/> Deceased  |
|  | Date of death:<br>□□/□□□/□□□□  |  |
| KIDNEY FUNCTION AT 365 DAYS  |                                |  |
| Requirement for RRT at 365 days following randomization? (If deceased at 365 days, select N/A) | <input type="checkbox"/> Y     | <input type="checkbox"/> N <input type="checkbox"/> N/A <input type="checkbox"/> Not Available/Unknown |

| QUALITY OF LIFE ASSESSMENTS AT 365 DAYS (see appendix) |   |
|--|---|
| EQ-5D-5L Assessment completed by:                      | <input type="checkbox"/> Patient <input type="checkbox"/> SDM/Other <input type="checkbox"/> Not done |
| Mobility (score 1-5; missing 9)                        | <input type="checkbox"/>  |
| Self-care (score 1-5; missing 9)                       | <input type="checkbox"/>  |
| Usual activities (score 1-5; missing 9)                | <input type="checkbox"/>  |
| Pain/discomfort (score 1-5; missing 9)                 | <input type="checkbox"/>  |
| Anxiety/depression (score 1-5; missing 9)              | <input type="checkbox"/>  |
| EQ-VAS score (score 0 – 100)                           | □□□   |

| CLINICAL FRAILTY SCORE  |
|---|
| <input type="checkbox"/> 1- Very Fit – robust, active, energetic and motivated  |
| <input type="checkbox"/> 2- Well –no active disease symptoms but are less fit, active occasionally  |
| <input type="checkbox"/> 3- Managing Well –well controlled medical problems, not regularly active   |
| <input type="checkbox"/> 4- Vulnerable – not dependent, symptoms limit activities   |
| <input type="checkbox"/> 5- Mildly Frail – more evident slowing need help with high order independent activities of daily living                  |
| <input type="checkbox"/> 6- Moderately Frail – need help with all outside activities, keeping house, bathing, and often have problems with stairs |
| <input type="checkbox"/> 7- Severely Frail – complete dependence for personal care (physical or cognitive)  |
| <input type="checkbox"/> 8- Very Severely Frail –approaching end of life, unlikely to recover from minor illness.                                 |
| <input type="checkbox"/> 9- Terminally Ill – life expectancy <6 months who are not otherwise evidently frail                                      |

|  |                        |                                      |
|--|------------------------|--------------------------------------|
| Principal Investigator: _____<br>(please print name) | Signature of PI: _____ | Date: ____/____/____<br>(dd mm yyyy) |
|--|------------------------|--------------------------------------|

Subject ID: \_\_\_\_\_ - \_\_\_\_\_

**Appendix 1: SOFA score worksheet**

|  | 0                           | 1                               | 2   | 3   | 4  |
|--|-----------------------------|---------------------------------|---|---|--|
| <b>Respiration</b><br>PaO <sub>2</sub> /FiO <sub>2</sub> | > 400                       | ≤ 400<br>(± resp. support)      | ≤ 300<br>(± resp. support)  | ≤ 200<br>(+ resp. support)  | ≤ 100<br>(+ resp. support)   |
| <b>Coagulation</b><br>Platelets(x 10 <sup>9</sup> /L)    | >150                        | 101-150                         | 50-100  | 20-49   | ≤ 20   |
| <b>Liver</b><br>Bilirubin                                | <20 μmol/L<br>(<1.2 mg/dL)  | 20-32 μmol/L<br>(1.2-1.9 mg/dL) | 33-101 μmol/L<br>(2.0-5.9 mg/dL)                                  | 102-204 μmol/L<br>(6.0-11.9 mg/dL)  | >204 μmol/L<br>(>11.9 mg/dL)   |
| <b>Cardiovascular</b>                                    | MAP ≥ 70 mmHg               | MAP < 70 mmHg                   | DA ≤ 5 μg/kg/min or dobutamine (any dose) or milrinone (any dose) | DA > 5 μg/kg/min or EPI ≤ 0.1 μg/kg/min or NE ≤ 0.1 μg/kg/min or VP ≤ 1.8 U/hr or phenylephrine (any dose if given as infusion NOT bolus) | DA > 15 μg/kg/min or EPI > 0.1 μg/kg/min or NE > 0.1 μg/kg/min or VP > 1.8 U/hr  |
| <b>CNS</b><br>Glasgow Coma Scale                         | 15                          | 13-14                           | 10-12   | 6-9   | < 6  |
| <b>Renal</b><br>Creatinine                               | ≤ 97 μmol/L<br>(≤1.1 mg/dL) | 98-168 μmol/L<br>(1.2-1.9mg/dL) | 169-299 μmol/L<br>(2.0-3.4 mg/dL)                                 | 303 – 433 μmol/L<br>(3.5-4.9 mg/dL) or urine output ≤ 500 mL/day  | ≥ 433 μmol/L<br>(≥5.0 mg/dL) or urine output < 200 mL/d or patient receiving RRT |

## Appendix 2:

### Criteria for Diagnosis of Sepsis

**Has patient met criteria for sepsis in the preceding 72 hours?** Based on the criteria below, indicate whether or not the patient has sepsis.

#### Criterion 1: Presence of infection

a) Documented positive culture of normally sterile body fluid    Yes     No

OR

b) Probable infection (defined as one of the following):

- White cells in normally sterile body fluid    Yes     No
- Perforated viscus    Yes     No
- Radiographic evidence of pneumonia associated with production of purulent sputum  
Yes     No
- Syndrome associated with high risk of infection (for example, ascending cholangitis, necrotizing pancreatitis)    Yes     No

#### Criterion 2: Evidence of systemic inflammatory response syndrome

At least 2 of the 4 following criteria must be met in the past 24 hours

1. Temperature  $\geq 38^{\circ}\text{C}$  or  $\leq 36^{\circ}\text{C}$   
Yes     No
2. Heart rate  $\geq 90$  beats/minute, except in patients with a medical condition known to cause tachycardia or receiving treatment that would prevent tachycardia  
Yes     No
3. Respiratory rate  $\geq 20$  breaths/minute or  $\text{PaCO}_2 \leq 32$  mmHg or the use of mechanical ventilation for acute respiratory failure  
Yes     No
4. White blood cell count  $\geq 12,000/\text{mm}^3$  or  $\leq 4,000/\text{mm}^3$  or a differential count showing  $>10$  percent immature neutrophils  
Yes     No

**If 1a or 1b PLUS criterion 2 are met, then patient has “sepsis”.**

**Appendix 3: EQ-5D-5L and VAS**



**Health Questionnaire**

**English version for Canada**

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**SCRIPT FOR TELEPHONE INTERVIEW**

**GENERAL INTRODUCTION**

It is suggested that the telephone interviewer follows the script of the EQ-5D. Although allowance should be made for the interviewer's particular style of speaking, the wording of the questionnaire instructions should be followed as closely as possible. In the case of the EQ-5D descriptive system on pages 2 and 3, the precise wording must be followed.

It is recommended that the interviewer has a copy of the EQ-5D in front of him or her while it is administered over the telephone. This enables the respondent's answers to be entered directly on the EQ-5D by the interviewer on behalf of the respondent (i.e. the appropriate boxes on pages 2 and 3 are marked and the scale on page 4 is marked at the point indicating the respondent's 'health today'). The respondent should also have a copy of the EQ-5D in front of him or her for reference. If the respondent asks for clarification, the interviewer can help by re-reading the question verbatim. The interviewer should not try to offer his or her own explanation but suggest that the respondent uses his or her own interpretation.

If the respondent has difficulty regarding which box to mark, the interviewer should repeat the question verbatim and ask the respondent to answer in a way that most closely resembles his or her thoughts about his or her health today.

## **INTRODUCTION TO EQ-5D**

*(Note to interviewer: please read the following to the respondent)*

---

We are trying to find out what you think about your health. I will first ask you some simple questions about your health TODAY. I will then ask you to rate your health on a measuring scale. I will explain what to do as I go along but please interrupt me if you do not understand something or if things are not clear to you. Please also remember that there are no right or wrong answers. We are interested here only in your personal view.

## **EQ-5D DESCRIPTIVE SYSTEM: INTRODUCTION**

**First I am going to read out some questions. Each question has a choice of five answers. Please tell me which answer best describes your health TODAY. Do not choose more than one answer in each group of questions.**

*(Note to interviewer: it may be necessary to remind the respondent regularly that the timeframe is TODAY. It may also be necessary to repeat the questions verbatim.)*

---

## **EQ-5D DESCRIPTIVE SYSTEM MOBILITY**

**First I'd like to ask you about mobility. Would you say that:**

- 1. You have no problems in walking about?**
- 2. You have slight problems in walking about?**
- 3. You have moderate problems in walking about?**
- 4. You have severe problems in walking about?**
- 5. You are unable to walk about?**

*(Note to interviewer: mark the appropriate box on the EQ-5D questionnaire)*

---

## **SELF-CARE**

**Next I'd like to ask you about self-care. Would you say that:**

- 1. You have no problems washing or dressing yourself?**
- 2. You have slight problems washing or dressing yourself?**
- 3. You have moderate problems washing or dressing yourself ?**
- 4. You have severe problems washing or dressing yourself?**
- 5. You are unable to wash or dress yourself?**

---

*(Note to interviewer: mark the appropriate box on the EQ-5D questionnaire)*

Subject ID: \_\_\_\_\_ - \_\_\_\_\_

## USUAL ACTIVITIES

Next I'd like to ask you about your usual activities, for example work, study, housework, family or leisure activities. Would you say that:

1. You have no problems doing your usual activities?
2. You have slight problems doing your usual activities?
3. You have moderate problems doing your usual activities?
4. You have severe problems doing your usual activities?
5. You are unable to do your usual activities?

*(Note to interviewer: mark the appropriate box on the EQ-5D questionnaire)*

---

## PAIN/DISCOMFORT

Next I'd like to ask you about pain or discomfort. Would you say that:

1. You have no pain or discomfort?
2. You have slight pain or discomfort?
3. You have moderate pain or discomfort?
4. You have severe pain or discomfort?
5. You have extreme pain or discomfort?

*(Note to interviewer: mark the appropriate box on the EQ-5D questionnaire)*

---

## ANXIETY/DEPRESSION

Finally I'd like to ask you about anxiety or depression. Would you say that:

1. You are not anxious or depressed?
2. You are slightly anxious or depressed?
3. You are moderately anxious or depressed?
4. You are severely anxious or depressed?
5. You are extremely anxious or depressed?

*(Note to interviewer: mark the appropriate box on the EQ-5D questionnaire)*

---



Subject ID: \_\_\_\_\_ - \_\_\_\_\_

**EQ VAS: INTRODUCTION**

*(Note for administrator: if possible, it might be useful to send a visual aid (i.e. the EQ VAS) before the telephone call so that the respondent can have this in front of him or her when completing the task)*

**Now, I would like to ask you to say how good or bad your health is TODAY.**

**I'd like you to try to picture in your mind a scale that looks rather like a thermometer. Can you do that? The best health you can imagine is marked 100 (one hundred) at the top of the scale and the worst health you can imagine is marked 0 (zero) at the bottom.**

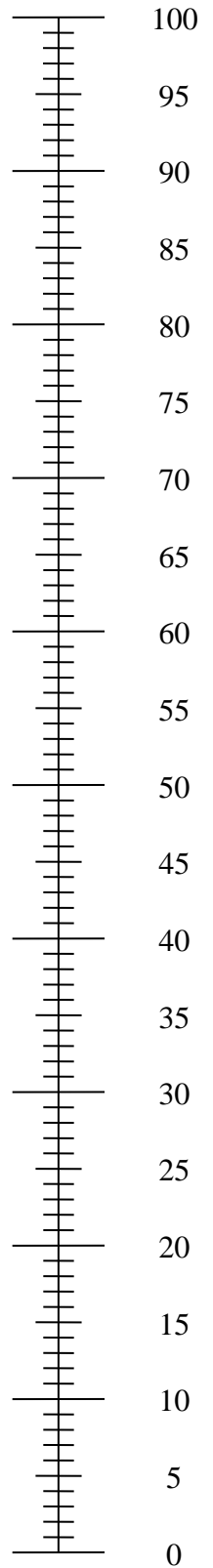
**EQ VAS: TASK**

**I would now like you to tell me the point on this scale where you would put your health today.**

*(Note to interviewer: mark the scale at the point indicating the respondent's 'health today')*

**Thank you for taking the time to answer these questions.**

The best health  
you can imagine



The worst health  
you can imagine