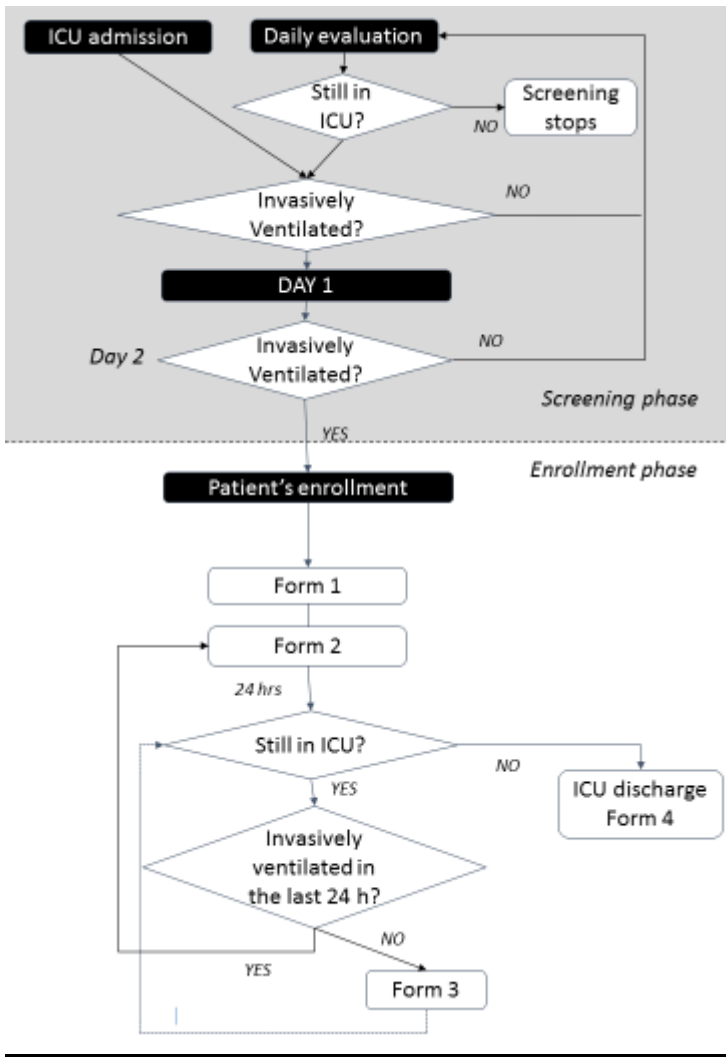


# WorldwidE AssessmeNt of Separation of pAtients From ventilatory assistancE

## WEAN SAFE



### Data Collection Forms



## SCREENING FORM

Progressive patient Number	Invasively ventilated during ICU stay?	Invasively ventilated on the 2 <sup>nd</sup> Morning after initiation of ventilation (or ICU admission if ventilated on admission)?	Exclusion criteria?	If Y/Y/N: Patient enrolled!	ICU outcome (Alive/dead)

Center ID: \_\_\_\_\_

**FORM 0: - ORGANIZATIONAL DATA OF THE PARTICIPATING ICU**  
**TO BE FILLED ONLY ONCE FOR THE STUDY**

0.1 Name of the INSTITUTION: \_\_\_\_\_

0.2 Mailing Address: \_\_\_\_\_

0.3 Phone \_\_\_\_\_

0.4 Contact person #1: \_\_\_\_\_

0.5 Email: \_\_\_\_\_

0.6 Contact person #2: \_\_\_\_\_

0.7 Email: \_\_\_\_\_

0.8 ICU Medical Director: \_\_\_\_\_

0.9  Open ICU  Closed ICU [ONE SELECTION ONLY]

0.10 Type of hospital:  University/Academic  Non-University [ONE SELECTION ONLY]

Type of ICU (check all that apply):

0.11  Medical

0.12  Respiratory ICU

0.13  Surgical

0.14  Cardiothoracic

0.15  Neurosurgical

0.16  Other specialty

0.17 Total number of beds in the hospital: \_\_\_\_\_

0.18 Number of beds in use in the ICU at commencement of study: \_\_\_\_\_

0.19 Total number of admissions to the ICU in last calendar year: \_\_\_\_\_

0.20 Total number of ICU beds in the hospital (including all ICUs, also not involved in this study, excluding intermediate care): \_\_\_\_\_

0.21 Was this ICU involved in research activities (other than surveys) in the last 5 years?  
 YES  NO [ONE SELECTION ONLY]

0.22 Is there a step-down/intermediate care unit in your hospital?  
 YES  NO [ONE SELECTION ONLY]

0.23 Does this hospital have a dedicated weaning facility within the hospital?  
 YES  NO [ONE SELECTION ONLY]

Average number of Health Professionals **present** in the ICU<sup>1</sup>:

	Daytime	Night time
Staff Physicians	0.24	0.25
Doctors in training/Non-staff	0.26	0.27
Nurses/Nurse practitioners	0.28	0.29
Physician assistants	0.30	0.31
Occupational Therapists	0.32	0.33
Physiotherapists	0.34	0.35
Pharmacists	0.36	0.37
Respiratory Therapists	0.38	0.39

Which UNITS are used for the following:

0.40 **Noradrenaline/norepinephrine:**  mcg/min  mcg/kg/min  mg/hour [ONE SELECTION ONLY]

0.41 **Adrenaline/epinephrine:**  mcg/min  mcg/kg/min  mg/hour [ONE SELECTION ONLY]

0.42 **Dopamine:**  mcg/min  mcg/kg/min  mg/hour [ONE SELECTION ONLY]

0.43 **Dobutamine:**  mcg/min  mcg/kg/min  mg/hour [ONE SELECTION ONLY]

0.44 **Blood gases?**  mmHg  kPa [ONE SELECTION ONLY]

0.45 **Platelets:**  10<sup>3</sup>/mm<sup>3</sup>  10<sup>9</sup>/L [ONE SELECTION ONLY]

0.46 **Hemoglobin:**  g/100 ml  g/L  mmol/L [ONE SELECTION ONLY]

0.47 **Height:**  inch  cm [ONE SELECTION ONLY]

0.48 **Weight:**  lbs  kg [ONE SELECTION ONLY]

0.49 Do you use written/electronic sedation protocols?  YES  NO [ONE SELECTION ONLY]

0.50 Do you use a sedation scale?  YES  NO [ONE SELECTION ONLY]

0.51 (IF YES:  SAS  RASS  Ramsay  Other \_\_\_\_\_)

0.52 Does your ICU have weaning protocols for patients ventilated > 24 hours?  YES  NO [ONE SELECTION ONLY]

0.53 If yes:  Physician driven  Nurses driven  RT driven [ONE SELECTION ONLY]

0.54 Please upload your protocol.

0.55 Do you use automated weaning system?

YES  NO [ONE SELECTION ONLY]

0.56 If yes, please indicate which one: \_\_\_\_\_

<sup>1</sup> This number may be less than 1.0, particularly for allied health professionals such as physiotherapists. If so, please estimate amount of time as a proportion of a full working day spent by these personnel in the ICU.

Study Patient ID: \_\_\_\_\_

Date of Data collection: \_\_\_\_\_

## FORM 1: TO BE COMPLETED FOR ALL PATIENTS INVASIVELY VENTILATED ON DAY 2

1.1 Date of enrollment (between 7AM and 10AM on day 1): \_\_/\_\_/\_\_

1.2 Date and hour of commencement of IMV: \_\_/\_\_/\_\_\_\_ (DD/MM/Year)

1.3 at \_\_\_\_\_ (24 hour clock)

1.4 Date of ICU admission in the current episode: \_\_/\_\_/201\_\_ (DD/MM/Year)

1.5 Gender: M F [ONE SELECTION ONLY]

1.6 Age: \_\_\_\_\_

What was the reason for the ICU admission?

1.7  Medical OR non-surgical

1.8  Scheduled Surgery

1.9  Emergency surgery and /or Trauma

1.10  Monitoring (e.g. in situ thrombolysis, desensitization), or post procedure (including PCI, bronchoscopy)

### Hospital Admission

1.11 Date of presentation in current Hospital: \_\_/\_\_/201\_\_ (DD/MM/Year)

1.12 Height (first documented at ICU admission): \_\_\_\_\_

1.13 Weight (first documented at ICU admission): \_\_\_\_\_

1.14 Residence Status prior to hospital admission [ONE SELECTION ONLY]

Home  Other healthcare facility  Nursing home  Unknown  Homeless

1.15 Admission Source: [ONE SELECTION ONLY]

ICU  Ward  ER  OR/Recovery  Other, please specify \_\_\_\_\_

1.16 Was the patient intubated (excluding elective surgery) during this hospital admission prior to enrollment?

YES  NO [ONE SELECTION ONLY]

1.17 Was the patient previously enrolled in this study?  YES  NO [ONE SELECTION ONLY]

1.18 (If yes, indicate the patient's code \_\_\_\_\_)

### Co-morbidities present before ICU admission (check all that apply):

1.19  COPD (If known, GOLD:  I  II  III  IV) 1.20  Interstitial Lung Disease 1.21  Other chronic lung disease

1.22  Asthma 1.23  Active solid organ Neoplasm<sup>2</sup> 1.24  Hematologic neoplasm

1.25  Bone marrow transplant 1.26  Diabetes Mellitus

1.27  Heart failure: NYHA classes III-IV 1.28  Chronic Renal Failure 1.29  Immunosuppression<sup>3</sup>

<sup>2</sup> Excluding non-melanoma skin cancer

<sup>3</sup> Includes drugs such as cyclosporine, azathioprine, rituximab or cancer chemotherapy, steroids (except for adrenal insufficiency replacement)

1.30  Chronic liver failure (1.31  Child-Pugh Class C)      1.32  Congenital/Acquired Myopathies/Neuropathies  
1.33  alcohol abuse      1.34  active smoker      1.35  pulmonary hypertension      1.36  kyphoscoliosis  
If gender=F      1.37 Pregnancy [ONE SELECTION ONLY]       Yes       No       Unknown

1.38 **Extent of Cognitive Deterioration (in the 2 months prior to first ICU admission)** [ONE SELECTION ONLY]  
 None       Mild       Moderate/severe

1.39 **Activities of daily living (in the 2 months prior to first ICU admission)** [ONE SELECTION ONLY]  
 Independent       Partially dependent       Completely dependent       Unable to assess

1.40 **Clinical Frailty Scale Score (in the 2 months prior to first ICU admission)** [ONE SELECTION ONLY]

1. Very fit — robust, active, energetic, well motivated and fit; exercise regularly; most fit group for their age
2. Well — without active disease, but less fit than people in category 1
3. Managing Well, with treated comorbid disease — disease symptoms are well controlled
4. Apparently Vulnerable — not frankly dependent, patients “slowed up” or have disease symptoms
5. Mildly Frail — with limited dependence on others for instrumental activities of daily living
6. Moderately Frail — help is needed with all outside activities and with keeping house, i.e. in both instrumental and non-instrumental activities of daily living
7. Severely frail — completely dependent on others for personal care, from whatever cause (physical or cognitive).
8. Very Severely Frail – Completely dependent, approaching the end of life. Terminally Ill – life expectancy < 6 months, whether or not evidently frail.

**What is/are the cause(s) of the patient’s ICU admission (check all that apply)?**

- 1.41  Hypercapnic Respiratory Failure  
1.42  Hypoxaemic Respiratory Failure  
1.43  Sepsis/septic shock  
1.44  Cardiogenic pulmonary edema  
1.45  Cardiac arrest  
1.46  Emergency surgery  
1.47  Elective surgery (1.48  CARDIAC      1.49  ABDOMINAL      1.50  THORACIC  
1.51  NEUROSURGICAL      1.52  Other \_\_\_\_\_)  
1.53  Shock (other than septic)  
1.54  Trauma  
1.55  Neurologic impairment  
1.56  Drug overdose  
1.57  Airway protection  
1.58  Other ( \_\_\_\_\_ )  
1.59  Metabolic/electrolyte

Study Patient ID: \_\_\_\_\_

Date of Data collection: \_\_\_\_\_

## FORM 2: DAILY DATA COLLECTION FORM

*THIS FORM HAS TO BE FILLED EVERY DAY, REPORTING DATA COLLECTED BETWEEN 7-10 am*

2.1 Was Patient invasively ventilated in the last 24 hours?  YES  NO (Go to form 4) [ONE SELECTION ONLY]

2.2 Patient's interface:  ETT  Tracheostomy  Not invasively ventilated anymore [ONE SELECTION ONLY]

2.3 Sedation level: \_\_\_\_\_  RASS  SASS  RAMSAY  if not measured [ONE SELECTION ONLY]

2.4 Was a sedation interruption planned:  Yes  No [ONE SELECTION ONLY]

**What is the current (at the time of evaluation) level of ventilator assistance received (if on separation attempt, please give prior level of assistance)?**

2.5  Volume A/C      2.6  PC/BIPAP/APRV      2.7  SIMV      2.8  PRVG      2.9  PSV  
2.10  NAVA      2.11  CPAP      2.12  T-Tube      2.13  Other (specify)

**Please record ventilator settings immediately prior to Arterial Blood Gas Analysis:**

2.14 Peak \_\_\_\_\_      2.15 Plateau (if different) \_\_\_\_\_  
2.16 RR (set) \_\_\_\_\_      2.17 RR (total) \_\_\_\_\_      2.18 PEEP (cmH2O) \_\_\_\_\_  
2.19 PIP (cmH2O) \_\_\_\_\_ (specify depending on mode)      2.20 Plateau P (if different) (cmH2O) \_\_\_\_\_  
2.21 FiO2 \_\_\_\_\_      2.22 Actual Tidal volume \_\_\_\_\_      2.23 **p0.1** \_\_\_\_\_ (if measured)

**Arterial Blood Gas (if measured):**      2.24 pH: \_\_ . \_\_ \_\_      2.25 PaO<sub>2</sub>: \_\_ \_\_ \_\_  
2.26 PaCO<sub>2</sub>: \_\_ \_\_ \_\_      2.27 Lactate \_\_ . \_\_ \_\_

2.28 If no Arterial Blood Gas Analysis: Pulse Oximeter SpO<sub>2</sub>: \_\_ \_\_ \_\_ %

**2.29 What is the lowest level of assistance received in the last 24 hours? IF DIFFERENT FROM ABOVE**

[ONE SELECTION ONLY]

Volume A/C       PC/BIPAP/APRV       SIMV       PRVG       PSV  
 NAVA       CPAP       T-Tube       Other (specify)  
 Accidental Extubation       Planned Extubation

2.30 Peak \_\_\_\_\_      2.31 Plateau (if different) \_\_\_\_\_ [if cmv]  
2.32 RR (set) \_\_\_\_\_      2.33 RR (total) \_\_\_\_\_      2.34 PEEP (cmH2O) \_\_\_\_\_  
2.35 FiO2 \_\_\_\_\_      2.36 Actual Tidal volume \_\_\_\_\_      2.37 **p0.1** \_\_\_\_\_ (if measured)

2.38 How long was this level maintained for? \_\_\_\_\_ hours

2.39 What was the reason? (planned/patient deterioration)

**Arterial Blood Gas (if measured):**      2.40 pH: \_\_ . \_\_ \_\_      2.41 PaO<sub>2</sub>: \_\_ \_\_ \_\_  
2.42 PaCO<sub>2</sub>: \_\_ \_\_ \_\_      2.43 Lactate \_\_ . \_\_ \_\_

2.44 If no Arterial Blood Gas Analysis: Pulse Oximeter SpO<sub>2</sub>: \_\_ \_\_ \_\_ %

**2.45 Was this a spontaneous breathing trial (SBT), to predict success in separating the patient from the ventilator?**

YES       NO      [ONE SELECTION ONLY]



**SOFA Score (every third day from day 2, 5, etc.)****Values****NOT AVAILABLE**

Glasgow Coma Scale (3-15)

2.46 motor

\_\_\_\_\_

2.47 eye

\_\_\_\_\_

2.48 verbal

1

2.49 Platelet Count(UNITS)

\_\_\_\_\_

2.50 Total Bilirubin (if measured)

\_\_\_\_\_

2.51 Creatinine (if measured)

\_\_\_\_\_

2.52 OR Urine Output (mL/day)

\_\_\_\_\_

2.53 Mean Arterial Pressure (mmHg)

\_\_\_\_\_

2.54 Dopamine infusion

\_\_\_\_\_

2.55 Dobutamine infusion

\_\_\_\_\_

2.56 Noradrenaline infusion

\_\_\_\_\_

2.57 Adrenaline infusion

\_\_\_\_\_

2.58 Others vasopressors? (Yes/No) or dosage?

2.59 PDE inhibitors (Yes/No) or dosage?

In the last 24 hours, did the patient receive any of the following drugs:

2.60 Sedatives[ONE SELECTION ONLY]: Continuous  Intermittent  None 2.61 Opioids[ONE SELECTION ONLY]: Continuous  Intermittent  None 2.62 NM blockers[ONE SELECTION ONLY]: Continuous  Intermittent  None 2.63 Steroids[ONE SELECTION ONLY]: High dose  Low dose  None 2.64 Diuretics[ONE SELECTION ONLY]: High dose  Low dose  None 2.65 Renal replacement therapy [ONE SELECTION ONLY]  YES  NO2.66 Is the patient receiving ECMO/ECCO2R  YES  NO Blood flow\_\_\_\_\_ l/min

***PART B: - TO BE FILLED FOR PATIENTS WITH PEEP < 10 cm H2O, and FiO2 < 50%, if they are not receiving neuromuscular blockers or high doses of vasopressors (> 0.2 mcg/kg/min of noradrenaline or equivalent)***

**What are the reasons for not separating the patient from the ventilator according to the attending physician (check all that apply)?**

- 2.67  Unresolved surgical condition
- 2.68  Unresolved respiratory failure
- 2.69  Upper airway protection
- 2.70  Decreased level of consciousness
- 2.71  Agitation/ delirium
- 2.72  Cardiac failure / Fluid Overload
- 2.73  Hemodynamic instability
- 2.74  Muscle weakness
- 2.75  Planned intervention requiring airway protection
- 2.76  Failed spontaneous breathing trial
- 2.77  Recent [< 24 hours] re-intubation
- 2.78  Excessive secretion
- 2.79  Weak cough

2.80 **Maximum Inspiratory Pressure (if measured in the last 24 hours)** \_\_\_\_\_ cmH2O

2.81 **Is this patient considered in weaning phase according to the attending physician?**

Yes       No       Uncertain       Unknown      [ONE SELECTION ONLY]

2.82 **Amount of secretions:**     none/mild       moderate       abundant [ONE SELECTION ONLY]

2.83 **Cough strength:**       weak       intermediate       normal/strong  
 NOT RECORDED      [ONE SELECTION ONLY]

2.84 **Was the patient out of the bed last 24 hours?**     Yes       No      [ONE SELECTION ONLY]

2.85 **Did the patient do mobility exercise last 24 hours?**

Yes, active       Yes, passive       No      [ONE SELECTION ONLY]

2.86 heart rate \_\_\_\_\_

2.87 fluid balance \_\_\_\_\_

2.88 sodium \_\_\_\_\_

2.89 potassium \_\_\_\_\_

Study Patient ID: \_\_\_\_\_

Date of Data collection: \_\_\_\_\_

## FORM 3: DAILY DATA COLLECTION FORM FOR PATIENTS NOT CONNECTED TO THE VENTILATOR IN THE LAST 24 HOURS

**IN THE LAST 24 HOURS DID THE PATIENT RECEIVE ANY OF THE FOLLOWING? (Check all that apply)**

- 3.1  Face mask/Nasal cannula low flow oxygen (<15)
- 3.2  NIV/CPAP Helmet
- 3.3  NIV/CPAP Face/Nose Mask
- 3.4  High Flow nasal cannula
- 3.5  None of the above

**IF YES, WHAT WAS THE REASON? (Check all that apply)**

- 3.6  Hypoxia
- 3.7  Hypercapnia
- 3.8  Respiratory distress
- 3.9  Prophylaxis
- 3.10  Restoration of home ventilation (including Sleep Apnea Syndrome)

Study Patient ID: \_\_\_\_\_

Date of Data collection: \_\_\_\_\_

## FORM 4: - OUTCOMES – ICU DISCHARGE/DEATH

### ICU Outcome

4.1  Alive  Dead [ONE SELECTION ONLY]

4.2 Date of ICU discharge/Death: \_\_/\_\_/\_\_\_\_ (DD/MM/Year)

### *For pts discharged alive*

4.3 Discharged to: [ONE SELECTION ONLY]

Other ICU  Hospital Ward  Intermediate Care Unit  Hospital Discharge  Weaning unit

### Respiratory status at ICU Discharge (check all that apply):

4.4  Intubated 4.5  Tracheostomy 4.6  Non-invasive ventilation

4.7  Oxygen therapy 4.8  No oxygen therapy

4.9 Level of physical Dependence (at discharge) [ONE SELECTION ONLY]

Independent  Partially Dependent  Completely Dependent

### Changes in Goals of Care

4.10 Was there a pre-existing order limiting life-sustaining measures prior to ICU admission?  
(E.g. withhold/withdraw)

4.11 Was there a decision to limit a life sustaining measure at any time during the ICU stay?

Yes  No  Not legally available [ONE SELECTION ONLY]

What was the life sustaining measure limited?

4.12  No CPR

4.13  No re-intubation

4.14  No re-admission to ICU

4.15  ICU trial

4.16  Full comfort care [i.e. no organ support]

4.17  Terminal extubation.

4.18 Did the difficulty in weaning influence the decision to limit life-sustaining measures? [ONE SELECTION ONLY]

No

Yes – Sole/major reason

Yes – One of a number of reasons

4.19 Date of decision to withhold/withdraw life sustaining measures: \_\_/\_\_/\_\_\_\_

### Hospital (or 90 day) Outcome (whichever event occurs first)

4.20  Alive  Dead [ONE SELECTION ONLY]

4.21 Date of hospital discharge: \_\_/\_\_/\_\_\_\_