DIAMONDS CRF - patients with suspected COVID19

PATIENT DETAILS (this box should NOT be transmitted outside local hospital):

Surname: ..... **Hospital or NHS number:** .....

First name: .....

Partial postcode (UK): |__|__|__|__|-|__| X X

Search patient identification log to see if the patient already consented to the study. If yes, use the previously assigned study number and a new episode number

DIAMONDS CRF – patients with suspected COVID19

1.1 STUDY ID DETAILS (DIS-Centre ID-subject ID-episode; eg DIS-1101-1001-E01)

Site code (eg 1101): |__|__|__|__| **DOB (ddmmyy):** |__|__|__|__|__|__|

Study number |__|__|__|__| **Male** ☐ **Female** ☐

Episode (eg 01) |__|__| **Admission height (cm)** ..... **Weight (kg)** .....

Alternate study number(s) .....

Consented to use research samples **Yes** ☐ **No** ☐ Consented to share samples? **Yes** ☐ **No** ☐

1.2 ADMISSION TIMELINES

Date of symptom onset	D D M M Y Y
Date of fever onset	D D M M Y Y
Date & time of first presentation to any hospital	D D M M Y Y H H M M
Admitted to ITU?	**Yes** ☐ **No** ☐
Date & time admitted to ITU	D D M M Y Y H H M M
Date & time of first research bloods	D D M M Y Y H H M M
Consent date	D D M M Y Y

1.3 PRESENTING FEATURES

	Y	N		Y	N
Fever	☐	☐	Rash	☐	☐
Respiratory	☐	☐	Sensory (e.g.anosmia, ageusia)	☐	☐
Cardiac	☐	☐	Headache	☐	☐
Gastrointestinal	☐	☐	Other Neuro	☐	☐
Musculoskeletal	☐	☐	Shock	☐	☐
Lymphadenopathy	☐	☐	Conjunctivitis	☐	☐
Oedema/Ascites	☐	☐	Mucositis	☐	☐
Involvement of extremities	☐	☐	BCG reactivation	☐	☐

Other……

1.4 VITAL SIGNS AT TRIAGE

Temperature: ..... Heart Rate: .....

Resp Rate: ..... BP (systolic): .....

Oxygen saturation (%): ..... in air ☐ in O_2 ☐

Central cap refill (s): .....

Ill appearance: Y☐ N☐

AVPU ☐, GCS ☐, Blantyre ☐: .....

Abbrev. Mental Test Score .....

1.5 COMORBIDITIES (tick all that apply) **Don't Know or Not Stated?** ☐

Dementia; specify:	☐	Allergic disease; specify:	☐
Endocrine; specify:	☐	Genetic, eg T21; specify:	☐
Smoking; n/day:	☐	Recent surgery; specify:	☐
Malignancy; specify:	☐	Hypertension:	☐
Pulmonary; specify:	☐	Organ transplant; specify:	☐
Gastrointestinal; specify:	☐	Obesity, BMI	☐
Neurological; specify:	☐	Consanguinity; specify:	☐
Cardiac; specify:	☐	Pregnant; Gestation: ...../40	☐
Immunosuppressed; e.g HIV, specify:	☐	Clinical Frailty Scale (Dalhousie): ...../9	☐
Haematology, e.g. HbSS, specify:	☐	Prematurity; Gestation: ...../40	☐

Important history not captured above – please use ICD10 codes: .....

1.6 SELF-REPORTED ETHNICITY (TICK AS APPLICABLE)

White European	Black	Asian	Middle-Eastern	South American
☐ North/Mid/East European	☐ North African (Morocco,Algeria,Tunisia,Libya,Egypt)	☐ South Asian (Indian,Pakistani,Bangladeshi,Tamil)	☐ Turkish	☐ Native American
☐ South Europe (Merditerranean & Portugal)	☐ Sub-Saharan	☐ South East Asian Vietnamese,Cambodian,Thai,Malay,Indonesian,Filipino	☐ Arabian Peninsula	
☐ Roman	☐ Black Caribbean	☐ West Asian (Afghan,Iranian)	☐ Jewish	☐ **Other**……
☐ Finnish		☐ East Asian (Chinese,Japanese,Korean)		☐ **Mixed**……

2.1 INVESTIGATIONS, SEVERITY & TREATMENT

	Default	Units if different	Baseline (if not with 1st research bloods)	1st research bloods/on admission	2nd research bloods	3rd research bloods (at 28 days/convalesce)
DATE:	dd/mm/yy					
TIME:	hh:mm					
Haematology						
Haemoglobin	g/L					
White cells	10^9/L					
Platelets	10^9/L					
Neutrophils	10^9/L					
Lymphocytes	10^9/L					
Monocytes	10^9/L					
Eosinophils	10^9/L					
Fibrinogen	g/L					
D-dimer	ng/ml					
PT	seconds					
Chemistry						
Urea	mmol/L					
Creatinine	micromol/L					
ALT	IU/L					
Bilirubin	micromol/L					
Albumin	g/L					
CRP	mg/L					
PCT	ng/ml					
Ferritin	µg/L					
Trop-T	ng/L					
BNP / NT-proBNP	pg/ml					
LDH	IU/L					
CK	IU/L					
sCD-25						
Blood gas:						
Base excess	mmol/L					
Lactate	mmol/L					
pO_2	kPa					
Severity						
Patient location			ED ☐ HDU ☐ Ward ☐ ICU ☐	ED ☐ HDU ☐ Ward ☐ ICU ☐	ED ☐ HDU ☐ Ward ☐ ICU ☐	ED ☐ HDU ☐ Ward ☐ ICU ☐
Ventilation			Invasive ☐ NIV ☐ O2 only ☐ None ☐	Invasive ☐ NIV ☐ O2 only ☐ None ☐	Invasive ☐ NIV ☐ O2 only ☐ None ☐	Invasive ☐ NIV ☐ O2 only ☐ None ☐
O_2 Saturation	%					
FiO_2 / O_2 Flow	% or L/min		% ☐ L / min ☐	% ☐ L / min ☐	% ☐ L / min ☐	% ☐ L / min ☐
Heart rate	/min					
Systolic BP	mmHg					
Respiratory rate	/min					
Capillary refill	s					
GCS/AVPU	/15; AVPU					
Inotropes			Yes ☐ No ☐	Yes ☐ No ☐	Yes ☐ No ☐	Yes ☐ No ☐
ECMO			Yes ☐ No ☐	Yes ☐ No ☐	Yes ☐ No ☐	Yes ☐ No ☐
Haemofiltration			Yes ☐ No ☐	Yes ☐ No ☐	Yes ☐ No ☐	Yes ☐ No ☐
Treatment:	Name(s):		Please Tick YES if patient has received treatment since last bloods (or prior to bloods for baseline)			
Antibiotic			Yes ☐ No ☐	Yes ☐ No ☐	Yes ☐ No ☐	Yes ☐ No ☐
Antiviral			Yes ☐ No ☐	Yes ☐ No ☐	Yes ☐ No ☐	Yes ☐ No ☐
Antimalarial			Yes ☐ No ☐	Yes ☐ No ☐	Yes ☐ No ☐	Yes ☐ No ☐
Steroid > 1mg/kg			Yes ☐ No ☐	Yes ☐ No ☐	Yes ☐ No ☐	Yes ☐ No ☐
Immunoglobulin			Yes ☐ No ☐	Yes ☐ No ☐	Yes ☐ No ☐	Yes ☐ No ☐
Monoclonal Ab			Yes ☐ No ☐	Yes ☐ No ☐	Yes ☐ No ☐	Yes ☐ No ☐
Study Treatment	Study Name:		Yes ☐ No ☐	Yes ☐ No ☐	Yes ☐ No ☐	Yes ☐ No ☐
Other			Yes ☐ No ☐	Yes ☐ No ☐	Yes ☐ No ☐	Yes ☐ No ☐
Maximum CRP (mg/L): ……			***Max neutrophil count(10^9/L):*** ……		***Min lymphocyte count(10^9/L):*** ……	

3.1 RADIOLOGY RESULTS

		Yes	No		Yes	No
Chest X-ray:	Had CXR?	☐	☐	X-ray: Other: ……		
	Normal	☐	☐	CT: interstitial disease	☐	☐
	Infiltrates	☐	☐	CT: Other ……		
	Pneumonia with consolidation	☐	☐	MRI: ……		
	Pleural effusions	☐	☐			
	Pulmonary emboli	☐	☐	Other ……		

3.2 CARDIAC INVESTIGATIONS		***1st ECHO***; Date.....			***Worst ECHO***; Date.....		
Coronary arteries	Normal	Yes ☐	No ☐	Unk ☐	Yes ☐	No ☐	Unk ☐
For largest two CAs **Left coronary: LCA; Circumflex: Cx; Left anterior descending: LAD; Right Coronary: RCA**	Location	.....	.....		.....	.....	
	Lopez Z-score	.....	.....		.....	.....	
	Internal diameter mm	.....	.....		.....	.....	
Overall Function	Myocarditis	Yes ☐	No ☐	Unk ☐	Yes ☐	No ☐	Unk ☐
	Low Cardiac Output Syndrome	Yes ☐	No ☐	Unk ☐	Yes ☐	No ☐	Unk ☐
	Pericarditis	Yes ☐	No ☐	Unk ☐	Yes ☐	No ☐	Unk ☐
	Valvular regurgitation	Yes ☐	No ☐	Unk ☐	Yes ☐	No ☐	Unk ☐
	Fractional Shortening (%)	.....			.....		
	LV end-diastolic diameter	.....			.....		
	ECG	Normal ☐		Block ☐	Normal ☐		Block ☐
		Arrhythmia ☐		Other ☐	Arrhythmia ☐		Other ☐

4.1 VIROLOGY & BACTERIOLOGY

Test	***Date(s) (ddmmyy)***	***Results***
SARS-CoV-2 ☐		PCR ☐ Ct value...../VL..... Ag ☐ IgM ☐ IgG ☐ All negative ☐ Test 1: Test2: Subsequent Test(s):
Blood culture ☐		Central line ☐ Peripheral ☐ All negative ☐
Blood PCR, rapid antigen (bacteriology) ☐		RAg ☐ PCR ☐ All negative ☐
Blood PCR (virology) ☐		PCR ☐ Negative ☐
CSF metrics ☐		White cells..... Neutrophils %/abs...../..... Lymphocytes %/abs...../..... Protein..... CSF & blood Glucose...../..... CSF lactate .....
CSF bacterial ☐		Culture ☐ RAg/IF ☐ PCR ☐ All negative ☐
CSF virology ☐		PCR ☐ Negative ☐
Urinalysis ☐		Dipstix (nitrites, leukocytes, protein) Microscopy (epithelial & white cells)
Urine organism ☐		Culture ☐ RAg ☐ PCR ☐ All negative ☐
Nose, throat swab ☐		Culture ☐ RAg/IF ☐ PCR ☐ All negative ☐
Nasopharyngeal aspirate ☐		Culture ☐ RAg/IF ☐ PCR ☐ All negative ☐
Stool bacteriology ☐		Culture ☐ RAg/IF ☐ PCR ☐ All negative ☐
Stool virology ☐		RAg/IF ☐ PCR ☐ All negative ☐
BAL ☐		Negative ☐
ETT Aspirate ☐		Negative ☐
Serology results ☐		Negative ☐
Other test		

5.1 – 5.3 CAUSATIVE ORGANISM(S) IN THIS ILLNESS – tick those that apply

Identify pathogens from results & clinical findings (eg positive swab result, or pathognomonic varicella rash)

	yes	no		yes	no		yes	no
Evidence of viral aetiology	☐	☐	**Evidence of bacterial cause**	☐	☐	**Non-bacterial/viral?**	☐	☐
Specify virus(es)			Specify bacteria.....			Specify pathogen.....		
.....			.....			.....		
Virus consistent with some but NOT all symptoms?	☐	☐	Bacteria consistent with some but NOT all symptoms?	☐	☐	Pathogen consistent with some but NOT all symptom	☐	☐
Virus likely to account for all features of the illness?	☐	☐	Bacteria likely to account for all features of the illness?	☐	☐	Pathogen likely accounts for all features of illness?	☐	☐

6.1 DISCHARGE DESTINATION & TIMELINES

Reason for transfer:.....

Discharged home from ED Y☐ N☐ | Admitted to ICU from ED Y☐ N☐

Admitted to ward from ED Y☐ N☐ | Died in ED Y☐ N☐

Transferred out from ED Y☐ N☐ | Date/Time left ED: D D M M Y Y H H M M

Date/time of ICU discharge	Date:	D D M M Y Y H H M M
Date/time of discharge from hospital	Date:	D D M M Y Y H H M M
Date/time of death, if died	Date:	D D M M Y Y H H M M

If died, was SARS-CoV-2: likely cause of death ☐ contributed to death ☐ incidental to death ☐

6.2 CEILING OF CARE (If admitted)

Ward only ☐
NIV on ward ☐
ITU care ☐
No Ceiling of Care ☐
Unknown ☐
DNACPR? Y☐ N☐ Unk☐

6.3 SEVERITY (Note: Days = number of midnights on intervention + 1)

	yes	no			yes	no	
Oxygen	☐	☐	Days …	Inotropes	☐	☐	Days …
NIV	☐	☐	Days …	ECMO	☐	☐	Days …
Invasive Vent	☐	☐	Days …	Haemofiltration	☐	☐	Days …
ICU	☐	☐	Days …	Patient died	☐	☐	

7.1 SYNDROME CLASSIFICATION – tick main syndrome (tick more than one if required)

Cardiovascular	Arrhythmia ☐	Cardiac Arrest ☐	Cardiac Ischaemia ☐
	Congestive Heart Failure ☐	Central Artery Vasculitis ☐	Endocarditis ☐
	Myocarditis ☐	Pericarditis ☐	Peripheral Artery Vasculitis ☐
GIT	Mod/severe diarrhoea ☐	Mod/severe vomiting ☐	
Haematological	Deep Vein Thrombosis ☐	Pulmonary Embolism ☐	Sickle Crisis ☐
Inflammatory	SLE ☐	Kawasaki Disease ☐	Macrophage Activation Synd. ☐
	Juvenile Idiopathic Arthritis ☐	COVID-related inflammation ☐	Steven-Johnson Synd. ☐
Lower respiratory tract	Asthma Exacerbation ☐	Bronchiolitis ☐	Empyema ☐
	Pleural Effusion ☐	Pneumonia ☐	Pneumothorax ☐
	Undefined LRTI ☐	Viral Induced Wheeze ☐	
Musculoskeletal	Arthralgia ☐	Discitis ☐	Myositis ☐
	Osteomyelitis ☐	Reactive arthritis ☐	Septic arthritis ☐
	Transient synovitis ☐		
Neurological	CNS Abscess ☐	Encephalitis ☐	Meningitis ☐
	Seizure ☐	Stroke / CVA ☐	
Pathogen syndromes	COVID19 ☐	EBV/Glandular fever ☐	Flu-like illness ☐
	Hand-foot-mouth ☐	Hepatitis A ☐	HSV stomatitis ☐
	Lyme disease ☐	Malaria ☐	Measles ☐
	Mumps ☐	Pertussis ☐	Roseola/HHV6 ☐
	Scarlet fever ☐	Staph scalded skin ☐	Varicella ☐
Sepsis syndromes	Bacteraemia ☐	Febrile neutropaenia ☐	Purpura fulminans ☐
	Septic shock ☐	Severe sepsis ☐	Toxic shock syndrome ☐
Soft tissue	Abscess ☐	Cellulitis (skin) ☐	Impetigo ☐
	Infected eczema ☐	Lymphadenitis ☐	Necrotising fasciitis ☐
	Peri/orbital cellulitis ☐	Wound infection ☐	
Surgical	Appendicitis ☐	Bowel obstruction ☐	Mesenteric adenitis ☐
	Pancreatitis ☐	Peritonitis ☐	
Undifferentiated fever	Febrile convulsion ☐	Fever without source ☐	Fever unknown origin ☐
	Post procedural fever ☐		
Urinary tract	Haemolytic uremic syndrome ☐	Pyelonephritis ☐	UTI ☐
URTI/Ear nose throat	Abscess ☐	Croup ☐	Mastoiditis ☐
	Otitis media ☐	Pharyngitis ☐	Sinusitis ☐
	Stomatitis/lip infection ☐	Tonsillitis ☐	URTI (non-specific) ☐
Other infections	CLABSI (line infection) ☐	Conjunctivitis ☐	

Details of above syndromes (eg location, sub-type) .....

Other syndrome, give ICD10 code: .....

8.1 PRIMARY PHENOTYPE– tick ONE box (see diagram below), prioritising the bacterial/viral (coloured) boxes

	yes		yes		yes
Definite bacterial infection	☐	Viral syndrome - high or no inflammatory markers	☐	Other infection including parasites	☐
Probable bacterial infection	☐	Probable viral infection	☐	Uncertain – infection or inflammatory syndrome	☐
Bacterial syndrome - low or no inflammatory markers	☐	Definite viral infection	☐	Inflammatory syndrome – confident diagnosis	☐
Unknown bacterial or viral infection	☐	Trivial illness: no investigations, treatment, or follow-up	☐	Other cause of illness – specify: ……..……..	☐

8.2 SECONDARY PHENOTYPE – use only if a co-incident, confirmed non-bacterial non-viral illness is ALSO responsible for some or all features of the illness (eg malaria, inflammatory condition, chronic infection)

	yes		yes
Other Infection	☐	Inflammatory	☐

Initials concurring with final phenotype: ……

Initials not concurring with final phenotype: ……

Lopez Z-scores for coronary arteries: http://www.parameterz.com/sites/coronary-arteries

To view the phenotyping algorithm, please use this link: https://imperialcollegelondon.box.com/s/uemqmuzv7vms3ws7c856797ik4cnhhg1

Click here for the Dalhousie Clinical Frailty Scale

Study number: |__|__|__|__|-|__|__|__|__| - E |__|__|

SAMPLE HANDLING RECORD

STUDY ID DETAILS (DIS-Centre ID-subject ID-episode; e.g. DIS-1101-1001-E01)

DIS-.....-.....-..... **Alternative Study number**.....

Centre ID **Subject ID** **Episode**

Sample type	Collected Yes No	Date and time of sample collection			Time to processing (initial storage)	Sample aliquots: volume and number (if applicable)	Storage location
		Time Point (1st,2nd,Dis)	Date	Time			
Example: Blood EDTA	☒ ☐	*1st*	*22-01-2012*	*23:45*	*6h (in fridge)*	*Plasma (100µl): 5* *Plasma (250µl): 1* *EDTA aliquot (Volume): 1 x 450µl* *Cell Pellet (all) (µl): 4* *Smart tube (200µl):*	*Imp Coll, -80˚C freezer 9, box 6*
Blood EDTA		Tick if same draw as blood culture ☐					
	☐ ☐					*Plasma (100µl):* *Plasma (250µl):* *EDTA aliquot (Volume):* *Cell Pellet (all) (µl):* *Smart tube (200µl):*	
	☐ ☐					*Plasma (100µl):* *Plasma (200µl):* *EDTA aliquot (Volume):* *Cell Pellet (all) (µl):*	
	☐ ☐					*Plasma (100µl):* *Plasma (250µl):* *EDTA aliquot (Volume):* *Cell Pellet (all) (µl):*	
RNA: PAXgene ☐	☐ ☐					*Whole tube* ☐ *'Home-made'* ☐	
	☐ ☐					*Whole tube* ☐ *'Home-made'* ☐	
TEMPUS ☐	☐ ☐					*Whole tube* ☐ *'Home-made'* ☐	
Serum	☐ ☐					*Serum (100µl):* *Serum (250µl):*	
	☐ ☐					*Serum (100µl):* *Serum (250µl):*	
	☐ ☐					*Serum (100µl):* *Serum (250µl):*	
Throat swab	☐ ☐						
Stool/rectal swab	☐ ☐						
BAL sample	☐ ☐						
Other:							
Other:							

Sample handling deviations

	If any answer is NO (& for any other deviation) please comment over page	TP1	TP2	DIS
BLOOD EDTA	If the sample was not processed immediately, was it stored at 4°C within 2 hours?	Y ☐ N ☐	Y ☐ N ☐	Y ☐ N ☐
	Was the sample processed according to SOP and stored at -80°C within 6 hours?	Y ☐ N ☐	Y ☐ N ☐	Y ☐ N ☐
BLOOD SERUM	Was the sample processed according to SOP and stored at -80°C within 24 hours?	Y ☐ N ☐	Y ☐ N ☐	Y ☐ N ☐
SMART tube	Was the sample processed according to SOP and stored at -80°C within 15 minutes?	Y ☐ N ☐	*n/a*	*n/a*
	If the sample was not stored at -80°C within 15 minutes, was it kept at 4°C for 1 hour before being stored at -80°C?	Y ☐ N ☐	*n/a*	*n/a*
PAX tube	Was the sample stored for a minimum of 24 hours at -20°C, before storage at -80°C?	Y ☐ N ☐	Y ☐ N ☐	Y ☐ N ☐
Throat swab	Was the sample stored at -80°C within 4 weeks?	Y ☐ N ☐	Y ☐ N ☐	Y ☐ N ☐

Comments/details ***Please give details stating clearly which sample type and what time point was affected.***