

RKD Vasculitis COVID-19 Module

Created by: Jennifer Scott (Wellcome-HRB ICAT fellow) and Matthew Rutherford (Clinical academic renal fellow, UK)

The following was constructed as a means to capture data for immunosuppressed patients who contract COVID-19 (C-19). The aim was to ensure the module was granular, while still allowing for a busy clinician to complete it in a timely fashion. There is a large emphasis on interoperability (e.g. the use of standardised ontologies) and including fields to facilitate collaboration with other research groups. This C-19 module/instrument was developed using the following:

- SECURE-IBD (IBD C-19 registry) data dictionary
- COVID-19 Global Rheumatological Alliance data dictionary
- Data dictionary from <https://rheum-covid.org/>
- Health Protection Surveillance Centre (HPSC Ireland) Critical Care surveillance forms
- WHO COVID-19 surveillance CRF
- Comments from the UKIVAS group: Mark Little, Neil Basu, Rona Smith, Alan Salama, David Jayne, Silke Brix
- COVID-19 existing literature as of 23rd March 2020.

We have maintained existing relevant fields in existing instruments (visuals included below, and shaded in orange) and added an additional COVID-19 specific instrument, which was modelled on our current 'encounter' instrument (used for clinic visits) – the information will populate a simultaneous encounter (as a pop-up within the COVID-19 instrument) and other relevant fields (via piping).









Dissemination:

REDCAP has the capability of quick exports and rough raw statistics. The plan is to distribute a **weekly email** to give researchers and clinicians real-time information. R markdown is a potential option to standardise reports and graphics.

Instrument (new): COVID-19

Field Label	Field Type	Choices
Reporter information		
Name of physician providing care for vasculitis patient	Text	
Name of centre providing care	Dropdown	Current hospital dropdown from 'Patient' – 'Hospital Unit', including 'other' as last option
Date this form completed	Calendar (Default = Today)	
Please select all databases this form has been shared with	Checkbox	Irish RKD / UKIVAS / EULAR / Global COVID

For 'Patient information', only non-orange fields appear in the COVID-19 instrument (as below):

Patient information (Part 1)	
Country of residence	 Ireland 
County of residence	 
Education	 
E-cigarette or Vape use	 

Patient information		
Gender	Dropdown	Male / Female / Other <i>RKD: pipe in from 'baseline characteristics – common'</i>
Race (select all that apply)	Checkbox	<i>RKD: piping from 'ethnicity' in 'baseline characteristics – common'</i>
Country of residence	Dropdown	<i>RKD: Default = Ireland</i> NEW RKD FIELD - below 'country of birth' in 'baseline characteristics – common'
County of residence	Dropdown	<i>RKD: 32 counties listed in alphabetical order & 'other' with free text</i> NEW RKD FIELD - below 'country of residence' in 'baseline characteristics – common'
Education	Dropdown	Primary School / High school / University / Unknown or Prefer not to answer NEW RKD FIELD- above 'employment status at diagnosis' in 'baseline characteristics – common'
Smoking history	Dropdown	Current Smoker/ Former Smoker/ Never Smoker/ Unknown smoking status <i>RKD: pipe from smoking history in 'baseline characteristics – common'</i>
E-cigarette or Vape use	Dropdown	Yes / No / Unknown

		NEW RKD FIELD - add below the 'smoking history' field in 'baseline characteristics – common'
Comorbidities (check all that apply)	Checkbox	<p>Asthma - SNOMEDCT/195967001 //</p> <p>Atrial fibrillation - SNOMEDCT/49436004 //</p> <p>Cerebrovascular accident (stroke) - SNOMEDCT/230690007 //</p> <p>COPD (not including late onset asthma) - SNOMEDCT/13645005 //</p> <p>Coronary heart disease (Ischaemic heart disease) - SNOMEDCT/414545008 //</p> <p>Diabetes mellitus - SNOMEDCT/73211009 //</p> <p>Hyperlipidaemia - SNOMEDCT/55822004 //</p> <p>Hypertension requiring treatment - SNOMEDCT/38341003 //</p> <p>Hypothyroidism - SNOMEDCT/40930008 //</p> <p>Renal disease (kidney disease) - SNOMEDCT/90708001 //</p> <p>Thromboembolic disease - SNOMEDCT/371039008 //</p> <p>Other (SNOMEDCT ontology) // None</p> <p>RKD: pipe selected comorbidities from 'pre-existing co-morbidities' instrument (see image below)</p>

For **'Patient information (part 2)'**, all fields are obtained from existing fields, as explained for each variable. **It is important these fields are completed in the relevant sections** to ensure an enriched dataset:

Patient information (part 2)		
Vasculitis diagnosis	Dropdown	<p>See standard UKIVAS options below</p> <p><i>RKD: pipe in from 'Diagnosis – Vasculitis': either 'Small vessel</i></p>

		<i>vasculitis (ANCA associated)</i> <i>OR 'Small vessel vasculitis (Immune Complex)' OR 'Medium vessel vasculitis' OR 'Large vessel vasculitis' OR 'Variable vessel vasculitis' OR 'Single organ vasculitis'</i>
ANCA serology (at time of diagnosis)	Dropdown	PR3 / MPO / PR3 and MPO / ELISA negative / No ELISA performed / Other (free text) <i>RKD: pipe in from 'General characteristics – vasculitis' -> 'At any point ANCA Specificity'</i>
Date of formal vasculitis diagnosis	Calendar	<i>RKD: pipe in from 'Diagnosis – Vasculitis': 'Date of diagnosis'</i>
Biopsy performed	Dropdown	Yes / No / Unknown <i>RKD: pipe in from 'Diagnosis – Vasculitis' – same field</i>
Histologically confirmed diagnosis	Dropdown	Yes / No / Unknown <i>RKD: pipe in from 'Diagnosis – Vasculitis' – same field</i>
Vasculitis diagnosis confidence <i>Attach reference to diagnosis confidence table</i>	Dropdown	Possible / Probable / Definite <i>RKD: pipe in from 'Diagnosis – Vasculitis' – same field</i>

For 'Vasculitis/Disease status at time of C-19 diagnosis':

'Encounters' Data:
Vasculitis/Disease status at time of C-19 diagnosis
 BVAS
 Medication (partial)

[New Encounter Instance](#)

End-stage Kidney Disease (ESKD) Yes No

VDI Score

- Complete ESKD and VDI Score, as detailed below:

End-stage Kidney Disease (ESKD)	Radio button	Yes / No <i>RKD: piped to 'Renal Replacement Therapy' – 'End-stage kidney disease'</i>
<i>If ESKD = Yes</i> Date of End-stage Kidney Disease (<i>Date of</i>	Calendar	<i>RKD: piped to 'Renal Replacement Therapy' – 'Date of End-stage kidney disease'</i>

<i>commencement on dialysis or transplant, whichever first)</i>		
<i>If ESKD = Yes</i>		
Type of Renal Replacement Therapy (RRT)	Dropdown	Functioning renal transplant / Haemodialysis / Peritoneal Dialysis / Sustained CKD V
VDI Score	RKD: Integer	

- Then **click 'New Encounter Instance'**, to reveal a pop-up window containing the usual 'encounter' instrument (see below). Complete this in full:
 - Select 'yes' for 'COVID-19 related entry'
 - Click 'Save & exit form' at the bottom of the pop-up after completing all fields
 - Then click 'x' in top right corner to close the pop-up

- This section includes the following variables:

Vasculitis/Disease status at time of C-19 diagnosis		
Employment status	Dropdown	Employed full-time / Employed part-time / Retired / Disability benefit / Student / Not working / Unknown
Disease activity at time of C-19 symptom onset or diagnosis if asymptomatic (physician global)	Dropdown	Active / Low disease activity / Remission
Urinalysis Done	Radio button	Yes / No
<i>If Urinalysis = Yes:</i> Urinalysis Protein	Radio button	Negative / +1 / +2 / > = +3
<i>If Urinalysis = Yes:</i>	Radio button	Negative / +1 / +2 / > = +3

Urinalysis Blood		
Last eGFR (CKD-EPI) prior to C-19 diagnosis This field is obtained from the preceeding encounter for the bespoke export. No additional data entry is required for this field.	Integer	<i>Field Note: Please enter NA if the patient was dialysis dependent at that time</i>
Dialysis dependent	Radio button	Yes / No Field note: 'If patient has started/stopped dialysis since the last encounter, please input relevant dates into 'Renal Replacement Therapy' instrument.
<i>If Dialysis dependent = yes</i> Date of dialysis start +/- stop	Calender	
Weight (kg)	Number (allow 1 decimal point)	
Height (m)	Please complete in 'baseline characteristics – common'	
BMI	Calculated field = weight (kg from above) / height ² (m, from above)	
Clinical samples obtained	Tick boxes	1, Plasma exchange fluid 2, Serum 3, Urine 4, DNA extracted from saliva 5, Saliva for DNA 6, PAX gene tube for RNA 7, EDTA for PBMC 8, EDTA for DNA 9, Tissue 10, EDTA for plasma 11, none
BVAS Scoring	FULL BVAS (see SOP: clinical data entry for full explanation): radio button & tick boxes for each variable	
BVAS Score	Calculated field	
Do you think vasculitis is relapsing in this encounter? <i>This is the physician's assessment at the time of clinical review.</i>	Dropdown	High probability / Possibly / No / Unknown

Adjudicated probability of relapse? <i>This field is completed retrospectively by senior clinician, taking all variables into account (e.g. clinical signs/symptoms, laboratory values, biopsy, etc.)</i>	Dropdown	Definite / High Probability / Possibly / No <i>Information link (hover over 'i in blue circle') to see definitions of Definite / High Probability, etc.</i>
--	----------	--

<p>Medication</p> <p>*includes any medication the patient is on <u>within 2 weeks of COVID-19 diagnosis</u> AND *all questions relate to drugs/doses at time of C-19 symptom onset (or diagnosis if asymptomatic)</p> <p>Please ensure 'Treatment - continuing medication' AND 'Treatment – intermittent pulse administration' is up to date in terms of dose and start/stop dates for all immunosuppressive medications.</p>		
Immunosuppressive status	Dropdown	Currently on immunosuppression / Discontinuation of immunosuppression within 6 months prior to this encounter / Discontinuation of immunosuppression > 6 months prior to this encounter / Treatment Naïve
<i>If Immunosuppressive status != (not equals) 'Treatment Naïve'</i>		
Corticosteroids	Radio button	Yes / No
<i>If Corticosteroids = Yes</i>		
Current corticosteroid dose	Radio button (RKD)	< 5 mg/day / 5-10 mg/day / 11-20 mg/day / > 20 mg/day
Corticosteroids in response to this clinical encounter/episode	Dropdown	Increased / No change / Reduced / Stopped / Unknown
<i>If Immunosuppressive status != (not equals) 'Treatment Naïve'</i>		
Immunosuppressive medication	Dropdown	Select medication from dropdown list. If it is not listed, select 'other' and enter the medication in the new field that appears, using an ATC backed ontology (i.e. when you begin to type the ontology will suggest medications to
<u>For implementation:</u>		

<p>Patients may be on >1 Immunosuppressive agent. If so, select the second agent from the field 'Additional Immunosuppressive medication'. Consequently, complete whether this additional agent was increased / no change / reduce, etc. If the patient is not on any additional agents, leave this blank.</p>		<p>select).</p> <p>The following are a list of medications that we are particularly interesting in capturing (with the associated ACT ontology):</p> <p>Abatacept – UATC/L04AA24 Alfa1 antitrypsin – UATC/B02AB02 Anakinra – UATC/L04AC03 Apremilast – UATC/L04AA32 Azathioprine - UATC/L04AX01 Belimumab – UATC/L04AA26 Bevacizumab – UATC/L01XC07 Ciclesonide – UATC/R03BA08 Ciclosporin – UATC/L04AD01 Chloroquine – UATC/P01BA01 Cyclophosphamide (Daily Oral) – UATC/LC01AA01 Cyclophosphamide (Intravenous pulse) – UATC/LC01AA01 Hydroxychloroquine – UATC/P01BA02 IVIG: Immunoglobulins – UATC/J06BA02 Leflunomide - UATC/L04AA13 Mepolizumab - UATC/R03DX09 Methotrexate - UATC/L01BA01 Mycophenolate mofetil - UATC/L04AA06 Plasma (from recovered patients) – UATC/B05AX03 // Rituximab - UATC/L01XC02 Secukinumab – UATC/L04AC10 Sulfasalazine – UATC/A07EC01 Tacrolimus (including Advagraf, Prograf, etc.) - UATC/L04AD02 Thalidomide – UATC/L04AX02 Tocilizumab – UATC/L04AC07 Tofacitinib – UATC/L04AA29 Tumor necrosis factor alpha (TNF-) inhibitors – UATC/L04AB Ustekinumab - UATC/L04AC05 Other – ATC backed ontology // None // Unknown</p>
<p>Immunosuppressive medication in response to this clinical encounter/episode</p>	<p>Dropdown</p>	<p>Increased / No change / Reduced / Stopped / Unknown</p>
<p><i>If Immunosuppressive medication in response to this clinical encounter/episode = Increased:</i></p> <p>Response to increased immunosuppression</p>	<p>Dropdown</p>	<p>Clear response (i.e. improved clinically) / No response / Unknown response</p>

- The remaining encounter instrument includes fields surrounding prophylactic medication and laboratory results. Please see the SOP: clinical data entry for further instructions.
- For Investigations summary: XXX
- Other medication variables to complete on the main C19 instrument include:

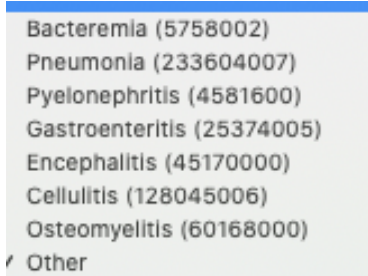
Angiotensin-converting-enzyme inhibitor at C19 diagnosis (ACE-i)	Radio button	Yes / No / Unknown
Angiotensin II receptor blocker at C19 diagnosis (ARB)	Radio button	Yes / No / Unknown
Non-steroidal anti-inflammatory drug at C19 diagnosis (NSAID)	Radio button	Yes / No / Unknown

COVID-19 Questions		
Date of C-19 symptom onset (if known)	Calendar	
Date of C-19 diagnosis	Calendar	
Interval (days) between symptom onset and diagnosis (if known)	Calculated field using 'date of C19 symptom onset' and 'date of C19 diagnosis'	
Age at C-19 diagnosis (years)	Calculated field using DOB ('Baseline characteristics – common')	
Location at which C-19 diagnosis was made	Dropdown	1, Home or standalone testing 2, Nursing home or assisted living facility 3, Outpatient facility 4, Emergency Room 5, Inpatient/Hospital 6, Other (freetext) 7, Unknown
Method of C-19 testing (select the most objective option)	Dropdown	1, symptoms (presumptive) 2, PCR 3, antibody 4, metagenomic testing 5, CT scan 6, other (free text) 7, Laboratory assay, type unknown
<i>If Method = PCR:</i>		
Level of Sars-CoV-2 (COVID-19) PCR	Integer	
Sars-CoV-2 (COVID-19) IgM	Integer	
Sars-CoV-2 (COVID-19) IgG	Integer	
Admission to hospital required	Radio button	Yes /No/ Unknown
<i>If Yes:</i> Date of admission	Calendar	
Admission to Intensive Care Unit	Radio button	Yes /No/ Unknown
<i>If Yes:</i> Date of admission	Calendar	
Interval (months) from AAV diagnosis to C-19 diagnosis	Calculated field using Date of	

	diagnosis ('Diagnosis – vasculitis')	
Have patient's symptoms resolved at time of this report?	Dropdown	1, yes 2, no 3, unknown 4, Asymptomatic patient (just tested positive)
<i>If Have patient's symptoms resolved at time of this report? = yes</i>		
Date of symptom resolution (if known)	Calendar	<i>Field note: first date patient is asymptomatic, signifying recovery</i>
Interval (days) between symptom onset (if known) and symptom resolution OR current date (if symptoms persist)	Calculated field using 'date of symptom onset' and 'date of symptom resolution' (if not known use 'today's date')	
Date of hospital discharge (if known)	Calendar	
Length of stay (days)	Calculated field using 'date of admission' and 'date of hospital discharge'	
Infection Acquisition	Dropdown	High-risk travel to endemic area / Contact of known or suspected person / Attendance to a healthcare facility/ward where C-19 infections are managed / None of the above (community acquired) / Unknown
Clinical features at outset (check all that apply)	Checkbox	Fever – MEDDRA/10016558 / Malaise – MEDDRA/10025482/ Headache – MEDDRA/10019211/ Irritability or confusion – MEDDRA/10010300 / Arthralgia – MEDDRA/10003239 / Myalgia – MEDDRA/10028411 / Conjunctivitis – MEDDRA/10010741 / Rhinorrhea – MEDDRA/10039101 / Anosmia – MEDDRA/10002653 (Loss of smell) / Ageusia – MEDDRA/10001480 (Loss of taste) Sore Throat – MEDDRA/10041367 / Cough – MEDDRA/10011224 / Sputum production – MEDDRA/10041805 / Shortness of Breath – MEDDRA/10040604 / Chest pain – MEDDRA/10008479 / RR >24 breaths/min – MEDDRA/10038711/

		Abdominal pain – MEDDRA/10000081/ Nausea – MEDDRA/10028813 / Vomiting – MEDDRA/10047700 / Diarrhea – MEDDRA/10012735 / Other (MEDDRA Ontology) / None (asymptomatic) / Unknown
Body temperature (highest recorded , °C)	Number (allow 1 decimal) Validation: only allow range 13 - 46°C	
CRP (mg/L) Field note: Please enter the highest/peak recorded lab value for each field	Number (allow 1 decimal) RKD: for all lab values pipe to corresponding field in 'encounters'	Some lab values are entered in the encounter pop-up (as described in the sop: clinical data entry) and the remaining C19 specific lab values are completed in the COVID-19 instrument (these are highlighted in yellow).
Creatinine (mmol/L)	Integer	
AST (U/L)	Integer	
ALT (U/L)	Integer	
Haemoglobin (g/dL)		
Total White Cell Count x 10 ⁹ /L	Number (allow 1 decimal)	
Neutrophil count x 10 ⁹ /L	Number (allow 1 decimal)	
Lymphocyte count x 10 ⁹ /L	Number (allow 1 decimal)	
Neutrophil / Lymphocyte ratio	Calculated field	
Urine Protein Creatinine ratio (uPCR, mg/mmol)		
ANCA IF	Dropdown	Atypical / C / P / Negative / Not tested / Pending
Anti-PR3 level	Integer	
Anti-MPO level	Integer	
Platelet count x 10 ⁹ /L	Integer	
Creatinine kinase (U/L)	Integer	
D-dimer (mg/L)	Integer	
Ferritin	Integer	
Lactate (mg/dL)		
Prothrombin time (s)	Number (allow 1 decimal)	
Lactate dehydrogenase (U/L)	Integer	
Troponin	Integer	
Next to 'Troponin': Units	Dropdown	

Findings on chest imaging	Dropdown	<ul style="list-style-type: none"> Inflammation Ischaemia Infarction Haemorrhage Bony destruction Metastasis Mass/tumour Abscess Polyp Ulceration Cirrhosis Fibrosis Stenosis Calcification Effusion Embolism Nodules Consolidation Organomegaly Single granuloma Multiple granulomas None
Were antibiotics administered?	Radio button	Yes / No / Unknown
Was treatment administered for C-19 infection (other than best supportive care)?	Checkbox	<p>No treatment except supportive care</p> <p>Kaletra ((Lopinavir/ritonavir) – UATC/J05AR10</p> <p>Remdesivir – No ontology code yet as novel</p> <p>Chloroquine – UATC/P01BA01</p> <p>Hydroxychloroquine – UATC/P01BA02</p> <p>Neuraminidase inhibitors, direct acting antivirals (e.g. Oseltamivir) – UATC/J05AH</p> <p>Azithromycin – UATC/S01AA26</p> <p>Tocilizumab – UATC/L04AC07</p> <p>Bevacizumab – UATC/L01XC07</p> <p>Tofacitinib – UATC/L04AA29</p> <p>Alfa1 antitrypsin – UATC/B02AB02</p> <p>Ciclesonide – UATC/R03BA08</p> <p>Plasma (from recovered patients) – UATC/B05AX03</p> <p>Other – ATC backed ontology</p>
Complications / Disease Course (check all that apply)	Checkbox	<p>Acute Respiratory Distress Syndrome – MEDDRA/10001052 /</p> <p>Acute respiratory failure (Type 1/2) – MEDDRA/10001053 /</p> <p>Pneumothorax – MEDDRA/10035759 /</p> <p>Acute liver injury – MEDDRA/10067970 /</p> <p>Acute heart failure – MEDDRA/10000803 /</p> <p>Myocarditis – MEDDRA/10028606 /</p> <p>Cardiac arrhythmia – MEDDRA/10003119 /</p> <p>Cardiac ischaemia – MEDDRA/10007584 /</p> <p>Acute Kidney Injury (AKI) – MEDDRA/10069339 /</p> <p>Sepsis – MEDDRA/10040047 /</p> <p>Vasopressor dependence at any time – MEDDRA/10064148 /</p> <p>Disseminated Intravascular Coagulation – MEDDRA/10013442 /</p> <p>Severe anaemia – MEDDRA/10002082 /</p> <p>Gastrointestinal haemorrhage – MEDDRA/10017956 /</p>

		<p>Encephalitis – MEDDRA/10014581 / Pregnancy-related complications – MEDDRA/10036569 / Hyperglycaemia – MEDDRA/10020637 / Hypoglycaemia – MEDDRA/10020996 / Rhabdomyolysis – MEDDRA/10039020 / Metabolic acidosis – MEDDRA/10027417 / Secondary infection – MEDDRA/10062158 / Macrophage activation syndrome – MEDDRA/10053867 / Other (MEDDRA ontology) / None</p>
<p>If AKI = selected, then please complete the following fields in the encounter pop-up.</p> <p>Dialysis dependent, Date of dialysis start +/- Date of dialysis stop</p>		
<p>Concomitant respiratory pathogens detected (select all that apply):</p>	<p>Checkbox</p>	<p>Influenza A Influenza B NON-COVID-19 Coronavirus Respiratory syncytial virus (RSV) Adenovirus</p>
<p><i>If Secondary Infection = selected</i></p> <p>Secondary infection is selected, please indicate the type of Infection (in addition concomitant respiratory viral pathogens)</p>	<p>Dropdown</p>	 <p>Other using SNOMEDCT ontology</p>
<p><i>If Secondary Infection = selected</i></p> <p>With regards to the secondary infection, please select the microorganism (if known)</p>	<p>SNOMEDCT ontology</p>	<p>Begin typing the name of the microorganism into the field and the ontology will begin to suggest matches.</p>
<p>C-19 Outcome (Select the highest level of support the patient received)</p>	<p>Dropdown</p>	<ol style="list-style-type: none"> 1. Not hospitalized, no limitations on activities 2. Not hospitalized, limitation on activities 3. Hospitalized, not requiring supplemental oxygen 4. Hospitalized, requiring supplemental oxygen

		<p>5. Hospitalized, on non-invasive ventilation or high flow oxygen devices</p> <p>6. Hospitalized, on invasive mechanical ventilation or ECMO</p> <p>7. Death</p> <p>8. Unknown</p>
<p><i>If C-19 outcome = 7. Death</i></p> <p>Date of death</p>	<p>Calendar</p> <p>RKD: pipe to 'date of event' in 'baseline characteristics – common'</p>	
<p><i>If C-19 outcome = 7. Death</i></p> <p>Cause of death</p>	<p>SNOMEDCT ontology</p> <p>RKD: pipe to 'cause of death' in 'baseline characteristics – common'</p>	
<p>May we contact you to get more information about the outcomes of this case?</p>	<p>Radio button</p>	<p>Yes / No</p>
<p>Would you like to share any lessons or other aspects from this case? Please include as much information as desired, this will greatly help patients and colleagues.</p>	<p>Text</p>	

Current relevant instruments in RKD Registry

Relevant fields identified with red box. For more details please refer to SOP: Clinical Data Entry

Baseline characteristics - common

Editing existing RKD ID 10 (Patient Id 10) 10

RKD ID	10
Gender	Female
Date of Birth	
Year of birth	1985
Ethnicity	W2 - White Irish
Consent obtained for registry/biobank	<input type="checkbox"/> Consent for use of data in registry <input type="checkbox"/> Biobanking <input type="checkbox"/> Future contact <input checked="" type="checkbox"/> All <input type="checkbox"/> No
Consent Version Number	
Date of Initial Consent	21-12-2012 Today
Has consent been obtained for Genetic studies	
Employment status at diagnosis	Not working
Ethnicity of mother	NS - Not Stated
Ethnicity of father	NS - Not Stated
Country of birth	Ireland
Relationship to other case	
Maternal or Paternal	
Clinical samples obtained	<input type="checkbox"/> Plasma exchange fluid <input checked="" type="checkbox"/> Serum <input checked="" type="checkbox"/> Urine <input type="checkbox"/> DNA extracted from saliva <input type="checkbox"/> Saliva for DNA <input checked="" type="checkbox"/> PAX gene tube for RNA <input type="checkbox"/> EDTA for PBMC <input checked="" type="checkbox"/> EDTA for DNA <input type="checkbox"/> Tissue <input checked="" type="checkbox"/> EDTA for plasma <input type="checkbox"/> none
Name of biobank biological sample is stored in	
Height	Unknown

Smoking History	
Smoking	Previous
Age of starting	21
Date of stopping	18-03-2020 Today D-M-Y
Average no. of cigarettes per day	20
Patient Status	
Status	Dead
Death	<input type="radio"/> Yes <input checked="" type="radio"/> No
Date of event	Today D-M-Y
Cause of death	
Cause of death - Known	
Cause of death - known, snomedCT	Coronavirus infection 186747009 snomedCT
Form Status	
Complete?	Complete

Renal Replacement Therapy

Editing existing RKD ID 10 (Patient Id 10) 10	
RKD ID	10
Required renal replacement therapy during first presentation	<input checked="" type="radio"/> Yes <input type="radio"/> No reset
Renal recovery (independence from dialysis, regardless of dialysis duration)	<input type="radio"/> Yes <input checked="" type="radio"/> No reset
End-stage kidney disease	<input checked="" type="radio"/> Yes <input type="radio"/> No reset <small>Dialysis for >90 days, sustained CKD V, commencement of dialysis and death within 90 days, and/or transplantation</small>
Date of end-stage kidney disease (date of commencement on dialysis or transplant, whichever first)	18-03-2020 Today D-M-Y <small>If patient develops ESKD after initially recovering from dialysis-dependent kidney failure, enter the date that ESKD develops</small>
Form Status	
Complete?	Incomplete
<input type="button" value="Save & Exit Form"/> <input type="button" value="Save & Stay"/> <input type="button" value="-- Cancel --"/>	

RKD ID 10

Please enter only one comorbid event per instance.

- Asthma - SNOMEDCT/195967001
- Atrial fibrillation - SNOMEDCT/49436004
- Cerebrovascular accident (stroke) - SNOMEDCT/230690007
- COPD (not including late onset asthma) - SNOMEDCT/13645005
- Coronary heart disease (Ischaemic heart disease) - SNOMEDCT/414545008
- Diabetes mellitus - SNOMEDCT/73211009
- Hyperlipidaemia - SNOMEDCT/55822004
- Hypertension requiring treatment - SNOMEDCT/38341003
- Hypothyroidism - SNOMEDCT/40930008
- Malignancy (neoplasm) - SNOMEDCT/108369006
- Renal disease (kidney disease) - SNOMEDCT/90708001
- Thromboembolic disease - SNOMEDCT/371039008
- Other
- None

Comorbid events (present before vasculitis diagnosis)

Other

Comorbid events (present before vasculitis diagnosis)

Comorbid events detail

Form Status

Complete?


Diagnosis - Vasculitis

Editing existing RKD ID 10 (Patient Id 10) 10

RKD ID

10

Date of diagnosis

 Today D-M-Y
JRC


Age at diagnosis

View equation
JRC

Date of onset of symptoms - known/unknown

Unknown ▾
JRC

Date of onset of symptoms

 Today D-M-Y
JRC

Age at onset

View equation
JRC

Small vessel vasculitis (ANCA associated)

Granulomatosis with polyangiitis (Wegener) - (▾)
JRC

Please select up to a MAXIMUM of 3 diagnoses

Small vessel vasculitis (Immune complex)

▾
JRC

Medium vessel vasculitis

▾
JRC

Large vessel vasculitis

▾
JRC

Variable vessel vasculitis

▾
JRC

Single organ vasculitis

▾
JRC

Secondary vasculitis

Yes
 No
reset

Other

Yes
 No
reset

Other details

JRC

Unclassified

Yes
 No
reset

Biopsy performed

Yes ▾
JRC

Histologically confirmed diagnosis

Yes ▾
JRC

Please open supporting PDF for reference

Attachment:  [Diagnosis confidence table.pdf](#) (0.1 MB)

Diagnosis confidence (initial assessment)

Definite ▾
JRC

Form Status

Complete?

Complete ▾
JRC

Treatment – continuing medications (PO)

	Drug	Dose	Unit of Dose	Start Date	Stop Date
1	Prednisolone - UATC/H02AB06	5	mg	2013-02-03	2014-10-16
2	Prednisolone - UATC/H02AB06	10	mg	2014-10-16	2018-01-05
3	Prednisolone - UATC/H02AB06	5	mg	2016-07-22	2017-12-10
4	Other	40	g	2016-11-08	

Current instance: 5 5

Editing existing RKD ID 10 (Instance #5) (Patient Id 10) 10

RKD ID	10
Drug	<input type="text"/>
Drug, DRON	<input type="text"/>
Drug	Other <input type="text"/>
Drug, ATC	ramipril <input type="text"/> C09AA05 <input type="text"/>
Dose	5 <input type="text"/>
Unit of Doses	mg <input type="text"/>
Frequency	Daily <input type="text"/>
Start Date	18-03-2020 <input type="text"/> Today <input type="text"/> D-M-Y
On going	<input checked="" type="radio"/> Yes <input type="radio"/> No reset
Stop Date	<input type="text"/> Today <input type="text"/> D-M-Y
Form Status	
Complete?	Incomplete <input type="text"/>

Treatment – intermittent pulse administration (IV)

Editing existing RKD ID 10 (Patient Id 10) 10

RKD ID	10
IV therapy	<input checked="" type="checkbox"/> Cyclophosphamide Injectable Solution - UATC/ L01AA01 <input type="checkbox"/> Rituximab - UATC/L01XC02 -- Mabthera <input type="checkbox"/> Rituximab - UATC/L01XC02 -- Truxima <input type="checkbox"/> Methylprednisolone - UATC/D07AA01 <input type="checkbox"/> Ivlg - UATC/J06BA02 (immunoglobulins, normal human, for intravenous administration) <input type="checkbox"/> Mepolizumab - UATC/R03DX09 <input type="checkbox"/> Other
Date of IV therapy	
Dose of IV therapy	
Unit of dose	mg <input type="text"/>
Form Status	
Complete?	Complete <input type="text"/>

References

Ruan Q, Yang K, Wang W, et al. Clinical predictors of mortality due to COVID-19 based on an analysis of data of 150 patients from Wuhan, China. *Intensive Care Med* Published Online First: 3 March 2020. doi:10.1007/s00134-020-05991-x

Wang D, Hu B, Hu C, et al. Clinical Characteristics of 138 Hospitalized Patients With 2019 Novel Coronavirus-Infected Pneumonia in Wuhan, China. *JAMA* Published Online First: 7 February 2020. doi:10.1001/jama.2020.1585

Huang C, Wang Y, Li X, et al. Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. *Lancet* 2020;395:497–506.

Xu X-W, Wu X-X, Jiang X-G, et al. Clinical findings in a group of patients infected with the 2019 novel coronavirus (SARS-Cov-2) outside of Wuhan, China: retrospective case series. *BMJ* 2020;368:m606.

Guan W-J, Ni Z-Y, Hu Y, et al. Clinical Characteristics of Coronavirus Disease 2019 in China. *N Engl J Med* Published Online First: 28 February 2020. doi:10.1056/NEJMoa2002032

Metlay JP, Waterer GW, Long AC, et al. Diagnosis and Treatment of Adults with Community-acquired Pneumonia. An Official Clinical Practice Guideline of the American Thoracic Society and Infectious Diseases Society of America. *Am J Respir Crit Care Med* 2019;200:e45–67.

HPSC Surveillance:

https://www.hpsc.ie/a-z/respiratory/coronavirus/novelcoronavirus/surveillance/ADULT%20influenza%20&%20COVID%2019%20ICU%20Admission%20Discharge%20form_20200303_%20v032.pdf