Patient CRF Worksheets

These Patient CRF Worksheets have been developed to assist your site in collecting data for the trial.

The following table can be used by the site to track the completion of data collection for the patient.

|  |  |  |
| --- | --- | --- |
| **Complete****(✓)** | **Form Name** | **Page** |
| **Baseline** (These data are recorded on Day 1 only. Day 1 = ICU admission day) |
|  | Patient Information |  |
|  | Enrollment |  |
|  | Baseline SOFA Score  |  |
|  | Nutrition Assessment * Malnutrition
* Clinical Frailty Scale
* SARC-F
 |  |
|  | Nutrition Goals* Determining Nutrition Goals
* Initiation of Nutrition Therapy
 |  |
| **Daily Data** (These data are recorded daily until the first of ICU discharge, death or day 12) |
|  | Daily Nutrition Data |  |
|  | Daily Enteral Nutrition (EN) Data* Protein Supplements
* Non-Protein Modular Supplements
* EN Interruption
 |  |
|  | Daily IV Nutrition Data |  |
|  | Daily Protein Data (Day 13-28)*(NOTE: these data are collected until the first of ICU discharge, death or Day 28)* |  |
|  | Daily Nutritional Adequacy *(automatically calculated by REDCap)** Energy
* Protein
 |  |
|  | Daily Vasopressors/Inotropes |  |
|  | Daily Renal Replacement Therapy  |  |
| **Outcomes** (These data are recorded at Death, or ICU and Hospital discharge and Day 60) |
|  | Vasopressors/Inotropes (Start and Stop Dates) |  |
|  | Mechanical Ventilation (Start and Stop Dates) |  |
|  | Renal Replacement Therapy (Start and Stop Dates) |  |
|  | Hospital Outcomes* ICU Stay
* Hospital Discharge
* 60 Day Outcome
 |  |

##

**Sex:** ❑ Male **Age:** \_\_\_\_\_\_\_\_

❑ Female

**Hospital Admission Date**

(YYYY-MM-DD): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **Time** (HH:MM, 24h): \_\_\_\_\_\_\_\_\_\_\_\_

**ICU Admission Date**

(YYYY-MM-DD): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **Time** (HH:MM, 24h): \_\_\_\_\_\_\_\_\_\_\_\_

**Type of Admission:** ❑ Medical *(check one option from taxonomy ‘****A****’ below)*

❑ Surgical Elective *(check one option from taxonomy ‘****B****’ below)*

❑ Surgical Emergency *(check one option from taxonomy ‘****B****’ below)*

|  |
| --- |
| ***TAXONOMY A - Primary ICU Diagnosis: Medical (Non-Operative Condition System) (check one)*** |
| **Cardiovascular/Vascular*** Acute myocardial infarction
* Aortic aneurysm
* Cardiac arrest
* Cardiogenic shock
* Congestive heart failure
* Hypertension
* Peripheral vascular disease
* Rhythm disturbance
* Other CV disease (specify): \_\_\_\_\_\_\_\_\_

**Respiratory*** Aspiration pneumonia
* Asthma
* Bacterial/ Viral pneumonia
* Chronic obstructive pulmonary disease
* Mechanical airway obstruction
* Parasitic pneumonia (i.e. pneumocystis carinii)
* Pulmonary edema (non-cardiogenic)
* Pulmonary embolism
* Respiratory arrest
* Respiratory neoplasm (including larynx and trachea)
* Other respiratory disease (specify):
 | **Gastrointestinal** * GI bleeding due to diverticulosis
* GI bleeding due to ulcer/laceration
* GI bleeding due to varices
* GI inflammatory disease (ulcerative colitis, Crohn’s disease)
* GI perforation/obstruction
* Hepatic failure
* Pancreatitis
* Other GI disease (specify): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Neurologic*** Intracerebral hemorrhage
* Neurologic infection
* Neurologic neoplasm
* Neuromuscular disease
* Seizure
* Stroke
* Subarachnoid hemorrhage
* Other neurologic disease (specify): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Sepsis*** Sepsis (other than urinary tract)
* Sepsis of urinary tract origin
 | **Trauma*** Head trauma (with/without multiple trauma)
* Multiple trauma (excluding head trauma)

**Metabolic*** Diabetic ketoacidosis
* Drug overdose
* Metabolic coma
* Other metabolic disease (specify): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Hematologic*** Coagulopathy/neutropenia thrombocytopenia
* Other hematologic condition (specify): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Burns†*** Burns

**Other*** Renal disease (specify): \_\_\_\_\_\_\_
* Other medical disease (specify):
 |
| ***TAXONOMY B - Primary ICU Diagnosis: Surgical Elective and Surgical Emergency (Operative Condition System) (check one)*** |
| **Cardiovascular/Vascular\**** CABG only
* Carotid endarterectomy
* Dissecting/ruptured aorta
* Elective abdominal aneurysm repair
* Peripheral artery bypass graft
* Peripheral vascular surgery (no bypass graft)
* Valvular heart surgery/CABG
* Valvular heart surgery only
* Other CV disease (specify): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Respiratory*** Lung neoplasm
* Respiratory infection
* Respiratory neoplasm (mouth, sinus larynx, trachea)
* Other respiratory disease (specify): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
 | **Gastrointestinal** * GI bleeding
* GI cholecystitis/ cholangitis
* GI inflammatory disease
* GI neoplasm
* GI obstruction
* GI perforation/rupture
* Liver transplant
* Pancreatitis
* Other GI disease (specify): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Neurologic*** Craniotomy for neoplasm
* Intracerebral hemorrhage
* Laminectomy/other spinal cord surgery
* Subarachnoid hemorrhage
* Subdural/epidural hematoma
* Other neurologic disease (specify):
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
 | **Trauma*** Head trauma (with/without multiple trauma)
* Multiple trauma (excluding head trauma)

**Renal*** Renal neoplasm
* Other renal disease (specify): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Gynecologic*** Hysterectomy

**Orthopedic*** Hip or extremity fracture

**Bariatric Surgery*** Laproscopic Banding
* Laproscopic Gastric Bypass
* Open Gastric Bypass (Roux-en-Y)
* Vertical Banded Gastroplasty

**Burns†*** Burns

**Other** * Other surgical disease (specify):

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

|  |
| --- |
| **†if Burns:** |
| Date of burn injury (YYYY-MM-DD): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Total body surface area (%TBSA) burn: \_\_\_\_\_\_\_\_\_\_\_\_ %Type of burn:[ ]  Scald [ ]  Fire [ ]  Chemical [ ]  Radiation [ ]  Unknown [ ]  Other, specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Is there presence of full thickness burn (3rd degree)? [ ]  Yes [ ]  NoIs inhalation injury present? [ ]  Yes [ ]  No*If yes,* indicate the Inhalation Injury Severity Score:[ ] 0 – No injury [ ] 1– Mild [ ] 2 – Moderate [ ] 3 – Severe [ ] 4 – Massive |
| **\*if Cardiovascular/Vascular:** |
| Date of cardiac surgery (YYYY-MM-DD): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Canadian Cardiovascular Society (CCS) grading of angina pectoris: [ ]  Grade 1 [ ]  Grade 2 [ ]  Grade 3 [ ]  Grade 4 [ ]  Not DoneNew York Heart Association (NYHA) Functional Classification: [ ]  Grade 1 [ ]  Grade 2 [ ]  Grade 3 [ ]  Grade 4 [ ]  Not DoneLVEF function: [ ]  >50% [ ]  31-50% [ ]  21-30% [ ]  <20% Did the patient receive any of the following cardiac medications (select all given): [ ]  ACE Inhibitor [ ]  Aspirin [ ] Beta blockers [ ] StatinsUrgency: [ ]  Elective [ ]  Urgent [ ]  Emergency [ ]  SalvageWas the patient considered to be in a critical pre-operative state? [ ]  Yes [ ]  NoWeight of the intervention: [ ]  Isolated CABG [ ]  Single non-CABG [ ]  2 procedures [ ]  3 proceduresDid the surgery involve the thoracic aorta? [ ]  Yes [ ]  NoWas Cardiopulmonary Bypass (CPB) used? [ ]  Yes [ ]  No |

**COMORBITITIES**

[ ]  Yes *(check all applicable options from taxonomy ‘C’ below.)*

[ ]  No

|  |  |
| --- | --- |
| **TAXONOMY C - Comorbidities** |  |
| **Myocardial*** Angina
* Arrhythmia
* Congestive heart failure (or heart disease)
* Recent myocardial infarction (≤90 days)
* Previous myocardial infarction (>90 days)
* Moderate pulmonary hypertension (PA systolic/RVSP 31-55 mmHg)
* Severe pulmonary hypertension (PA systolic/RVSP >55 mmHg)
* Valvular
* Active endocarditis
* Previous cardiac surgery

**Vascular*** Cerebrovascular disease (Stroke or TIA)
* Hypertension
* Extracardiac arteriopathy

**Pulmonary*** Asthma
* Chronic obstructive pulmonary disease (COPD, emphysema)

**Neurologic*** Dementia
* Hemiplegia (paraplegia)
* Neurologic illnesses (such as Multiple sclerosis or Parkinsons)

**Endocrine*** Diabetes Type I or II on insulin
* Diabetes type II not on insulin
* Diabetes with end organ damage
* Obesity and/or BMI > 30 (weight in kg/(ht in meters)2)

**Renal*** Moderate renal disease (Creatinine clearance 51-85 mL/min)
* Severe renal disease (Creatinine clearance ≤50 mL/min off dialysis)
* Dialysis (regardless of serum creatinine)
 | **Gastrointestinal*** Gastrointestinal disease (hernia or reflux)
* GI bleeding
* Inflammatory bowel
* Mild liver disease
* Moderate or severe liver disease
* Peptic ulcer disease

**Cancer/Immune*** AIDS
* Any Tumor
* Leukemia
* Lymphoma
* Metastatic solid tumor

**Psychological** * Anxiety or Panic Disorders
* Depression

**Musculoskeletal*** Arthritis (Rheumatoid or Osteoarthritis
* Connective Tissue disease
* Degenerative Disc disease (back disease or spinal stenosis or severe chronic back pain)
* Osteoporosis

**Substance Use*** Heavy alcohol use or binge drinking history
* Current smoker
* Drug abuse history

**Miscellaneous*** Hearing Impairment (very hard of hearing even with hearing aids)
* Visual Impairment (cataracts, glaucoma, macular degeneration)
* Severe mobility impairment
 |

**APACHE II Score:** \_\_\_\_\_\_\_\_\_

*If score ≤ 10*, is the APACHE II Score based on:❑Partial data 🡪 🡪 🡪 provide reason(s) below.

 ❑Complete data

 **Please provide the reason the APACHE II Score cannot be calculated:**

* No bloodwork taken
* Data cannot be found

**Upon enrollment, is the patient suffering from acute kidney injury (AKI)?**

❑ Yes 🡪 🡪 🡪 record urine output (UO) at time of enrollment

❑ No

**Urine output at time of enrollment:**

❑ UO <0.5 mL/kg/h for 6h

❑ UO <0.5 mL/kg/h for 12h

❑ UO < 0.3 mL/kg/h for 24h

❑ anuria for 12 h

 **Baseline (normal) creatinine prior to illness:** \_\_\_\_\_\_\_\_\_\_\_ ❑ mmol/L ❑ mg/dL

*Acute kidney injury (AKI), or as previously called Acute Renal Failure (ARF), is commonly defined as an abrupt decline in renal function. We are using the uniformly accepted definition of AKI (i.e. RIFLE Criteria) to determine presence of AKI in study patients at baseline. As such the patient’s urine output is captured here. Creatinine values will also be captured during the patient’s participation in the study and will be recorded on a separate CRF.*

**Was a wound present at ICU admission?**

❑ Yes 🡪 🡪 🡪 Check all that apply: ❑ Pressure ulcer

❑ No ❑Enterocutaneous fistula

 ❑ Open abdomen

 ❑ Wound dehiscence

***Pressure ulcer*** *– also called ‘bedsores’ or ‘decubitus ulcers’ are injuries to the skin and underlying tissue resulting from prolonged pressure on the skin. They most often develop on skin that covers bony areas, such as heels, ankles, hips and tailbone.*

***Enterocutaneous fistula*** *– is an abnormal connection that develops between the intestinal tract or stomach and the skin. As a result, contents of the stomach or intestines leak through to the skin. Most enterocutaneous fistulas occur after bowel surgery.*

***Open abdomen*** *– An abdominal wall defect created by intentionally leaving on abdominal incision open at the completion of intraabdominal surgery or by opening (or re-opening) the abdomen because of a concern for abdominal compartment syndrome.*

***Wound dehiscence*** *– Is a surgical complication in which a wound ruptures along a surgical incision.*

**Is a computed SOFA Score available?** ❑ Yes 🡪 *If yes*, SOFA Score: \_\_\_\_\_\_\_\_

❑ No *🡪 If no, enter the following data:*

|  |  |  |
| --- | --- | --- |
| **Lowest PaO2/FiO2 Ratio** **(also known as P/F ratio):*** ≥ 400 mmHg or N/A
* 300 - 399 mmHg
* 200 - 299 mmHg
* 100 - 199 mmHg with respiratory support
* < 100 mmHg with respiratory support
 | **Lowest Platelets:*** ≥ 150 x 10­­3/mm3 or N/A
* 100 - 149 x 10­­3/mm3
* 50 - 99 x 10­­3/mm3
* 20 - 49 x 10­­3/mm3
* < 20 x 10­­3/mm3
 | **Highest Bilirubin (total):*** < 1.2 mg/dL (< 20 μmol/L) or N/A
* 1.2 - 1.9 mg/dL (20 - 32 μmol/L)
* 2.0 - 5.9 mg/dL (33 - 101 μmol/L)
* 6.0 - 11.9 mg/dL (102 - 204 μmol/L)
* ≥ 12 mg/dL (> 204 μmol/L)
 |
| **Did the patient receive vasopressors today?**

|  |  |
| --- | --- |
| ❑ Yes↓ | ❑ No ↓  |
| If yes:❑ Dopamine ≤ 5μg/kg/min or Dobutamine (any dose)❑ Dopamine 5 - 15 μg/kg/min or Epinephrine ≤ 0.1 μg/kg/min or Norepinephrine ≤ 0.1 μg/kg/min❑ Dopamine > 15 μg/kg/min or Epinephrine > 0.1 μg/kg/min or Norepinephrine > 0.1 μg/kg/min | If no: ❑ Mean Arterial Pressure (MAP) < 70 mmHg❑ Mean Arterial Pressure (MAP) ≥ 70 mmHg |

 |
| What is the patient’s state of consciousness?(Choose the options that give the highest score). |
| **Eye Opening**❑ 1- None❑ 2- To pain❑ 3- To speech❑ 4- Spontaneous | **Verbal Response**❑ 1- None❑ 2- Incomprehensible words❑ 3- Inappropriate words❑ 4- Confused❑ 5- Oriented | **Best Motor Response**❑ 1- None❑ 2- Extension❑ 3- Abdominal flexion❑ 4- Withdraws from pain❑ 5- Localizes to pain❑ 6- Obeys commands |
| **Highest Creatinine:**❑ < 1.2 mg/dL (< 110 μmol/L) or N/A❑ 1.2 - 1.9 mg/dL (110 - 170 μmol/L) ❑ 2.0 - 3.4 mg/dL (171 - 229 μmol/L)❑ 3.5 - 4.9 mg/dL (300 - 440 μmol/L)❑ ≥ 5 mg/dl (> 440 μmol/L) | **Total urine output:**❑ ≥ 500 mL/day or N/A❑ 200 - 499 mL/day❑ < 200 mL/day |

**Was a formal nutrition assessment done?**

❑ Yes 🡪 🡪 🡪 **Date (YYYY-MM-DD):** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

❑ No

**MALNUTRITION**

**Does the patient have moderate to severe malnutrition?**

❑ Yes 🡪 Check all that apply below.

❑ No

* ***Unintentional weight loss of:*** *(select one of the following)*
* 1-2% in 1 week
* >2% in 1 week
* 5% in 1 month
* >5% in 1 month
* >5% in 2 months
* 7.5% in 3 months
* >7.5% in 3 months
* 5-10% in 6 months
* >10% in 6 months
* ***Reduced food intake of:*** *(select one of the following)*
* 0-25% of normal requirements in the past week
* 25-60% of normal requirements in the past week
* ≤50% of normal requirements in ≥ 5 days
* <75% of normal requirements for > 1 week
* ***BMI of:*** *(select one of the following)*
* <18.5
* 18.5-20.5
* <20 if age <70 with >5% weight loss in the past 3 months or >10% in any time frame
* <22 if age >70 with >5% weight loss in the past 3 months or >10% in any time frame
* ***Edema:*** *(select one of the following)*
* Moderate edema
* Severe edema
* ***Moderate/severe fat and/or muscle wasting as evidenced by:*** *(select all that apply)*
* Physical exam
* CT scan
	+ What findings lead you to conclude there is wasting? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Ultrasound
	+ What findings lead you to conclude there is wasting? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Other, specify findings: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

***Other, specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_***

**Clinical Frailty Scale**

**Please consider the participant’s overall condition 2 weeks *prior to this admission to hospital*.**

How fit or frail was she/he at that time point? **Check one response only.** If you have trouble deciding between two options, choose the higher functioning level.

|  |  |  |
| --- | --- | --- |
|  |  | **Description** |
| ❑ |  | **Very Fit *(category 1)***People who are robust, active, energetic and motivated. These people commonly exercise regularly. They are among the fittest for their age. |
| ❑ |  | **Well *(category 2)***N**o active disease symptoms** but less fit than people in category 1. Often, they exercise or are very **active occasionally**, *e.g.* seasonally. *Well* older adults share most attributes of the very fit, except for regular, vigorous exercise. Like them, some may complain of memory symptoms, but without objective deficits. |
| ❑ |  | **Managing Well *(category 3)***Medical problems are well controlled, but people in this category are not regularly active beyond routine walking.Those with treated medical problems who exercise are classed in categories 1 or 2. |
| ❑ |  | **Vulnerable *(category 4)***N**ot dependent** on others for daily help, but often **symptoms limit activities**. A common complaint is being “**slowed up**” and/ or being **tired during the day**. Many people in this category rate their health as no better than “fair”. Memory problems, if present, can begin to affect function (e.g. having to look up familiar recipes, misplacing documents) but usually do not meet dementia criteria. Families often note some withdrawal – *e.g*. needing encouragement to go to social activities. |
| ❑ |  | **Mildly Frail *(category 5)*** M**ore evident slowing** and individuals help needed in “**high” activities of daily living** (finances, transportation, heavy housework, medications). Mildly frail people might have difficulty with shopping or walking outside alone, meal preparation, and housework. Often, they will have **several illnesses** and take multiple medications.This category includes people with **mild dementia**. Their common symptoms include forgetting the details of a recent event, even though they remember the event itself, asking the same question, or telling the same story several times a day and social withdrawal. |
| ❑ |  | **Moderately Frail *(category 6)*** Individuals need help with **all** **outside activities** and with **keeping house**. Inside, they often have **problems with stairs** and need **help with bathing** and might need minimal assistance (cuing, standby) with dressing. If a memory problem causes the dependency, often recent memory will be very impaired, even though they seemingly can remember their past life events well. |
| ❑ |  | **Severely Frail *(category 7)***Completely dependent on others for all or most personal activities of daily living, such as dressing and feeding. |
| ❑ |  | **Very Severely Frail *(category* 8)**Completely dependent, approaching the end of life. Typically, people in this category could not recover from even a minor illness. |

**SARC-F SCALE**

**How much difficulty did they have in lifting and carrying 10 pounds?**

❑ None - 0

❑ Some - 1

❑ A lot or unable – 2

**How much difficulty did they have walking across a room?**

❑ None - 0

❑ Some - 1

❑ A lot, use aids or unable – 2

**How much difficulty did they have transferring from a chair or bed?**

❑ None - 0

❑ Some - 1

❑ A lot or unable without help – 2

**How much difficulty did they have climbing a flight of 10 stairs?**

❑ None – 0

❑ Some - 1

❑ A lot or unable – 2

**How many times did they fall in the past year?**

❑ None – 0

❑ 1-3 falls - 1

❑ 4 or more falls - 2

##

|  |  |
| --- | --- |
| **Height (meters):**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_How was height determined? ❒Actual ❒Estimated | **Dry Body Weight (kg):** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ How was weight determined? ❒ Actual ❒ Estimated  |
|  BMI (Automatically Calc’d): \_\_\_\_\_\_\_\_\_\_\_ kg/m2 |

**POST-RANDOMIZATION NUTRITION GOALS**

|  |  |
| --- | --- |
| Weight used to determine ***goal calorie*** requirement: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_kg | Goal Calorie Requirement: \_\_\_\_\_\_\_\_\_\_\_kcal/day |
| Weight used to determine ***goal protein*** requirement: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_kg | Precise Goal Protein Requirement:\_\_\_\_\_\_\_\_\_\_\_ g/day |

**INITIATION OF NUTRITION THERAPY**

|  |  |
| --- | --- |
| **Enteral Nutrition****When was EN first initiated?*** EN initiated prior to ICU admission
* EN initiated during first 28 days in ICU:

*Date (YYYY-MM-DD):\_\_\_\_\_\_\_\_\_\_\_\_\_* *Time (HH:MM, 24h):\_\_\_\_\_\_\_\_\_\_** EN not initiated during first 28 days in ICU

**When was EN discontinued?** * EN discontinued during first 28 days in ICU:

*Date (YYYY-MM-DD):\_\_\_\_\_\_\_\_\_\_\_\_\_* *Time (HH:MM, 24h):\_\_\_\_\_\_\_\_\_\_** Still receiving EN in ICU after study day 28
 | **Parenteral Nutrition****When was PN first initiated?*** PN initiated prior to ICU admission
* PN initiated during first 28 days in ICU:

*Date (YYYY-MM-DD):\_\_\_\_\_\_\_\_\_\_\_\_\_* *Time (HH:MM, 24h):\_\_\_\_\_\_\_\_\_\_** PN not initiated during first 28 days in ICU

**When was PN discontinued?** * PN discontinued during first 28 days in ICU:

*Date (YYYY-MM-DD):\_\_\_\_\_\_\_\_\_\_\_\_\_* *Time (HH:MM, 24h):\_\_\_\_\_\_\_\_\_\_** Still receiving PN in ICU after study day 28
 |

**What was the delivery technique recommended by the physician or dietitian at the initial assessment for enteral nutrition?** (check one of the following)

* Initiate EN: start at low rate and progress to hourly goal rate
* Initiate EN: start at or progress to 24hr volume goal based hourly rate
* Initiate EN: start at hourly goal rate
* Initiate EN: keep at low rate (trophic feeds: no progress)
* Initiate EN: bolus feed
* Keep Nil Per Os (NPO) or Nil By Mouth
* Oral nutrition
* Parenteral Nutrition

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Study Day:** | **1** **ICU Admit** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** |
| NPO because palliating or comfort measures?If you have indicated “Yes”, no more data is needed to be entered today. | ❑ Y ❑ N | ❑ Y ❑ N | ❑ Y ❑ N | ❑ Y ❑ N | ❑ Y ❑ N | ❑ Y ❑ N | ❑ Y ❑ N | ❑ Y ❑ N | ❑ Y ❑ N | ❑ Y ❑ N | ❑ Y ❑ N | ❑ Y ❑ N |
| Did the protein goals change from the randomization group?If “yes,”why:1. No longer critically ill
2. New onset ARDS
3. Worse renal
4. Improved renal
5. Start dialysis
6. New wound
7. New surgical wound
8. –ve nitrogen balance
9. Increased protein losses
 | ❑ Y ❑ N❑ 1❑ 2❑ 3❑ 4❑ 5❑ 6❑ 7❑ 8❑ 9 | ❑ Y ❑ N❑ 1❑ 2❑ 3❑ 4❑ 5❑ 6❑ 7❑ 8❑ 9 | ❑ Y ❑ N❑ 1❑ 2❑ 3❑ 4❑ 5❑ 6❑ 7❑ 8❑ 9 | ❑ Y ❑ N❑ 1❑ 2❑ 3❑ 4❑ 5❑ 6❑ 7❑ 8❑ 9 | ❑ Y ❑ N❑ 1❑ 2❑ 3❑ 4❑ 5❑ 6❑ 7❑ 8❑ 9 | ❑ Y ❑ N❑ 1❑ 2❑ 3❑ 4❑ 5❑ 6❑ 7❑ 8❑ 9 | ❑ Y ❑ N❑ 1❑ 2❑ 3❑ 4❑ 5❑ 6❑ 7❑ 8❑ 9 | ❑ Y ❑ N❑ 1❑ 2❑ 3❑ 4❑ 5❑ 6❑ 7❑ 8❑ 9 | ❑ Y ❑ N❑ 1❑ 2❑ 3❑ 4❑ 5❑ 6❑ 7❑ 8❑ 9 | ❑ Y ❑ N❑ 1❑ 2❑ 3❑ 4❑ 5❑ 6❑ 7❑ 8❑ 9 | ❑ Y ❑ N❑ 1❑ 2❑ 3❑ 4❑ 5❑ 6❑ 7❑ 8❑ 9 | ❑ Y ❑ N❑ 1❑ 2❑ 3❑ 4❑ 5❑ 6❑ 7❑ 8❑ 9 |
| Was nutrition received orally/by mouth? | ❑ Y ❑ N | ❑ Y ❑ N | ❑ Y ❑ N | ❑ Y ❑ N | ❑ Y ❑ N | ❑ Y ❑ N | ❑ Y ❑ N | ❑ Y ❑ N | ❑ Y ❑ N | ❑ Y ❑ N | ❑ Y ❑ N | ❑ Y ❑ N |
| Blood glucose (closest to 8am)  | ❑ Y ❑ N \_\_\_\_\_\_\_ | ❑ Y ❑ N ­­\_\_\_\_\_\_\_\_ | ❑ Y ❑ N ­­\_\_\_\_\_\_\_\_ | ❑ Y ❑ N ­­\_\_\_\_\_\_\_\_ | ❑ Y ❑ N ­­\_\_\_\_\_\_\_\_ | ❑ Y ❑ N ­­\_\_\_\_\_\_\_\_ | ❑ Y ❑ N ­­\_\_\_\_\_\_\_\_ | ❑ Y ❑ N ­­\_\_\_\_\_\_\_\_ | ❑ Y ❑ N ­­\_\_\_\_\_\_\_\_ | ❑ Y ❑ N ­­\_\_\_\_\_\_\_\_ | ❑ Y ❑ N ­­\_\_\_\_\_\_\_\_ | ❑ Y ❑ N ­­\_\_\_\_\_\_\_\_ |

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Hypoglycemic event? (<3.5mmol/L or <63mg/dL)Record blood glucose (enter up to 3) | 1. 2. 3.  | 1. 2. 3.  | 1. 2. 3.  | 1. 2. 3.  | 1. 2. 3.  | 1. 2. 3.  | 1. 2. 3.  | 1. 2. 3.  | 1. 2. 3.  | 1. 2. 3.  | 1. 2. 3.  | 1. 2. 3.  |
| Propofol (≥ 6 hours) If yes:  Amount given (mL): | ❑ Y ❑ N ­­\_\_\_\_\_\_\_\_ | ❑ Y ❑ N ­­\_\_\_\_\_\_\_\_ | ❑ Y ❑ N ­­\_\_\_\_\_\_\_\_ | ❑ Y ❑ N ­­\_\_\_\_\_\_\_\_ | ❑ Y ❑ N ­­\_\_\_\_\_\_\_\_ | ❑ Y ❑ N ­­\_\_\_\_\_\_\_\_ | ❑ Y ❑ N ­­\_\_\_\_\_\_\_\_ | ❑ Y ❑ N ­­\_\_\_\_\_\_\_\_ | ❑ Y ❑ N ­­\_\_\_\_\_\_\_\_ | ❑ Y ❑ N ­­\_\_\_\_\_\_\_\_ | ❑ Y ❑ N ­­\_\_\_\_\_\_\_\_ | ❑ Y ❑ N ­­\_\_\_\_\_\_\_\_ |
| Highest CreatinineUnits: ❑µmol/L ❑mg/dL | \_\_\_\_\_\_\_❑N/A | \_\_\_\_\_\_\_❑N/A | \_\_\_\_\_\_\_❑N/A | \_\_\_\_\_\_\_❑N/A | \_\_\_\_\_\_\_❑N/A | \_\_\_\_\_\_\_❑N/A | \_\_\_\_\_\_\_❑N/A | \_\_\_\_\_\_\_❑N/A | \_\_\_\_\_\_\_❑N/A | \_\_\_\_\_\_\_❑N/A | \_\_\_\_\_\_\_❑N/A | \_\_\_\_\_\_\_❑N/A |
| Highest Urea/BUNUnits: ❑mmol/L ❑mg/dL | \_\_\_\_\_\_\_❑N/A | \_\_\_\_\_\_\_❑N/A | \_\_\_\_\_\_\_❑N/A | \_\_\_\_\_\_\_❑N/A | \_\_\_\_\_\_\_❑N/A | \_\_\_\_\_\_\_❑N/A | \_\_\_\_\_\_\_❑N/A | \_\_\_\_\_\_\_❑N/A | \_\_\_\_\_\_\_❑N/A | \_\_\_\_\_\_\_❑N/A | \_\_\_\_\_\_\_❑N/A | \_\_\_\_\_\_\_❑N/A |
| Lowest PhosphateUnits: ❑mmol/L ❑mg/dL | \_\_\_\_\_\_\_❑N/A | \_\_\_\_\_\_\_❑N/A | \_\_\_\_\_\_\_❑N/A | \_\_\_\_\_\_\_❑N/A | \_\_\_\_\_\_\_❑N/A | \_\_\_\_\_\_\_❑N/A | \_\_\_\_\_\_\_❑N/A | \_\_\_\_\_\_\_❑N/A | \_\_\_\_\_\_\_❑N/A | \_\_\_\_\_\_\_❑N/A | \_\_\_\_\_\_\_❑N/A | \_\_\_\_\_\_\_❑N/A |
| Location of Feeding Tube: *(Select one)* | ❑  Gastric❑  Sm Bowel❑  No tube | ❑  Gastric❑  Sm Bowel❑  No tube | ❑  Gastric❑  Sm Bowel❑  No tube | ❑  Gastric❑  Sm Bowel❑  No tube | ❑  Gastric❑  Sm Bowel❑  No tube | ❑  Gastric❑  Sm Bowel❑  No tube | ❑  Gastric❑  Sm Bowel❑  No tube | ❑  Gastric❑  Sm Bowel❑  No tube | ❑  Gastric❑  Sm Bowel❑  No tube | ❑  Gastric❑  Sm Bowel❑  No tube | ❑  Gastric❑  Sm Bowel❑  No tube | ❑  Gastric❑  Sm Bowel❑  No tube |
| Motility Agents*If yes, select all apply:* 1. Alizapride
2. Cinitapride
3. Cisapride
4. Domperidone
5. Erythromycin
6. Itopride
7. Lesuride
8. Methylnaltrexon
9. Metoclopramide
10. Mosapride
11. Naloxone

12) Other (specify) | ❑ Y ❑ N❑ 1❑ 2❑ 3❑ 4❑ 5❑ 6❑ 7❑ 8❑ 9❑ 10❑ 11❑ 12 | ❑ Y ❑ N❑ 1❑ 2❑ 3❑ 4❑ 5❑ 6❑ 7❑ 8❑ 9❑ 10❑ 11❑ 12 | ❑ Y ❑ N❑ 1❑ 2❑ 3❑ 4❑ 5❑ 6❑ 7❑ 8❑ 9❑ 10❑ 11❑ 12 | ❑ Y ❑ N❑ 1❑ 2❑ 3❑ 4❑ 5❑ 6❑ 7❑ 8❑ 9❑ 10❑ 11❑ 12 | ❑ Y ❑ N❑ 1❑ 2❑ 3❑ 4❑ 5❑ 6❑ 7❑ 8❑ 9❑ 10❑ 11❑ 12 | ❑ Y ❑ N❑ 1❑ 2❑ 3❑ 4❑ 5❑ 6❑ 7❑ 8❑ 9❑ 10❑ 11❑ 12 | ❑ Y ❑ N❑ 1❑ 2❑ 3❑ 4❑ 5❑ 6❑ 7❑ 8❑ 9❑ 10❑ 11❑ 12 | ❑ Y ❑ N❑ 1❑ 2❑ 3❑ 4❑ 5❑ 6❑ 7❑ 8❑ 9❑ 10❑ 11❑ 12 | ❑ Y ❑ N❑ 1❑ 2❑ 3❑ 4❑ 5❑ 6❑ 7❑ 8❑ 9❑ 10❑ 11❑ 12 | ❑ Y ❑ N❑ 1❑ 2❑ 3❑ 4❑ 5❑ 6❑ 7❑ 8❑ 9❑ 10❑ 11❑ 12 | ❑ Y ❑ N❑ 1❑ 2❑ 3❑ 4❑ 5❑ 6❑ 7❑ 8❑ 9❑ 10❑ 11❑ 12 | ❑ Y ❑ N❑ 1❑ 2❑ 3❑ 4❑ 5❑ 6❑ 7❑ 8❑ 9❑ 10❑ 11❑ 12 |

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Study Day:** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** |
| **Was Enteral Nutrition (EN) received?** | ❑ Y ❑ N | ❑ Y ❑ N | ❑ Y ❑ N | ❑ Y ❑ N | ❑ Y ❑ N | ❑ Y ❑ N | ❑ Y ❑ N | ❑ Y ❑ N | ❑ Y ❑ N | ❑ Y ❑ N | ❑ Y ❑ N | ❑ Y ❑ N |
| *If EN was received today:* |   |   |   |   |   |   |   |   |   |   |   |   |
| **Record Enteral formula(s):**  | 1. 2.3.  | 1. 2.3.  | 1. 2.3.  | 1. 2.3.  | 1. 2.3.  | 1. 2.3.  | 1. 2.3.  | 1. 2.3.  | 1. 2.3.  | 1. 2.3.  | 1. 2.3.  | 1. 2.3.  |
| **Total kilocalories (Kcal) received from enteral formula(s):**  **Total protein (g) received from enteral formula(s):**  |  \_\_\_\_\_kcal \_\_\_\_\_g | \_\_\_\_\_kcal \_\_\_\_\_g | \_\_\_\_\_kcal \_\_\_\_\_g | \_\_\_\_\_kcal \_\_\_\_\_g | \_\_\_\_\_kcal \_\_\_\_\_g | \_\_\_\_\_kcal \_\_\_\_\_g | \_\_\_\_\_kcal \_\_\_\_\_g | \_\_\_\_\_kcal \_\_\_\_\_g | \_\_\_\_\_kcal \_\_\_\_\_g | \_\_\_\_\_kcal \_\_\_\_\_g | \_\_\_\_\_kcal \_\_\_\_\_g | \_\_\_\_\_kcal \_\_\_\_\_g |
| *If EN was or was not received today:* |
| **Supplemental protein?** Specify Protein Supplement |  Y  N ­­\_\_\_\_\_\_\_\_ |  Y  N ­­\_\_\_\_\_\_\_\_ |  Y  N ­­\_\_\_\_\_\_\_\_ |  Y  N ­­\_\_\_\_\_\_\_\_ |  Y  N ­­\_\_\_\_\_\_\_\_ |  Y  N ­­\_\_\_\_\_\_\_\_ |  Y  N ­­\_\_\_\_\_\_\_\_ |  Y  N ­­\_\_\_\_\_\_\_\_ |  Y  N ­­\_\_\_\_\_\_\_\_ |  Y  N ­­\_\_\_\_\_\_\_\_ |  Y  N ­­\_\_\_\_\_\_\_\_ |  Y  N ­­\_\_\_\_\_\_\_\_ |
| **Kilocalories (kcal) received from supplemental protein:** **Protein (g) received from supplemental protein:**  | \_\_\_\_\_kcal \_\_\_\_\_g | \_\_\_\_\_kcal \_\_\_\_\_g | \_\_\_\_\_kcal \_\_\_\_\_g | \_\_\_\_\_kcal \_\_\_\_\_g | \_\_\_\_\_kcal \_\_\_\_\_g | \_\_\_\_\_kcal \_\_\_\_\_g | \_\_\_\_\_kcal \_\_\_\_\_g | \_\_\_\_\_kcal \_\_\_\_\_g | \_\_\_\_\_kcal \_\_\_\_\_g | \_\_\_\_\_kcal \_\_\_\_\_g | \_\_\_\_\_kcal \_\_\_\_\_g | \_\_\_\_\_kcal \_\_\_\_\_g |
| **Non-protein modular supplements?** Specify (up to 2):  | ❑ Y ❑ N1.  2. |  Y  N1.  2. |  Y  N1.  2. |  Y  N1.  2. |  Y  N1.  2. |  Y  N1.  2. |  Y  N1.  2. |  Y  N1.  2. |  Y  N1.  2. |  Y  N1.  2. |  Y  N1.  2. |  Y  N1.  2. |
| Kilocalories received from other non-protein modular supplements:  |  \_\_\_\_\_\_kcal | \_\_\_\_\_\_kcal | \_\_\_\_\_\_kcal | \_\_\_\_\_\_kcal | \_\_\_\_\_\_kcal | \_\_\_\_\_\_kcal | \_\_\_\_\_\_kcal | \_\_\_\_\_\_kcal | \_\_\_\_\_\_kcal | \_\_\_\_\_\_kcal | \_\_\_\_\_\_kcal | \_\_\_\_\_\_kcal |

**EN INTERRUPTION**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Study Day:** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** |
| Was EN interrupted today? *If yes:* Total duration of time interrupted: (hours and minutes) | * Yes
* No

**\_\_\_\_\_\_\_** | * Yes
* No

**\_\_\_\_\_\_\_** | * Yes
* No

**\_\_\_\_\_\_\_** | * Yes
* No

**\_\_\_\_\_\_\_** | * Yes
* No

**\_\_\_\_\_\_\_** | * Yes
* No

**\_\_\_\_\_\_\_** | * Yes
* No

**\_\_\_\_\_\_\_** | * Yes
* No

**\_\_\_\_\_\_\_** | * Yes
* No

**\_\_\_\_\_\_\_** | * Yes
* No

**\_\_\_\_\_\_\_** | * Yes
* No

**\_\_\_\_\_\_\_** | * Yes
* No

**\_\_\_\_\_\_\_** |
| If yes, EN was interrupted: |
| Do you know the reason why EN was interrupted today? *If yes, select all that apply (from list below):* | * Yes
* No
 | * Yes
* No
 | * Yes
* No
 | * Yes
* No
 | * Yes
* No
 | * Yes
* No
 | * Yes
* No
 | * Yes
* No
 | * Yes
* No
 | * Yes
* No
 | * Yes
* No
 | * Yes
* No
 |
| 1. Fasting for endotracheal extubation/intubation/trach procedure
2. Fasting for other bedside procedure
3. Fasting for operating room procedure
4. Fasting for radiology suite procedure
5. Fasting for administration of medications
6. Intolerance to enteral feeding - high gastric

residuals1. Intolerance to enteral feeding - increased

abdominal girth or abdominal distension1. Intolerance to enteral feeding - vomiting/emesis
2. Intolerance to enteral feeding - diarrhea
3. Intolerance to enteral feeding - subjective

discomfort1. Necrotic bowel/gut ischemia
2. No enteral access available/enteral access lost,

displaced or malfunctioning1. Inotropes, vasopressor requirement
2. Subject deemed too sick to continue enteral feeding
3. Enteral feeding formula not available
4. New contraindication to EN
5. Trial of oral intake
6. NPO because subject palliating or receiving comfort measures only

Other *(specify): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*Other *(specify): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*If on any of the above days an enteral nutrition formula(s) was/were provided which is/are not found in the provided REDCap taxonomy, specify:  Company name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Product name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ *Is the formula polymeric?* **❑** Yes **❑** No *Does the formula contain:* **❑** Fish oil **❑** Supplemental glutamine (>10g/L or powder) **❑** Supplemental arginine (>4.5 g/L)  | **❑ 1****❑ 2****❑ 3****❑ 4****❑ 5****❑ 6****❑ 7****❑ 8****❑ 9****❑ 10****❑ 11****❑ 12****❑ 13****❑ 14****❑ 15****❑ 16****❑ 17****❑ 18****❑** | **❑ 1****❑ 2****❑ 3****❑ 4****❑ 5****❑ 6****❑ 7****❑ 8****❑ 9****❑ 10****❑ 11****❑ 12****❑ 13****❑ 14****❑ 15****❑ 16****❑ 17****❑ 18****❑** | **❑ 1****❑ 2****❑ 3****❑ 4****❑ 5****❑ 6****❑ 7****❑ 8****❑ 9****❑ 10****❑ 11****❑ 12****❑ 13****❑ 14****❑ 15****❑ 16****❑ 17****❑ 18****❑** | **❑ 1****❑ 2****❑ 3****❑ 4****❑ 5****❑ 6****❑ 7****❑ 8****❑ 9****❑ 10****❑ 11****❑ 12****❑ 13****❑ 14****❑ 15****❑ 16****❑ 17****❑ 18****❑** | **❑ 1****❑ 2****❑ 3****❑ 4****❑ 5****❑ 6****❑ 7****❑ 8****❑ 9****❑ 10****❑ 11****❑ 12****❑ 13****❑ 14****❑ 15****❑ 16****❑ 17****❑ 18****❑** | **❑ 1****❑ 2****❑ 3****❑ 4****❑ 5****❑ 6****❑ 7****❑ 8****❑ 9****❑ 10****❑ 11****❑ 12****❑ 13****❑ 14****❑ 15****❑ 16****❑ 17****❑ 18****❑** | **❑ 1****❑ 2****❑ 3****❑ 4****❑ 5****❑ 6****❑ 7****❑ 8****❑ 9****❑ 10****❑ 11****❑ 12****❑ 13****❑ 14****❑ 15****❑ 16****❑ 17****❑ 18****❑** | **❑ 1****❑ 2****❑ 3****❑ 4****❑ 5****❑ 6****❑ 7****❑ 8****❑ 9****❑ 10****❑ 11****❑ 12****❑ 13****❑ 14****❑ 15****❑ 16****❑ 17****❑ 18****❑** | **❑ 1****❑ 2****❑ 3****❑ 4****❑ 5****❑ 6****❑ 7****❑ 8****❑ 9****❑ 10****❑ 11****❑ 12****❑ 13****❑ 14****❑ 15****❑ 16****❑ 17****❑ 18****❑** | **❑ 1****❑ 2****❑ 3****❑ 4****❑ 5****❑ 6****❑ 7****❑ 8****❑ 9****❑ 10****❑ 11****❑ 12****❑ 13****❑ 14****❑ 15****❑ 16****❑ 17****❑ 18****❑** | **❑ 1****❑ 2****❑ 3****❑ 4****❑ 5****❑ 6****❑ 7****❑ 8****❑ 9****❑ 10****❑ 11****❑ 12****❑ 13****❑ 14****❑ 15****❑ 16****❑ 17****❑ 18****❑** | **❑ 1****❑ 2****❑ 3****❑ 4****❑ 5****❑ 6****❑ 7****❑ 8****❑ 9****❑ 10****❑ 11****❑ 12****❑ 13****❑ 14****❑ 15****❑ 16****❑ 17****❑ 18****❑****❑** |

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Study Day:** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** |
| Was Parenteral Nutrition (PN) received?  | ❑ Y ❑ N | ❑ Y ❑ N | ❑ Y ❑ N | ❑ Y ❑ N | ❑ Y ❑ N | ❑ Y ❑ N | ❑ Y ❑ N | ❑ Y ❑ N | ❑ Y ❑ N | ❑ Y ❑ N | ❑ Y ❑ N | ❑ Y ❑ N |
| ***If PN was received today:*** |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Kilocalories (kcal) received from PN formula(s):   Total Protein (g) received from PN formula(s):  | \_\_\_\_\_kcal \_\_\_\_\_g | \_\_\_\_\_kcal \_\_\_\_\_g | \_\_\_\_\_kcal \_\_\_\_\_g | \_\_\_\_\_kcal \_\_\_\_\_g | \_\_\_\_\_kcal \_\_\_\_\_g | \_\_\_\_\_kcal \_\_\_\_\_g | \_\_\_\_\_kcal \_\_\_\_\_g | \_\_\_\_\_kcal \_\_\_\_\_g | \_\_\_\_\_kcal \_\_\_\_\_g | \_\_\_\_\_kcal \_\_\_\_\_g | \_\_\_\_\_kcal \_\_\_\_\_g | \_\_\_\_\_kcal \_\_\_\_\_g |
| Did the patient receive IV amino acids (independent of PN)?*If yes,* Amino acid solution*(See PN taxonomy)*: Kilocalories (kcal) received from amino acids:Protein (g) received from amino acids:  | ❑ Y ❑ N \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | ❑ Y ❑ N \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | ❑ Y ❑ N \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | ❑ Y ❑ N \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | ❑ Y ❑ N \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | ❑ Y ❑ N \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | ❑ Y ❑ N \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | ❑ Y ❑ N \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | ❑ Y ❑ N\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | ❑ Y ❑ N \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | ❑ Y ❑ N \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | ❑ Y ❑ N \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| ***If PN was not received today:*** |   |   |   |   |   |   |   |   |   |   |   |   |
| Did the patient receive IV amino acids **only?***If yes,* Amino acid solution:  *(See PN taxonomy)*  Kcal received from amino acids:  Protein (g) received from amino acids: |  Y  N\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ |  Y  N\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ |  Y  N\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ |  Y  N\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ |  Y  N\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ |  Y  N\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ |  Y  N\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ |  Y  N\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ |  Y  N\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ |  Y  N\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ |  Y  N\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ |  Y  N\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ |
| Did the patient receive IV lipids **only**?*If yes,* Lipid solution: 1 *(See PN taxonomy)*  Kcal received from lipids: |  Y  N \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ |  Y  N \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ |  Y  N \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ |  Y  N \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ |  Y  N \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ |  Y  N \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ |  Y  N \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ |  Y  N \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ |  Y  N \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ |  Y  N \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ |  Y  N \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ |  Y  N \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ |

1If on any of the above days an parenteral nutrition formula(s) was/were provided which is/are not found in the provided REDCap taxonomy, specify, specify:

 Company/manufacturer name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Product name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Lipid type:  Olive Oil  Soybean oil  MCT/LCT Physical Mixture  SMOF

  MCT/LCT Structured Form  Fish oil  Other: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Fish

 MCT/LCT Structured

 SM

 Soy

 Olive oil

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Study Day:** | **13** | **14** | **15** | **16** | **17** | **18** | **19** | **20** |
| NPO because subject palliating or receiving comfort measures only today? |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |
| Was enteral nutrition received? |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |
| *If yes,* protein (g) received from enteral formula(s): |  |  |  |  |  |  |  |  |
| *Supplemental protein?* |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |
| *If yes,* protein (g) received from supplemental protein: |  |  |  |  |  |  |  |  |
| Was parenteral nutrition (PN) received?  |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |
| *If yes,* protein (g) received from parenteral formula(s): |  |  |  |  |  |  |  |  |
| Did the patient receive IV amino acids **(independent of PN)**? |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |
| *If yes,* protein (g) received from amino acids: |  |  |  |  |  |  |  |  |
| **Study Day:** | **21** | **22** | **23** | **24** | **25** | **26** | **27** | **28** |
| NPO because subject palliating or receiving comfort measures only today? |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |
| Was enteral nutrition received? |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |
| *If yes,* protein (g) received from enteral formula(s): |  |  |  |  |  |  |  |  |
| *Supplemental protein?* |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |
| *If yes,* protein (g) received from supplemental protein: |  |  |  |  |  |  |  |  |
| Was parenteral nutrition received?  |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |
| *If yes,* protein (g) received from parenteral formula(s): |  |  |  |  |  |  |  |  |
| Did the patient receive IV amino acids **(independent of PN)**? |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |
| *If yes,* protein (g) received from amino acids: |  |  |  |  |  |  |  |  |

The calculations found on the REDCap “Daily Nutritional Adequacy” form can be recorded here and used to ensure compliance with the study protocol.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Study Day:** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** |
| Energy Adequacy (%) |  |  |  |  |  |  |  |  |  |  |  |  |
| Protein Adequacy (%)  |  |  |  |  |  |  |  |  |  |  |  |  |
| Energy Adequacy (kcal/kg) |  |  |  |  |  |  |  |  |  |  |  |  |
| Energy Adequacy (g/kg) |  |  |  |  |  |  |  |  |  |  |  |  |

##

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Study Day:** | **13** | **14** | **15** | **16** | **17** | **18** | **19** | **20** | **21** | **22** | **23** | **24** |
| Energy Adequacy (%) |  |  |  |  |  |  |  |  |  |  |  |  |
| Protein Adequacy (%)  |  |  |  |  |  |  |  |  |  |  |  |  |
| Energy Adequacy (kcal/kg) |  |  |  |  |  |  |  |  |  |  |  |  |
| Energy Adequacy (g/kg) |  |  |  |  |  |  |  |  |  |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Study Day:** | **25** | **26** | **27** | **28** |
| Energy Adequacy (%) |  |  |  |  |
| Protein Adequacy (%)  |  |  |  |  |
| Energy Adequacy (kcal/kg) |  |  |  |  |
| Energy Adequacy (g/kg) |  |  |  |  |

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Study Day:** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** |
| Did the participant receive a continuous infusion of vasopressors or inotropes today?  |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |
| *If yes,* record the highest hourly infusion rate for each vasopressor/inotropes received. |
| Dopamine (>5ug/kg/min) |  |  |  |  |  |  |  |  |  |  |  |  |
| Dobutamine |  |  |  |  |  |  |  |  |  |  |  |  |
| Norepinephrine |  |  |  |  |  |  |  |  |  |  |  |  |
| Epinephrine |  |  |  |  |  |  |  |  |  |  |  |  |
| Phenylephrine (>50ug/min) |  |  |  |  |  |  |  |  |  |  |  |  |
| Vasopressin |  |  |  |  |  |  |  |  |  |  |  |  |
| Milrinone |  |  |  |  |  |  |  |  |  |  |  |  |
| Levosimendan |  |  |  |  |  |  |  |  |  |  |  |  |

##

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Study Day:** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** | **14** |
| Did the participant receive RRT today?  |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |
| *If yes,* mode of RRT:Intermittent (IHD)Continuous (CRRT)Sustained low efficiency (SLED)Peritoneal (PD)Other (specify) | \_\_\_\_\_\_ | \_\_\_\_\_\_ | \_\_\_\_\_\_ | \_\_\_\_\_\_ | \_\_\_\_\_\_ | \_\_\_\_\_\_ | \_\_\_\_\_\_ | \_\_\_\_\_\_ | \_\_\_\_\_\_ | \_\_\_\_\_\_ | \_\_\_\_\_\_ | \_\_\_\_\_\_ | \_\_\_\_\_\_ | \_\_\_\_\_\_ |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Study Day:** | **15** | **16** | **17** | **18** | **19** | **20** | **21** | **22** | **23** | **24** | **25** | **26** | **27** | **28** |
| Did the participant receive RRT today?  |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |  Y  N |
| *If yes,* mode of RRT:Intermittent (IHD)Continuous (CRRT)Sustained low efficiency (SLED)Peritoneal (PD)Other (specify) | \_\_\_\_\_\_ | \_\_\_\_\_\_ | \_\_\_\_\_\_ | \_\_\_\_\_\_ | \_\_\_\_\_\_ | \_\_\_\_\_\_ | \_\_\_\_\_\_ | \_\_\_\_\_\_ | \_\_\_\_\_\_ | \_\_\_\_\_\_ | \_\_\_\_\_\_ | \_\_\_\_\_\_ | \_\_\_\_\_\_ | \_\_\_\_\_\_ |

**Complete one page for each vasopressor/inotrope the patient was on.**

|  |
| --- |
| **Did the patient receive vasopressors or inotropes during this ICU stay?** |
| Dopamine >5µg/kg/minDobutamine | NorepinephrineEpinephrine | Phenylephrine >50µg/minVasopressin | MilrinoneLevosimendan |

**Event 1**

|  |  |
| --- | --- |
| Start Date/Time: | Stop Date/Time:Same as death date/timeStill on vasopressor/inotrope at day 60Actual stop date/time:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Was \_\_\_\_\_\_\_\_\_\_re-started ≥ 24 hours from the last \_\_\_\_\_\_\_\_\_ stop date/time?  Yes No↓ |

**Event 2**

|  |  |
| --- | --- |
| Start Date/Time: | Stop Date/Time:Same as death date/timeStill on vasopressor/inotrope at day 60Actual stop date/time:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Was \_\_\_\_\_\_\_\_\_\_re-started ≥ 24 hours from the last \_\_\_\_\_\_\_\_\_ stop date/time?  Yes No↓ |

**Event 3**

|  |  |
| --- | --- |
| Start Date/Time: | Stop Date/Time:Same as death date/timeStill on vasopressor/inotrope at day 60Actual stop date/time:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Was \_\_\_\_\_\_\_\_\_\_re-started ≥ 24 hours from the last \_\_\_\_\_\_\_\_\_ stop date/time?  Yes No↓ |

**Event 4**

|  |  |
| --- | --- |
| Start Date/Time: | Stop Date/Time:Same as death date/timeStill on vasopressor/inotrope at day 60Actual stop date/time:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Was \_\_\_\_\_\_\_\_\_\_re-started ≥ 24 hours from the last \_\_\_\_\_\_\_\_\_ stop date/time?  Yes No↓ |

**Event 5**

|  |  |
| --- | --- |
| Start Date/Time: | Stop Date/Time:Same as death date/timeStill on vasopressor/inotrope at day 60Actual stop date/time:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
|  |

|  |
| --- |
| **Did the patient receive RRT during this ICU stay?** ❑Yes 🡪 If yes, complete the fields below. ❑No |
| **Was the patient was receiving RRT prior to admission?** * Yes (complete stop date information below to the left)
* No (complete start and stop date information below to the right)
 |
| **Stop date:** ❑ Continued past hospital discharge ❑ At 60 days, still on RRT in hospital ❑ Actual Stop Date (YYYY-MM-DD): \_\_\_\_\_\_\_\_\_\_\_\_\_ | **Start and Stop date:**Start Date (YYYY-MM-DD): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Stop Date:❑ Continued past hospital discharge❑ At 60 days, still on RRT in hospital❑ Actual Stop Date (YYYY-MM-DD): \_\_\_\_\_\_\_\_\_\_\_\_\_ |

##

**Ventilation Event 1**

|  |  |
| --- | --- |
| Start Date/Time: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_❑ Time N/A | Was mechanical ventilation re-instituted ≥ 24 hours from the last mechanical ventilation stop date/time? ❑ Yes ❑ No ↓ |
| Stop Date/Time:❑ Same as death date/time❑ Still vented at 60 days❑ Actual stop date/time: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

**Ventilation Event 2 (only record if ≥ 24 h in duration)**

|  |  |
| --- | --- |
| Start Date/Time:  | Was mechanical ventilation re-instituted ≥ 24 hours from the last mechanical ventilation stop date/time? ❑ Yes ❑ No ↓ |
| Stop Date/Time:❑ Same as death date/time❑ Still vented at 60 days❑ Actual stop date/time: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

**Ventilation Event 3 (only record if ≥ 24 h in duration)**

|  |  |
| --- | --- |
| Start Date/Time:  | Was mechanical ventilation re-instituted ≥ 24 hours from the last mechanical ventilation stop date/time? ❑ Yes ❑ No ↓ |
| Stop Date/Time:❑ Same as death date/time❑ Still vented at 60 days❑ Actual stop date/time: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

**Ventilation Event 4 (only record if ≥ 24 h in duration)**

|  |  |
| --- | --- |
| Start Date/Time:  | Was mechanical ventilation re-instituted ≥ 24 hours from the last mechanical ventilation stop date/time? ❑ Yes ❑ No ↓ |
| Stop Date/Time:❑ Same as death date/time❑ Still vented at 60 days❑ Actual stop date/time: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

**Ventilation Event 5 (only record if ≥ 24 h in duration)**

|  |  |
| --- | --- |
| Start Date/Time:  | Was mechanical ventilation re-instituted ≥ 24 hours from the last mechanical ventilation stop date/time? ❑ Yes ❑ No ↓ |
| Stop Date/Time:❑ Same as death date/time❑ Still vented at 60 days❑ Actual stop date/time: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

##

|  |  |
| --- | --- |
| Consent withdrawn during ICU stay?❒ Yes **→** ❒ No **↓** | Date/time consent withdrawn/denied:Type of withdrawal/denial of consent:❒ stop intervention, continue data collection ❒ stop intervention, stop data collection (discard previous data)❒ stop intervention, stop data collection (keep previous data) |

**ICU Stay 1**

|  |
| --- |
| Did the patient die during this ICU stay?  |
| ❑ Yes ↓  | ❑ No, Patient Discharged ↓  | ❑ No, Patient Still in ICU at 60 days |
| Death Date/Time: | ICU Discharge Date/Time: → | Was the patient re-admitted to the ICU? ❑ Yes ↓ ❑ No |

**ICU Stay 2**

|  |
| --- |
| Did the patient die during this ICU stay?  |
| ❑ Yes ↓  | ❑ No, Patient Discharged ↓  | ❑ No, Patient Still in ICU at 60 days |
| Death Date/Time: | ICU Discharge Date/Time: → | Was the patient re-admitted to the ICU? ❑ Yes ↓ ❑ No |

**ICU Stay 3**

|  |
| --- |
| Did the patient die during this ICU stay?  |
| ❑ Yes ↓  | ❑ No, Patient Discharged ↓  | ❑ No, Patient Still in ICU at 60 days |
| Death Date/Time: | ICU Discharge Date/Time: → | Was the patient re-admitted to the ICU? ❑ Yes ↓ ❑ No |

**ICU Stay 4**

|  |
| --- |
| Did the patient die during this ICU stay?  |
| ❑ Yes ↓  | ❑ No, Patient Discharged ↓  | ❑ No, Patient Still in ICU at 60 days |
| Death Date/Time: | ICU Discharge Date/Time: → | Was the patient re-admitted to the ICU? ❑ Yes ↓ ❑ No |

**ICU Stay 5**

|  |
| --- |
| Did the patient die during this ICU stay?  |
| ❑ Yes ↓  | ❑ No, Patient Discharged ↓  | ❑ No, Patient Still in ICU at 60 days |
| Death Date/Time: | ICU Discharge Date/Time: → | Was the patient re-admitted to the ICU? ❑ Yes ↓ ❑ No |

**Hospital Discharge (if pt d/c from ICU and did not die in ICU)**

|  |
| --- |
| Did the patient die during this Hospital stay?  |
| ❑Yes ↓  | ❑ No, Patient Discharged ↓ | ❑ No, Patient still in Hospital at 60 days |
| Death Date/Time: | Hospital Discharge Date/Time: → | Discharged to: ↓❑ Ward in another hospital❑ ICU in another hospital❑ Long term care facility❑ Rehabilitation Unit❑ Home with home care support❑ Home without home care❑ Other \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Was the patient re-admitted to hospital? ❑Yes ↓ ❑No  |

**Hospital Re-admission 1**

|  |
| --- |
| Hospital Admission Date/Time: |
| Did the patient die during this Hospital stay?  |
| ❑ Yes ↓  | ❑ No, Patient Discharged ↓ | ❑ No, Patient still in Hospital at 60 days |
| Death Date/Time: | Hospital Discharge Date/Time: → | Discharged to: ↓❑ Ward in another hospital❑ ICU in another hospital❑ Long term care facility❑ Rehabilitation Unit❑ Home with home care support❑ Home without home care❑ Other \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Was the patient re-admitted to hospital? ❑Yes ↓ ❑No  |

**Hospital Re-admission 2**

|  |
| --- |
| Hospital Admission Date/Time: |
| Did the patient die during this Hospital stay?  |
| [ ] Yes ↓  | [ ]  No, Patient Discharged ↓ | [ ]  No, Patient still in Hospital at 60 days |
| Death Date/Time: | Hospital Discharge Date/Time: → | Discharged to: ↓[ ]  Ward in another hospital[ ]  ICU in another hospital[ ]  Long term care facility[ ]  Rehabilitation Unit[ ]  Home with home care support[ ]  Home without home care[ ]  Other \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

**60-day Outcomes (if pt d/c from hospital and did not die in ICU or hospital)**

|  |
| --- |
| Did the patient die within 60 days of their ICU admission?  |
| [ ]  Yes ↓ | [ ]  No, patient is alive  ↓ |  |
| Death Date: ↓ | Date last known to be alive: ↓ |
| Confirm which of the following were completed to obtain survival status:[ ]  Family Physician[ ]  Medical Records[ ]  Facility patient was discharged to[ ]  Home care[ ]  Obituaries[ ]  Internet[ ]  Other (specify):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |