Supplementary

Table S1 Characterization of included studies from ClinicalTrials.gov

Study number	Title/PI/NCT#	Status	Trial design	Estimated enrollment	Comments	Objective
RAAS re	elated studies					
1	ARB, ACEi, DRi Usage in COVID-19/Ivanov <i>et al./</i> NCT04364984	Recruiting	Observational (patient registry)	10	The entry of COVID-19 using ACE receptors has led to many theories on the effect ACEi has on risks for infection and severity of infection.	Primary outcome: -BP (hypertensive efficacy) (time frame: 4 v
						Secondary outcome: -COVID-19 course (time frame: 3 weeks)
2	Phase IV Observational Study to Associate Hypertension and Hypertension Treatment to COVID19/Muiesan <i>et al./</i> NCT04331574	Recruiting	Observational (patient registry)	2,000	This study aims to verify whether the chronic intake of RAS inhibitors modifies the prevalence and severity of the clinical manifestation of COVID-19.	Primary outcome: -Number of COVID-19 patients admitted w -Number of COVID-19 patients admitted th
3	Prospective Monitoring of Drug Safety and the Occurrence of Complications During Hospitalization in Patients With Cardiovascular Diseases With COVID-19/Januszewicz <i>et al.</i> / NCT04374110	Recruiting	Observational (patient registry)	1,000	This study aims to assess the safety of the cardiovascular drugs in relation to the occurrence of complications during hospitalization in patients with CVD and COVID-19 infection.	Primary outcome: -Adverse events (time frame: 2 weeks) -Death, myocardial infarction, heart failure,
4	ACE Inhibitors or ARBs Discontinuation for Clinical Outcome Risk Reduction in Patients Hospitalized for the Endemic Severe Acute Respiratory Syndrome Coronavirus (SARS- CoV-2) Infection: the Randomized ACORES-2 Study/Montalescot <i>et al.</i> /NCT04329195	Recruiting	Interventional (clinical trial): intervention tested: discontinuation vs continuation of RAS blocker therapy	554	This study aims to assist in addressing whether RAAS blockade should be continued or discontinued in COVID-19.	Primary outcome: -Time to clinical improvement from day 0 to seven-category ordinal scale, or live discha (time frame: from day 0 to day 28 or hospit
5	Suspension of Angiotensin Receptor Blockers and Angiotensin-converting Enzyme Inhibitors and Adverse Outcomes in Hospitalized Patients With Coronavirus Infection	Recruiting	Interventional (clinical trial): intervention tested: suspension or maintenance of angiotensin receptor blockers and angiotensin-converting enzyme inhibitors	700	This study aims to assist in addressing whether RAAS blockade should be continued or discontinued in COVID-19.	Primary outcome: -Median days alive and out of the hospital
	(COVID-19). A Randomized Trial/Lopes et al./NCT04364893					Secondary outcome: -Number of participants with adverse cardi failure -Cardiovascular biomarkers related to COV
6	Hypertension in Patients Hospitalized With COVID-19 in Wuhan, China: A Single-Center Retrospective Observational Study/Zen <i>et al.</i> /NCT04318301	Completed	Observational	275	This study aims to investigate and compare the demographic characteristics, coexisting disease, severity of pneumonia, and the effect of antihypertensive drugs in patients with COVID-19 and	Primary outcome: -Rate of death (time frame: from date of ad up to 60 days) -mortality in 28-day
		of ACEi use on COVID-19 pneumonia outcomes.	hypertension. They specifically aim to assess the effect of ACEi use on COVID-19 pneumonia outcomes.	Secondary outcome: -Severity of pneumonia -Length of hospital stay		
7	The Randomized Elimination or Prolongation of Angiotensin Converting Enzyme Inhibitors and Angiotensin Receptor Blockers in Coronavirus Disease 2019/Chirinos <i>et al.</i> /NCT04338009	Enrolling by invitation	Interventional (clinical trial): intervention tested: continuation vs discontinuation of ARB/ACEI	152	This study aims to assist in addressing whether RAAS blockade should be continued or discontinued in COVID-19.	Primary outcome: -Hierarchical composite endpoint (time franchical composite endpoint (time franchical reprimary endpoint of the trial will be a graccording to four factors: (I) time to death, mechanical ventilation or extracorporeal models of days supported by renal replacement the modified sequential Organ Failure Assessments include the cardiac, respiratory, renal and compared by renal replacement of the sequential of the sequence of the

Table S1(continued)

: 4 weeks)

ed who used ACE/ARB (time frame: 3 months) ed that did not used ACE/ARB

lure, myocarditis, acute renal failure, stroke

y 0 to day 28 (improvement of two points on a scharge from the hospital, whichever comes first) ospital discharge)

oital (time frame: 30 days)

cardiovascular outcomes and new worsening heart

COVID-19

of admission until the date of death from any cause,

e frame: Up to 28 days)

e a global rank score that ranks patient outcomes ath, (II) the number of days supported by invasive al membrane oxygenation (ECMO), (III) the number nt therapy or pressor/inotropic therapy, and (IV) a essment (SOFA) score. The modified SOFA score will and coagulation domains of the SOFA score.

Study number	Title/PI/NCT#	Status	Trial design	Estimated enrollment	Comments	Objective
8	Retrospective Observational Study to Compare the Short, Mid- and Long-term Prognosis and Outcomes of SARS- CoV-2 Infected Hospitalized Patients With Cardiovascular Disease (CVD) to SARS-CoV-2 Infected Hospitalized Patients Without CVD: The Geneva Covid-19 CVD Study/Mach <i>et al.</i> / NCT04384029	Active, not recruiting	Observational	7,000	This study aims to gather observational data to compare clinical outcomes in COVID+ hospitalized patients with pre-existing or newly onset cardiovascular disease. The investigators will study prognosis and outcomes according to the patients' medications in the setting of controversy surrounding ACEi/ARB. This will assist in determining the association between COVID-19 disease and CVD, based on age, previous CV diseases, CV risk factors, CV medications (e.g., ACE inhibitors or angiotensin II receptor antagonists)	Primary outcome: -Morbidity of COVID-19 in patients with an days, 1 year after hospitalization) -Mortality difference between COVID-19 p disease
9	COVID-19 Blood Pressure Endothelium Interaction Study/ NHS Greater Glasgow and Clyde/NCT04409847	Not yet recruiting	Observational	70	The aim of this study is to understand the interaction of COVID-19 on blood pressure responses.	Primary outcome: -ABPM systolic blood pressure (time frame Secondary outcome: -24 hour, day, night DBP and SBP, dipping HR
10	Association Between Hypertension, Renin-Angiotensin- Aldosterone System Inhibitors and COVID-19/Georges <i>et al.</i> / NCT04374695	Not yet recruiting	Observational	700	The aim of this study is to analyze the associations between COVID-19 and hypertension, and treatments with ACEi and ARBS.	Primary outcome: -Prior treatment by ACEi (time frame: at ac -Prior treatment by ARB
						Secondary outcome: -Baseline characteristics and comorbiditie -Major clinical adverse events
11	Impact of Previous Treatment With Angiotensin II Receptor Blockers in Patients With SARS-Cov2 Infection Admitted to the Intensive Care Unit on Survival and Severity of the Disease (COVID-ARA2)/Asfar <i>et al.</i> /NCT04337190	Recruiting	Observational	100	The aim of this prospective study is to determine ACE2 level and activity in patients with SARSCoV2 infection admitted to the intensive care unit (ICU). The study involves serial blood collection for measurement of ACE2 levels.	Primary outcome: -ACE activity over time (time frame: at the Secondary outcome: -ACE activity over time -Mortality at 28 days -ARDS severity
Anticoa	gulation related studies					
12	Analysis of the Coagulopathy Developed by COVID-19 Infected Patients: Thrombin Generation Potential in COVID-19 Infected Patients/Gris <i>et al.</i> /NCT04356950	Recruiting	Observational	175	COVID-19 produces a hypercoagulable state that is not well understood yet. Existing coagulation tests like PT/ PTT only reflect a small portion of total thrombin generation. The aim is to apply a normalized and automated thrombin generation test (TGT), developed for testing the thrombotic risk (triggered by 5 pM Tissue Factor, with a purified thrombomodulin (TM) challenge) and to study its prediction of survival.	Primary outcome: -28 day survival (time frame: 1 month) -Absolute thrombin generation test latent p -Relative thrombin generation test latent p -Various other coagulation parameters Secondary outcome: -3 month survival rate
13	Coagulopathy Associated With Coronavirus disease19 (CA- COVID19) A Multi-Centre Observational Study in UK/Arachchillage <i>et al.</i> /NCT04405232	Recruiting	Observational	5000	Based on Chinese data, abnormal coagulation parameters (Prolonged Prothrombin time (PT) and raised D dimer) are reported to predict a poor prognosis and may therefore be important therapeutic targets. High rates of DVT and PE are also reported in early data. A better understanding of this could aid in AC management.	Primary outcome: -Prevalence and characteristics of coagular respiratory failure requiring ventilation, mul with COVID-19 infection (time frame: 12 m

Table S1(continued)

and without CVS disease (time frame: 0 days, 30 9 positive patients with and those without CVS

me: 24 hours (all day and night))

ing status, morning surge, 24 hour, day, night ABPM

admission to hospital)

ities

he day of admission, day 3 and day 7)

nt period t period

ulation abnormalities and their predictive value for nultiorgan failure and death in patients presenting ? months)

Study number	Title/PI/NCT#	Status	Trial design	Estimated enrollment	Comments	Objective
14	Coagulopathy of COVID-19: A Pragmatic Randomized Controlled Trial of Therapeutic Anticoagulation Versus Standard Care as a Rapid Response to the COVID-19 Pandemic (RAPID COVID COAG)/Sholzberg <i>et al.</i> / NCT04362085	Recruiting	Interventional (clinical study): intervention tested - therapeutic anticoagulation	462	COVID-19 coagulopathy is characterized by elevated D-dimer, an indicator of fibrin formation, and clot lysis, and a mildly prolonged prothrombin time, suggestive of coagulation consumption. This trial compares therapeutic anticoagulation compared to standard care in hospitalized patients with COVID-19 and an elevated D-dimer (≥2X upper limit of normal {ULN}).	
15	COVID-19-associated Coagulopathy: Safety and Efficacy of Prophylactic Anticoagulation Therapy in Hospitalized Adults With COVID-19/Perepu <i>et al.</i> /NCT04360824	Recruiting	Interventional (clinical trial): intervention tested: standard prophylactic dose enoxaparin vs intermediate prophylactic dose enoxaparin	170	This is a prospective, randomized, open-label, multi-center interventional study designed to compare the safety and efficacy of two LMWH dosing protocols in COVID-19 admissions with modified ISTH Overt DIC criteria score \geq 3.	Primary outcome: -Mortality (time frame: 30 Days post interv- -Risk of all-cause mortality Secondary outcome: -Major bleeding -Arterial thrombosis -Venous thromboembolism
16	Effectiveness of Weight-adjusted Prophylactic Low Molecular Weight Heparin Doses Compared With Lower Fixed Prophylactic Doses to Prevent Venous Thromboembolism in COVID-2019. The Multicenter Randomized Controlled Open-label Trial COVI-DOSE/Zuily <i>et al.</i> /NCT04373707	Recruiting	Interventional (clinical trial): intervention tested: weight adjusted prophylactic dose enoxaparin	602	Worldwide observational studies indicate a significant prothrombogenic effect associated with SARS-CoV-2 infection with a high incidence of venous thromboembolism (VTE), notably life-threatening pulmonary embolism. The optimal dose of AC has not yet been determined.	Primary outcome: -Venous thromboembolism (time frame: 28 -Risk of deep vein thrombosis or pulmonar related death Secondary outcome: -Major bleeding
						-Clinically relevant non-major bleeding
17	Evaluation of TEM-tPA (Thromboelastometry With tPA) to Detect Covid-19 Patients at High Risk of Thrombosis /Hospices Civils de Lyon/NCT04366778	Recruiting	Observational	325	Some patients develop severe thrombotic complications, such as pulmonary embolism, despite anti-thrombotic prophylaxis by low molecular weight heparin. The aim of this project is to evaluate modified thromboelastometry for identifying patients at high risk of thrombosis.	Primary outcome: -Coagulability (time frame: day 0, 3, 6, 9, 1 -Venous thrombotic event (VTE) or arterial
18	High Prevalence of Deep Venous Thrombosis in Non-severe COVID-19 Patients Hospitalized for a Neurovascular Pathology/University Hospital, Strasbourg, France/ NCT04452422	Recruiting	Observational	30	Severe SARS-CoV-2 infection, responsible of COVID-19, is accompanied by many venous thromboembolic events. Using bedside Doppler ultrasonography (DUS) of lower limbs, this study investigated the rates of DVT in these patients in stroke unit.	Primary outcome: -Number of cumulated deep venous throm after admission)
19	Incidence of Acute Pulmonary Embolism in Covid-19 Patients on CT Angiography and Relationship to D-dimer Levels/University Hospital, Strasbourg, France/NCT04373486	Recruiting	Observational	160	It has been suggested an independent association between the severity of the disease and the level of D-dimer. Finally, Tang <i>et al.</i> showed that anticoagulant therapy is associated with a decreased mortality at Day-28 in severe Covid-19 patients, in favor of a possible associated coagulopathy. The purpose of this study is to describe the rate of pulmonary embolus in patients classified as COVID-19 infection and who underwent chest CT angiography.	Primary outcome: -Rate of positivity for acute pulmonary em 2020)

Table S1(continued)

ressure ventilation, invasive mechanical ventilation, rame: up to 28 days)

ervention)

28 days) nary embolism or venous thromboembolism-

9, 12, 15) rial thrombosis (time frame: day 15)

ombosis among hospitalization (time frame: Day 7

embolism (time frame: March 1, 2020- March 31,

	I (continuea)					
Study number	Title/PI/NCT#	Status	Trial design	Estimated enrollment	Comments	Objective
20	Incidence of Thromboembolic Events and Prognosis of COVID-19 Patients Hospitalized in Intensive Care Units in France/University Hospital, Strasbourg, France/ NCT04405869	Recruiting	Observational	300	The main objective of this study is to describe the incidence of thromboembolic events in a population of patients hospitalized in ICUs in France for severe COVID-19. They further evaluate the influence of different anticoagulation regimens on these coagulation parameters and on the incidence of thromboembolic events	Primary outcome: -Analysis of incidence of thromboembolic month)
21	Intermediate or Prophylactic-Dose Anticoagulation for Venous or Arterial Thromboembolism in Severe COVID-19: A Cluster Based Randomized Selection Trial (IMPROVE-COVID)/Kirtane <i>et al.</i> /NCT04367831	-	Interventional (clinical trial): intervention tested: heparin and enoxaparin doses for venous or arterial thromboembolism	100	This study assesses the effectiveness of intermediate versus prophylactic doses of anticoagulation in patients critically ill with COVID-19 in the ICUs throughout the hospital. Anticoagulation is part of the patient's usual standard of care but determining the dose of anticoagulation is based on physician preference. The investigators are conducting this study (a randomized trial with adaptive design employing cluster randomization) with the support of all of the ICUs to collect data in order to determine what should be the standard of care in terms of anticoagulation in these critically ill patients.	Primary outcome: -Total Number of Patients with Clinically R ICU (time frame: Discharge from ICU or 30
22	Preventing COVID-19-associated Thrombosis, Coagulopathy and Mortality With Low- and High-dose Anticoagulation: a Randomized, Open-label Clinical Trial/ Blondon <i>et al.</i> /NCT04345848	Recruiting	Interventional (clinical trial): intervention tested: two different doses of enoxaparin	200	The investigators hypothesize that high-dose anticoagulants, compared with low-dose anticoagulants, lower the risk of venous and arterial thrombosis, disseminated intravascular coagulation (DIC) and mortality. This open-label controlled trial will randomize hospitalized adults with severe COVID-19 infection to therapeutic anticoagulation vs. thromboprophylaxis during the hospital stay.	Primary outcome: -Composite outcome of arterial or venous coagulation and all-cause mortality (time f Secondary outcome: -Arterial thrombosis -Venous thromboembolism -Disseminated intravascular coagulation -All-cause mortality
23	Screening of Cardiovascular Complications in Patients With COVID-19/Doyen <i>et al.</i> /NCT04335162	Recruiting	Observational	100	Patients with COVID-19 in the ICU or hospitalized with a severe form have a poor prognosis. High levels of D-Dimers (81% of non survivors) and fibrin degradation products are associated with increased risk of mortality suggesting the possibility of venous thromboembolism.	Primary outcome: -Determine the incidence of cardiomyopat 28 days) Secondary outcome: -Mortality -Duration of mechanical ventilation -Shock at day 28 -Length of stay in the ICU
24	Study of the Prevalence of Deep Vein Thrombosis in Patients Hospitalized in Intensive Care for Acute Respiratory Failure Linked to Pneumonia Documented With SARS-COV2/ Générale de Santé/NCT04388657	-	Observational	100	Hemostasis abnormalities have been shown to be associated with a poor prognosis in these patients with COVID-19 pneumonia and higher rates of DVT's have been described. This research is based on the hypothesis that the existence of deep vein thrombosis (DVT) could make it possible to screen patients at risk of pulmonary embolism and to set up a curative anticoagulation.	Primary outcome: -Percentage of patients with one or more l

Table S1(continued)

lic events in patients with Sars-CoV-2 (time frame: 1

y Relevant Venous or Arterial Thrombotic Events in 30 days)

ous thrombosis, disseminated intravascular ne frame: 30 days)

pathies and venous thromboembolism (time frame:

re DVTs (time frame: 28 days)

Study number	Title/PI/NCT#	Status	Trial design	Estimated enrollment	Comments	Objective
25	Thrombo Embolic Events in Critical Care Patients With Covid-19 Serious Acute Pneumopathy/Centre Hospitalier Universitaire, Amiens/NCT04366752	Recruiting	Observational	100	The understanding of hemostasis and inflammation crosstalk has gained considerable knowledge during the past decade in the field of arterial and venous thrombosis.Patients with infection of COVID-19 and severe pneumoniae seem to have higher risk of thromboembolism. Not much data is available regarding the biological disorders of coagulation in these patients. The purpose of this project is to analyze hemostasis and coagulation of patients with infection of COVID-19 and severe pneumonia.	Primary outcome: -Variation of thrombin time in COVID-19 pa weeks) -Variation of factor V, factor II, fibrin, and fil
26	Utilização da Enoxaparina em Dose Anticoagulante em Pacientes Hospitalizados Com síndrome respiratória Aguda Grave Por COVID-19/Juni <i>et al.</i> /NCT04444700	Recruiting	Interventional (clinical trial): intervention tested: therapeutic anticoagulation with enoxaparin	462	Published papers evaluating coagulopathy on COVID-19 patients indicate a higher incidence of thromboembolic events, sometimes, as high as 20%. Such events increase ICU admissions and are associated with death. This study aims to determine the effect of therapeutic anticoagulation compared to standard care in hospitalized patients with COVID-19 and with low oxygen saturation.	Primary outcome: -Composite main outcome (time frame: up -Composite outcome of ICU admission (ye (yes/no), invasive mechanical ventilation (y
27	Impact of Implementation of an Intensified Thromboprophylaxis Protocol in in Critically III ICU Patients With COVID-19: a Longitudinal Controlled Before-after Study/ Jessa Hospital/NCT04394000	Completed	Observational (patient registry)	72	The main goal of this study is to investigate and compare the mortality, the incidence of DVT and the incidence of kidney and liver failure in patients admitted to ICU before and after intensified thromboprophylaxis protocol on 31st of March 2020.	Primary outcome: -2 week mortality (time frame: 2 weeks after Secondary outcome: -The incidence of DVTs, kidney failure, and the ICU before and after the implementation
28	COVID-19 and Deep Venous Thrombosis: a Cross-sectional Study/Jessa Hospital/NCT04338932	Completed	Observational	12	This study aims to investigate the prevalence, and identify possible risk factors of, DVT's in patients intubated and mechanically ventilated at the ICU. Parameters include demographics, comorbidities, symptoms, lab results, treatment, complications, ventilation, and radiological findings.	Primary outcome: -The prevalence of a DVT in patients at the
29	Patient Characteristics, Outcome and Thromboembolic Events Among Adult Critically III COVID-19 Patients With Different Anticoagulant Regimes at One of the Biggest Emergency Hospitals in Northern Europe, Sweden/Cronhjort <i>et al.</i> /NCT04412304	Completed	Observational	166	This study aims to compare anticoagulation regime with outcome in critically ill patients with COVID-19 by describing baseline characteristics and comorbidities, level of organ support, and dose of anticoagulation treatment.	Primary outcome: -28 days ICU mortality (time frame: 28 day Secondary outcome: -Incidence of thromboembolic events -Incidence of bleeding events -ICU free days alive from ICU admission
30	Incidence and Characteristics of Pulmonary Embolism in COVID-19 Patients Hospitalized for Acute Respiratory Syndrome/Groupe Hospitalier Paris Saint Joseph/ NCT04420312	Completed	Observational	1,024	Strikingly high D-dimers levels have been early reported in COVID-19 patients and have been associated with increased mortality. A single observational study suggests that anticoagulation is associated with a decreased mortality in severe COVID-19 patients. This is a multicentric case-control study that aims at evaluating the prevalence of pulmonary embolism and associated clinical outcomes.	Primary outcome: -Impact of pulmonary embolism on COVID Secondary outcome: -Clinical and radiological characteristics

Table S1(continued)

patients admitted to the ICU (time frame: up to 6 d fibrinogen in COVID-19 infected patients in ICU

up to 28 days) (yes/no), non-invasive positive pressure ventilation n (yes/no), or all-cause death (yes/no) up to 28 days.

after admission at ICU)

and liver failure in COVID-19 patients admitted to ation of the thromboprophylaxis protocol.

the ICU (time frame: 1 day at ICU)

days from ICU-admission)

/ID-19 patients (time frame: March 1st, 2020)

Study number	Title/PI/NCT#	Status	Trial design	Estimated enrollment	Comments	Objective
31	Risk of Venous Thromboembolism in Critically III Patients With Severe COVID-19/Bellmunt <i>et al.</i> /NCT04374617	Completed	Observational	230	The aim of this study is to determine the cumulative incidence of VTE in critically ill patients with COVID-19 and its impact on prognosis by performing a cut-off	Primary outcome: -Venous thromboembolisms (time frame: 7
					screening of deep venous thrombosis (DVT) with bilateral duplex ultrasound in 230 patients.	Secondary outcome: -Deaths from all causes during the follow-
32	A Multicenter, Randomized-Controlled Trial to Evaluate the Efficacy and Safety of Antithrombotic Therapy for Prevention of Arterial and Venous Thrombotic Complications in Critically-III COVID-19 Patients/Morrow <i>et al.</i> /NCT04409834	Not yet recruiting	Interventional (clinical trial): intervention tested: drugs (unfractionated heparin iv, enoxaparin, clopidogrel, unfractionated heparin sc, enoxaparin 40 mg/0.4 mL injectable solution)	750	This is a multicenter, open-label, 2x2 factorial, randomized-controlled trial of critically ill patients with COVID-19 that evaluates the efficacy and safety of full- dose vs standard prophylactic dose anticoagulation and of antiplatelet vs. no antiplatelet therapy for prevention of venous and arterial thrombotic events	Primary outcome: -Venous or arterial thrombotic events (time whichever earlier) -Hierarchical composite: Death due to ven clinically evident DVT, type 1 MI, ischemic emia, or clinically silent DVT
						Secondary outcome: -Clinically evident venous or arterial throm -Hierarchical composite: Death due to ven clinically evident DVT, type 1 MI, ischemic emia
33	A Randomized, Open-Label Trial of Therapeutic Anticoagulation in COVID-19 Patients With an Elevated D-Dimer/Albaghdadi <i>et al.</i> /NCT04377997	Not yet recruiting	Interventional (clinical trial): intervention tested: enoxaparin	300	The aim of this randomized, open-label trial is to look at therapeutic anticoagulation in COVID-19 patients with an elevated D-dimer and evaluate the efficacy and safety.	Primary outcomes: -Number of patients with the composite eff symptomatic deep venous thrombosis, pur myocardial infarction, or hemodynamic shi- -Number of patients with a major bleeding Thrombosis and Hemostasis (ISTH) definit
34	Effect of Anticoagulation Therapy on Clinical Outcomes in Moderate to Severe Coronavirus Disease 2019 (COVID-19)/ Landmesser <i>et al.</i> /NCT04416048	Not yet recruiting	Interventional (clinical trial): intervention tested: rivaroxaban vs standard of care	400	This is a multicenter, prospective, randomized, event-driven study that evaluates rivaroxaban compared with standard of prophylactic anticoagulants.	Primary outcome: -Composite endpoint of venous thromboe arterial thromboembolism, new myocardia mortality or progression to intubation and randomization)
35	Enoxaparin for Primary Thromboprophylaxis in Ambulatory Patients With Coronavirus: The Multicenter Randomized Controlled Ovid Trial/Kucher <i>et al.</i> /NCT04400799	Not yet recruiting	Interventional (clinical trial): intervention tested: enoxaparin	1,000	The study is a multicenter randomized open-label controlled trial and its hypothesis is that early thromboprophylaxis may prevent or limit coagulopathy, and reduce thromboembolic complications leading to	Primary outcome: -Hospitalizations (time frame: 30 days) -All-cause death
					hospitalization or death, in the presence of mild COVID disease among outpatients.	Secondary outcome: -Number of cardiovascular events, any hose disseminated intravascular coagulation
36	Exploratory Assessment of the Coagulation Changes Associated With Severe Inflammation in COVID-19 Patients/ HemoSonics LLC/NCT04460664	Not yet recruiting	Observational	50	This single center, prospective, observational pilot study aims to characterize changes in coagulation status of patients with COVID-19 infection during their hospital stay. The QPlus Cartridge can measure hypercoagulable and hypo-coagulable conditions resulting from the functional interaction of the enzymatic and cellular components of coagulation and therefore, can be invaluable for longitudinal monitoring of the coagulopathies reported in COVID-19 patients and the response to anticoagulants.	Primary outcome: -Quantra clot time results (time frame: with -Quantra stiffness results

Table S1(continued)

e: 7 days)

w-up

me frame: 28 days or until hospital discharge,

renous or arterial thrombosis, pulmonary embolism, nic stroke, systemic embolism or acute limb isch-

ombotic events renous or arterial thrombosis, pulmonary embolism, nic stroke, systemic embolism or acute limb isch-

e efficacy endpoint of death, cardiac arrest, pulmonary embolism, arterial thromboembolism, shock (time frame: 12 weeks) ing event according to the International Society of inition

ooembolism (DVT and/or fatal or non-fatal PE), dial infarction, non-hemorrhagic stroke, all-cause nd invasive ventilation (time frame: 35 days post

hospitalizations, all-cause death, net clinical benefit,

vithin 24 hours of admission to the hospital)

Study number	Title/PI/NCT#	Status	Trial design	Estimated enrollment	Comments	Objective
37	Incidence of Deep Vein Thrombosis at Doppler Echo in Patients With SARS-Cov-2 Pneumopathy Hospitalized in ICU/Maruizot <i>et al.</i> /NCT04363528	Not yet recruiting	Interventional (clinical trial): intervention tested: doppler echo	50	The main objective of the study is to determine the incidence of deep vein thrombosis at Doppler echo in patients with SARS-Cov-2 pneumopathy upon their entry into ICU and after 7 days of hospitalization in ICU.	Primary outcome: -Incidence of DVTs (time frame: day 0 and
38	Increased Risk of Venous Thromboembolism and Higher Hypercoagulable State in Patients Recovered in Intensive Care Unit and in Medical Ward for Coronavirus Disease 2019 (COVID-19)/Simioni <i>et al.</i> /NCT04359212	Not yet recruiting	Observational	90	The aim of this study is to verify if patients admitted to hospital in a medical division and in the ICU for a COVID-19 infection are at a higher risk of developing VTE complication and if they actually present an increased hypercoagulable state.	Primary outcome: -Cumulative proportion of any distal or pro- symptomatic pulmonary embolism (time fr Secondary outcome: -Cumulative proportion of any distal or pro- symptomatic pulmonary embolism plus the embolism
39	Investigating the Relationship Between the Renin Angiotensin System and the Coagulopathy Associated With COVID-19/ Owen <i>et al.</i> /NCT04419610	Not yet recruiting	Interventional (clinical trial): intervention tested: TRV027 peptide for infusion vs NaCl placebo comparator for infusion	60	The aim of this study is to determine whether the coagulopathy associated with COVID-19 infection is driven by overactivation of the renin angiotensin system (RAS). AnglI and Ang(1-7) affect various aspects of the coagulation system including platelets and endothelial cells, and therefore, the hypothesis is that overactivation of RAS is partly responsible for the coagulopathy present in COVID-19 infection. TRV027 is a similar peptide to Ang(1-7) but is a much more potent biased agonist at AT1R than Ang(1-7) and would be expected to oppose the effects of AnglI accumulation, and functionally correct the Ang(1-7) deficiency.	
40	Prasugrel in the Prevention of Severe SARS-CoV2 Pneumonia in Hospitalised Patients/Azienda Ospedaliera Universitaria Integrata Verona/NCT04445623	Not yet recruiting	Interventional (clinical trial): intervention tested: Prasugrel Hydrochloride 10 MG Oral Tablet vs placebo	128	The hypothesis of this study is that COVID-19 platelet activation occurs via an inflammation- dependent mechanism and that early antithrombotic prophylaxis in non-critical patients, like those admitted to medical wards, could reduce the incidence of pulmonary thrombosis as well as respiratory and multi-organ failure, contributing to improve clinical outcome of the patients with pneumonia caused by SARS-COV2 viruses.	Primary outcome: -P/F ratio at day 7 (time frame: day 7) Secondary outcome: -Daily P/F ratio (time frame: 15 days) -Venous thrombosis/pulmonary embolism
41	Randomised Controlled Trial Comparing High Versus Low LMWH Dosages in Hospitalized Patients With Severe COVID-19 Pneumonia and Coagulopathy Not Requiring Invasive Mechanical Ventilation/Marietta <i>et al.</i> /NCT04408235	Not yet recruiting	Interventional (clinical trial): intervention tested: enoxaparin	300	The goal of this study is to assess whether high doses of low molecular weight heparin compared to standard prophylactic dose are more effective to prevent clinical worsening and are similar in terms of major bleeding risk during hospital stay.	Primary outcome: -Clinical worsening (time frame: through s Secondary outcome: -Mortality at 30 days (time frame: 30 days)
42	Thrombosis Risk Assessment May Predict Clinical Presentation and Length of Hospital Stay in Covid-19 Pneumonia/Civan et al./NCT04423315	Not yet recruiting	Observational	70	The aim of this study is to investigate the association between thrombosis risk and clinical presentation of COVID-19. The investigators aimed to find out potential associations between markers of prothrombotic or inflammatory conditions and some clinical features of COVID-19 pneumonia cases on admission and follow-up.	Primary outcome: -Length of hospital stay (time frame: 2 mo

Table S1(continued)

and 7 of ICU admission)

r proximal deep venous thrombosis or of a ne frame: 28 days)

proximal deep venous thrombosis or of s the asymptomatic incidentally detected pulmonary

-19 (time frame: day 1 and day 8)

sm/thrombosis

n study completion, up to 30 days)

ıys)

months)

Study number	Title/PI/NCT#	Status	Trial design	Estimated enrollment	Comments	Objective
43	Crizanlizumab for Treating COVID-19 Vasculopathy/ Lowenstein <i>et al.</i> /NCT04435184	Not yet recruiting	Interventional (clinical trial): intervention tested: Crizanlizumab	40	The aim of this study is to test the efficacy and safety of crizanlizumab in decreasing biomarkers of inflammation and thrombosis in a placebo-controlled, double-blind	
					randomized clinical trial.	Secondary outcome: -Soluble P-selectin levels, D-dimer levels, as assessed by the WHO Ordinal Scale for safety of crizanlizumab as assessed by ad
44	Investigation of Systemic Microvascular Flow and Reactivity in Patients Presenting in the Acute Phase of Coronavirus Disease-19./Tibirica <i>et al.</i> /NCT04406545	Recruiting	Observational	25	This study aims to investigate the presence of endothelial dysfunction in patients with COVID-19, also evaluating associations between the presence of endothelial dysfunction and demographic, clinical, and laboratory variables.	Primary outcome: -To evaluate, through laser doppler, the pro- endothelial function in patients in the acute Microvascular reactivity will be evaluated temperature-controlled room)
45	Thrombo Embolic Events in Hospitalized Patients With Covid-19 Serious Acute Pneumopathy/Slama <i>et al./</i> NCT04377490	Recruiting	Observational	100	The purpose of this project is to analyze hemostasis and coagulation of every hospitalized patient with infection of COVID-19.	Primary outcomes: -Variation of thrombin time (in seconds) in 6 weeks) -Variation of factor V concentration -Variation of factor II concentration -Variation of concentration of fibrin and fib
46	Evaluation of the Role of Sonoclot Coagulation and Platelet Function Analyzer in Assessment of Coagulopathy in Critically III COVID-19 Patients.	Recruiting	Observational	50	Coagulopathy is one of the most significant prognostic factors in patients with COVID-19 and is associated with increased mortality and admission to critical care. Most observed coagulopathy in patients hospitalized with COVID-19 is characterized by increased D-dimer and fibrinogen levels. They will use the sonoclot on COVID positive patients and a COVID negative control group to describe differences in the rate of clot formation.	Primary outcome: -Clot rate formation (time frame: 30 minute
47	Evaluation of the Role of Sonoclot Coagulation and Platelet Function Analyzer in Assessment of Coagulopathy in Critically III COVID-19 Patients./Abdelaal <i>et al.</i> /NCT04479280	Recruiting	Observational	12,000	The aim of this study is to investigate the prevalence of VTE in a regional healthcare system prior to, and during the SARS-CoV-pandemic and the differences between ICU, hospitalized and outpatient cohorts.	
48	Assessment of Endothelial and Haemostatic Changes During Severe SARS-CoV-2 Infection/Ebesnier <i>et al.</i> /NCT04357847	Recruiting	Observational	100	The outbreak at covid-19 is caused by the SARS-CoV-2 virus. This virus can be responsible for severe respiratory failure but also for extra-respiratory organ dysfunctions associated with severe inflammatory stress.	Primary outcome: -Association of InterCellular Adhesion Mol frame: 24 hours)
49	Assessment of the Risk of Pulmonary Embolism and Coagulation Profile in Patients With SARS Coronavirus (COV-2) Lung Disease/Tcherakian <i>et al.</i> /NCT04479540	Recruiting	Interventional (clinical trial): intervention tested: angiography scanner	120	The main objective is to study the coagulation and fibrinolysis profile in these patients and to assess endothelial activation in order to better understand the phsyio-pathological mechanism behind PE and to determine if one of the parameters studied could be an indicator of PE risk.	Primary outcome: -Rate of PE in COVID-19 patients (time fra Secondary outcome: -Prothrombin level measurements -aPTT level measurements -Fibrinogen measurements

Table S1(continued)

ay 1 after randomization)

ls, VWF levels, CRP levels, change in clinical status for COVID-19 trials, time to hospital discharge, adverse events

presence of changes in systemic microvascular sute phase of COVID-19 (time frame: ed after a 20-minute rest in the supine position in a

in Hospitalized Covid-19 patients (time frame: up to

fibrinogen degradation

utes)

Nous thromboembolism in a regional healthcare V-2 pandemic? (time frame: March to May in 2020) risk factor for thromboembolism?

Iolecule-1 plasma level with 28 days mortality (time

frame: Day 0-12)

Study number	Title/PI/NCT#	Status	Trial design	Estimated enrollment	Comments	Objective
Arrythmi	a related studies					
50	Cardiac Arrhythmias In Patients With Coronavirus Disease (COVID-19)/Reddy <i>et al.</i> /NCT04358029	Recruiting	Observational	10,000	Improved characterization of arrhythmia burden and mechanism of death is critical, primarily in guiding the need for developing treatment strategies as some current treatment modalities have increase arrhythmogenic potential.	Primary outcome: -Frequency of cardiac arrhythmias (time fr Secondary outcome: -Mode of death
51	The ACOVID-19 Study - A Prospective Cohort Study Investigating the Acute Effect of COVID-19 on the Heart by Continuous ECG Monitoring/Lamberts <i>et al.</i> /NCT04395664	Recruiting	Observational	1,000	The investigators aim to examine if continuous ECG monitoring can be used to understand the contribution of COVID-19 infection in the acute phase to the development of cardiac arrhythmias, especially focusing on cardiovascular outcomes. In all patients included, the investigators aim to examine if continuous ECG monitoring - alone and in combination with biomarkers - can be used to detect early signs of cardiac complications and predict long-term risk of cardiovascular morbidity and mortality following COVID-19 infection.	Primary outcome: -In-hopsital mortality during hospitalization frame: 4 months) -Incident ICU admission during hospitaliza
52	COVIDAR - International Registry on Arrhythmias in COVID-19/Arbelo <i>et al.</i> /NCT04437901	Not yet recruiting	Observational (patient registry)	10,000	This study aims to describe the incidence and type of arrhythmic events in the context of the SARS-CoV infection.	Primary outcome: -Arrhythmia (time Fame: from date of adm arrhythmic adverse event or date of death up to 12 months)
						Secondary outcome: -Electrocardiographic changes (underlying duration, presence of Brugada QRS patter -Lab abnormalities (electrolyte misbalance function)
53	Remote Monitoring in Patients With Coronavirus Disease (COVID-19)/Reddy <i>et al.</i> /NCT04350476	Not yet recruiting	Interventional (clinical trial): intervention tested: VitalConnect Vital Sign Patch which is a home monitoring system	1,000	The aim of this study is to assess the impact of remote cardiac and vital sign monitoring in patients with COVID-19 in the outpatient setting.	Primary outcome: -Number of different arrhythmias (time fram -Temperature -Oxygen saturation
CVD cor	norbidity and effect on COVID-19 related studies					
54	Cardiac Complications in Patients With SARS Coronavirus 2 Registry/Asselbergs <i>et al.</i> /NCT04325412	Recruiting	Observational (patient registry)	1,000	The aim of CAPACITY is to collect data regarding the cardiovascular history, diagnostic information and occurrence of cardiovascular complications in COVID-19 patients in order to aid in providing more insight in (1) the incidence of cardiovascular complications in patients with COVID-19, and (2) the vulnerability and clinical course of COVID-19 in patients with an underlying cardiovascular disease.	Primary outcome: -The incidence of cardiovascular complica days)
55	Characterization of Cardiovascular Diseases and Risk Factors in Patients With Suspected SARS-CoV2/Covid-19 Infection/Rassaf <i>et al.</i> /NCT04327479	Recruiting	Observational (patient registry)	728	This study aims to characterize the effect of pre-existing cardiovascular conditions on mortality in patients with COVID-19 infection.	Primary outcome: -All cause mortality (time frame: during 1 y
						Secondary outcome: -30- day mortality (time frame: within 30 d -Major adverse cardiovascular events (tim

Table S1(continued)

frame: 19 months)

ation and a confirmed COVID-19 diagnosis (time

alization and a confirmed COVID-19 diagnosis

dmission until the date of first documented ath from any cause, whichever came first, assessed

ying rhythm, atrioventricular conduction, QRS atter, QTc duration) ance, cardiac biomarkers, renal function, liver

frame: 7-14 days)

lications in patients with COVID-19 (time frame: 30

g 1 year follow-up)

D days after inclusion) time frame: during 1 year follow-up)

Study number	Title/PI/NCT#	Status	Trial design	Estimated enrollment	Comments	Objective
56	COVID-19 in Hospitalised Patients With Preexisting Cardiovascular Diseases and/or Cardiac Involvement and/ or Cardiovascular Risk Factors: the Global PCHF-COVICAV Registry/Flammer <i>et al.</i> /NCT04390555	Recruiting	Observational (patient registry)	1,500	Patients with cardiovascular diseases, heart failure in particular, and cardiovascular risk factors seem to be at a very high risk if affected by COVID-19 - and vice versa there are more and more reports of cardiac manifestations with the viral disease. This study looks at the effect that comorbid cardiovascular conditions have on the COVID-19 disease course.	Primary outcome: -In-hospital mortality (time frame: Hospital -All-cause and cardiovascular mortality du
57	Impact of Covid-19 in Congenital Heart Disease - COVID-CHD/Amedro <i>et al</i> ./NCT04336384	Recruiting	Observational	5,000	Cardiovascular disease appears to be a risk for severe COVID-19 infection. The population of congenital heart disease (CHD) might also be at risk, however, no data is available in this group of patients. This study aims to assess the morbidity, the mortality and the risk factors associated with Covid-19 in patients with CHD in France.	Primary outcome: -Prevalence of COVID-19 infection in the c completion, an average of 2 weeks)
58	Impact of COVID19 Outbreak in Cardiac Patients Admitted in Intensive Care Unit: the CCU-COVID19 Study/Silvain <i>et al.</i> / NCT04344912	Recruiting	Observational (patient registry)	500	This registry will evaluate the impact of the COVID19 outbreak on cardiac patients admitted in the ICU of the Pitie-Salpetriere Hospital in Paris, France.	Primary outcome: -Incidence of recurrent major cardiovascul (time frame: from admission to one year fo
59	Prospective Observational ICU Trial in Critical III COVID-19 Patients (POINT-C) Cardiovascular Risk and the Effects on Myocardial Events in Critical III COVID-19 Patients/Rief <i>et al.</i> / NCT04349982	Recruiting	Observational (patient registry)	50	The aim of this study is to observe the intensive care course in 30-50 COVID-19 patients with regard to cardiovascular risk factors and biomarkers.	Primary outcome: -ICU CV risk and Biomarker (e.g., Troponir weeks)
						Secondary outcome: -CV risk and Outcome during ICU stay
60	Qatar Cardiovascular COVID-19 Registry/Al Suwaidi <i>et al./</i> NCT04430374	Recruiting	Observational (patient registry)	100	Described in the initial data, COVID-19 infection poses increased risk to patients with cardiovascular comorbid conditions. This study aims to assess patients with cardiac disease with COVID-19 in Qatar and the acute myocardial infarction with COVID-19 from the Gulf countries and collect all the related data to come with a comprehensive view about those patients.	Primary outcome: -The impact of COVID-19 on cardiovascula date)
61	Changes in Organ Specific Biomarkers, Virus Expression and Prognosis of Covid-19/University Hospital, Akershus/ NCT04314232	Recruiting	Observational	200	Covid-19 is associated with a wide range of symptoms and clinical trajectories, and early identification of patients at risk for developing severe disease is desirable. This study aims to assess the prognostic value organ specific biomarkers, viral dynamics and immune response markers in patients infected with SARS-CoV2.	Primary outcome: -Number of participants with ICU admissio (baseline) until the date of either admission hospitalization (up to 52 weeks))
62	Risk Factors, Personalized Prognoses and 1-year Follow-ups of Patients Admitted to Spanish Intensive Care Units Due to COVID-19/Torres <i>et al.</i> /NCT04457505	Recruiting	Observational (patient registry)	5,000	This study aims to characterize the risk factors associated with patients who develop severe disease and have high mortality rates. Amongst other things the investigators explore how cardiac comorbid conditions affect outcomes in COVID-19.	Primary outcome: -One year mortality (time frame: At 12 mor -Six month mortality (time frame: At 6 mor

Table S1(continued)

italization period, assessed up to 30 days) during index hospitalization.

e overall CHD population (time frame: through study

cular events (MACE) and urgent rehospitalization r follow up)

nin) (time frame: through study completion, up to 4

cular patient (time frame: 2 month from starting

sion or death (time frame: From hospital admission ion to the ICU or death during the index

nonths of ICU admission) nonth of ICU admission)

Study number	Title/PI/NCT#	Status	Trial design	Estimated enrollment	Comments	Objective
63	Early Risk Stratification of Patient Hospitalized for SARS- CoV2 Infection: Critical COVID-19 France CCF/Bonnet <i>et al.</i> / NCT04344327	Completed	Observational	2,878	This study aims to identify early predictors of clinical worsening in patients hospitalized for COVID-19 in the cardiology or conventional medicine department. Clinical data relating to history, comorbidities, risk factors, treatments, clinical parameters, biological and cardiological data, procedures and events during	Primary outcome: -Death rate (time frame: through study con -transfer to ICU -ventilation analysis Secondary outcome:
64	Accurate Classification System for Patients With COVID-19 Based on Prognostic Nomogram/Gong <i>et al.</i> /NCT04302688	Completed	Observational	669	hospitalization will be recorded. In this study, a COVID-19 pneumonia grading scale was set up and the score system was validated to predict the clinical outcome of a patient. This grading system was compared with SEPSIS and CURB-65 grading system. The investigators specifically aim to describe the effect of cardiac comorbid conditions on COVID-19 mortality.	-Construction of a predictive score for CO Primary outcome: -Survival status (time frame: 10 December
65	Time of Recovery and Prognostic Factors of COVID-19 Pneumonia/Mingrone <i>et al.</i> /NCT04324684	Completed	Observational	198	This study will assess the recovery rate in patients with COVID-19 pneumonia with certain comorbidities. Comorbidities include hypertension, obesity and/or type 2 diabetes, cardiovascular disease, and chronic obstructive lung disease.	Primary outcome: -Rate of recovery (time frame: 3 weeks) Secondary outcome: -Time to improvement -Efficacy of treatments -Organ failure
66	Cardiovascular Disease, Cardiovascular Risk Factors, Treatments and Severe COVID-19 Outcomes. A Nationwide Registry-based Case-Control Study/Karolinska Institutet/ NCT04426084	Active, not recruiting	Observational (patient registry)	22,784	This study cross-references several nationwide high-quality Swedish registers in order to study risk factors and the effect they have on outcomes for severe COVID-19, with a focus on cardiovascular disease, different treatments and socioeconomic factors.	Primary outcome: -Severe Covid-19 (time frame: 2020-03-01 -Severe COVID-19 with pulmonary embolis Secondary Outcome: -CRRT(Continuous Renal Replacement The -ECMO (Extracorporeal Membrane Oxyger -ICU Mortality
67	Coronavirus Disease 19 Survival - The COVIVA Study/ Twerenbold <i>et al.</i> /NCT04366765	Recruiting	Observational	1,500	This study aims to i) perform extensive clinical and biomarker phenotyping in COVID-19 suspects presenting to the emergency department (ED) as well as admitted to the intensive care unit, ii) compare clinical and biomarker profiles of COVID-19 patients with a control group, iii) derive and validate personalized risk prediction models for early clinical decision support, and iv) explore pathophysiological mechanisms.	Primary outcome: -Short-term prognosis (time frame: at 30 d
68	Cardiovascular Risk in COVID-19 Patients: Metabolic, Prothrombotic and Proinflammatory Mechanisms Associated With Outcome and With Cardiorespiratory Features During the Acute Viral Disease and at Short Term Follow-up/Parati <i>et al.</i> /NCT04371289	Not yet recruiting	Observational	5,500	The goals of this study are to comprehensively assess risk factors for severe COVID-19 syndrome, study pathophysiology of its cardio-respiratory manifestations, estimate risk scores using artificial intelligence, and assess its clinical immunoinflammatory and cardiorespiratory sequelae in discharged patients at short term follow-up.	Primary outcome: -predictive modeling of in-hospital outcom -clinical, pathophysiological and molecular -short-term sequelae

Table S1(continued)

completion, an average of 4 weeks)

COVID-19 severe form

per 2019 to 10 February 2020)

-01 to 2020-05-11) polism

Therapy) genation)

days)

ome (time frame: 12 months) ular mechanisms

Study number	Title/PI/NCT#	Status	Trial design	Estimated enrollment	Comments	Objective
69	Impact of Comorbidities on COVID19 Outcome/Hassan <i>et al.</i> /NCT04459390	Not yet recruiting	Observational	100	The aim of this study is to assess the impact of comorbidities in patients with diagnosis of COVID-19 on outcome, in order to find the predicator of prolonged hospital stay, need for ICU admission or poor outcome.	Primary outcome: -rate of recovery/ICU admission/need for r -time to improvement
70	WHF COVID-19 and Cardiovascular Disease Survey/Silwa et al./NCT04475471	Recruiting	Observational	5,200	The aim of this global study is to better understand cardiovascular conditions that increase the risk of developing severe COVID-19, and a better characterization of cardiovascular complications in hospitalized patients with COVID-19.	Primary outcome: -Assessment of the patients for major adv Outcome will be assessed at discharge an -Assessment of the patients for Pulmonary pneumonia, acute respiratory distress syn- in ICU or ICCU, need of ventilator -Assessment of the patients for Neurologic Ischemic Attack (TIA) -All cause deaths
Myocard	ditis related studies					
71	Cardiovascular and Pulmonary Imaging in SARS-CoV-2: A Study of the Heart, Lungs and Wellbeing After COVID-19./ Berry et al./NCT04403607	Recruiting	Observational	180	COVID-19 places patients at high risk for myocardial injury. This study uses cardiac imagin (MRI and CTA coronary) at 28 days post discharge to identify the number of patients with myocardial inflammation (myocarditis).	Primary outcome: -Proportion of patients with a diagnosis of frame: 28 days after discharge from hospit
72	Hospital Registry of Acute Myocarditis: Evolution of the Proportion of Positive SARS-COV-2 Cases During the Covid-19 Pandemic, Case Characteristics and Prognoses/ Delmas <i>et al.</i> /NCT04375748	Recruiting	Observational	400	A significant association was found between troponin elevation, and that of CRP and NtproBNP, suggesting an inflammatory part to this cardiac damage. In the context of the viral pandemic at Covid19, although few data exist, it is legitimate to consider the possibility of true arrays of acute inflammatory myocarditis or by direct viral attack which could thus modify the natural history and the prognosis of patients.	Primary outcome: -Assess the proportion of positive SARS-0 (hospitalized for acute myocarditis) (time fi
73	Imaging Cardiac Phenotype of SARS-Cov-2 (Covid19) Infected Patients/Minville <i>et al.</i> /NCT04358952	Recruiting	Observational	50	The objective of this study is to define cardiac phenotype in covid using comprehensive cardiac imaging tools of patients infected with Covid 19 in order to explore the functional impact of the infection on the myocardium. Patients with biological myocardial involvement will be followed to determine the evolution of their myocardial functional parameters during the course of the infection.	Primary outcome: -left ventricular function (time frame: Day 0 Secondary outcome: -inflammatory biological parameters
74	Cardiac Involvement in Coronavirus (SARS-Cov-2) Infected Health Care Workers: The CCC Study/Sanchez <i>et al.</i> /NCT04413071	Completed	Observational	142	The aim of this study is to look at prevalence of myocardial damage suggestive of myocarditis and the prevalence of pericarditis in HUSA healthcare workers during a 3 month period. These will be related to the systemic immune response to SARS-CoV-2.	Primary outcome: -Myocarditis and pericarditis incidence (tin Secondary outcome: -Atrial fibrillation -Ischemic heart disease -Dilatation of right hear chambers -Valvular heart disease -Rhythm disorders

Table S1(continued)

for mechanical ventilation (time frame: baseline)

adverse cardiovascular events (MACE) (time frame: e and 30-day follow-up visit)

nary outcomes including Pulmonary embolism, syndrome, need of intensive care - number of days

ogical Outcomes including stroke and Transient

s of myocardial inflammation (myocarditis) (time spital)

RS-CoV-2 cases among the patients included ne frame: 1 year)

ay 0,3,7)

(time frame: up to 3 months)

	(<i>continuea</i>)					
Study number	Title/PI/NCT#	Status	Trial design	Estimated enrollment	Comments	Objective
75	Uncovering the Cardiac Phenotype of Individuals With SARS-COV-2 and Cardiac Injury/Grodin <i>et al.</i> /NCT04435457	Not yet recruiting	Observational (patient registry)	70	The aim of this study is to better understand the epidemiology of cardiac injury in acutely ill COVID-19 patients through deep cardiac phenotyping and identify the molecular profile of individuals most susceptible to cardiac injury from COVID-19.	Primary outcomes: -prevalence of myocarditis (time frame: up Secondary outcomes: -prevalence of cardiac abnormalities by car -prevalence of molecular and genetic immu
Cardiac	injury related studies					
76	Acute Cardiovascular Events Triggered by COVID-19-Related, Non-infectious Stress The Jordan COVID-9 caRdiovascular Events (JoCORE) Study/Hammoudeh <i>et al.</i> /NCT04368637	Recruiting	Observational	50	Acute coronary events are often triggered by emotional/stressful events. This observational study aims to assess the incidence of acute cardiovascular events triggered by COVID related stress.	Primary outcome: -Acute cardiovascular event triggered by C -Ventricular tachycardia -Acute stroke -Implantable cardioverter defibrillator
77	An Observational Study of Hospitalised Patients With Coronavirus Disease 2019 (COVID-19) to Determine the Degree of Myocardial Injury Using Biomarkers and Echocardiography, and the Impact of This on Cardiovascular Outcomes/Weir <i>et al.</i> /NCT04438993	Recruiting	Observational	100	The primary objective of the study is to evaluate the prevalence of myocardial injury and cardiac dysfunction in patients admitted to the hospital with COVID infection. Several biomarkers will be collected (Troponin, pro-BNP and ferritin) as well as an ECG and echocar- diogram.	
78	Association of Early Myocardial Injury With Major Adverse Outcomes in Patients With COVID-19/Kini <i>et al./</i> NCT04397939	Recruiting	Observational	5,000	The aim of the proposed study is to analyze the incidence, clinical outcomes, and predictors of myocardial injury in a large patient population with COVID-19 treated in Mount Sinai Hospital (MSH) system.	Primary outcome: -in-hospital death (time frame: During hosp Secondary outcome: -length of stay
79	Cardiac Arrest Incidence and Outcome Among Patient With COVID-19 Pneumonia in French ICUs/Chelly <i>et al.</i> / NCT04373759	Recruiting	Observational (patient registry)	100	This study aims to report the incidence of ICUCA among patients hospitalized in French ICU for COVID-19 and to report the morbidity and mortality among COVID-19 patients admitted alive in ICU for an OHCA or an IHCA.	Primary outcome: -Incidence of unexpected cardiac arrest (tir
80	Cardiovascular Manifestations of Hospitalized Patients With Coronavirus Disease 2019/Koutroumpakis <i>et al.</i> / NCT04335630	Recruiting	Observational	500	This study aims to describe the effects of COVID on the cardiovascular system. Cardiovascular disease associated with COVID-19 might be contributing to the high mortality rates and its recognition will allow for prevention, early diagnosis, and appropriate treatment. Laboratory evidence of myocardial injury, electrocardiographic changes, arrhythmias and echocardiographic abnormalities will be used to evaluate this.	Primary outcome: -Prevalence of cardiomyopathy, myocardia arrhythmias, cardiogenic shock or cardiac
81	Effect of Covid-19 Epidemic on Primary PCI and Prognosis in Patients With Acute STEMI/Li <i>et al.</i> /NCT04427735	Recruiting	Observational	200	During the pandemic there have been concerns that patients with STEMI requiring PCI may have poorer outcomes due to delays as a result of COVID testing. This study compares patients with STEMI requiring PCI to a group of patients during the same time in 2019 to assess outcomes.	Primary outcome: -MACE (major adverse cardiovascular ever -cardiovascular death, re-infarction, malign and stroke -all cause death

Table S1(continued)

up to 4 weeks)

cardiac magnetic resonance imaging

COVID-19 stress (time frame: 4 months)

sitive inpatients (time frame: 6 months)

o experience adverse events compared to those

ospitalization, average 2-3 weeks)

t (time frame: 7 months)

dial infarction, heart failure, clinically significant ac arrest (time frame: 1ne year)

vents) (time frame: 1 year) lignant arrhythmia, heart failure, revascularization,

	(continueu)					
Study number	Title/PI/NCT#	Status	Trial design	Estimated enrollment	Comments	Objective
82	Identification of Predictors for the Evolution of COVID-19 Related Interstitial Pneumonia by Transcriptomic and Seroproteomic Techniques/Ranucci <i>et al.</i> /NCT04441502	Recruiting	Observational	240	This study aims to verify whether there are transcripts or cytokines / chemokines in peripheral blood, modulated differently in patients with COVID-19, distinguished on the basis of the evolution towards	Primary outcome: -circulating markers for COVID-19 signatu weeks follow up)
					more severe clinical pictures that require patient intubation or that show signs of cardiovascular damage.	Secondary outcome: -COVID-19 signature and adverse cardiov COVID-19 related coagulation pattern
83	Impact of a Novel Coronavirus (2019-nCoV) Outbreak on Public Anxiety and Cardiovascular Disease Risk in China/Hao <i>et al.</i> /NCT04255940	Recruiting	Observational	12000	This survey aims to assess whether the public anxiety from a novel coronavirus (2019-nCoV) outbreak increases cardiovascular disease risk in China.	Primary outcome: -cardiovascular death (time frame: 3 mont
	et al./NC104255940				Cardiovascular events occurring after 2019-nCoV outbreak in Jinan were prospectively assessed by emergency physicians and compared those events with events that occurred during the past 3 months and the same months of the last year.	Secondary outcome: -major adverse cardiovascular events -times from symptom onset to hospital ar -anxiety
84	Joint Use of Electrocardiogram and Transthoracic Echocardiography With Other Clinico-biological Parameters in an Observational Study to Monitor Cardio- vascular Events and Predict Outcomes in Patients Diagnosed With COVID-19/Salem <i>et al.</i> /NCT04320017	Recruiting	Observational	500	Cardiovascular events have possibly been highly underestimated. The study proposes to systematically collect cardio-vascular data to study the incidence of myocarditis and coronaropathy events during COVID-19 infection. The investigators also assess predictive factors for transfer in Intensive Care Unit or death.	Primary outcome: -Incidence of acute myocardial events in (hospital stay (time frame: ECG and conco 1, day 3 day 6 the first week after admissi discharged (up to 20 days))
85	Pathology and Pathogenesis of Cardiac Injury in COVID-19 Infections in Humans/Papa <i>et al.</i> /NCT04367792	Recruiting	Observational	50	The primary goal of the study is to conduct the first systematic cardiac autopsy study in >= 50 patients dying from COVID-19 to understand the pathology and pathogenesis of cardiac injury in patients with COVID-19, with/without cardiovascular comorbidities. Such data is essential for understanding rate of involvement, type of involvement and degree of injury in patients contracting the disease.	Primary outcome: -Cardiac pathological findings from series (time frame: 1 year) -viral load in cardiac tissues and the exter -Co-localize the SARS-CoV-2 using RNAs ACE2 and serine protease TMPRSS2 in d
86	Preventing Cardiac Complication of COVID-19 Disease With Early Acute Coronary Syndrome Therapy: A Randomised Controlled Trial./Kanagaratnam <i>et al.</i> /NCT04333407	Recruiting	Interventional (clinical trial): intervention tested: drugs (aspirin, clopidogrel, rivaroxaban, atorvastatin, omeprazole)	3,170	The severity of COVID-19 disease (as well as the likelihood of progression to severe disease) appears to be in part driven by direct injury to the cardiov ascular system. Randomizing patients to cardioprotective medicine will help us understand the role of the cardiovascular system in COVID-19 disease. It will also guide future treatment.	Primary outcome: -all cause mortality at 30 days after admis
87	Prediction of Acute Heart or Kidney Injury With Cardiovascular-renal Biomarkers in Patients Hospitalised for Severe or Critical Covid-19 Infection/Central Hospital, Nancy, France/NCT04354610	Recruiting	Interventional (clinical trial): intervention tested: -biological samples specific to research, -clinical examination, -telephone follow-up three months after discharge from hospital	,	The main objective of the Nancy Cov-H-AKI study is to evaluate the association of variations (from inclusion to 72H post-inclusion) of 5 blood-based cardio-vascular-renal biomarkers selected a priori, cardiac (NT-proBNP), coagulation (D-dimers), related to the renin angiotensin aldosterone system (ACE2) and renal (Penkid, and NGAL) with the appearance of acute kidney injury KDIGO grade 1 or higher OR cardiac injury in patients hospitalised for either the severe or the critical form of Covid-19.	Primary outcome: -Worsening of renal function by at least KI infection (time frame: From inclusion to ho -Troponin greater than 99th percentile dur

Table S1(continued)

ature (time frame: from ICU/ward admission for 8

liovascular events

onths)

arrival

in COVID-19 population at baseline and during ncomitant troponin at day 1 after admission at day ission, and then at day 14 and before the patient is

ries of >= 50 patients dying from COVID-19 disease

xtent of damage NAscope in situ hybridization, with its entry receptor n different cell types found in the heart

mission (time frame: at 30 days after admission)

t KDIGO grade 1 during hospitalization for Covid-19 hospital discharge, an average of 21 days) during hospitalization for Covid-19 infection

Study number	Title/PI/NCT#	Status	Trial design	Estimated enrollment	Comments	Objective
88	Randomized, Open-Label, Controlled Trial of Colchicine to Reduce Cardiac Injury in Hospitalized COVID-19 Patients (COLHEART-19)/Ardehali <i>et al.</i> /NCT04355143	Recruiting	Interventional (clinical trial): intervention tested: colchicine tablets, other "current care" per UCLA treating physicians	150	This study investigates the potential cardio-protective effect of colchicine when added to standard of care. Participants will be randomized in a 1:1 ratio to receive Colchicine plus current care per UCLA treating physicians versus current care per UCLA treating physicians alone (control arm). Importantly, this adaptive trial design allows for patients in either study arm to receive other investigational drugs for COVID-19 as new science emerges.	Primary outcome: -Composite of all-cause mortality, need for circulatory support (MCS) (time frame: 90 Secondary outcome: -Delta (peak minus baseline) troponin leve -Delta (baseline to peak) brain natriuretic p -Change in left ventricular ejection fraction -Delta (peak minus baseline) C-Reactive p
89	The ECHOVID-19 Study - A Prospective Cohort Study Investigating the Acute Effect of COVID-19 on the Heart and Lung by Ultrasound/Biering-Sørensen <i>et al.</i> /NCT04377035	Recruiting	Observational	1,000	The investigators aim to examine if echocardiography - both conventional and advanced - can be used to predict which patients will develop acute respiratory distress syndrome (ARDS) or other short-term acute complications, especially focusing on cardiovascular outcomes. In addition, using a novel technique of lung ultrasound (LUS), the investigators aim to analyze specific LUS-findings, and associate them with short- term prognosis and development of ARDS and long- term cardiovascular morbidity and mortality.	Primary outcome: -In-hospital mortality during hospitalization frame: 2.5 months) -Incident ARDS (Adult Respiratory Distress Secondary outcome: -incidence of myocardial infarct, cardiac a
90	The Prevalence of Pulmonary Hypertension, With or Without Right Ventricular Loading, in Patients With COVID-19 Who Are Being Treated With a Respirator in the Intensive Care Unit/Lönnqvist et al/NCT04459364	Recruiting	Observational (patient registry)	80	This study looks at the incidence of pulmonary hypertension in the setting of COVID-19 pneumonia with and without right ventricular loading. The researchers plan to use on site echocardiography to evaluate these patients.	Primary outcome: -Prevalence of pulmonary hypertension ar treated in intensive care unit evaluated by
91	The Role of Adaptive Immunity in COVID-19 Associated Myocardial Injury/Mohiddin <i>et al.</i> /NCT04340921	Recruiting	Observational	140	The laboratory plans to perform immunophenotyping of peripheral T-cells in patients with COVID-19 and complications (ARDS or myocardial injury) and map this against clinical patient outcomes. The aim is to determine if there is a specific T-cell immunophenotype associated with COVID-19 and/or complications, which can be used to inform prognosis and guide potential therapies.	Primary outcomes: -T-cell immunophenotype (time frame: 12 Secondary outcomes: - Myocardial injury and mortality.
92	Cardiac Structural and Functional Characteristics in COVID-19: A Dynamic Echocardiographic Study/Pu <i>et al./</i> NCT04352842	Completed	Observational	51	This study aims to use a dynamic echocardiography study to investigate cardiac structural and functional changes in patients with COVID-19 who were admitted to the ICU. They will also compare the cardiac characteristics between deceased and survived patients.	Primary outcome: death of any cause (time frame: From adm
93	Retrospective Study of Myocardial Damage in COVID-19/ Cheng et al./NCT04312464	Enrolling by invitation	Observational	500	This study's goal is to investigate the clinical characteristics, incidence of myocardial injury, and effect of myocardial injury on the prognosis in COVID-19 patients.	Primary outcome: -The myocardial injury incidence (time fran Secondary outcome: -Clinical characteristics, Clinical course, C death

Table S1(continued)

d for mechanical ventilation, or need for mechanical 90 Days)

evel tic peptide (BNP) level ction (LVEF) on echocardiography ve protein (CRP)

ation and a confirmed COVID-19 diagnosis (time

tress Syndrome) and intensive care unit admission

ac arrest, heart failure, pulmonary embolism or stroke

n and right ventricular load in patients with COVID-19 I by routine echocardiography (time frame: Day 01)

12 months from enrollment)

admission to April 8 2020 (cutoff day))

frame: 75 days)

, Cardiovascular comorbidity, Analysis of causes of

Study number	Title/PI/NCT#	Status	Trial design	Estimated enrollment	Comments	Objective
94	Influence of COVID-19 on Vascular Endothelial Function/ Radboud University/NCT04468412	Not yet Obser recruiting	Observational	200	The aim of this prospective observational study is to investigate the predictive value of endothelial dysfunction, measured by carotid artery reactivity testing, for 1 year cardiovascular events in patients with	Primary outcomes: -endothelial dysfunction (time frame: CAF year after recovery from COVID-19)
					past COVID-19 infection.	Secondary outcomes: -major adverse cardiovascular events (MA
95	Multi-modality Imaging & Immunophenotyping of COVID-19 Related Myocardial Injury/Tarkin <i>et al.</i> /NCT04412369	Not yet recruiting	Observational	20	The aim of this study is to identify disease-specific patterns of myocardial injury in COVID-19 using non-invasive multi-modality cardiac imaging, paired with cytokine/chemokine testing, immunophenotyping of peripheral blood cells and coagulation profiles.	Primary outcomes: -number of participants with a diagnosis of myocardial infarction and/or other mechan imaging (time frame: baseline)
						Secondary outcomes: -comparison of a panel of inflammatory c categorized by cardiac diagnosis after ima -comparison of a panel of blood coagulat diagnosis after imaging
96	Myocardial Infarction Rates Overview During COVID-19 Pandemic In France: MODIF Study/Bonnet <i>et al./</i> NCT04357314	Not yet recruiting	Observational	80	The aim of this study is to investigate the rates and characteristics of patients presenting with acute myocardial infarction between March 1, 2020 to May 31, 2020 and compared those data with those of this year (2019).	Primary outcomes: -rates of patients presenting with acute m [between March 1 to May 31, 2019 and be outcomes: -patient profile during admission for acute -medical care times analysis -proportion of patients who underwent sys-
Long ter	m sequela related studies					
97	A Single-center Registry and Embedded Interventional Study of the Effects of COVID-19 With and Without Treatment With AT-001 on Cardiac Structure and Function in Patients Hospitalized for Management of COVID-19 Infection/Katz <i>et al.</i> /NCT04365699	Recruiting	Interventional (Clinical Study): intervention tested: Aldose Reductase Inhibitor	500	The aim of this trial is to determine the effects of standard of care treatment vs. standard of care plus AT-001 on cardiac structure and function and in-hospital survival in patients hospitalized for management of COVID-19 infection.	Primary outcome: -Proportion of subjects with decreased lef at time of hospitalization (time frame: 30 c -Assess the incidence of adverse events f
						Secondary objectives: -Change in left ventricular ejection fractior -Change in left ventricular end diastolic di -Biomarkers of cardiac injury -Incidence of atrial fibrillation -Frequency of ventricular arrhythmias
98	Long-term Effects of Coronavirus 2019 Disease on the Cardiovascular System in Patients Who Have Undergone a Diagnostic Nasopharyngeal Swab for SARS-CoV-2. CV	Recruiting	Observational (patient registry)	10,000	Long-term cardiovascular outcomes of these patients are entirely unknown. The investigators aim to perform a registry of patients who have undergone a diagnostic	Primary outcome: -cardiovascular mortality (time frame: 1 ye
	COVID-19 Registry/Ortega Paz <i>et al.</i> /NCT04359927				nasopharyngeal swab for SARS-CoV-2 and determine their long-term cardiovascular outcomes.	Secondary outcome: -acute myocardial infarction -stroke
99	The CardioPostCovid Study: Cardiovascular Consequences After COVID-19/Assistance Publique Hopitaux De Marseille"/ NCT04452630	Recruiting	Observational	200	The occurrence of cardiovascular complications in SARS-CoV-2 infections appears to be more frequent than in other viral respiratory infections. This study focused on the evaluation and the systematic cardiovascular follow up of patients who survived an episode of Covid-19, regardless of their cardiovascular profiles.	Primary outcome: -Presence of at least one clinical, biologic 1 month of recovering (time frame: 1 monthing)

Table S1(continued)

AR will be measured between 6 and 20 weeks and 1

MACE) (time frame: 1 year)

sis of COVID-19 related myocarditis, Type 1 or 2 chanism of cardiac injury confirmed by multi-modality

/ cytokines and immune cell profiles in patients imaging

lation markers in patients categorized by cardiac

e myocardial infarction (time frame: 3 months d between March 1 to May 31, 2020)] Secondary

ute myocardial infarction

systemic thrombolysis

d left ventricular ejection fraction ≥10% from baseline 30 days) ats from the intervention.

tion diameter

year)

gical and/or imaging cardiovascular anomaly within onth)

Study number	Title/PI/NCT#	Status	Trial design	Estimated enrollment	Comments	Objective
100	Long-term Sequelae of Severe Sars-CoV-2 Infections University of Geissen NCT04442789	Recruiting	Observational	30	The long-term consequences of the strong inflammatory response affecting various organs are currently unknown. The effects on various organ systems are assessed post recovery. Cardiovascular assessment will include echocardiogram and electrogram.	Primary outcome: -Sequelae after COVID-19 (time frame: 12
101	The Assessment of the Prevalence, Clinical Course and Treatment of COVID-19 Complications/Gasior <i>et al.</i> /NCT04453748	Enrolling by invitation	Observational	200	This study aims to assess the prevalence of particular complications after COVID-19 (ie pulmonary, cardiovascular, neurological, hepatic, and psychiatric disorders) and identify demographic and clinical risk factors of COVID-19 complications.	Primary outcome: -Prevalence of COVID-19 complications (Secondary outcome: -Assessment of risk factors of COVID-19
102	Opportunistic Screening for Asymptomatic Left Ventricular Dysfunction in COVID-19 Survivors/The University of Hong Kong/NCT04355884	Not yet recruiting	Observational	100	The aim of this prospective study is to evaluate the possible latent effects from COVID-19 in COVID-19 survivors.	Primary outcome: -new-onset cardiac arrhythmia (time fram- -elevation of NT-proBNP -left ventricular dysfunction
103	Re-assessment After Hospitalization for Sars-COV-2 Infection: Standardized Assessment of Sequelae and Comorbidities 3 to 6 Months After Hospitalization/University Hospital, Montpellier/NCT04443257	Not yet recruiting	Observational	200	The aim of this study is to explore the sequelae of patients who have been hospitalized for acute SARS- CoV-2 infection, between 3 to 6 months after discharge from hospital, by characterizing the incidence of chronic respiratory failure and fibrosis, as well as of various comorbidities such as cardiovascular, metabolic, and psychological diseases.	Primary outcome: -development or worsening of a ventilator assessed by spriometry (time frame: 3 to
						Secondary outcome: -Incidence of worsening of cardiovascular psychological pathology (anxiety, depress -Assessment of health related quality of lindevelopment or worsening of metabolic of the second sec
104	Registry of the Evolution of Diagnosed and/or Hospitalized Patients for Pulmonary Embolism During the Covid-19 Pandemic: Retrospective and Prospective Multicentric Study./Hospital St. Joseph, Marseille, France/NCT04465656	Not yet recruiting	Observational	250	The aim of this study is to classify all the complications occurring after the diagnosis of pulmonary embolism in patients tested initially COVID-19 positive and negative RT-PCR during the peak of the pandemic in France. The patients will be followed for 1 year in order to provide clinical and paraclinical data not yet published in the literature.	Primary outcome: -% of patients for each group presenting of the occurrence of at least ONE of the follow PE complications (time frame: 6 months at -chronic interstitial pathology -recurrence of PE -pulmonary hypertension -death
105	Become of Patients Infected or Suspected of Being Infected by Covid-19 and Supported by the GHPSJ and the Establishments of the Paris Plaisance Hospital City/Pilmis <i>et al.</i> /NCT04365530	Recruiting	Observational	2,000	The aim of this study is to study the long term sequela of patients infected with COVID-19 to guide future management of patients with this infection.	Primary outcome: -Clinical consequences of a Covid-19 infe Secondary outcome:
						-Risk factors at M6 (time frame: Month 6) -Risk factors at year 1 (time frame: Year 1) -Risk factors at year 2 (time frame: Year 2)
106	Analysis of Chronic Non-infectious Diseases Dynamics After COVID-19 Infection in Adult Patients/Arutyunov <i>et al.</i> / NCT04492384	Recruiting	Observational	3,500	This study aims to analyze non-infectious diseases dynamics after SARS-CoV-2 infection in adults. It includes a retrospective analysis of medical histories and outcomes in adults with pre-existing conditions after SARS-CoV-2 infection and prospective monitoring of health status during 3, 6 and 12 months after discharge.	Primary outcome: -Rate of non-infectious diseases (time frame medical help) -Severity of COVID-19 depending on pre- Disability registration / change of disability -Mortality

Table S1(continued)

: 12 months, extension if required)

ns (time frame: 2 months)

19 complications (time frame: 2 months)

ame: at the time of screening)

atory disorder and/or chronic respiratory failure 3 to 6 months after SARS CoV-2 infection)

ular diseases, renal disease, liver disease, ression, post-traumatic stress, and insomnia) of life, fatigue, socioeconomic deprivation, lic disorders, auto-immune disorders

ng the occurrence of PE complications defined by following events up to 6 months after PE diagnosis as after PE diagnosis)

infection in the care population (time frame: Year 2)

n 6) ar 1) ar 2)

frame: 12 month since a moment of request of

ore-existing diseases bility status

Study number	Title/PI/NCT#	Status	Trial design	Estimated enrollment	Comments	Objective
107	Follow-up of Critical COVID-19 Patients (FUP-COVID)/Uppsala University/NCT04474249	Recruiting	Observational	300	The study will follow COVID-19 patients who required intensive care. The patients will be contacted after three to six months for a first follow-up with assessment of functional level in activities of daily life, psychiatric symptoms, neurological symptoms and working capacity as well as specific organ functions. The organ functions will include circulation, respiration, coagulation, immune function and kidney function. In addition, blood and urine will be collected for biobanking.	Primary outcome: -Mortality (time frame: within 90 days after -Mortality (time frame: within 1 year after a
108	Hemodynamic Characteristics of Patients With SARS-CoV-2: PiCCOVID Study/Monnet <i>et al.</i> /NCT04337983	Recruiting	Observational	200	This study is a systematic assessment of cardiovascular system in COVID survivors, including echocardiography evaluating the left ventricular function and transpulmonary thermodilution of patients who survived COVID.	-
Effect of	f COVID-19 on elective cardiac procedure related studies					
109	Randomized Controlled Trial of Digital Cardiac Counseling in Patients With Delayed Cardiac Surgical Treatment Due to Covid-19 Pandemic (DCC Trial)/Nia <i>et al.</i> /NCT04393636	Recruiting	Interventional (clinical trial): intervention tested: digital cardiac counseling	394	There are some studies showing an increased mortality associated with an increased waiting time for the patients on the waiting list for an elective cardiac surgery. The rationale for this study is to evaluate whether Digital Cardiac Counseling (DCC) would improve outcomes of the patients waiting for an elective cardiac operation. At the DCC platform, there will be assessments of cardiovascular symptoms, Covid-19 prevention for cardiovascular patients, smoking cessation, anxiety relief, exercise stimulation, pulmonary rehabilitation and diet adjustments.	Primary outcome: -MACEs (time frame: Cumulative incidence Secondary outcome: -all-cause mortality, cardiovascular related
110	Morbidity and Mortality Due to Deferral of Aortic Valve Replacement in Patients With Severe Aortic Stenosis - a Collateral Effect of the SARS-CoV-2 Pandemic (AS DEFER)/ Pilgram <i>et al.</i> /NCT04333875	Active, not recruiting	Observational (patient registry)	71	The COVID-19 pandemic has resulted in elective cardiac procedures being cancelled. The aim of this study is to investigate the effect of deferral of valvular replacement in patients with severe but not critical aortic stenosis on morbidity and mortality. The study will describe the rates of morbidity and mortality among patients with severe but not critical aortic stenosis in the interval from referral /indication for valvular replacement to intervention.	Primary outcome: Composite of all-cause mortality, disabling for heart failure (time frame: Assessed at 6 replacement)
Effect of	f social isolation related studies					
111	Psychological Impact of Quarantine During the COVID-19 Outbreak and Worsening of Cardiovascular Risk in the French General Population: a Prospective Cohort Study/Berard <i>et al.</i> /NCT04397835	Recruiting	Observational	800	This study aims to assess risk factors for severe stress, anxiety or depression, during and after quarantine, as well as risk factors (including stress, anxiety or depression), in the worsening of cardiovascular risk. A telephone interview will be carried out during quarantine (V1), in the month following the end of quarantine (V2) and then, at 6 (V3) and 12 (V4) months.	Primary outcome: -worsening of cardiovascular risk (treatme gain, physical activity) (time frame: at 1, 6 Secondary outcome: -psychological impact of the quarantine of

Table S1(continued)

after admission to ICU) ter admission to ICU)

udy completion, an estimation of 6 months)

systolic left ventricular dysfunction

ence (from inclusion) at 1 year postoperatively)

ted mortality, COVID-19 related mortality

oling and non-disabling stroke, and hospitalization at 6 months after indication/referral for aortic valve

ments, smoking consumption, food balance, weight , 6 and 12 month)

on anxiety, stress, and health

Study number	Title/PI/NCT#	Status	Trial design	Estimated enrollment	Comments	Objective
112	COVID-19 Related Lockdown Effects On Chronic Diseases/ Centre Hospitalier Universitaire Dijon/NCT04390126	Active, not recruiting	Observational	1,200	The aim of this study is to assess the health impact of the containment related to the COVID-19 pandemic in patients with chronic diseases. The study's hypothesis is that in patients with chronic diseases, confinement leads to changes in health behaviors, non-adherence to pharmacological treatment and increased psychological stress leading to subsequent increased risk of deterioration in health status in short, medium, and long term.	Secondary outcome:
113	Cardiovascular Prevention During COVID-19 Pandemic Lockdown in Young Adults (COLA Trial)/Brunner <i>et al.</i> /NCT04361877	Recruiting	Observational	1,900	The study aims to determine the impact of COVID-19 pandemic lockdown on cardiovascular prevention behaviour.	Primary outcome: Change of physical activ Secondary outcome: change in nutrition, s of smoking behavior, change of stress level
114	Integrated Distance Management Strategy for Patients With Cardiovascular Disease (Ischaemic Coronary Artery Disease, High Blood Pressure, Heart Failure) in the Context of the COVID-19 Pandemic/Burlacu <i>et al.</i> /NCT04325867	Recruiting	Interventional (clinical trial): intervention tested: telemedicine platform of remote monitoring through wearable devices		Given the Covid-19 pandemic, patients with complex cardiovascular conditions are under the obligation to stay in the house isolated and can no longer come to standard clinical and paraclinical monitoring and control visits. Therefore, a remote management solution (tele-medicine) of these patients must be found. The investigators aim to create an electronic platform to communicate with these patients and offer solutions for their cardiovascular health issues.	
115	A Telerehabilitation Approach to Improve Long-term Physical Ability and Quality of Life in Patients With Severe Acute Respiratory Syndrome Coronavirus (SARSCoV-2, COVID-19) Immediately After Hospitalization. The ATHLOS Study/Kortianou <i>et al.</i> /NCT04368845	Recruiting	Interventional (clinical trial): intervention tested: telerehabilitation device that includes breathing exercises and aerobic and resistance training exercises administered by a physiotherapist	100	The researchers test the efficacy of telerehabilitation by means of a device that includes breathing exercises and aerobic and resistance training exercises administered by a physiotherapist.	Primary outcome: -Physical Performance (time frame: Chang 3 and 6 months) -Cardiorespiratory fitness -lower limb strength -health related quality of life -anxiety and depression -physical activity Secondary outcome:
						-fatigue -dyspnea
116	Does a Systematic Phone-call by a Medical Student/General Practitioner Team in Patients Suffering From a Chronic Condition During the COVID-19 Containment Period Impact One-month Hospitalization's Rate in France? A Cluster Randomized Trial/University Hospital, Tours/NCT04359875	Not yet recruiting	Interventional (clinical trial): intervention tested: behavioral-phone-call screening and management by a medical student/ general practitioner tandem		COVIQUEST project is cluster randomized trial designed to assess the optimizing of the screening and management of patients with chronic condition at risk of decompensation through a collaboration between the general practitioner and medical student. The goal is to assess the occurrence of hospitalization during a one-month period after a phone call in the setting of COVID-19 quarantine	Primary outcomes: -hospitalization(s) at one month (time fram Secondary outcomes: -phone call from general practitioner, mort secondary care, number of prescriptions re pharmacy, number of, time to, duration of, 6 months, cardiovascular events (MACE), p

Table S1(continued)

class (time frame: during the period from 20 April

ts at 1 year (time frame: throughout the study for 12

vle, difficulties accessing care, and measurement ecific questionnaire (score between 0 and 24): (time 2020 to 7 May 2020)

activity (time frame: 14 days)

n, semiquantitative change of alcohol intake, change evel, step count

(e-health) for remote managing cardiovascular

tform

ange From Baseline in SPPB Scores at

ame: 1 month)

nortality at one month, use of primary care and ns related to the chronic disease dispensed by the n of, and reason for hospitalization, mortality at E), psychotropic drugs

Study number	Title/PI/NCT#	Status	Trial design	Estimated enrollment	Comments	Objective
117	The Heart Hive COVID-19 Study: A Longitudinal Observational Study of the Impact and Clinical Outcomes of the COVID-19 Pandemic on Individuals With Heart Muscle Disease/Ware <i>et al.</i> /NCT04468256	Not yet recruiting	Observational	1,000	The aim of this study is to conduct serial surveys in patients with cardiomyopathy and subjects without heart disease evaluating the health-related, behavioral and psychological impact of the COVID-19 pandemic, and to use national registries and medical records to longitudinally assess hospital admissions and patient mortality from COVID-19 for UK-based participants.	Primary outcomes: -qualitative measure of exposure, percepti COVID-19 pandemic (time frame: 2 years) -health outcomes
Other re	lated studies					
118	CoronaWatch - Early Detection of Cardiovascular Risks in COVID-19 Via SmartWatch/Meder <i>et al.</i> /NCT04376853	Recruiting	Observational	50	Investigators aim to determine whether the addition of SmartWatches enhances risk stratification and early detection of complications and prognostics in patients with COVID-19 who have cardiovascular disease or receive medication with arrhythmogenic potential.	Primary outcome: -Biomarker (time frame: 3 months) -Identification of biomarkers (laboratory-ch early detection of complications and progr
119	Multi-Center Prospective Cohort Study: Impact of Burnout on Cardiovascular and Immune Biomarkers Among Frontline Healthcare Professionals During Covid-19 Pandemic in Abu Dhabi Emirate/Almahmeed <i>et al.</i> /NCT04422418	Recruiting	Observational	200	The objective of this study is to investigate the evolution of psychological, cardiovascular, and immune markers in healthcare professionals with different levels of exposure to the COVID-19 pandemic. These markers will be stratified by the level of exposure to the COVID-19 pandemic, positive diagnosis of COVID-19, profession, sex, age, and already existing cardiovascular risk	Secondary outcomes: -Change from baseline -Cardiovascular risk through heart rate vari frame: baseline, 2-3 months, 6 months) -Data is collected through wearable monitor
120	Robot Assisted Percutaneous Cardiovascular Intervention as a Strategy to Reduce or Risk of Intra-Procedure Contamination by COVID-19 and Other Respiratory Viruses/ Lemos <i>et al.</i> /NCT04379453	Recruiting	Interventional (clinical trial): intervention tested: robot assisted percutaneous cardiovascular intervention	10	COVID-19 pandemic increased the interest in performing procedures with robotic assistance. This allows timely intervention without exposing physicians or patients to transmission of airborne infections.	Primary outcomes: -Successful cardiovascular intervention (tir -Performed with the professional team pos 50% of the duration of the intervention -absence of fatal complications caused by occlusion during index admission
121	Stain Therapy and COVID-19 Infection (STACOV Project) /Masana <i>et al.</i> /NCT04407273	Recruiting	Observational	1,200	Considering that stains interfere with SARS-CoV-2 cellular uptake and some inflammatory pathways activated by the virus, the researchers hypothesize that patients on statin therapy should be less vulnerable to infection and their clinical course and prognosis potentially better than individuals not on statin therapy.	Primary outcome: -SARS-CoV-2 scale of severity (9 steps) in (time frame: at the time of admission)
122	International Study on Acute Coronary Syndromes - ST-segment Elevation Myocardial Infarction COVID 19/Università degli Studi del Piemonte Orientale "Amedeo Avogadro"/NCT04412655	Active, not recruiting	Observational	6,609	This is a retrospective multicenter registry study aimed at estimating the real impact of COVID-19 pandemic on treatment and outcome of STEMI by primary angioplasty, and to identify risk factors for delays in interventions or deferral in seeking treatment.	

ption of risk, behavior, and experience during the rs)

-chemical, clinical, digital) for risk stratification and ognosis

variability markers at 2-3 months and 6 months (time

nitoring technology

(time frame: Until the end of the procedure) positioned at > 2 meters from the patient for at least

by the procedure or acute non-fatal vessel

in COVID-19 infected patients with statin therapy

angioplasty (time frame: March April 2019 and

angioplasty later than 12 hours from symptoms

angioplasty later than 30 minutes from PCI