



Centre ID number: |\_|\_|\_|\_|\_|\_| Patient's ID number: |\_|\_|\_|\_|\_|\_|\_|\_|\_|\_|

## Screening for eligibility

### Inclusion criteria

Age  $\geq$  18 years YES  NO

Patient undergoing PLANNED advanced airway management for anesthesia in operating room OR non-operating room anesthesia (NORA)? YES  NO

If NO, did you have an UNPLANNED airway management? YES  NO

Reason for UNPLANNED airway management?

- Failure of regional anesthesia
- Patient's agitation
- Prolonged surgery/change of surgical plan
- Rescue airway during deep sedation
- Other

### Exclusion criteria

Is airway management required for underlying patient's critical condition? (e.g. cardiorespiratory failure or neurologic impairment?) YES  NO

Is airway management indicated for cardiopulmonary resuscitation? YES  NO

### ENROLLMENT

Is the patient finally enrolled into the STARGATE study? YES  NO

Please specify the reason for not enrollment:

- Required informed consent not obtained
- Local investigator not present/available for data collection
- Treating physician's decision
- Other, Specify the reason for not enrollment \_\_\_\_\_

## Informed consent and admission data

Date of hospital admission |\_\_|\_|\_|\_|\_|\_|\_|\_|\_|\_|\_|

Informed consent:

(select NO if not required according to Institution Review Board/Ethics Committee regulations)

Informed consent required? YES  NO

Was informed consent obtained? YES  NO

(Please note that, if consent was required by your local Ethics Committee, it should be acquired in order to enroll this patient and report patient's data.)

Date of informed consent acquisition |\_\_|\_|\_|\_|\_|\_|\_|\_|\_|\_|\_|

Date of advanced airway management |\_\_|\_|\_|\_|\_|\_|\_|\_|\_|\_|\_|

Time of advanced airway management |\_\_|\_|\_|:|\_\_|\_|\_|

## Demographic data and clinical characteristics

Sex at birth  Male  Female

Pregnancy status

Pregnant

Not pregnant

Unknown

Gestational week |\_\_|\_|\_|

Birth date |\_\_|\_|\_|\_|\_|\_|\_|\_|\_|\_|\_|

Age |\_\_|\_|\_| (years)

Weight |\_\_|\_|\_|\_|\_|\_| Unit of measure  lbs  Kg

Height |\_\_|\_|\_|\_|\_| Unit of measure  inch  cm

Clinical frailty scale

1 - Very fit

2 - Fit

3 - Managing well

4 - VERY MILD frailty

5 - MILD frailty

6 - MODERATE frailty

7 - SEVERE frailty

8 - VERY SEVERE frailty

9 - Terminally ill

Comorbidities (check all)

Asthma

COPD

Diabetes Mellitus

Solid neoplasm

Hematologic malignancy

Heart failure (NYHA III-IV)

Prior myocardial infarction

Cerebrovascular disease

Cerebrovascular (hemiplegia) event

- Dementia
  - Arterial hypertension
    - Hypertension treatment drugs:
      - beta-blockers
      - ACE inhibitors
      - Angiotensin II receptor blockers
      - Calcium channel blockers
      - Alpha blockers
      - Alpha-2 receptor agonists
      - Other anti-hypertensive drug \_\_\_\_\_
  - Moderate to severe renal disease
  - Mild liver disease
  - Moderate to severe liver disease
  - Diabetes
  - Acquired ImmunoDeficiency-Syndrome (AIDS)
  - Neuromuscular disease
  - Obstructive sleep apnea syndrome
    - OSAS staging:
      - WITH prescription of nocturnal CPAP
      - WITHOUT prescription of nocturnal CPAP
  - Chronic lung disease
  - Rheumatologic disease
  - Respiratory infection < 30 days ago
  - Obesity
  - SARS-COV2 infection (positive nasal swab before procedure)
  - None
  - Other
- Specify other comorbidity \_\_\_\_\_

Stage of solid neoplasm  
 Metastatic  Non-metastatic  Unknown

Use of glucagon-like peptide 1 receptor (GLP-1) agonists (e.g. liraglutide, semaglutide, dulaglutide) for either diabetes mellitus or weight loss? YES  NO

Specify the GLP-1 receptor agonist molecule  
 Dulaglutide  
 Exenatide  
 Liraglutide  
 Semaglutide  
 Other, Specify other GLP-1 receptor agonist molecule \_\_\_\_\_

Specify the time interval from the last GLP-1 receptor agonist assumption:  
 No interruption  
 1 day  
 2 days  
 3, days  
 4, days  
 1 week  
 > 1 week

Current smoker YES  NO

(4 METs corresponds to the oxygen consumption required to walking up two flights of stairs.  
 Metabolic equivalent of task (METs)?  
 ≤ 4  
 > 4

ASA physical status

- ASA I: A normal healthy (not-smoking) patient;
- ASA II: A patient with mild systemic disease (without substantive functional limitations)
- ASA III: A patient with severe systemic disease (substantive functional limitations);
- ASA IV: A patient with severe systemic disease that is a constant threat to life;
- ASA V: A moribund patient who is not expected to survive without the operation.

## Procedure details

### Procedure details

Setting of the procedure

- Operating room
- Non-operating room

Type of surgery (please check the most relevant site of surgery)

- Neurosurgery
- Ear - nose - throat (ENT) surgery
- Maxillofacial surgery
- Plastic surgery
- Cardiac surgery
- Vascular surgery
- Thoracic surgery
- Breast surgery
- Orthopedic surgery
- Vertebral surgery
- Gynecologic surgery
- Urologic Surgery
- Obstetric surgery
- Bariatric surgery
- Upper gastro-intestinal surgery
- Lower gastro-intestinal surgery
- Trauma surgery
- Transplant surgery
- Specify the OTHER surgical site \_\_\_\_\_

Trauma patient: in case of polytrauma with different surgical steps, please check all involved sites.  
Specify sites of trauma: (check all surgical sites)

- Traumatic brain injury
- Spinal injury
- Facial trauma
- Thoracic trauma
- Abdominal trauma
- Pelvis trauma
- Peripheral bone

Urgency of the surgical procedure :  Elective  Urgent/Emergency surgery

First surgical approach

- Open surgery
- Laparoscopic/Thoracoscopic surgery
- Robotic Surgery
- Other surgical/procedure approach \_\_\_\_\_

Type of NORA procedure

- Cath lab
- Bronchoscopy

- Endoscopy
- Radiology
- Other \_\_\_\_\_

Goal of the NORA procedure

- Diagnostic
- Therapeutic

Planned ICU admission YES  NO

## Airway management setting

### Airway evaluation

Anticipated difficult ventilation? YES  NO  Evaluation not performed

Anticipated difficult intubation? YES  NO  Evaluation not performed

Predictors of difficult airway management

- Mallampati score III - IV
- Reduced mouth opening (< 3 cm)
- Reduced thyro-mental distance
- Prognathism (abnormal anterior position of the mandible)
- Retrognathia (abnormal posterior position of the mandible)
- Neck stiffness
- Need of cervical spine immobilization
- Beard
- Loose teeth
- High -risk of full stomach
- Upper lip bite test = 3
- Large tongue
- Previous radiotherapy of head/neck
- Solid neoplasm of neck/pharinx/larynx
- Previous reported difficult airway management
- None
- Other predictor of difficult airway management \_\_\_\_\_

Monitoring selected during the airway procedure

- ECG (3 or 5 leads)
- SpO2
- Non-invasive blood pressure
- Invasive blood pressure
- Anesthesia depth monitoring (e.g. bispectral index, entropy)
- Neuromuscular block monitoring
- Capnometry
- Capnography
- Fraction of expired oxygen (FeO2)

### Parameters BEFORE preoxygenation start

Systolic blood pressure |\_\_|\_\_|\_\_| (mmHg)

Diastolic blood pressure |\_\_|\_\_|\_\_| (mmHg)

Heart rate (HR) |\_\_|\_\_|\_\_| (bpm)

SpO2 |\_\_|\_\_|\_\_| (%)

# Airway management procedure

## Preoxygenation

Preoxygenation performed? YES  NO

Time of preoxygenation start |\_\_|\_\_|:|\_\_|\_\_|

Specify the patient's position that mostly apply

- Supine position
- Head/back elevation
- Trendelenburg position
- Specify other patient's position \_\_\_\_\_

Preoxygenation method:

- Anesthesia breathing circuit
- Venturi mask
- Nasal cannula (standard)
- High-flow nasal oxygen (HFNO)
- Continuous positive airway pressure (CPAP)
- Noninvasive positive pressure ventilation (NPPV = pressure support +/- PEEP)
- Other \_\_\_\_\_

Specify FiO<sub>2</sub> |\_\_|\_\_|\_\_| (%)

Specify O<sub>2</sub>/gas flow |\_\_|\_\_| (L/min)

Specify the CPAP level |\_\_|\_\_| (cmH<sub>2</sub>O)

Specify the pressure support (PS) level |\_\_|\_\_| (cmH<sub>2</sub>O)

Specify the positive end-expiratory pressure (PEEP) level |\_\_|\_\_|(cmH<sub>2</sub>O)

Specify the SpO<sub>2</sub> at the end of preoxygenation |\_\_|\_\_|\_\_| (%)

Specify the fraction of expired oxygen (FeO<sub>2</sub>) at the end of preoxygenation |\_\_|\_\_|\_\_| (%)

## PRE-EMPTIVE vasopressors - fluids administration

*PRE-EMPTIVE vasopressor use (definition): the patient is not under a vasopressor before intubation but the clinician plans to start a vasopressor to limit the hemodynamic effects of induction*

Pre-emptive (PLANNED) co-administration of a vasopressor: YES  NO

Specify the drug:

- Norepinephrine
  - Specify method of administration  Bolus  Continuous infusion
- Ephedrine
- Phenylephrine
  - Specify method of administration  Bolus  Continuous infusion
- Metaraminol
  - Specify method of administration  Bolus  Continuous infusion
- Other, specify type \_\_\_\_\_
  - Specify method of administration  Bolus  Continuous infusion

Pre-emptive (PLANNED) co-administration of fluids during the induction: YES  NO

Type of administered fluids BEFORE INDUCTION

- Saline (NaCl 0.9%)
- Balanced solution (e.g. Ringer lactate)
- Synthetic colloids
- Albumin
- Red blood cells
- Plasma
- other, specify OTHER PRE-EMPTIVE fluids administered \_\_\_\_\_

Specify TOTAL volume (ml) of PRE-EMPTIVE fluids administered (BEFORE INDUCTION)

- 0 - 250 ml
- 250 - 500 ml
- 500 - 1000 ml
- 1000 - 2000 ml
- > 2000 ml

**Induction drugs**

Hypnotic drug administered? YES  NO

Hypnotics:

- Propofol
- Select the method of PROPOFOL induction  Manual bolus  Target controlled infusion

Specify PROPOFOL induction dose (total absolute dose) |\_\_|\_\_|\_\_| (mg)

Specify PROPOFOL concentration at effector site (Cet) |\_\_|\_\_|, |\_\_| (mcg/mL)

- Thiopental

Specify THIOPIENTAL induction dose (total absolute dose) |\_\_|\_\_|\_\_|(mg)

- Midazolam

Specify the method of MIDAZOLAM administration  Bolus  Continuous infusion

Specify MIDAZOLAM bolus dose (total absolute dose) |\_\_|\_\_| (mg)

Specify MIDAZOLAM infusion rate |\_\_|\_\_| (mg/Kg/h)

- Ketamine

Specify KETAMINE induction dose (total absolute dose) |\_\_|\_\_|\_\_|(mg)

- Etomidate

Specify ETOMIDATE induction dose (total absolute dose)|\_\_|\_\_|\_\_| (mg)

- Dexmedetomidine

Specify DEXMEDETOMIDINE infusion dose |\_\_|\_\_| (mcg/Kg/h)

- Other

Specify the OTHER drug used \_\_\_\_\_

Specify dose of OTHER induction drugs |\_\_|\_\_|\_\_| (mg)

Opioid administered? YES  NO

Opioids

- Fentanyl

Specify FENTANYL dose |\_\_|\_\_|\_\_| (mcg)

- Remifentanyl

Specify REMIFENTANIL type of infusion:

- Standard infusion, Specify dose: |\_|\_|\_|\_|\_|(mcg/Kg/min)
- Target controlled infusion, Specify concentration at effector sit (Cet) |\_|\_|\_|\_|(ng/mL)

Sufentanyl  
Specify SUFENTANYL dose |\_|\_|\_|\_| (mcg)

Alfentanyl  
Specify ALFENTANYL dose |\_|\_|\_|\_| (mcg)

Other  
Specify type \_\_\_\_\_  
Specify dose |\_|\_|\_|\_| (mcg)

Muscle relaxant administered? YES  NO

Muscle relaxant

Succinylcholine  
Specify dose |\_|\_|\_|\_| (mg)

Rocuronium  
Specify dose |\_|\_|\_|\_| (mg)

Cisatracurium  
Specify dose |\_|\_|\_|\_| (mg)

Vecuronium  
Specify dose |\_|\_|\_|\_| (mg)

Atracurium  
Specify dose |\_|\_|\_|\_| (mg)

Other  
Specify type: \_\_\_\_\_  
Specify dose: |\_|\_|\_|\_| (mg)

Manual ventilation performed before advanced airway management: YES  NO

*Difficult mask ventilation (definition): It is not possible to provide adequate ventilation because of one or more of the following problems: inadequate mask seal, excessive gas leak, or excessive resistance to the ingress or egress of gas*

Was ease of manual ventilation checked before muscle relaxant administration? YES  NO

Difficult manual ventilation? YES  NO

Apneic oxygenation applied during airway management? YES  NO

Specify the method of APNEIC OXYGENATION

- Standard nasal cannula
- High-flow nasal cannula
- Other, Specify \_\_\_\_\_

Planned method for advanced airway management:

- Supraglottic airway device placement
- Laryngoscopy (asleep)
- Asleep flexible bronchoscopy
- Awake flexible bronchoscopy
- Awake videolaryngoscopy



Topical anesthesia performed? YES  NO

### **Elective FLEXIBLE BRONCHOSCOPY**

Any respiratory support provided during flexible bronchoscopy intubation? YES  NO

Specify the respiratory support provided during flexible bronchoscopy

- Standard nasal oxygen
- High-flow nasal oxygen
- Positive pressure ventilation using a NIV interface with a bronchoscopy port
- Other, Specify: \_\_\_\_\_

Intubation performed through the use of a supraglottic airway device (SGA)? YES  NO

Specify the FIRST ATTEMPT approach? nasal  oral

Was FIRST ATTEMPT of intubation using flexible bronchoscopy successful? YES  NO

Specify the NEXT STRATEGY of airway management:

- New attempt of flexible bronchoscopy
- New attempt of SGA placement
- Direct laryngoscopy and intubation
- Videolaryngoscopy and intubation
- Other \_\_\_\_\_

Specify all changes applied before the next attempt using flexible bronchoscopy

- Different operator
- Different patient's position
- Different site of flexible bronchoscope insertion (e.g from nasal to oral approach)
- Improved topical anesthesia
- Improved patient's sedation
- No changes
- Other, Specify \_\_\_\_\_

Were airways finally secured? YES  NO

(with a laryngoscopy/flexible bronchoscopy and endotracheal intubation/SGA placement)

Total number of attempts

- 1  2  3  4  5

Specify the airway management FINAL EVENT in case of failure:

- Cannot intubate cannot oxygenate (CICO) scenario
  - Was an emergency front of neck access (eFONA) required? YES  NO
  - Specify the eFONA technique performer:
    - Scalpel cricothyroidotomy
    - Needle/cannula cricothyroidotomy
    - Surgical tracheostomy

- The patient was woken up and procedure rescheduled/reconsidered
- Other event, Specify \_\_\_\_\_

Specify the final SUCCESSFUL method of airway management

- Intubation through flexible bronchoscopy
- Supraglottic airway (SGA) placement
- Direct laryngoscopy and intubation
- Videolaryngoscopy and intubation
- Other strategy, Specify \_\_\_\_\_

Specify the operator performing the FIRST attempt of flexible bronchoscopy

Anesthesia resident

Specify the operator's current year of RESIDENCY program

1st  2nd  3rd  4th  5th  6th  7th  8th

Anesthesia consultant

Anesthesia nurse

Anesthesia technician

Other \_\_\_\_\_

Specify the OPERATOR performing the SUCCESSFUL attempt:

Anesthesia resident

Specify the operator's current year of RESIDENCY program

1st  2nd  3rd  4th  5th  6th  7th  8th

Anesthesia consultant

Anesthesia nurse

Anesthesia technician

Other \_\_\_\_\_

### **Elective SGA use**

Specify the type of supraglottic airway (SGA) used

LMA Classic

LMA Unique

LMA Proseal

LMA Supreme

AirQ LMA

AMBU AURA-i LMA

LMA C-Trach

i-GEL

Other type of SGA, specify \_\_\_\_\_

Specify SGA size |\_\_|\_\_|

Was FIRST attempt of SGA placement successful? YES  NO

Specify any change applied before the SECOND attempt of airway management: (check all that apply)

Different operator

Administration of neuromuscular blocking agent

Different patient's position

Different SGA size

Different SGA type

No changes

Other, specify \_\_\_\_\_

Specify the SECOND STEP/EVENT of airway management

New attempt of SGA placement

Direct laryngoscopy and intubation

Videolaryngoscopy and intubation

Intubation with flexible bronchoscopy

Cannot intubate cannot oxygenate (CICO) scenario

The patient was woken up and procedure rescheduled/reconsidered

Other, specify \_\_\_\_\_

Specify the type of supraglottic airway (SGA) used for the SECOND ATTEMPT

LMA Classic

LMA Unique

LMA Proseal

- LMA Supreme
- AirQ LMA
- AMBU AURA-i LMA
- LMA C-Trach
- i-GEL
- Other type of SGA, specify \_\_\_\_\_

Specify SGA size of the SECOND ATTEMPT |\_\_|\_\_|

Was SECOND ATTEMPT OF SGA placement successful? YES  NO

Specify any change applied before the FINAL step of airway management (check all that apply)

- Different operator
- Administration of neuromuscular blocking agent
- Different patient's position
- SGA size
- SGA type
- No changes
- Other \_\_\_\_\_

Were airways finally secured? YES  NO

(with a laryngoscopy/flexible bronchoscopy and endotracheal intubation/SGA placement)

Total number of attempts  1  2  3  4  5

Specify the airway management FINAL EVENT in case of failure:

- Cannot intubate cannot oxygenate (CICO) scenario
  - Was an emergency front of neck access (eFONA) required? YES  NO
  - Specify the eFONA technique performer:
    - Scalpel cricothyroidotomy
    - Needle/cannula cricothyroidotomy
    - Surgical tracheostomy
- The patient was woken up and procedure rescheduled/reconsidered
- Other event, Specify \_\_\_\_\_

Specify the final SUCCESSFUL method of airway management

- Intubation through flexible bronchoscopy
- Supraglottic airway (SGA) placement
- Direct laryngoscopy and intubation
- Videolaryngoscopy and intubation
- Other strategy, Specify \_\_\_\_\_

Specify the operator performing the FIRST attempt of SGA placement

- Anesthesia resident
  - Specify the operator's current year of RESIDENCY program
    - 1st  2nd  3rd  4th  5th  6th  7th  8th
- Anesthesia consultant
- Anesthesia nurse
- Anesthesia technician
- Other \_\_\_\_\_

Specify the OPERATOR performing the SUCCESSFUL attempt:

- Anesthesia resident
  - Specify the operator's current year of RESIDENCY program
    - 1st  2nd  3rd  4th  5th  6th  7th  8th
- Anesthesia consultant
- Anesthesia nurse
- Anesthesia technician

Other \_\_\_\_\_

## **Elective laryngoscopy**

### **FIRST ATTEMPT**

Rapid sequence induction/intubation applied? YES  NO   
(No ventilation between induction and laryngoscopy)

Cricoid pressure applied? YES  NO

Specify the FIRST method of LARYNGOSCOPY

- Direct laryngoscopy with Macintosh blade
- Direct laryngoscopy with Miller blade
- Videolaryngoscopy

Specify blade size/number

- Blade N° 3
- Blade N° 4
- Blade N° 5

Specify VIDEOLARYNGOSCOPY blade type (check all that apply)

- Hyperangulated
- Macintosh-type
- Channelled

Specify type of videolaryngoscope

- Integrated monitor to VL handle
- Separate monitor

Did you use a STYLET during the FIRST attempt of intubation? YES  NO

Did you use a BOUGIE during your FIRST attempt of intubation? YES  NO

Did you apply an external laryngeal manipulation? YES  NO

Specify the laryngoscopic view (Cormack - Lehane)

- Grade I  Grade II a  Grade II b  Grade III  Grade IV

Percentage of glottic opening (POGO)

Specify the percentage of laryngeal opening (POGO) view

- 100% of laryngeal view
- 80% of laryngeal view
- 50% of laryngeal view
- < 5% of laryngeal view

Type of tube  Single lumen tube  Double lumen tube

Specify the operator performing the FIRST attempt of LARYNGOSCOPY

Anesthesia resident

Specify the operator's current year of RESIDENCY program

- 1st  2nd  3rd  4th  5th  6th  7th  8th

Anesthesia consultant

Anesthesia nurse

Anesthesia technician

Other \_\_\_\_\_

Was FIRST attempt of intubation successful? YES  NO

Esophageal intubation? YES  NO

Specify the NEXT STEP/EVENT of airway management

- NEW attempt of LARYNGOSCOPY
- Supraglottic airway (SGA) insertion
- New attempt with a flexible bronchoscope
- Cannot intubate cannot oxygenate (CICO) scenario
- The patient was woken up and procedure rescheduled/reconsidered
- Other, specify \_\_\_\_\_

## SECOND ATTEMPT

Check all changes applied before the second attempt

- Change of patient's position
- Change of operator
- No changes
- Other specify \_\_\_\_\_

Facemask ventilation performed between first and second attempt YES  NO

Specify the SECOND method of LARYNGOSCOPY

- Direct laryngoscopy with Macintosh blade
- Direct laryngoscopy with Miller blade
- Videolaryngoscopy

Specify blade size/number

- Blade N° 3
- Blade N° 4
- Blade N° 5

Specify VIDEOLARYNGOSCOPY blade type (check all that apply)

- Hyperangulated
- Macintosh-type
- Channelled

Specify type of videolaryngoscope

- Integrated monitor to VL handle
- Separate monitor

Did you use a STYLET during the SECOND attempt of intubation? YES  NO

Did you use a BOUGIE during your SECOND attempt of intubation? YES  NO

Did you apply an external laryngeal manipulation? YES  NO

Specify the laryngoscopic view (Cormack - Lehane)

- Grade I  Grade II a  Grade II b  Grade III  Grade IV

Percentage of glottic opening (POGO)

Specify the percentage of laryngeal opening (POGO) view

- 100% of laryngeal view
- 80% of laryngeal view
- 50% of laryngeal view
- < 5% of laryngeal view

Type of tube  Single lumen tube  Double lumen tube

Specify the operator performing the SECOND attempt of LARYNGOSCOPY

- Anesthesia resident

Specify the operator's current year of RESIDENCY program

- 1st  2nd  3rd  4th  5th  6th  7th  8th

- Anesthesia consultant
- Anesthesia nurse
- Anesthesia technician
- Other \_\_\_\_\_

Outcome of the SECOND attempt

- Tracheal intubation
- Esophageal intubation
- Unsuccessful attempt

Were airways finally secured? YES  NO

(with a laryngoscopy/flexible bronchoscopy and endotracheal intubation/SGA placement)

### Final event

Specify the airway management FINAL EVENT

- Cannot intubate cannot oxygenate (CICO) scenario
- The patient was woken up and procedure rescheduled/reconsidered
- Other event, specify \_\_\_\_\_

Was an emergency front of neck access (eFONA) required? YES  NO

- Specify the eFONA technique performed
- Scalpel cricothyroidotomy
- Needle/cannula cricothyroidotomy
- Surgical tracheostomy

Specify the SUCCESSFUL strategy of airway management

- NEW attempt of LARYNGOSCOPY
- Supraglottic airway (SGA) insertion
- New attempt with a flexible bronchoscope
- Other, specify \_\_\_\_\_

### SUCCESSFUL attempt

Check all changes applied before the SUCCESSFUL attempt:

- Change of patient's position
- Change of operator
- No changes
- Other, specify \_\_\_\_\_

Facemask ventilation performed before the SUCCESSFUL attempt YES  NO

Specify the SUCCESSFUL method of LARYNGOSCOPY

- Direct laryngoscopy with Macintosh blade
- Direct laryngoscopy with Miller blade
- Videolaryngoscopy

Specify blade size/number

- Blade N° 3
- Blade N° 4
- Blade N° 5

Specify VIDEOLARYNGOSCOPY blade type (check all that apply)

- Hyperangulated
- Macintosh-type
- Channelled

Specify type of videolaryngoscope

- Integrated monitor to VL handle
- Separate monitor

Did you use a STYLET during the SUCCESSFUL attempt of intubation? YES  NO

Did you use a BOUGIE during your SUCCESSFUL attempt of intubation? YES  NO

Did you apply an external laryngeal manipulation? YES  NO

Specify the laryngoscopic view (Cormack - Lehane)

Grade I  Grade II a  Grade II b  Grade III  Grade IV

Percentage of glottic opening (POGO)

Specify the percentage of laryngeal opening (POGO) view

100% of laryngeal view

80% of laryngeal view

50% of laryngeal view

< 5% of laryngeal view

Type of tube  Single lumen tube  Double lumen tube

Specify the operator performing the SUCCESSFUL attempt of LARYNGOSCOPY

Anesthesia resident

Specify the operator's current year of RESIDENCY program

1st  2nd  3rd  4th  5th  6th  7th  8th

Anesthesia consultant

Anesthesia nurse

Anesthesia technician

Other \_\_\_\_\_

Total number of attempts

1  2  3  4  5

Specify the OPERATOR performing the SUCCESSFUL attempt:

Anesthesia resident

Specify the operator's current year of RESIDENCY program

1st  2nd  3rd  4th  5th  6th  7th  8th

Anesthesia consultant

Anesthesia nurse

Anesthesia technician

Other \_\_\_\_\_

### End of airway management

Time of successful end of airway management |\_\_|\_\_: |\_\_|\_\_|

(in case of multiple attempts, consider the end of last one)

Specify the FIRST method used to confirm intubation

Capnography

Capnometry

Chest auscultation

Flexible bronchoscopy

Other, Specify \_\_\_\_\_

Did you apply a protocol for this specific airway management?

Yes

No

# Outcome of airway management procedure

## SpO2 during airway management

Lowest SpO2 during advanced airway management up to 10 min from induction  
(or surgical incision, whichever come first)

\_\_\_\_|\_\_\_\_|\_\_\_\_|%

Lowest SpO2 during advanced airway management from 11 to 30 min from induction  
(or surgical incision, whichever come first)

\_\_\_\_|\_\_\_\_|\_\_\_\_|%

## Hemodynamics after airway management

Lowest systolic blood pressure up to 10 min from induction  
(or surgical incision, whichever come first)

\_\_\_\_|\_\_\_\_|\_\_\_\_| (mmHg)

Lowest systolic blood pressure from 11 to 30 min from induction  
(or surgical incision, whichever come first)

\_\_\_\_|\_\_\_\_|\_\_\_\_| (mmHg)

Was systolic blood pressure < 90 mmHg for more than 15 minutes? YES  NO

Anaphylaxis suspected? YES  NO

Specify the most suspected trigger of anaphylaxis

- Radiocontrast medium
- Antibiotic
- Benzodiazepine
- Muscle relaxant agent
- Colloids
- Unknown
- Other suspected agent

Specify the drug/molecule most suspected trigger \_\_\_\_\_

Systolic blood pressure > 180 mmHg up to 30 min from induction or surgical incision? YES  NO

*Unplanned need of vasopressor (definition): Rescue administration of any vasopressor (either as a bolus or continuous infusion) due to hypotension after induction.*

Unplanned need of a vasopressor after advanced airway management? YES  NO

Specify the RESCUE vasopressor used after induction

- Norepinephrine
  - method of administration  Bolus  Continuous infusion
  - Specify NOREPINEPHRINE (tartrate) bolus dose \_\_\_\_|\_\_\_\_|\_\_\_\_| (mcg)
  - Specify NOREPINEPHRINE (tartrate) infusion dose \_\_\_\_|\_\_\_\_|\_\_\_\_| (mcg/Kg/min)

- Ephedrine
  - Specify EPHEDRINE total dose \_\_\_\_|\_\_\_\_|(mg)

- Phenylephrine
  - Specify PHENYLEPHRINE method of administration  Bolus  Continuous infusion
  - Specify PHENYLEPHRINE total bolus dose \_\_\_\_|\_\_\_\_|(mcg)
  - Specify PHENYLEPHRINE infusion dose \_\_\_\_|\_\_\_\_|\_\_\_\_| (mcg/Kg/min)

- Dobutamine
  - Specify DOBUTAMINE infusione dose \_\_\_\_|\_\_\_\_|\_\_\_\_| (mcg/Kg/min)

- Metaraminol
  - Specify METARAMINOL method of administration  Bolus  Continuous infusion



Specify METARAMINOL total bolus dose |\_\_|\_\_|\_\_(mg)

Specify METARAMINOL infusion dose |\_\_|\_\_| (mg/Kg/h)

Other

Specify type \_\_\_\_\_

Specify dose of \_\_\_\_\_ (mcg)

RESCUE administration of FLUIDS within 30 minutes from induction? YES  NO

Type of RESCUE administered FLUIDS (within 30 minutes from induction)

Saline (NaCl 0.9%)

Balanced solution (e.g. Ringer lactate)

Synthetic colloids

Albumin

Red blood cells

Plasma

Other

Specify TOTAL volume of administered RESCUE FLUIDS within 30 minutes from induction |\_\_|\_\_|\_\_|\_\_(ml)

Cardiac arrest within 30 minutes from induction? YES  NO

Specify the single most probable reason of cardiac arrest

Hypoxia

Hypovolemia

Cardiac arrhythmia

Unknown

Other reason specify \_\_\_\_\_

Outcome of cardiac arrest

Return of spontaneous circulation (ROSC)

Death

Any major cardiac arrhythmia within 30 minutes from induction? YES  NO

### Other events

*Airway injury (definition): Any detectable and clinically relevant injury attributable to airway management procedure (e.g. bleeding, tracheal or bronchial tear or laceration)*

Any clinically relevant AIRWAY INJURY? YES  NO

Specify the type of the clinically relevant airway injury: \_\_\_\_\_

Specify the site of the clinically relevant airway injury: \_\_\_\_\_

*Dental injury (definition): Fracture or avulsion of tooth during airway management*

Dental injury? YES  NO

*Clinically relevant bleeding (definition): Any sign or symptom of hemorrhage that meet at least one of the following criteria:*

- requiring medical intervention by a healthcare professional;
- leading to prolonged hospitalization or increased level of care

Clinically relevant airway bleeding? YES  NO

Specify the site of the clinically relevant airway injury: \_\_\_\_\_

*Aspiration of gastric contents (definition): Presence of gastric contents at the glottic level visualized during laryngoscopy/flexible bronchoscopy*

Aspiration of gastric contents? YES  NO

Unplanned ICU admission due to airway-related complications? YES  NO

# Removal of the airway device

*Advanced airway device removal (definition): extubation or removal of the supraglottic airway (SGA) device*

Time of advanced airway device removal|\_\_|\_\_:|\_\_|\_\_|

Specify the place of advanced airway device (i.e. Operating room either tracheal tube or SGA) removal

- Recovery room
- ICU
- Radiology Unit
- Endoscopy Unit
- Cardiology Unit
- Other

Specify \_\_\_\_\_

Administration of a reversal of neuromuscular block? YES  NO

Specify the train of four ratio (TOFR) at the moment of extubation/SGA removal \_\_\_\_\_

Patient's consciousness at the moment of extubation/SGA removal

- Patient fully awake
- Patient with recovered reflexes but still asleep

Was extubation/SGA removal postponed due to concerns for airways-related complications? YES  NO

Specify the reason for extubation/SGA removal delay

- Airway bleeding
- Prolonged instrumentation with risk of airway edema
- Airway injury
- Residual curarization
- Other, specify \_\_\_\_\_

Unplanned re-intubation after tracheal tube/SGA removal? YES  NO

Specify the main reason for unplanned intubation at the end of the procedure

- Stridor/airway obstruction
- Residual curarization
- Airway bleeding
- Respiratory failure
- Cardiovascular collapse
- Cardiac arrest
- Surgical/procedure complication needing re-intervention
- Other, specify \_\_\_\_\_

Was difficult airway management ("airway alert") during this procedure communicated to the patient?  
YES  NO

Type of difficult airway management communication ("airway alert")

- Oral communication
- Written
- Both

# Hospital discharge

Specify date of hospital discharge

---

Specify patient's status at hospital discharge

- Dead
- Alive