

# 1. Presentation - in hospital, out-patient clinic or dialysis center: patient characteristics

Record ID \_\_\_\_\_

**Before entering data: This database is only meant for adult patients (>=18 yrs)**

- Who receive dialysis treatment or who are living with a kidney transplant
- Who have a confirmed COVID-19 infection (by PCR or CT)

**Please note:**

- Fill in data for the moment patients presented themselves for evaluation of COVID-19
- After this first presentation patients can be admitted to hospital or be sent home.

**In case of admission after initially being sent home, this is a second presentation.**

**This should be a separate entry using data at second presentation.**

**-Please enter only de-identified information below. Do not include your patients name, initials, date of birth or zip code. Thank you!**

## 1. PRESENTATION - IN HOSPITAL, OUT-PATIENT CLINIC OR DIALYSIS CENTER: PATIENT CHARACTERISTICS

1.1 This eCRF concerns a patient:

- Receiving dialysis treatment, first presentation
- Living with a kidney transplant, first presentation
- Receiving dialysis treatment, second presentation
- Living with a kidney transplant, second presentation

**Explanatory note:**

In case patients present themselves for diagnostics and are positive, but are discharged home because they have mild disease, it can happen that they return some days later because of worsening disease. In that case, please fill in data at their first presentation, but ALSO data at their second presentation in a new record, using the respective option above.

Is this a second presentation of a patient already entered in the database?

- Yes
- No

Patient record ID of patients' first presentation \_\_\_\_\_

1.2 Date of presentation (dd-mm-yyyy) \_\_\_\_\_

1.3 Date of first symptoms (dd-mm-yyyy) \_\_\_\_\_

1.4 Sex

- Female
- Male

1.5 Age (years)

\_\_\_\_\_  
((years))

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1.6 Race

- Asian
- Black or African descent
- White or Caucasian
- Other
- Unknown

## 1.7 Country

- Albania
- Algeria
- Andorra
- Armenia
- Austria
- Azerbaijan
- Belarus
- Belgium
- Bosnia and Herzegovina
- Bulgaria
- Croatia
- Cyprus
- Czech Republic (Czechia)
- Denmark
- Egypt
- Estonia
- Finland
- France
- Georgia
- Germany
- Greece
- Holy see
- Hungary
- Iceland
- Ireland
- Israel
- Italy
- Kazakhstan
- Kosovo
- Latvia
- Lebanon
- Libiya
- Liechtenstein
- Lithuania
- Luxembourg
- Malta
- Moldova
- Monaco
- Montenegro
- Morocco
- Netherlands
- North Macedonia
- Norway
- Poland
- Portugal
- Romania
- Russia
- San Marino
- Serbia
- Slovakia
- Slovenia
- Spain
- Sweden
- Switzerland
- Syria
- Tunesia
- Turkey
- Ukraine
- United Kingdom
- Other

1.8 Risk factors

- Hypertension (RR>140/90 or antihypertensive drugs)  
 Diabetes Mellitus  
 Coronary Artery Disease  
 Heart failure  
 Chronic lung disease  
 Active malignancy  
 Auto-immune disease  
 None

1.9 Tobacco use

- Current  
 Prior  
 Never  
 Unknown

1.10 Body weight (kg)

(In case of dialysis, post-dialysis weight)

((kg)) \_\_\_\_\_

1.11 Length (cm)

((cm)) \_\_\_\_\_

1.12 What was the general condition of your patient before this COVID-19 disease episode on the frailty scale:

- Very fit to Managing well  
 Vulnerable to Moderately frail  
 Severely frail to Terminally ill

1.12.1 Please select the appropriate score on the Clinical Frailty Scale:

1. Very fit  
 2. Well  
 3. Managing well

(See image and text below)

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.



**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.



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

1.12.2 Please select the appropriate score on the Clinical Frailty Scale:

4. Vulnerable  
 5. Mildly frail  
 6. Moderately frail

(See image and text below)

## Clinical Frailty Scale:



**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.

1.12.3 Please select the appropriate score on the Clinical Frailty Scale:

7. Severely frail  
 8. Very severely frail  
 9. Terminally ill

(See image and text below)

## Clinical Frailty Scale:



**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).



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



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

1.13 Use of ACE inhibitor

- Yes  No  Unknown

1.14 Use of Angiotensin Receptor Blocker

- Yes  No  Unknown

1.15 Identifier of KRT registry

Is your center connected to Eurotransplant

- Yes  No

Please fill in the Eurotransplant identifier:

\_\_\_\_\_

Please fill in the identifier of your national or regional transplant registry:

\_\_\_\_\_

Enter the unique identification number that is used for this patient in your hospital.  
This is REQUIRED for patient retrieval:  
(for your information, this number will be deleted when your patient record is completed and closed. This number will NOT be saved in the final database).

1.16 Year of start any form of kidney replacement therapy (yyyy)

\_\_\_\_\_  
((yyyy))

(Unknown year of start any form of kidney replacement therapy)

Unknown

1.17 Year of last transplantation (yyyy)

\_\_\_\_\_  
((yyyy))

(Unknown year of last transplantation)

Unknown

1.17.1 Only kidney transplantation

Yes  No

1.17.2 Also other transplanted organ (pancreas, liver, heart etc.)

Yes  No

1.18 Use of immunosuppressive therapy at presentation

	Yes	No	Unknown
Prednisone	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tacrolimus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cyclosporine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mycophenolate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
mTOR inhibitor (sirolimus, everolimus)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Azathioprine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Belatacept	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Anti TNF A	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Rituximab	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cyclophosphamide	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Specify other immunosuppressive therapy at presentation

\_\_\_\_\_

1.19 Did the patient receive any of the following medications within 6 months prior to illness onset

Yes  No

(polyclonal or monoclonal anti T or B cell agents, IL-2R antibodies, high dose steroids)

	Yes	No	Unknown
Polyclonal antilymphocyte antibodies (ATG, rATG, hATG, thymoglobulin)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Alemtuzumab	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Basiliximab	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Rituximab	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
High dose steroids	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Specify other medication within 6 months prior to illness onset

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### 1.20 Identifier of KRT registry

Please fill in the identifier of your national or regional registry:

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Enter the unique identification number that is used for this patient in your hospital. This is REQUIRED for patient retrieval: (for your information, this number will be deleted when your patient record is completed and closed. This number will NOT be saved in the final database).

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### 1.21 Type of dialysis

- Hemodialysis  
 Peritoneal dialysis

Which type of Hemodialysis

- In-center hemodialysis  
 Home hemodialysis

### 1.22 Year of start any form of kidney replacement therapy (yyyy)

\_\_\_\_\_  
 ((yyyy))

(unknown year of start any form of kidney replacement therapy)

Unknown

### 1.23 Previous kidney transplantation

Yes  No

Year of most recent kidney transplantation (yyyy)

\_\_\_\_\_  
 ((yyyy))

(Unknown year of most recent kidney transplantation)

Unknown

### 1.24 Year of start present form of dialysis (yyyy)

\_\_\_\_\_  
 ((yyyy))

(Unknown year of start present form of dialysis)

Unknown

### 1.25 Use of immunosuppressive therapy at presentation

Yes  No

	Yes	No	Unknown
Prednisone	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tacrolimus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cyclosporine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mycophenolate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
mTOR inhibitor (sirolimus, everolimus)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Azathioprine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Belatacept	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Anti TNF A	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Rituximab	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cyclophosphamide	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Specify other immunosuppressive therapy at presentation \_\_\_\_\_

### 1.26 Primary kidney disease

ERA-EDTA-code

- Primary glomerulonephritis  
 Pyelonephritis     Interstitial nephritis  
 Familial/hereditary renal diseases  
 Congenital diseases     Vascular diseases  
 Secondary glomerular/systemic disease  
 Diabetic Kidney Disease  
 Other     Unknown

Specify Other ERA-EDTA code \_\_\_\_\_

### 1.27 Status of preparation for renal transplantation

- Active on waiting list  
 Temporarily not on waiting list (due to problems present before COVID-19 period)  
 In preparation for placement on waiting list  
 Not transplantable (already before COVID-19 period)  
 Unknown

### 1.28 Residual diuresis > +/- 200 ml/day

- Yes     No     Unknown



## 2. Presentation - in hospital, out-patient clinic or dialysis center: COVID-19 related characteristics

### 2.1 Symptoms at presentation

	Yes	No	Unknown
Sore throat	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cough	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Shortness of breath	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fever	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Headache	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nausea or vomiting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Diarrhea	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Myalgia or arthralgia	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2.2 Temperature at presentation (Celsius)

\_\_\_\_\_  
((Celsius) (use decimal point instead of comma))

2.3 Respiration rate at presentation (/min)

\_\_\_\_\_  
((/min))

2.4 Oxygen saturation with room air (%)

\_\_\_\_\_  
((%))

2.5 Systolic blood pressure (mmHg)

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

2.6 Diastolic blood pressure (mmHg)

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

2.7 Pulse rate (bpm)

\_\_\_\_\_  
((bpm))

2.8 COVID test result

- Positive  
 Negative  
 Indeterminate  
 Unknown

2.9 Abnormalities on chest X-ray suggestive for COVID-19

- Yes    No    No chest X-ray performed

2.10 Abnormalities on CT-scan suggestive for COVID-19

- Yes    No    No CT-scan performed

2.11 Was your patient identified because he/she had:

- Complaints suggestive for COVID-19  
 Limited symptoms, and had a direct COVID-19 contact  
 No symptoms, but had a direct COVID-19 contact  
 No symptoms, but was found because of a routine screening

## 2.12 Organs affected other than airways at presentation

2.12.1 Liver (transaminases > 2 times the upper limit of normal)

- Yes    No    Unknown

2.12.2 Heart (signs of congestive heart failure/new abnormalities on ECG)

- Yes    No    Unknown

2.12.3 Kidney (>25% increase in creatinine compared to situation before COVID-19 presentation)

- Yes    No    Unknown

## Lab results at presentation, or first available after that encounter

2.13.1 Lymphocyte count - Value

\_\_\_\_\_

2.13.2 Lymphocyte count - Unit

- x1000/microL    10<sup>9</sup>/L  
 Other unit

2.13.3 Please specify other unit for Lymphocyte count

\_\_\_\_\_

2.14.1 Creatinine - Value

\_\_\_\_\_

2.14.2 Creatinine - Unit

- micromol/L    mg/dL  
 Other unit

2.14.3 Please specify other unit for Creatinine

\_\_\_\_\_

2.15.1 CRP - Value

\_\_\_\_\_

2.15.2 CRP - Unit

- mg/L    mg/dL    Other unit

2.15.3 Please specify other unit for CRP

\_\_\_\_\_

### 3. Follow-up

#### Follow-up data

Please fill in these data. However, this form can only be definitely completed:

- In case your patient is not admitted,

- For admitted patients only after discharge from hospital or when deceased.

3.1 Hospital admission  Yes  No

3.1.1 Date of hospital admission (dd-mm-yyyy)

\_\_\_\_\_

3.1.2 Reason for no hospital admission

Because there was no indication

Because there were logistical restrictions for hospital admission related to COVID-19

Because your patient/patients family preferred no admission to hospital

3.2 ICU admission  Yes  No

3.2.1 Date of ICU admission (dd-mm-yyyy)

\_\_\_\_\_

3.2.2 Reason for no ICU admission

Because there was no indication

Because there were logistical restrictions for ICU admission related to COVID-19

Because your patient/patients family preferred no admission to hospital

Because prognosis was too bad

3.3 Intubation  Yes  No

3.3.1 Date of intubation (dd-mm-yyyy)

\_\_\_\_\_

3.3.2 Reason for no intubation

Because there was no indication

Because there were logistical restrictions for ventilator support related to COVID-19

Because your patient/patients family preferred no admission to hospital

Because prognosis was too bad

3.4 Start of CVVH/Hemodialysis  Yes  No

3.4.1 Date of start CVVH/Hemodialysis (dd-mm-yyyy)

\_\_\_\_\_

3.4.2 Reason for no start CVVH/Hemodialysis

Because there was no indication

Because there were logistical restrictions for kidney replacement therapy related to COVID-19

Because your patient/patients family preferred no admission to hospital

Because prognosis was too bad

3.5 Was kidney replacement therapy continued during admission  Yes  No

3.5.1 Was intensity of kidney replacement therapy increased  Yes  No

3.5.2 Reason for discontinuation of kidney replacement therapy  
 Because there was no indication  
 Because there were logistical restrictions for kidney replacement therapy related to COVID-19  
 Because your patient/patients family preferred no start of kidney replacement  
 Because prognosis was too bad

3.6 Did your patient receive antiviral therapy  Yes  No

	Yes	No	Unknown
(Hydroxy)chloroquine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lopinavir/ritonavir	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Remdesevir	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Interferon	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Azithromycin	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3.6.1 Specify other antiviral therapy \_\_\_\_\_

3.7 Did your patient receive anti-inflammatory therapy  Yes  No

	Yes	No	Unknown
Tocilizumab	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Anakinra	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
High dose steroids	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3.7.1 Specify other anti-inflammatory therapy \_\_\_\_\_

3.8 ACE-inhibitor  
 Continued  
 Discontinued  
 Replaced by ARB

3.9 Angiotensin Receptor Blocker  
 Continued  
 Discontinued

3.10 Organs affected other than airways during Follow-up

3.10.1 Liver (transaminases > 2 times the upper limit of normal)  Yes  No  Unknown

3.10.2 Heart (signs of congestive heart failure/new abnormalities on ECG)  Yes  No  Unknown

3.10.3 Kidney (>25% increase in creatinine compared to situation before COVID-19 presentation)	<input type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> Unknown
3.11 Change in dose of tacrolimus < 48h after presentation	<input type="radio"/> No change	<input type="radio"/> Withdrawal	<input type="radio"/> Reduction
3.12 Change in dose of cyclosporine < 48h after presentation	<input type="radio"/> No change	<input type="radio"/> Withdrawal	<input type="radio"/> Reduction
3.13 Change in dose of mycophenolate < 48h after presentation	<input type="radio"/> No change	<input type="radio"/> Withdrawal	<input type="radio"/> Reduction
3.14 Change in dose of azathioprine < 48h after presentation	<input type="radio"/> No change	<input type="radio"/> Withdrawal	<input type="radio"/> Reduction
3.15 Change in dose of mTor inhibitor < 48h after presentation	<input type="radio"/> No change	<input type="radio"/> Withdrawal	<input type="radio"/> Reduction
3.16 Change in dose of Belatacept < 48h after presentation	<input type="radio"/> No change	<input type="radio"/> Withdrawal	<input type="radio"/> Reduction
3.17 Change in dose of Prednisone < 48h after presentation	<input type="radio"/> No change	<input type="radio"/> Increase	<input type="radio"/> Reduction
3.18 Change in dose of Anti TNF A < 48h after presentation	<input type="radio"/> No change	<input type="radio"/> Withdrawal	<input type="radio"/> Reduction
3.19 Change in dose of Rituximab < 48h after presentation	<input type="radio"/> No change	<input type="radio"/> Withdrawal	<input type="radio"/> Reduction
3.20 Change in dose of Cyclophosphamide < 48h after presentation	<input type="radio"/> No change	<input type="radio"/> Withdrawal	<input type="radio"/> Reduction
3.21 Change in dose of Other immunosuppressive therapy (filled in at presentation) at follow-up < 48h after presentation	<input type="radio"/> No change	<input type="radio"/> Withdrawal	<input type="radio"/> Reduction
3.22 Other adjustment of immunosuppressive therapy	_____		
3.23 Any additional remarks	_____		
3.24 Change in dose of tacrolimus < 48h after presentation	<input type="radio"/> No change	<input type="radio"/> Withdrawal	<input type="radio"/> Reduction
3.25 Change in dose of cyclosporine < 48h after presentation	<input type="radio"/> No change	<input type="radio"/> Withdrawal	<input type="radio"/> Reduction
3.26 Change in dose of mycophenolate < 48h after presentation	<input type="radio"/> No change	<input type="radio"/> Withdrawal	<input type="radio"/> Reduction

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3.27 Change in dose of azathioprine < 48h after presentation

No change    Reduction  
 Withdrawal

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3.28 Change in dose of mTor inhibitor < 48h after presentation

No change    Reduction  
 Withdrawal

---

3.29 Change in dose of Belatacept < 48h after presentation

No change    Reduction  
 Withdrawal

---

3.30 Change in dose of Prednisone < 48h after presentation

No change    Reduction  
 Increase

---

3.31 Change in dose of Anti TNF A < 48h after presentation

No change    Reduction  
 Withdrawal

---

3.32 Change in dose of Rituximab < 48h after presentation

No change    Reduction  
 Withdrawal

---

3.33 Change in dose of Cyclophosphamide < 48h after presentation

No change    Reduction  
 Withdrawal

---

3.34 Change in dose of Other immunosuppressive therapy (filled in at presentation) at follow-up < 48h after presentation

No change    Reduction  
 Withdrawal

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3.35 Other adjustment of immunosuppressive therapy

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3.36 Any additional remarks

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## 4. Outcome

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Your patient was not admitted to the hospital, but sent home. You will be asked to provide information on vital status at day 28 and at month 3 after diagnosis (= date of presentation).

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At hospital discharge

This form can only be definitely completed:

- In case your patient is not admitted,
  - For admitted patients only after discharge from hospital or when deceased.
- 

4.1 Vital status at hospital discharge

- Alive    Deceased  
 Lost to follow-up
- 

4.1.1 Specify Alive

- Transferred to other hospital  
 Transferred to a nursing home  
 Discharge to home
- 

4.1.2 Date of death (dd-mm-yyyy)

\_\_\_\_\_

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4.1.3 Cause of death COVID-19 related

- Yes    No

## 4.1.4 Cause of death according to ERA-EDTA code

- Cause of death uncertain / not determined 0  
 Myocardial ischaemia and infarction 11  
 Hyperkalaemia 12     Haemorrhagic pericarditis 13     Other causes of cardiac failure 14     Cardiac arrest / sudden death; other cause or unknow 15  
 Hypertensive cardiac failure 16  
 Hypokalaemia 17     Fluid overload / pulmonary oedema 18 18  
 Pulmonary embolus 21  
 Cerebro vascular accident, other cause or unspecified 22     Gastro-intestinal haemorrhage 23     Haemorrhage from graft site 24     Haemorrhage from vascular access or dialysis circuit 25  
 Haemorrhage from ruptured vascular aneurysm (not 22 or 23) 26  
 Haemorrhage from surgery (not 23, 24 or 26) 27     Other haemorrhage (not 23-27) 28     Mesenteric infarction 29  
 Pulmonary infection (bacterial - not code 73) 31     Pulmonary infection (viral) 32  
 Pulmonary infection (fungal or protozoal; parasitic) 33     Infection elsewhere except virus hepatitis 34     Septicaemia 35 35  
 Tuberculosis (lung) 36 36  
 Tuberculosis (elsewhere) 37 37  
 Generalized viral infection 38 38  
 Peritonitis (all causes except for peritoneal dialysis) 39 39     Liver disease due to hepatitis B virus 41     Liver disease due to other viral hepatitis 42  
 Liver disease due to drug toxicity 43  
 Cirrhosis - not viral 44  
 Cystic liver disease 45  
 Liver failure - cause unknown 46  
 Patient refused further treatment for ESRF 51     Suicide 52     ESRF treatment ceased for any other reason 53  
 ESRF treatment withdrawn for medical reasons 54     Pancreatitis 62  
 Bone marrow depression 63  
 Cachexia 64     Malignant disease, possibly induced by immunosuppressive therapy 66     Malignant disease: solid tumors except those of 67  
 Malignant disease: lymphoproliferative disorders except those of 68  
 Dementia 69     Peritonitis (sclerosing, with peritoneal dialysis) 70  
 Perforation of peptic ulcer 71 71  
 Perforation of colon 72  
 Chronic obstructive airways disease 73  
 Accident related to ESRF treatment (not 25) 81     Accident unrelated to ESRF treatment 82     Peritonitis (bacterial, with peritoneal dialysis) 100     Peritonitis (fungal, with peritoneal dialysis) 101  
 Peritonitis (due to other cause, with peritoneal dialysis) 102  
 Other identified cause of death 99

4.1.5 Date lost to follow-up (if applicable)  
(dd-mm-yyyy)



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4.1.6 Reason for lost to follow-up

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4.1.7 Date of detubation (dd-mm-yyyy)

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4.1.8 Date of last CVVH/Hemodialysis (dd-mm-yyyy)

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4.1.9 Reason to stop CVVH/Hemodialysis

- Recovery of kidney function  
 Prognosis was too bad

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4.1.10 Date of discharge from ICU (dd-mm-yyyy)

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4.1.11 Date of discharge from hospital (dd-mm-yyyy)

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#### VITAL STATUS AT DAY 28 AFTER PRESENTATION

Besides vital status at hospital discharge, we also need to know vital status at day 28 after presentation. The form below can only be definitely completed in case the presentation of your patient was at least 28 days ago.

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Day 28 for your patient is:  
(please look in the dropdown menu and select date)

---

4.2 Vital status 28 days after presentation

- Alive    Deceased  
 Lost to follow-up

---

4.2.1 Date of death (dd-mm-yyyy)

---

---

4.2.2 Cause of death COVID-19 related

- Yes    No

## 5. Follow-up survey three months after presentation

This form asks questions about the situation at exactly three months after initial presentation. In case your patient has already longer follow-up, please put yourself in the situation as if it was exactly three months after initial presentation

This form does not have to be filled in for a second presentation.

Follow-up three months after presentation does not have to be filled in due to death of the patient before or at day 28 after initial presentation.

Additional question about baseline characteristics

Was your patient identified because he/she had

- Complaints suggestive for COVID-19
- Had limited symptoms, and had a direct COVID-19 contact
- Had no symptoms, but had a direct COVID-19 contact
- Had no symptoms, but was found because of routine screening

Filling in these questions about vital, functional and mental status at three months after initial presentation will cost you approximately 3 minutes per patient.

Outcome with respect to vital status

Date of 3 months after presentation for your patient is:  
(please look in the dropdown menu and select date)

5.1. What is the current vital status of your patient (3 months after first COVID-19 presentation)?

- Alive
- Deceased
- Lost to follow-up

5.1.1 Specify alive

- Currently in hospital
- Currently in nursing home
- Currently at home

5.2. Use of ACE-inhibitor 3 months after presentation

- Yes
- No
- Unknown

5.3. Use of angiotensin-2 receptor blocker 3 months after presentation

- Yes
- No
- Unknown

5.4. Body weight (kg) 3 months after presentation

(In case of dialysis, post-dialysis weight)

\_\_\_\_\_  
((kg))

5.5. Cause of death COVID-19 related

- Yes
- No

5.6. Did your patient experience any of the following complications between the diagnosis of COVID-19 and T=3 months after presentation?

(More than one answer may apply)

- Myocardial infarction
- Pulmonary embolism
- Deep venous thrombosis
- Shunt thrombosis
- Mesenteric thrombosis
- Peripheral arterial disease leading to intervention (percutaneous angioplasty/surgery)
- Ischemic stroke
- Hemorrhagic stroke
- Thrombotic micro-angiopathy
- None of the above

5.7. General condition of your patient on the frailty scale 3 months after presentation?

- Very fit to Managing well
- Vulnerable to Moderately frail
- Severely frail to Terminally ill

5.7.1 Please select the appropriate score on the Clinical Frailty Scale 3 months after presentation:

- 1. Very fit    2. Well
- 3. Managing well

(See image and text below)

Clinical Frailty Score:



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



**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.



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

5.7.2 Please select the appropriate score on the Clinical Frailty Scale 3 months after presentation:

- 4. Vulnerable    5. Mildly frail
- 6. Moderately frail

(See image and text below)

## Clinical Frailty Score:



**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.

5.7.3 Please select the appropriate score on the Clinical Frailty Scale 3 months after presentation:

7. Severely frail     8. Very severely frail  
 9. Terminally ill

(See image and text below)

## Clinical Frailty Score:



**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).



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



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

5.8. Status on kidney transplant waiting list 3 months after presentation

- Active on waiting list  
 Temporarily not on waiting list  
 In preparation for potential placement on waiting list  
 Not transplantable  
 Unknown

5.9 Residual diuresis > +/- 200 ml/day 3 months after presentation

- Yes     No

5.10 Change of dialysis modality since diagnosis COVID-19, 3 months after presentation

- Yes     No

5.10.1 What is the modality 3 months after presentation?

In-center hemodialysis  
 Home-hemodialysis  
 Peritoneal dialysis  
 Kidney transplantation

5.11 Did acute rejection occur between diagnosis of COVID-19 and T=3 months after presentation?

Yes  No

5.11.1 Was rejection biopsy proven?

Yes  No

5.12 Did graft failure, leading to dialysis, occur between diagnosis of COVID-19 and T=3 months after presentation?

No  
 Yes - temporarily  
 Yes - permanently

5.13 Creatinine at 3 months after presentation

\_\_\_\_\_

5.13.1 Unit of Creatinine at 3 months after presentation

micromol/L  mg/dL

With regard to admission to ICU due to COVID-19:

5.14 In retrospect, was it a good decision that this patient was admitted to the ICU?

Yes  No

5.14.1 Please explain  
(More than one reason may apply)

Patient died shortly after admission to ICU  
 Patient was in retrospect too frail for intensive treatment  
 Patient suffers from extensive loss of functional capacity after ICU discharge

5.15 In retrospect, was it a good decision that this patient received mechanical ventilation?

Yes  No

5.15.1 Please explain  
(More than one reason may apply)

Patient died shortly after starting mechanical ventilation  
 Patient was in retrospect too frail for this treatment  
 Patient suffers from extensive loss of functional capacity after ICU discharge

Outcome with respect to functional (Q5.16) and mental (Q5.17) status after three months:

\*Functional status is a patient's ability to perform normal, daily activities such as walking, bathing, dressing, getting out of bed, and using the toilet.

\*\* Mental status is a patient's intellectual capacity, emotional state, and general mental health (including mood, behavior, orientation, judgment, memory, problem-solving ability, and contact with reality).

5.16 Did your patient reach his/her pre-COVID-19 functional status 3 months after initial presentation?

Yes  
 No  
 I don't know and could not obtain this information from my colleague(s)

(Please note that the 3 months time point is important)

5.16.1 When do you think your patient will return to his/her pre-COVID-19 physical functional status?  
(Additional time beyond the 3 months time point that this question refers to)

- 0 - 3 months  
 3 - 6 months  
 6 - 12 months  
 > 1 year  
 Never

5.16.2 What would be the limiting factor  
(More than one answer may apply)

- Impairment due to thrombo-embolic events (stroke, pulmonary embolism etc.)  
 Impaired lung function (other than caused by pulmonary embolism)  
 Decline in cognitive function (other than due to thrombo-embolic event)  
 Reduced mobility (other than due to thrombo-embolic event)  
 Reduced muscle strength  
 Disturbed mental status (anxiety, depression, post-traumatic stress disorder)  
 Tiredness  
 Other factor(s)

5.16.3 Please specify other factor(s) concerning physical functional status

\_\_\_\_\_

5.17 Did your patient already reach his/her pre-COVID-19 mental status 3 months after initial presentation?  
(Please note that the 3 months time point is important)

- Yes  
 No  
 I don't know and could not obtain this information from my colleague(s)

5.17.1 When do you think your patient will return to his/her pre-COVID-19 mental status?  
(Additional time beyond the 3 months time point that this question refers to)

- 0-3 months  
 3-6 months  
 6-12 months  
 > 1 year  
 Never

5.17.2. What would be the limiting factor  
(More than one answer may apply)

- Delirium  
 Depression  
 Anxiety  
 Bereavement/grief  
 Memory loss  
 Sleep disturbances  
 Post-traumatic stress disorder  
 Other factor(s)

5.17.3 Please specify other factor(s) concerning mental status

\_\_\_\_\_