

## Data items on patient's characteristics

Demographic information				
Age	Gender	Ethnicity	Country of residence	
General information on consultation				
Agreement	Availability of biomaterial	Coded DRG	Reason for consultation (ICD-10)	Emergency admission
Country of diagnosis	Region of diagnosis	Month of first diagnosis	Days between contact and diagnosis	Stage at diagnosis
Days from diagnosis to the start of each stage	Duration: inpatient stay, ICU, ventilation	Follow-up since diagnosis	Last known status	
Cardiovascular comorbidities				
Coronary artery disease	Myocardial infarction	Hypertension	Chronic heart failure	Years of heart failure
Stage of heart failure (NYHA)	Ejection fraction	Atrial fibrillation	AV block	Aortic stenosis
Myocarditis	Carotid arterial disease	Thromboembolic diseases (DVT, PE)	Peripher vascular disease	
Pulmonary comorbidities				
Asthma	COPD	Other chronic pulmonary diseases		
Neurological comorbidities				
Hemiplegia	Dementia	Cerebrovascular disease, stroke, TIA	Motoneuron diseases	Movement disorder
Multiple sclerosis	Myasthenia gravis	NMOSD	Other neurological autoimmune diseases	Other prior neurological diagnosis
Hemato/oncological comorbidities				
Leukemia	Lymphoma	Solid tumor	Solid tumor, metastasized	Stem cell transplantation
Other comorbidities				
Connective tissue disease	Peptic ulcer disease	Chronic liver disease	Liver cirrhosis	Diabetes without end-organ damage
Diabetes with end-organ damage	Acute kidney injury	Chronic kidney disease	On dialysis	Organ transplantation
Rheumatic disease	HIV/AIDS			
Further conditions				
Smoking status	E-cigarettes	Body-Mass-Index	Immunosuppressive therapy (last 3 months)	Known colonization with multi-resistant pathogens

### Data items during different phases

Data item	At diagnosis	Uncomplicated phase	Complicated phase	Critical phase	Recovery phase
<b>Virology/Microbiology</b>					
Type of virological testing (PCR, Rapid Test, Serology)	X	X	X	X	X
RT-PCR: Testing site	X	X	X	X	X
RT-PCR: Virusstrain	X				
RT-PCR: Tested target at diagnosis	X				
RT-PCR: Lowest detected number of cycles	X	X	X	X	X
Anti-SARS-CoV-2 antibody titer IgA/IgG	X	X	X	X	X
Viral coinfections		X	X	X	
Superinfections		X	X	X	X
<b>Symptoms</b>					
Runny nose	X	X	X	X	
Sore throat	X	X	X	X	
Dry cough	X	X	X	X	
Productive cough	X	X	X	X	
Wheezing	X	X	X	X	
Dyspnoe	X	X	X	X	X
Feeling of breathlessness		X	X		
Palpitations	X	X	X	X	
Nausea / emesis	X	X	X	X	
Diarrhea	X	X	X	X	
Muscle aches	X	X	X	X	
Muscle weakness	X	X	X	X	
Fever	X	X	X	X	
Delirium	X	X	X	X	
Excessive tiredness	X	X	X	X	
Headache	X	X	X	X	
Meningism	X	X	X	X	
Smell disorders	X	X	X	X	
Taste disorder	X	X	X	X	
Other neurological symptoms	X	X	X	X	
Red eye	X	X	X	X	
Asymptomatic	X	X	X	X	

Data item	At diagnosis	Uncomplicated phase	Complicated phase	Critical phase	Recovery phase
<b>Cardiovascular Complications</b>					
Cardiac arrhythmia			X		X
Life threatening arrhythmia				X	
Myocardial ischemia, acute coronary syndrome			X	X	
Myocarditis			X	X	
(Congestive) heart failure			X	X	X
Pericardial effusion			X		
Any bleeding			X	X	
<b>Respiratory Complications</b>					
Need for oxygen supplementation			X		X
Clinical indication for intubation				X	
Re-intubation				X	
ECMO				X	
<b>Renal complications</b>					
Acute kidney injury (KDIGO)			X	X	
New renal failure with need for dialysis				X	
Not recovered kidney failure					X
<b>Thrombotic and thrombembolic complications</b>					
Abdominal thrombosis			X	X	
Arterial thrombosis			X	X	
Microangiopathy, -thrombosis			X	X	
Venous thrombosis, pulmonary thrombembolism			X	X	
<b>Neurological complications</b>					
Intracerebral bleeding			X	X	
Ischemic stroke			X	X	
Cause of stroke			X	X	
Stroke score NIHSS			X	X	
Meningitis/Encephalitis			X	X	
Myositis			X	X	
Seizure			X	X	
Neurological sequelae					X
Severe cognitive impairment					X
<b>Further complications</b>					
Vasculitis			X	X	

Data item	At diagnosis	Uncomplicated phase	Complicated phase	Critical phase	Recovery phase
Septic shock				X	
qSOFA $\geq 2$				X	
Other complications, specify			X	X	
Severe fatigue					X
Other sequelae					X
<b>Vital signs and respiratory parameters</b>					
Systolic blood pressure	X	X	X	X	
Diastolic blood pressure	X	X	X	X	
Pulse	X	X	X	X	
Oxygen saturation	X	X	X	X	
PaO <sub>2</sub>	X	X	X	X	
PaCO <sub>2</sub>	X	X	X	X	
Temperature	X	X	X	X	
Respiratory rate	X	X	X	X	
<b>Further diagnostics</b>					
Glasgow Coma Scale	X	X	X	X	
SOFA score			X	X	
Neurological diagnostic	X	X	X	X	
Chest CT results		X	X	X	X
<b>Laboratory values</b>					
GOT/AST	X	X	X	X	
GPT/ALT	X	X	X	X	
Gamma-GT	X	X	X	X	
Bilirubine	X	X	X	X	
Lipase	X	X	X	X	
Troponine T	X	X	X	X	
Troponine I	X	X	X	X	
Creatinine kinase		X	X	X	X
NT-pro-BNP		X	X	X	X
Creatinine	X	X	X	X	X
Urea	X	X	X	X	
LDH	X	X	X	X	
Triglyceride	X	X	X	X	
AT III	X	X	X	X	

Data item	At diagnosis	Uncomplicated phase	Complicated phase	Critical phase	Recovery phase
PTT	X	X	X	X	
INR	X	X	X	X	
D-dimer	X	X	X	X	
Fibrinogen	X	X	X	X	
vWF	X	X	X	X	
Multiplate (ADP, TRAP)	X	X	X	X	
Rotational thromboelastometry (ROTEM: Extem, Intem, Fibtem)	X	X	X	X	
CRP	X	X	X	X	
Procalcitonin	X	X	X	X	
Interleukin-6	X	X	X	X	
sIL2R	X	X	X	X	
Ferritin	X	X	X	X	
Circulating ACE2	X	X	X	X	
25-Hydroxyvitamin D	X	X	X	X	
Leukocytes	X	X	X	X	
Lymphocytes	X	X	X	X	
Neutrophils	X	X	X	X	
Eosinophils	X	X	X	X	
Platelets	X	X	X	X	
Reticulated platelet fraction	X	X	X	X	
Hemoglobin	X	X	X	X	
Urine test strips	X				
<b>Antiviral treatment</b>					
Atazanavir		X	X	X	
Darunavir		X	X	X	
Chloroquine phosphate		X	X	X	
Hydroxychloroquine		X	X	X	
Lopinavir/ritonavir		X	X	X	
Ganciclovir		X	X	X	
Oseltamivir		X	X	X	
Remdesivir		X	X	X	
Ribavirin		X	X	X	
Camostat		X	X	X	
Favipiravir		X	X	X	

Data item	At diagnosis	Uncomplicated phase	Complicated phase	Critical phase	Recovery phase
<b>Antibacterial prophylaxis</b>					
Betalactams		X	X	X	
Azithromycin		X	X	X	
Other macrolide		X	X	X	
Fluoroquinolones		X	X	X	
<b>Antifungals</b>					
Itraconazole		X	X	X	
Posaconazole		X	X	X	
Other systemically active antifungals		X	X	X	
<b>Immunosuppressants</b>					
Steroids		X	X	X	
CNI or mTor inhibitors		X	X	X	
Anti-TNF-alpha inhibitors		X	X	X	
Tocilizumab			X	X	
IL-1 Receptor antagonists			X	X	
Ruxolitinib		X	X	X	
<b>Heart/circulatory medication</b>					
ACE inhibitors	X	X	X	X	
Betablockers		X	X	X	
AT-1 antagonists	X	X	X	X	
Ca-channel blockers		X	X	X	
Other antihypertensives		X	X	X	
Statines	X	X	X	X	
Antiarrhythmics			X	X	
Adrenaline, sympathomimetics			X	X	
Vasopressin			X	X	
Colchicine			X	X	
<b>Immune therapy</b>					
Interferone (any)		X	X	X	
25-Hydroxyvitamin D		X	X	X	
Zinc			X	X	
Apheresis therapy			X	X	
Immunoglobulines			X	X	
<b>Anticoagulation, thrombocyte aggregation inhibition</b>					

Data item	At diagnosis	Uncomplicated phase	Complicated phase	Critical phase	Recovery phase
UFH prophylactic/therapeutic		X	X	X	
NMH prophylactic/therapeutic		X	X	X	
DOAKs		X	X	X	
Warfarin/marcumar		X	X	X	
<b>Further treatments</b>					
Ibuprofen	X				
Complementary and/or integrative medicine (CIM)	X	X	X	X	
<b>ICU treatment</b>					
Oxygen supplementation				X	
Non-invasive ventilation				X	
Invasive ventilation				X	
Vital signs and respiratory parameters after intubation				X	
ECMO				X	
Dialysis				X	
Cardiac assist device				X	
Ventilation prone position				X	
Re-intubation				X	
Other extracorporeal oxygenation/decarboxylation				X	
<b>Mechanical ventilation</b>					
PEEP				X	
Pmax				X	
Frequency				X	
FiO2				X	
PaO2/FiO2 (Horowitz)				X	

### Data items in sub-ECRFs

Cardiovascular Diseases				
<b>Drugs at diagnosis</b>				
Aldosteron antagonists	Other diuretics	Platelet inhibition	Oral anticoagulants	Ca-channel blocker
<b>Diagnostics at diagnosis</b>				
CK	CK-MB	NT-pro-BNP		

Diabetes				
Diabetes type	Duration of disease			
<b>Laboratory values at admission and fasting values at admission + 1</b>				
HbA1c	C-peptide	Glucose	C-peptid-to-Glucose-Ration (CGR)	Insulin level
Cortisol level				

Pulmonary Diseases				
<b>Specification of other chronic pulmonary disease</b>				
Cystic fibrosis	Obesity hypoventilation syndrome (OHS)	Obstructive sleep apnoea syndrome (OSAS)	Pulmonary fibrosis	Pulmonary hypertension
<b>Prior ventilation/oxygen support</b>				
Continuous positive airway pressure therapy	Long term oxygen therapy	Non-invasive ventilation		
<b>Regular use of inhaler</b>				
ICS monotherapy	LABA or LAMA monotherapy	ICS combination with LABA and/or LAMA	LABA and LAMA combination	Unknown drug
Only on demand				
<b>Pulmonary function test (Spirometry)</b>				
FEV1 before COVID-19	FEV1 at diagnosis	FEV1 in recovery phase		
<b>Deterioration of the prior chronic pulmonary disease in recovery phase</b>				
Change in medication	Continuous use of oxygen therapy			



Organ Transplantation				
Transplant type	Time since most recent transplantation			
<b>Previous graft status</b>				
Stable graft	Chronic rejection	T-cell depleting therapy (last 6 months)	B-cell depleting therapy (last 6 months)	Steroid bolus therapy (last 6 months)
<b>Immunosuppressive treatment at diagnosis</b>				
Azathioprine	Belatacept	Steroids	Cyclosporine	mTOR-Inhibitor
Mycophenolate mofetile	Tracrolimus			
<b>Immunosuppressive treatment: changes due to current disease</b>				
Doses unchanged	Doses reduction > 50 %	Stopping of drug therapy		

Rheumatic Diseases				
<b>Underlying disease</b>				
Adult-onset Still's disease	Behcet disease	Dermatomyositis	Eosinophilic granulatoasis with	Familial mediterranean fever
Giant cell arteriitis	Gout	Granulomatosis with polyangiitis (GPA)	IgA Vasculitis (Purpura Schönlein Henoch)	Juvenile idiopathic arthritis
Leucocytoclastic vasculitis	Microscopic polyangiitis	Mixed connective tissue disease	Polyarteriitis nodosa	Polymyalgia rheumatica
Polymyositis	Psoriatic arthritis	Relapsing Polychondritis	Sarcoidosis	Sjögren's syndrome
Spondyloarthritis	Systemic lupus erythematosus	Systemic sclerosis	Takayasu arteriitis	Rheumatoid arthritis
Disease duration				
<b>Organ manifestation</b>				
Arthritis	CNS	Ears, nose, throat (ENT)	Gastrointestinal	Heart
Oesesophagus	PNS	Pulmonal	Raynaud's phenomenon	Renal
Skin				

HIV				
<b>Current antiretroviral therapy</b>				
Protease inhibitors	Integrase inhibitors	NNRTI		
<b>Diagnostics</b>				
CD4 T-cell count (absolute, relative)	Viral load			

<b>(Hemato)Oncology</b>				
<b>Underlying disease</b>				
AML	ALL	Hodgkin lymphoma	NHL	Multiple Myeloma
Gastrointestinal cancer	Lung cancer	Gynaecological cancer	Head/neck cancer	Other disease
<b>Diagnostics at diagnosis</b>				
ECOG	Hypogamma-globulinaemia IgG	Status of disease		
<b>Therapy</b>				
Chemotherapy at diagnosis	High dose steroids at diagnosis	Targeted therapy at diagnosis	Immunosuppressive medication at diagnosis	Systemic drug/regimen last month
Systemic drug/regimen last 3 months	Operation last 3 months	Radiotherapy last 3 months		
<b>Diagnostics</b>				
ECOG	Hypogamma-globulinaemia IgG	Status of disease		
<b>Therapy</b>				
Chemotherapy	High dose steroids	Targeted therapy	Immunosuppressive medication	Systemic drug last month
Systemic drug last 3 months	Operation last 3 months	Radiotherapy last 3 months		

<b>Immunosuppressive therapy</b>				
<b>CD antibodies</b>				
Anti-CD20 (Rituximab, Obinutuzumab)	Anti-CD22 (Inotuzumab-Ozogamicin)	Anti-CD38 (Daratumumab)	Anti-CD52 (Alemtuzumab)	Anti-CD79b (Polatuzumab-Vedotin)
Belimumab	CD19-BiTE (Blinatumomab)			
<b>Inhibitors</b>				
Complement inhibitors (Eculizumab) Crovalimab,	Co-stimulator inhibitors (Abatacept, Belatacept)	Integrin antagonists (Natalizumab)	TNF-alpha inhibitors (Adalimumab)	JAK inhibitors (Baricitinib, Ruxolitinib) Fedratinib,
Calcineurin inhibitors (Ciclosporin) Tacrolimus)	mTOR inhibitors (Everolimus, Sirolimus)	PDE-4 inhibitor (Apremilast)		
<b>Interleukin inhibitors</b>				
Basiliximab	Canakinumab	Ixekinumab	Sarilumab	Secukinumab
Tocilizumab	Ustekinumab	Anakinra (IL-1)		
<b>Chemotherapeutics</b>				
6-Mercaptopurine	Azathioprine	Leflunomide	Methotrexate	Mycophenolat mofetil
Sulfasalazine	Teriflunomid	Cladribine (iv, sc, po)	Cyclophosphamide (iv, po)	Mitoxantrone
<b>Other immunosuppressive therapy</b>				
Steroids (< 100 / < 10 mg/d prednisolone)	Fumarate	iv/sc immunoglobulines	Interferon alpha/beta	Glatirameracetat
S1P-receptor modulator (Fingolimod) Sponimod)				
<b>Underlying disease</b>				
Multiple sclerosis	Other neurological autoimmune disease	Oncology	Organ transplantation	Rheumatic disease
Other disease (e.g. dermatological)				

Liver Cirrhosis				
<b>Etiology</b>				
Alcoholic	Autoimmune hepatitis	PBC	PSC	Viral
<b>Decompensation status</b>				
Never decompensated	Currently compensated, past decompensated	Acute decompensation (last 30 days)	Liver transplantation list	
<b>Decompensation at diagnosis</b>				
New/worsening ascites	New/worsening hepatic encephalopathy	New/worsening gastrointestinal bleeding		
<b>Reasons for consultation</b>				
Complications of cirrhosis	Gastrointestinal symptoms	Respiratory symptoms		
<b>Recent bacterial infection</b>				
Bacteremia	Bacterial pneumonia	Spontaneous bacterial peritonitis	Skin/soft tissue infection	Urinary tract infection
<b>Diagnostics</b>				
Components of Child - Pugh Score	MELD-Score before diagnosis	MELD-Score at diagnosis	MELD-Score worst during disease	
<b>Evaluation of organ systems: Acute-on-chronic liver failure</b>				
Liver (Bilirubin)	Kidney (Creatinine)	Brain (West-Haven encephalopathy)	Coagulation (INR, platelets)	Circulatory system (Vasopressors)
Respiratory system (Horowitz index)				
<b>Medication last 30 days</b>				
Beta-Blockers	Diuretics	Norfloracin	Proton pump inhibitors	Rifaximin
Statins				

Nephrology				
<b>Acute Kidney Injury (AKI)</b>				
KDIGO stage	Proteinuria during AKI	Hematuria during AKI		
<b>Chronic kidney disease (CKD)</b>				
Chronic kidney disease (CKD) stage	Proteinuria during CKD			
<b>Etiology of Chronic kidney disease</b>				
Congenital disease	Idiopathic kidney disease	Obstructive nephropathy	Primary glomerular disease	Polycystic kidney disease
Secondary glomerular disease	Tubulointerstitial disease	Vascular-hypertensive kidney disease		
<b>Dialysis</b>				
Mode of dialysis (HD, PD)	Duration of dialysis			

Neurology				
<b>Comorbidities</b>				
Brain tumor	Encephalitis	Epilepsy	Meningitis	Sinus/venous thrombosis
Subarachnoid bleeding	Myasthenia, bulbar	Myasthenia, generalized	Myasthenia, ocular	Myositis
Hemorrhagic stroke	Ischemic stroke	Transitory ischemic attack (TIA)	Migraine	Year of diagnosis
<b>Hemorrhagic stroke: Pattern of bleeding</b>				
Lobar hemorrhage	Loco typico for hypertensive origin	Multifocal disseminated bleedings		
<b>Ischemic stroke: Most likely cause (TOAST)</b>				
Cardioembolic	Large artery atherosclerosis	Small artery occlusion	Other causes	Undefined
Atrial fibrillation	Internal carotid artery stenosis > 50 %			
<b>Multiple sclerosis</b>				
PPMS	PRMS/CIS	SPMS	Severity of MS at diagnosis and recovery	B-cells at diagnosis (CD19/CD20 count)
<b>Dementia</b>				
Alzheimer	Dementia with Lewy-bodies	Frontotemporal dementia	Parkinson's dementia	Vascular dementia
<b>Movement disorder</b>				
Ataxia (hereditary, other)	Corticobasal syndrome	Dystonia	Essential tremor	Tremor, other
Huntington's disease	Multiple system atrophy	Parkinson's disease	Other Parkinsonism	Progressive supranuclear palsy
<b>Motoneuron disease</b>				
Amyotrophic lateral sclerosis (ALS)	Spinal muscular atrophy (SMA)			
<b>Diagnostics</b>				
Year of diagnosis	Disease duration	Previous status of gait, falls	Previous status of speech, swallowing,	Previous cognitive status
Previous nursing need	Modified Rankin at admission and discharge	MoCA Scale at admission and discharge	Barthel index at discharge	cCT (during all phases)
cMRI (during all phases)	EEG (during all phases)	Electrophysiology (during all phases)	Spinal tap (during all phases)	Pathogen and antibody testing (all phases)
<b>Previous medication</b>				
Antidementive drugs	Antidepressant drugs	Antiepileptic drugs	Antipsychotic drugs	Antiparkinsonian drugs
Riluzole				
<b>Anticoagulation, thrombocyte aggregation inhibition</b>				
Aspirin	Statins	Warfarin	Dabigatran	Apixaban
Rivaroxaban	Edoxaban	Clopidogrel		
<b>Multiple Sclerosis: immunomodulatory treatment</b>				
Relapse treatment last 3 months	Interruption at COVID-19 diagnosis	Interruption at symptom worsening	Prophylactic interruption (duration)	No interruption
Alemtuzumab	Azathioprin	Beta-Interferon	Cladribine	Dimethylfumarate
Fingolimod	Glatiramer acetate	Intravenous Immunoglobulines	Low dose steroids	Mitoxantrone
Natalizumab	Ocrelizumab	Rituximab	Siponimod	Teriflunomide

Apheresis therapy				
<b>Type of apheresis</b>				
Therapeutic plasma exchange	CytoSorb therapy	Double Filtration Plasmapheresis		
<b>Treatment details</b>				
Clinical phase at initiation of treatment	Plasma volume per treatment	Number of treatments	Days of treatments	
Experience of therapeutic effect				

Emergency Care				
Lung ultrasound findings (multilobular abnormalities)				
<b>Initial therapeutic approaches</b>				
Cardiopulmonary resuscitation	Drugs	Fluid administration	Inotropic support	Oxygen inhalation nasal
Oxygen inhalation face mask	Oxygen inhalation with reservoir	High flow oxygen (L/min, FiO2)	NIV	Intubation and mechanical ventilation
<b>Ventilator settings</b>				
CSV	CPAP	ASB	CPAP + ASB	BIPAP + SIMV
CMV: pressure/volume controlled	BIPAP (Level 1, Level 2)	PEEP	FiO2	
<b>Further patient course</b>				
Discharge	Transfer to other hospital	Admission to ward	Admission to ICU	Death in emergency department

Complementary Medicine				
<b>Type and phase of application</b>				
Anthroposophic medicine	Aroma therapy	Ayurvedic medicine	Homeopathy	Kampo
Neuropathy	Phytotherapy	Supplements (e.g. Zinc)	Traditional Chinese Medicine	Vitamins
<b>Interventions</b>				
Acupuncture	Reduced antipyretics	Baths, hydrotherapy	Breathing exercises	Drug therapy (oral, parenteral)
External applications	Inhalation	Manual therapy	Regulative therapy	Wraps, pads
<b>Lifestyle interventions</b>				
Dietary advice	Mediation, mindfulness	Mindful Movement Exercises (e.g. Yoga)	Smoking cessation	Sports, exercise
Stress reduction				

Fatal outcome				
Palliative care before COVID-19	Premortal change of therapeutic goals	Place of death	Contacts before/during death phase	Health/social care involvement
Autopsy				