COVIP study patient data form

Use this form to record patient data offline for each patient. Upon completion, follow the data entry links you've received per email and enter patient data. You may also enter data directly online if preferred.

| For use only at investigators site (NOT part of eCRF): | | |
|--|--|--|
| Patient name | | |
| Patient ID (internal hospital | | |
| records) | | |
| Admitted to ICU date: | | |
| Date of death (if dead): | | |

eCRF

Please write or circle correct answers below and enter online.

Black: Mandatory data Grey: Optional data

Demographics

| Consecutive Patient no. (1-999) This consecutive patient number must be same you will use for the eCRF | | |
|---|--------|----------|
| Date of consent/inclusion | | |
| Age at admission (must be 70 or above) | | years |
| SARS-CoV-2 (must be proven) | | □ Proven |
| Gender (mark answer) | □ Male | □ Female |
| Days in the hospital prior to ICU admission (if patient is admitted to hospital and ICU same day, it's day 1) | | days |
| Days with symptom onset prior to hospital admission (if patient is admitted to hospital the day symptoms begin, it's day 1) | | days |
| | | |

| Past medical history | Diabetes ¹ Ischemic heart disease ² Renal insufficiency ³ Arterial hypertension ⁴ | ges / □no / □ unknown | |
|---|---|--|--|
| | Pulmonary comorbidity ⁵ Chronic heart failure ⁶ | □ yes / □no / □ unknown □ yes / □no / □ unknown | |
| ¹ Any type of diabetes mellitus documented in patient charts or documents or according to anamnesis (patient or relatives), anti- diabetic drugs or insulin in current medication ² Documented pathologic coronary angiography, Known coronary artery disease according to patient charts, previous percutaneous coronary intevention (PCI) or coronary bypass surgery ³ Documented chronic renal insufficiency Grade 3 or higher, creatinine clearance <60ml/min documented in the past, chronic dialysis ⁴ Any grade of chronic arterial hypertension, medicated ⁵ Any kind of chronic pulmonary disease of any etiology (bronchial asthma, COPD, Pulmonary fibrosis), medicated, clinical or radiological signs of chronic pulmonary disease ⁶ Any kind of chronic heart failure of any etiology, medicated, clinical, echocardiographic or radiological signs of chronic heart failure, or as documented in patient charts. | | | |
| Ejection fraction [%] (last assessment) | □% □ unknown | | |
| ACE Inhibitor use? (within ten days before admission) | | □ yes / □no / □ unknown | |
| Angiotensin 2 receptor blocker use (within ten days before admission) | | □ yes / □no / □ unknown | |
| NSAID (nonsteroidal anti-inflamr | matory drug) use? | □ yes / □no / □ unknown | |
| If yes, treatment with | | □ Ibuprofen □ Diclofenac □ ASS □ Piroxicam □ Naproxen □ Indametacin □ Metamizol □ Other | |
| Paracetamol use? (within ten days before admission)? | | □ yes / □no / □ unknown | |
| | | | |

| (OPTIONAL) Habitat before admission (mark answer) | Own home (including if with spouse) Other home with family or caregivers Nursing home Hospital ward Other Unknown |
|---|--|
|---|--|

ICU-Admission

| Bacterial co-infection confirmed | □ yes / □no / □ unknown | | |
|---|----------------------------------|-----|--|
| First Blood gas analysis | | | |
| PaO ₂ | mmHg | kPa | |
| FiO ₂ ¹ | % | | |
| PaO2/FiO2 ratio | automatically calculated in eCRF | | |
| ¹ For nasal cannula, please check the table in the appendix to estimate FiO ₂ | | | |

Laboratory values on day 1

| | Common units | SI-Units | | |
|---------------------------------------|--------------|--------------------|--|--|
| Lowest thrombocyte count ¹ | 10³/μL | 10 ⁹ /L | | |
| Highest creatinine ¹ | mg/dL | mmol/L | | |
| Highest total bilirubin ¹ | mg/dL | mmol/L | | |
| Highest D-Dimer ¹ | μg/mL (DDU) | mg FEU/L | | |
| Inflammation (Not mandatory): | | | | |
| Highest Leucocyte ¹ | 10³/μL | 10 ⁹ /L | | |
| Lowest Lymphocyte count ¹ | 10³/μL | 10 ⁹ /L | | |
| Highest Procalcitonin ¹ | ng/dL | μg/L | | |
| Highest CRP ¹ | mg/L | nmol/L | | |
| ¹ on day 1 | | | | |
| Highest lactate day 1 | mg/dL | mmol/L | | |
| Highest lactate day 2 | mg/dL | mmol/L | | |

SOFA SCORE (at or close to time of admission)

| Organ system | Grading | Score (0-4) |
|---|--|-------------|
| Respiratory system: PaO2/FiO2 | 0 pts: >400 mmHg (>= 53 kPa) 1 pt: <400 mmHg (< 53 kPa) 2 pts: <300 mmHg (< 40 kPa) 3 pts: < 200 mmHg (< 27 kPa) AND mechanically ventilated 4 pts: < 100 mmHg (< 13 kPa) AND mechanically ventilated | |
| Nervous system: Glasgow coma scale score | 0 pts: GCS 15 1 pt: GCS 13-14 2 pts: 10-12 3 pts: 6-9 4 pts: <6 | |
| Cardiovascular system: Mean arterial pressure OR administration of vasopressors required | 0 pts: MAP ≥ 70 mmHg 1 pt: MAP < 70 mmHg 2 pts: Dopamine ≤ 5 μg/kg/min or dobutamine (any dose) 3 pts: Dopamine > 5 μg/kg/min OR epinephrine ≤ 0.1 μg/kg/min OR norepinephrine ≤ 0.1 μg/kg/min 4 pts: Dopamine > 15 μg/kg/min OR epinephrine > 0.1 μg/kg/min OR norepinephrine > 0.1 μg/kg/min | |
| Liver: Bilirubin | 0 pts: < 20 μmol/L (< 1.2 mg/dL) 1 pt: 20-32 μmol/L (1.2-1.9 mg/dL) 2 pts: 33-101 μmol/L (2.0-5.9 mg/dL) 3 pts: 102-204 μmol/L (6.0-11.9 mg/dL) 4 pts: > 204 μmol/L (>12.0 mg/dL) | |
| Coagulation: Platelets (10 ³ /μL or 10 ⁹ /L) | 0 pts: ≥ 150 10^3/ μ l 1 pt: < 150 10^3/ μ l 2 pts: < 100 10^3/ μ l 3 pts: < 50 10^3/ μ l 4 pts: < 20 10^3/ μ l | |
| Kidneys: Creatinine (μmol/L) | 0 pts: < 110 (< 1.2 mg/dL) 1 pt: 110-170 (1.2-1.9 mg/dL) 2 pts: 171-299 (2.0-3.4 mg/dL) 3 pts: 300-440 (3.5-4.9 mg/dL) (or < 500 ml/day) 4 pts: > 440 (> 5.0 mg/dL) (or < 200 ml/day) | |
| SOFA score total (sum of (automatically calculated online) | organ system scores) | |

Clinical Frailty Scale

| CFS | Was assessedWas not assessed | |
|---|--|--|
| Frailty score (1-9) (see scale at end of document) | 1 = Very fit 2 = Well 3 = Managing well 4 = Vulnerable 5 = Mildly frail 6 = Moderately frail 7 = Severely frail 8 = Very severely frail 9 = Terminally ill | |
| Assessors profession (mark answer) | ICU nurse ICU physician Dedicated research staff Other | |
| Information obtained from (mark answer) | Patient Family/caregivers Hospital records Other | |

(OPTIONAL)

KATZ - Katz Index of Independence in Activities of Daily Living

This simple questionnaire assesses six usual activities: Bathing, dressing, toileting, transferring, continence and feeding. A short explanation is given to each score where 1 represents Independence and 0 Dependence. The higher the score (max 6) the better the function of ADL are. This information should be obtained during the initial conversation with the patient/next-of kin. Independence = 1 point, Dependence = 0 points. Other o Patient Katz scoring was Unknown Family/caregivers obtained by (mark answer) Not performed Hospital records **Points Bathing** 1 pt: Bathes self completely or needs help in bathing only a single part of the body such as back, genital area or disabled extremity. 0 pts: Need help with bathing more than one part of the body, getting in or out of the tub or shower. Requires total bathing. Dressing 1 pt: Get clothes from closets and drawers and puts on clothes and outer garments complete with fasteners. May have help tying shoes. 0 pts: Needs help with dressing self or needs to be completely dressed. Toileting 1 pt: Goes to toilet, gets on and off, arranges clothes, cleans genital area without help. 0 pts: Needs help transferring to the toilet, cleaning self or uses bedpan or commode. **Transferring** 1 pt: Moves in and out of bed or chair unassisted. Mechanical transfer aids are acceptable. 0 pts: Needs help in moving from bed to chair or requires a complete transfer. Continence 1 pt: Exercises complete self-control over urination and defecation. 0 pts: Is partially or totally incontinent of bowel or bladder. Feeding 1 pt: Gets food from the plate into mouth without any help. Preparation of food may be done by another person. 0 pts: Needs partial or total help with feeding or requires parental feeding. Total points (6 = high i.e. patient is independent, 0 = Low i.e. patient is dependent) (automatically calculated in eCRF).

ICU interventions

| Intubation and mechanical ventilation? | Yes | No | Unknown |
|---|-----|-----|---------|
| If Yes, start of intubation and mechanical ventilation (day number) (Day number. Whole number. The day the treatment was started. The day of admission is number 1) | | day | |
| If Yes, duration of intubation and mechanical ventilation (Sum of hours, cumulated for ICU stay (whole number). If extubated and re-intubed, please supply the total (added) amount of hours intubated and on mechanical ventilation) | | | hours |
| Treatment with prone position: | Yes | No | Unknown |
| If Yes, start of treatment with prone position: (day number) (Day number. Whole number. The day the treatment was started. The day of admission is number 1) | | day | |
| Tracheostomy performed? (Tracheostomy performed with any technique (surgical, dilatational etc.) during ICU stay) | Yes | No | Unknown |
| If Yes, day of tracheostomy (day number) (Day number. Whole number. The day the treatment was perfomed. The day of admission is number 1) | | day | |
| Vasoactive drugs used? (Vasopressors, inopressors or inodilators (at any point during the ICU stay). Only if adrenergic agents were used. Pure vasodilators should be disregarded). | Yes | No | Unknown |
| If Yes, Start of treatment with vasoactive drugs (Day number. Whole number. The day the treatment was started. The day of admission is number 1) | | day | |
| If Yes, Duration of treatment with vasoactive drugs Sum hours (whole number, cumulated hours during ICU stay). | | | hours |
| | | | |

| Renal Replacement Therapy used? | Yes | No | Unknown |
|---|-----|-----|---------|
| If Yes, Start of Renal Replacement Therapy (RRT) (Day number. Whole number. The day the treatment was started. The day of admission is number 1) | | day | |
| If Yes, Duration of Renal Replacement Therapy (RRT) Sum hours (whole number, cumulated hours during ICU stay). | | | hours |
| Cytokine filter system | Yes | No | Unknown |
| Non-invasive ventilation (NIV) used? | Yes | No | Unknown |
| If Yes, Start of Non-invasive ventilation (NIV) (Day number. Whole number. The day the treatment was started. The day of admission is number 1) | | day | |
| If Yes, Duration of Non-invasive ventilation (NIV) Sum hours (whole number, cumulated hours during ICU stay). | | | hours |
| Transfer to another hospital for ECMO? | Yes | No | Unknown |
| If Yes, Day of transfer (Because your hospital does not offer ECMO / has no more ECMO capacities. Day number. Whole number. The day of admission is number 1) | | day | |

!!Please inform ECMO-Hospital, to not include the patient in COVIP for a second time!!

| Was ECMO-therapy performed? | Yes | No | Unknown |
|---|-----------|-----------------|------------------|
| If yes, type of ECMO (when both types, please select the first type used) | □ veno-ve | enous □ veno-ar | terial 🗆 unknown |
| If Yes, Start of ECMO (Day number. Whole number. The day the treatment was started. The day of admission is number 1) | | day | |
| If Yes, Duration of ECMO Sum hours (whole number, cumulated hours during ICU stay). | | | hours |
| Use of drugs: | | | |
| Antibiotics | Yes | No | Unknown |
| Corticosteroids | Yes | No | Unknown |
| Antiviral drugs | Yes | No | Unknown |
| Other experimental drugs | Yes | No | Unknown |
| Other experimental trial (non-drug) | Yes | No | Unknown |

Outcome

| Life-sustaining care withhold | Yes | No | Unknown |
|--|-------|------|---------|
| If Yes, when was the decision made to withhold life-sustaining care (Day number. Whole number. The day of admission is number 1) | | day | |
| Life-sustaining care withdrawn | Yes | No | Unknown |
| If Yes, when was the decision made to withdraw life-sustaining care (Day number. Whole number. The day of admission is number 1) | | day | |
| Was treatment withdrawn or withhold performed in triage condition without consulting the caregiver? | Yes | No | Unknown |
| Survived to ICU discharge | Yes | No | Unknown |
| ICU length of stay Sum of hours from admission until discharge (or death if patient died in the ICU). | | | hours |
| Vital status at 30 days? (from day of ICU admission) | Alive | Dead | Unknown |
| Vital status at 3 months? (from day of ICU admission) (if your ICU participates in 6 months follow-up) | Alive | Dead | Unknown |
| If dead, when did the patient die? (Day number. Whole number. The day of admission is number 1) | | day | |

(Optional)

EQ-5D-5L after 3 month

| | 0 | Patient |
|--|---|-------------------|
| EQ-5D-5L Information obtained from (mark answer) | 0 | Family/caregivers |
| | 0 | Hospital records |
| | 0 | Other |
| | 0 | Not assessed |

| EQ-5D-5L | | | | |
|--|--|--|--|--|
| Describing the health today | | | | |
| Please answer on behalf of the patient or by yourself, respectively. Under each heading, | | | | |
| mark ONE box that you think the patient would make to describe his/her own health TODAY | | | | |
| if he/she were able to do. | | | | |
| Mobility (walking about) | | | | |
| There are no problems in walking about | | | | |
| There are slight problems in walking about | | | | |
| There are a moderate problems in walking about | | | | |
| There are a severe problems in walking about | | | | |
| There is inability to walk about | | | | |
| | | | | |
| Self-care Self-care | | | | |
| There are no problems in washing or dressing | | | | |
| There are slight problems in washing or dressing | | | | |
| There are moderate problems in washing or dressing | | | | |
| There are severe problems in washing or dressing | | | | |
| There is inability to wash or dress | | | | |
| | | | | |
| Usual activities (for example work, study, housework, family or leisure | | | | |
| activities)) | | | | |
| There are no problems doing usual activities | | | | |
| There are slight problems doing usual activities | | | | |
| There are moderate problems doing usual activities | | | | |
| There are severe problems doing usual activities | | | | |
| There is inability to do usual activities | | | | |
| | | | | |

| Pain / discomfort | |
|--|--|
| There is no pain or discomfort | |
| There is slight pain or discomfort | |
| There is moderate pain or discomfort | |
| There is severe pain or discomfort | |
| There is has extreme pain or discomfort | |
| | |
| Anxiety / Depression | |
| There is no anxiety or depression | |
| There is slight anxiety or depression | |
| There is moderate anxiety or depression | |
| There is severe anxiety or depression | |
| There is extreme anxiety or depression | |
| | |
| We would like to know how good or bad the health is TODAY. | |
| This scale is numbered from 0 to 100. 100 means the best health imaginable 0 means the worst health imaginable Mark an X on the scale to indicate how the health is TODAY. Now, please write the number you marked on the scale in the box below | The best health you can imagine 100 95 90 85 80 75 70 65 60 15 10 15 10 15 10 15 10 15 10 15 10 15 10 10 |

Clinical Frailty Scale



1 Very Fit – People who are robust, active, energetic and motivated. These people commonly exercise regularly. They are among the fittest for their age.



7 Severely Frail – Completely dependent for personal care, from whatever cause (physical or cognitive). Even so, they seem stable and not at high risk of dying (within ~ 6 months).



2 Well – People who have no active disease symptoms but are less fit than category 1. Often, they exercise or are very active occasionally, e.g. seasonally.



8 Very Severely Frail – Completely dependent, approaching the end of life. Typically, they could not recover even from a minor illness.



3 Managing Well – People whose medical problems are well controlled, but are not regularly active beyond routine walking.



9 Terminally III – Approaching the end of life. This category applies to people with a life expectancy <6 months, who are not otherwise evidently frail.



4 Vulnerable – While not dependent on others for daily help, often symptoms limit activities. A common complaint is being "slowed up", and/or being tired during the day.



5 Mildly Frail – These people often have more evident slowing, and need help in high order IADLs (finances, transportation, heavy housework, medications). Typically, mild frailty progressively impairs shopping and walking outside alone, meal preparation and housework.



6 Moderately Frail – People 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.

Scoring frailty in people with dementia

The degree of frailty corresponds to the degree of dementia. Common **symptoms in mild dementia** include forgetting the details of a recent event, though still remembering the event itself, repeating the same question/story and social withdrawal.

In **moderate dementia**, recent memory is very impaired, even though they seemingly can remember their past life events well. They can do personal care with prompting.

In **severe dementia**, they cannot do personal care without help.

| Activities Points (1 or 0) | Independence (1 Point) | Dependence (0 Points) | |
|----------------------------|---|---|--|
| | NO supervision, direction or personal assistance. | WITH supervision, direction, personal assistance or total care. | |
| BATHING Points: | (1 POINT) Bathes self completely or needs help in bathing only a single part of the body such as the back, genital area or disabled extremity. | (0 POINTS) Need help with bathing more than one part of the body, getting in or out of the tub or shower. Requires total bathing | |
| DRESSING Points: | (1 POINT) Get clothes from closets and drawers and puts on clothes and outer garments complete with fasteners. May have help tying shoes. | (0 POINTS) Needs help with dressing self or needs to be completely dressed. | |
| TOILETING Points: | (1 POINT) Goes to toilet, gets on and off, arranges clothes, cleans genital area without help. | (0 POINTS) Needs help transferring to the toilet, cleaning self or uses bedpan or commode. | |
| TRANSFERRING Points: | (1 POINT) Moves in and out of bed or chair unassisted. Mechanical transfer aids are acceptable | (0 POINTS) Needs help in moving from bed to chair or requires a complete transfer. | |
| CONTINENCE Points: | (1 POINT) Exercises complete self control over urination and defecation. | (0 POINTS) Is partially or totally incontinent of bowel or bladder | |
| FEEDING Points: | (1 POINT) Gets food from plate into mouth without help. Preparation of food may be done by another person. | (0 POINTS) Needs partial or total help with feeding or requires parenteral feeding. | |

APPENDIX:

| Low-Flow System | Oxygen Flow Rates (L/min) | FiO ₂ |
|--------------------------|---------------------------|------------------|
| Nasal cannula | 1 | 0.24 |
| | 2 | 0.28 |
| | 3 | 0.32 |
| | 4 | 0.36 |
| | 5 | 0.40 |
| | 6 | 0.44 |
| Simple face mask | 5-6 | 0.40 |
| | 6-7 | 0.50 |
| | 7-8 | 0.60 |
| Partial-rebreathing mask | 6 | 0.60 |
| | 7 | 0.70 |
| | 8 | 0.80 |
| | 9 | 0.80 |
| | 10 | 0.80 |
| Non-rebreathing mask | 10 | 0.80 |
| | 15 | 0.90 |

Adapted from Critical Care Medicine: Perioperative Management by Michael James Murray, Lippincott Williams & Wilkins, 2002

When entering data in the online form, the ICU ID and the email address of the ICU primary contact is needed.

Sincerely, the COVIP steering committee

www.vipstudy.org

contact@vipstudy.org