## End-Tidal Carbon Dioxide

1. End-tidal carbon dioxide (EtCO2) value (mmHg):
2. Highest end-tidal carbon dioxide (EtCO2) value (mmHg):
3. Lowest end-tidal carbon dioxide (EtCO2) value (mmHg):
4. Mean daily end-tidal carbon dioxide (EtCO2) value (mmHg):

## Intracranial Pressure (ICP)

1. Type of monitor used:

[ ]  Intra-ventricular catheter (EVD) [ ]  Subarachnoid probe

[ ]  Epidural probe [ ]  Intra-parenchymal probe (camino)

[ ]  Other, specify:

1. EVD: How long was EVD clamped prior to reading?
2. Intracranial pressure (ICP) measurement: (mmHg or cm H2O):
3. Threshold used for ICP treatment:
4. Time ICP over threshold:
5. ICP measurement interval:

Hourly average:

5-minute average:

Other, specify:

1. Anatomical ICP Reference point:

[ ]  Epidural [ ]  Intraventricular

[ ]  Intraparenchymal [ ]  Subdural

[ ]  Other, specify:

1. Highest ICP measurement:
2. Lowest ICP measurement
3. Mean daily ICP measurement:
4. Cerebral perfusion pressure (CPP) value:
5. Lowest CPP measurement:
6. Time CPP under threshold (50 mmHg):
7. Cerebral perfusion value source:

[ ]  Invasive

[ ]  Non-invasive

1. Partial pressure of oxygen in brain tissue:
2. Values obtained from five minute average:
3. Highest partial pressure:
4. Lowest partial pressure:
5. Mean daily value of brain tissue oxygen:
6. Site of partial pressure of brain tissue oxygen:
7. Time partial pressure under threshold (20 mmHg)
8. Cerebrospinal fluid (CSF) volume: volume/day:

Volume/hr:

## Cardiac

1. Cardiac output:
2. Cardiac index (L/min/m2))
3. Stroke volume (ml):
4. Stroke volume measured by:

[ ]  Pulmonary artery (PA) catheter [ ]  LidCoTM sensor

[ ]  Flowtrack [ ]  Transpulmonary thermodilution

[ ]  Other, specify

1. Stroke volume variation measured by:

[ ]  Arterial line

1. Pulse pressure variation (mmHg):
2. Systemic vascular resistance:

[ ]  dyn·s/cm-5 [ ]  mmHg·min/L (~ HRU/Woods units)

[ ]  MPa·s/m3

1. Source of systemic vascular resistance:

[ ]  Pulmonary artery [ ]  Derived

[ ]  Radial artery [ ]  Non-invasive

[ ]  Femoral artery

1. Neuropupillary index:

|  | Left Eye | Right Eye |
| --- | --- | --- |
| Smallest | [ ]  0[ ]  1[ ]  2[ ]  3[ ]  4[ ]  5 | [ ]  0[ ]  1[ ]  2[ ]  3[ ]  4[ ]  5 |
| Largest | [ ]  0[ ]  1[ ]  2[ ]  3[ ]  4[ ]  5 | [ ]  0[ ]  1[ ]  2[ ]  3[ ]  4[ ]  5 |
| Mean Daily | [ ]  0[ ]  1[ ]  2[ ]  3[ ]  4[ ]  5 | [ ]  0[ ]  1[ ]  2[ ]  3[ ]  4[ ]  5 |

1. Mean arterial pressure (MAP) (mmHg):
	1. Highest value: (mmHg)
	2. Lowest value: (mmHg)
2. Method used to obtain MAP:

Invasive

[ ]  Yes

[ ]  No

If invasive, specify site: [ ]  Radial [ ]  Axillary

Non-invasive:

[ ]  Yes

[ ]  No

If non-invasive, specify site: [ ]  Left arm [ ]  Right arm

1. Ventilator settings:

[ ]  Tidal volume

[ ]  PEEP

[ ]  Backup rate

1. Ventilator mode:

[ ]  Controlled

[ ]  Assist

[ ]  Spontaneous

1. If controlled, specify:

Rate:

Volume:

1. Ventilator pressure support (mmHg):
2. Positive end-expiratory pressure (PEEP) (mmHg):
3. Ventilation measures:

[ ]  Tidal volume

[ ]  Plateau pressure

[ ]  Peak pressure

1. Richmond Agitation Sedation Scale result:

[ ]  +4 [ ]  -1

[ ]  +3 [ ]  -2

[ ]  +2 [ ]  -3

[ ]  +1 [ ]  -4

[ ]  0 [ ]  -5

1. Pain scale: (0-10)

## General Instructions

This CRF contains data on vital signs that would be collected for a subarachnoid hemorrhage (SAH) study.

Important note: The data elements included on this CRF Module are considered Supplemental (should only be collected if the research team considers them appropriate for their study).

## Specific Instructions

Please see the Data Dictionary for definitions for each of the data elements included in this CRF Module.

* Cardiac Index: This is a haemodynamic parameter that relates the **cardiac** output (CO) from the left ventricle in one minute to body surface area (BSA), thus relating heart performance to the size of the individual. The unit of measurement is liters per minute per square meter (L/min/m2).
* Stroke Volume: The amount of blood ejected by the left ventricle in one contraction, described in ml.
* Pulse Pressure Variation: Variation in pulse pressure over time (mostly depending on respiratory cycle):
	+ Psystolic – Pdiastolic
* Neuropupillary Index: The index to evaluate reactivity of pupils objectively; values range from 0 to 5.
* Cerebral Perfusion Pressure Value: The value of the difference between the Mean Arterial Pressure (MAP) and the Intracranial Pressure (ICP). It represents the pressure gradient driving cerebral blood flow and hence oxygen and metabolite delivery.