

The European Research Infrastructure for Translational Medicine (EATRIS)

EATRIS Members - SARS-CoV-2 Activities and Services

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More information: www.eatris.eu/insights/eatris-covid-19

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Institution	Country	SARS-CoV-2 Activities and Services
1 University Medical Centre Utrecht	NL	<ul style="list-style-type: none"> - Sampling of COVID-19 suspected patients in the emergency response unit and in the ICU (medium/high). - Plasma and cell isolation and Olink technology for ongoing mechanisms determination. - Service provider for the Olink technology and capacity to run assays for external groups. - Luminex assay for ~150 markers available for quantification. - ARCADIA and UDAIR available to process blood/plasma/serum, urine and liquor (CSF).
2 Istituto Nazionale Tumori- IRCCS G. Pascale	IT	<ul style="list-style-type: none"> - Coordination of a Phase 2 clinical trial with Tocilizumab (monoclonal anti-IL-6) for COVID-19 infected patients. (academic nationwide study approved by the Italian Drug Regulatory Agency with 300 patients in addition to an observational study on open label participants). 1) High trough put screening technology and FDA-approved drugs library to be screened in cellular based system to identify molecules that can interfere with virus infection ; or that can reduce cytokines production 2) Multiplexing technology to measure up to 48 cytokines/chemokines on the same sample either patient's plasma (to evaluate cytokines storm induced by the virus and the effect of drugs that counteract it), or cell supernatants 3) NMR-based measurement of oxidative stress and metabolism in multiplexing in patient's plasma to eventually evaluate early deterioration and drop in oxygen saturation
3 Biomedical Primate Research Centre	NL	<ul style="list-style-type: none"> - Macaque model for SARS-CoV-2 in development. - Ongoing vaccine study from a third party to study vaccine safety and efficacy in a rhesus macaque model. - COVID-19 Macaque models (Cyno and Rhesus) for vaccine and drug studies with license in place. - COVID-19 Marmoset models available (license under approval).A221Retrieving data. Wait a few seconds and try to cut or copy again. - Capacity to analyse viral load (PCR, culture), immunological and clinical parameters (including CT scans) in addition to providing pathology reports (gross pathology and histopathology). - Lung lesions can be followed real-time using in house (pet)-CT in addition to telemetry (home cage activity and body temperature) and virological and immunological assays.
		<p>Support for the COVID-19 effort with reagents and equipment. Including:</p> <p>Bioprocess Development Upstream Process Development Molecular Biology Cell Line Development Bioprocess optimization and scale-up: Expression & Culture System Bioreactor systems (e.g. stirred-tank, wave bioreactors) Bioreactor types (glass; stainless-steel; single-use) Operation modes (batch, fed-batch, perfusion and continuous) Downstream Process Development – DSP Purification of secreted and intracellular viral particles Ultracentrifugation Membrane technology: ÄKTA Crossflow – scalable, ultrafiltration systems Chromatography: ÄKTA Platform Technology (Explorer, Avant, Pure and Pilot)</p> <p>Analytical Services (GMP) Development, Optimization and Implementation of Analytical Methods Post development and analytical method transfer for QC Analysis of cell and viral banks Batch certification Quality Control Testing Evaluation of chemical, biological, microbial, viral and endotoxin contamination Techniques and equipment available: Common Molecular Biology (SDS-PAGE, qPCR, Western Blot, ELISA...) Restriction enzyme analysis Aggregation and refolding (SEC and RP chromatography) Genomic integrity Physical/total particles Titer (Spectrophotometry, qPCR) Cell based assays for Functional and Potency determination:</p>

4	IBET - Instituto de Biologia Experimental e Tecnológica	PT	<p>TCID50 plaque assay reporter gene assays cell viability and proliferation apoptosis and cell death, antibody dependent cell mediated cytotoxicity (ADCC) signaling and secretion. Detection of adventitious agents Process related impurities and bioburden (Residual/Host Cell protein and DNA; Benzonase, Triton, BSA...)</p> <p>Mass Spectrometry Services Protein/peptide identification, including Intact Mass Determination Antibody Characterization/MAM High-throughput Quantitative Proteomics – SWATH analysis, MRM-HR and label-based quantification (e.g. ITRAQ) Fragmentation Profile Intact Protein Measurement Small Molecule Mass Measurement Small Molecule Identification & Quantification MALDI Imaging (under development)</p> <p>Advanced 3D cell Models (for Drug Development studies) Neural Hepatic Cardiac Cancer (Breast, Lung) Immuno-oncology cell models (including immune component)</p> <p>cGMP Manufacturing of Biopharmaceuticals (at Genibet): Process Development (together with IBET) Biopharmaceutical Production (Drug Substance and Drug Product) Production of Master and Working Cell Bank / Virus Seed Stock Production Fill and Finish Quality Control and Quality Assurance Services cGMP Manufacturing portfolio includes: Polysaccharides Recombinant Proteins Plasmid DNA In vitro transcribed RNA Virus and Virus Like Particles – including viral banks Cell Banks Live Microbial Products</p>
5	Testa Center	SE	<p>Availability of production equipment for protein production in pilot scale. Testa Center is a private public partnership between the Swedish government and GE Healthcare making the facility available for the Life Science community in large.</p> <p>- Scale up expertise for both upstream and downstream processes.</p> <p>- Support for upstream and downstream processes development as well as support for scale up of a start-to-finish process. Cell culture capabilities from up to 500L (pilot scale) single-use bioreactors for mammalian cells and 50L (single-use) for microbial cultures. In analogy, the harvest and protein purification capabilities range from lab bench scale instrumentation to full production scale chromatography instrumentation. The facility is non-GMP, enabling technical runs for scalability or generation of larger amounts of material for research.</p> <p>Shaker incubators and bioreactors (batch, fed-batch and perfusion): ReadyToProcess Wave25, rocking platform Applikon 1-5 L stir tank Xcellerex XDR50 dual Xcellerex XDR200 Xcellerex XDR500</p> <p>Cell separation through filtration or centrifugation: ÄKTA Flux 5 ÄKTA Flux 6 ÄKTA readyflux Depth filtration Continuous centrifugation</p>

			<p>Protein purification: ÄKTA Start ÄKTA Pure ÄKTA Pilot ÄKTA Ready ÄKTA Process Columns in a variety of sizes</p> <p>Fluid handling: WM pumps XDUO100 XDUO200 XDUO500 Bins</p> <p>Analytics: Cell counter Metabolite analyzer Microscope Blood gas analyzer SDS-PAGE & Western blot HPLC (Agilent) Spectrophotometric assays Low-voltage TEM (Vironova)</p>
6	Lund University	SE	<p>- Human antibody development using phage display technology from large combinatorial in-house synthetic antibody libraries. - Extensive experience in development of antibodies from patient derived antibody libraries using phage display technology. - Characterization of antibody binding kinetics and affinity using Surface Plasmon Resonance Technology. High throughput capabilities are available (Bruker MASS-16). Characterization of antibody binding capabilities to cells using high throughput flow cytometry (iQue Plus). - Mass spectrometry analysis with a particular focus on post-translational modifications (e.g. Thermo Q Exactive HF-X mass spectrometer with uHPLC). - Spatial omics analysis using Digital Spatial Profiler technology (nanosttring GeoMx). - Multiplexed (up to 800-plex) analysis of RNA, DNA and protein (nanosttring nCounter technology).</p>
7	SCILIFE Labs	SE	<p>- New rapid color detection method for SARS-CoV-2 (ILACO). - Array based serologic identification of COVID-19 recovered individuals. - Developing inhibitors of the main protease of SARS CoV2 and raising antibodies against the spike protein. - COVID-19 Action Plan in place: 1) SciLifeLab/KAW Program for SARS-CoV-2 virus testing, and 2) SciLifeLab Open Call for Proposals, to battle the epidemic.</p>
8	Mario Negri Institute	IT	<p>- Ongoing study on the inhibition of SARS-CoV-2 replication through the inhibition of Cyclophilin A. - Study exploring Cyclophilin A as a possible biomarker of patients at high risk of developing severe pneumonia. - Design, synthesis and characterization of peptides aimed at inhibiting SARS-CoV-2 entry into the host cells. - Establishment of a biochemical platform to evaluate binding to ACE2 of potential new drugs. - Participation to the Regione Lombardia Crisis Unit for the support of the Emergency Rooms and Intensive Care Units. - Study on the pharmacological supportive therapy in patients under ventilatory treatment. - Evaluation of the effect of early CPAP treatment on subsequent need for invasive ventilation. - Creation of a registry and a network of hospital centers to monitor clinical and epidemiological characteristics of patients not requiring intensive care.</p>
9	Rīga Stradiņš University, Institute of Microbiology and Virology (MVI)	LV	<p>- Study of the biological properties of SARS-CoV-2 by detecting the presence of virus genomic sequence in different COVID-19 patients' biological material in time of disease progression and 10 days after, as well as by determining cytokine and chemokine level; anti-human immunoglobulin class antibodies against different recombinant SARS-CoV, MERS-CoV and SARS-CoV-2 antigens using SMIA; patients' immunological status by measuring immunocompetent cells population and by analysing research and clinical data to predict the spread of SARS-CoV-2 worldwide.</p>
10	Latvian Biomedical Research and Study Centre (BMC)	LV	<p>- Vaccine study against SARS-CoV-2 development and whole genome sequencing of the virus.</p>
11	Latvian Institute of Organic Synthesis (IOS)	LV	<p>- Integrated research platform to perform discovery and pre-clinical development of new therapeutics as well as to support development of new strategies to reduce risks of COVID-19 associated complications and shortening of rehabilitation period. This includes medicinal chemistry, structural biology and pre-clinical pharmacology research as well as ADME tests. - Biological samples and clinical data from COVID-19 cases available for Latvian population. • Sequencing of SARS-CoV-2 virus samples from infected cases in Latvian population to follow virus variability associated with clinical disease outcomes. • Development of vaccine against SARS-CoV-2 based on virus epitope presentation on virus-like particles.</p>
12	San Raffaele University Hospital	IT	<p>- Key elements of Preparedness for Pandemic Coronavirus Disease 2019 (COVID-19) in Nuclear Medicine Units.</p>
13	Alternative Energies and Atomic Energy Commission (CEA)	FR	<p>- non-human primate COVID-19 Challenge Model.</p>

14	Institute of Biomedicine of Seville (IBIS)	ES	<ul style="list-style-type: none"> - Expertise in influenza vaccines - Ongoing multicenter study of coronavirus disease 2019 (COVID-19) in Solid Organ Transplant Recipients, led by Dr. Elisa Cordero, with the support of the Spanish Network for the Research in Infectious Diseases (REIPI, ISCIII). This Project has also been sent to the Immunocompromised Hosts Group (ESGICH) of the European Society of Clinical Microbiology and Infectious Diseases (ESCMID) to integrate other European research groups. - SARS-CoV-2 viral load in respiratory airways and blood as factor associated to the clinical outcomes in COVID-19 adult patients, led by Dr. Javier Sánchez Céspedes, with the support of the Spanish Network for the Research in Infectious Diseases (REIPI, ISCIII). - Research group on Clinical Research in Infectious Diseases: led by Dr. Jesús Rodríguez Baño https://www.ibis-sevilla.es/investigacion/enfermedades-infecciosas-y-del-sistema-inmunitario/investigacion-clinica-en-enfermedades-infecciosas.aspx Project: A cohort study to identify phenotypes of COVID-19 patients predictive of complications and mortality. Sent to the Urgent request for expressions of interest for extraordinary financing of research projects on SARS-VOC-2 and COVID-19 disease from the Spanish Agency Institute of Health Carlos III (ISCIII). - Research group on Computational Systems' Medicine: led by Dr. Joaquín Dopazo https://www.ibis-sevilla.es/investigacion/oncohematologia-y-genetica/medicina-computacional-de-sistemas.aspx A version of their application on mechanistic models of cellular signaling focused on the routes SARS-CoV-2 uses, and which is being updated with the maps of the Disease Maps consortium: http://hipathia.babelomics.org/covid19/ Data from a previous project reused for COVID-19: the BBVA Foundation Project Machine Learning to combat rare diseases (MLDrugRD), awarded in the call for "Scientific Research Teams - Big Data 2018", aims to use Machine Learning to extract information from the public genomics repositories, to obtain therapeutic targets or reformulation of existing drugs, that help to combat or alleviate the pain of rare diseases. Now, they are reusing the algorithms developed, in the case of COVID-19. https://bmcbioinformatics.biomedcentral.com/articles/10.1186/s12859-019-2969-0 Webpage: updated with bioinformatics resources related to COVID-19: http://www.clinbioinfospa.es/CovidResources Project: Mechanistic model based on artificial intelligence for the reuse of drugs against SARS-CoV-2 infection. Sent to the Urgent request for expressions of interest for extraordinary financing of research projects on SARS-CoV-2 and COVID-19 disease from the Spanish Agency Institute of Health Carlos III (ISCIII).
15	Vall d'Hebron Research Institute (VHIR)	ES	<ul style="list-style-type: none"> - Expertise in fast diagnosis of COVID-19. - Whole-genome sequencing of SARS-CoV-2 and other respiratory viruses in upper and lower respiratory tract specimens. - NGS re-sequencing of human infectious agents. - Bioinformatics' solutions for deep-sequencing data analysis. - Studies of viral genetic diversity (QSutils opens-source online tool). - Phase 3 Randomized Study to Evaluate the Safety and Antiviral Activity of Remdesivir (GS-5734™) in Participants with Severe COVID-19. - Phase 3 Randomized Study to Evaluate the Safety and Antiviral Activity of Remdesivir (GS-5734™) in Participants with Moderate COVID-19 Compared to Standard of Care Treatment. - Adaptive study Phase 2/3, randomized, double blind clinical trial, to evaluate the efficacy and security of sARilumab en hospitalized patients for COVID-19. - Viral Detection through qPCR. - Detection and quantification of metabolites and peptides through UPLC-MS/MS. - Determination of immunological and phenotyping parameters, including multiplex trials, through flow cytometry. - Analysis of gene expression in response to COVID-19 infections using arrays. - Imaging studies using high-performance confocal microscopy (32 channel spectral detector, high-resolution confocal detector). - BCL1/2 animal facilities and rat and mouse models for COVID-19 commercially available. - Creation of data base in RedCap for the registration of information related to COVID-19 - Express Statistical studies on the analysis and exploitation of data related with COVID-19
16	Hospital La Paz Institute for Health Research (IdiPAZ)	ES	<ul style="list-style-type: none"> - High level isolation unit; expert in pathogenic emergencies.
17	Fundacion Jimenez Diaz Institute for Medical Research (IIS-FJD)	ES	<ul style="list-style-type: none"> - BALMYS-19 project (BAttle against COVID-19 using Mesenchymal Stromal cells) - Support and advice protocol for urgent care of SUMMA 112 to epileptic seizures at home during the pandemic COVID-19 - Statins after admission for positive COVID-19. - Epidemiological study of respiratory infections due to the new Coronavirus (SARS-CoV-2) in the pediatric population. - Investigating Prognostic factors that condition cardiovascular events after a viral respiratory infection. - Adendum Patients COVID-19 positive, and in the follow-up the need for oxygen, non-invasive mechanical ventilation, ICU admission or orotracheal intubation. - Smartphone-based monitoring of mental health and psychosocial repercussions of the COVID-19. - STOP-Coronavirus: clinical, immunological, genomic, virological and bioethical factors of COVID-19. - Morphological and molecular characterization of lung in COVID-19 disease. Correlate with immune response.
18	Wageningen University and Wageningen Bioveterinary Research (WBVR)	NL	<ul style="list-style-type: none"> - BSL 3 animal facilities, able to perform pre-clinical studies with laboratory species (mouse, hamster) and other species (ferret, pig). - BSL 3 laboratory facilities for virological analysis, COVID-19 related diagnostic procedures available, immunology and pathology facilities for various species.
19	University of Ljubljana	SI	<ul style="list-style-type: none"> - New antiviral compounds development strategy against SARS-CoV-2: Serine protease inhibitors Cysteine protease inhibitors - Investigations of molecular interactions between proteins and other molecules: Development of a methodology that is also applicable to other molecular systems, such as COVID-19. Design and construct of recombinant proteins useful for analytical or diagnostic applications. Development of innovative ways to prevent interactions by using small protein domains that can bind lipid molecules. In addition, model systems of lipid membranes are being developed and used. Exploration of protein structure by introducing new methods, e.g. cryo-electron microscopy.

			<ul style="list-style-type: none"> - Characterization of pharmaceutical drugs known to affect COVID-19: study the effect of ibuprofen and other NSAIDs in the exacerbation the COVID-19 disease course ? - Immunological studies of SARS-CoV-2. - Development of innovative innate immune agonists as vaccine adjuvants.
20	August Pi i Sunyer Biomedical Research institute (IDIBAPS)	ES	<ul style="list-style-type: none"> - Severe COVID-19 infection: prevalence, clinical characteristics and outcomes. - Extracorporeal membrane oxygenation for COVID-19 Acute Respiratory Disease. - Biomarkers identification to stratify severity in COVID-19 patients (Corona-BIO). - A Phase 3 Randomized Study to evaluate the Safety and Antiviral Activity of Remdesivir (GS-5734TM) in Participants with Severe COVID-19. - A Phase 3 Randomized Study to Evaluate the Safety and Antiviral Activity of Remdesivir (GS-5734TM) in Participants with Moderate COVID-19 Compared to Standard of Care Treatment. - Comparative study of the incidence, presentation, clinical evolution and prognostic factors of SARS-Cov-2 infection in people with or without HIV infection: case and control studies. - Identification and isolation of IgG Anti COVID-19 to produce antibodies as a treatment. - International registry of COVID-19 treatments and malignant arrhythmias. - Seroprevalence study of SARS-CoV-2 in the hospital context: immunological dynamics in one year follow-up. - Determination of the Infectivity of SARS-CoV-2 in renals cells. - MIT Open Voice COVID-19 AI Dataset. - Outcomes of surgery in COVID-19 infection: international cohort study (CovidSurg). - Pre-exposure profilaxis with hydroxychloroquine in high risk medical people durin the COVID-19 pandemy. - Creation of a digital tool to optimise the management of COVID-19 patients. - Associated behaviour to a less emotional uncomfort during COVID-19 pandemy confinement. - SARS-CoV-2 and Influenzavirus co-infection. Do we have to screen for COVID-19 in an Influenza virus infection case? - Severe respiratory morbidity in COVID-19: susceptibility from early life? A prospective case-control study among severe vs. mild cases. - Randomised, double blind, controled by placebo and multicentric study to evaluate the safety and efficacy of Tocilizumab in patients with severe pneumonia and COVID-19 disease. - Post exposure prophylaxis with hydroxychloroquine for household contacts of COVID-19 cases. - Immune response gene variability and severe infection by SARS-CoV-2 prediction. - Adaptative study Phase 2/3, randomised, double blind, controled as placebo to evaluate the efficacy and safety of Sarilumab in COVID-19 patients in hospitals - Risk factors, personalised pronic and follow-up of COVID-19 patients in the Spanish Intensive Care units: CIBERESUCICOVID. - Predictive Value of ROTEM Analysis in severe COVID-19 Infection. - Timing of intubation in ARDS COVID-19 patients. - Randomised pilot study to use convalescent plasma in COVID-19 patients. - Darunavir/cobicistat/TAF/FTC post-exposure prophylaxis measure for close contacts of patients with COVID-19. - Pre-clinical development of innovative mRNA/MVA vaccines strategies against SARS-CoV-2 - Echocardiograph follow up of pregnant women with COVID-19 infection. Associated risks with severe infection and pregnancy trimester. - Short, mid and long-term effect of COVID-19 disease in the cardiovascular system.
21	IRCCS ISMETT and Fondazione Ri.MED	IT	<ul style="list-style-type: none"> - ECMOCARD: international multicenter retroprospective observational clinical study. Principal Investigator: University of Queensland-Australia. Study to evaluate the treatment with ECMO (extracorporeal membrane oxygenation) in patients with COVID-19. - Multicenter study on the efficacy and tolerability of tocilizumab in the treatment of patients with COVID-19. This a national multicenter prospective observational clinical study. Principal Investigator: Istituto Nazionale dei Tumori di Napoli. - COVID-19 and SOTR: international multicenter prospective observational clinical study. Principal Investigator: University Hospital Virgen del Rocio Spain. Study to evaluate the effect of COVID-19 in transplanted patients. - CARDIO-COVID RISK: national multicenter prospective observational clinical study. Principal Investigator: IRCCS, ISTITUTO AUXOLOGICO ITALIANO, Università Milano Bicocca e Rete Cardiologica IRCCS. Study to evaluate the cardiovascular risk in COVID-19 patients. - 20 ICU beds to treat severe COVID-19 patients. - ECMO for patients with severe COVID 19-pneumonia. - Additional services available: <ul style="list-style-type: none"> Bioinformatics Bioengineering Biophysics and Structural Biology Computer Aided Drug Design High Throughput screening Genomics Proteomics Magnetic Resonance Imaging GMP production
22	Istituto Superiore di Sanità	IT	<ul style="list-style-type: none"> - Coordinates a surveillance system integrating microbiological and epidemiological data from Italian regions and from the ISS national reference laboratory for SARS-CoV-2 that confirm COVID-19 diagnosis and perform genomic analysis. - Working groups on different topics have been created (information and communication, education and training, medical devices, infection control, drugs, immunology, epidemiology. - External triage structure to screen all patients entering the institution; design specific procedures to manage people flow in and out the hospital. - Design of different clinical protocols to assist patients with special needs and in general ensuring all the necessary clinical assistance; evaluate the epidemiology of the infection by performing rapid tests to both clinicians and cancer patients. - Study genetic variability of SARS-CoV-2 in development.
23	National Centre for Infectious and Parasitic Diseases	BG	<ul style="list-style-type: none"> - Genetic virology tests - National reference services in the diagnostics of the infected persons.

24	Ramon & Cajal Health Research Institute (IRYCIS)	ES	<ul style="list-style-type: none"> - Clinical trial to assess corticosteroid efficacy in the treatment of COVID-19 subgroup of patients. - Study of clinical, genetic and metabolic factors of patients aimed at giving personalized treatment. - Computational models applied to the epidemiological study of the COVID-19 disease and as a predictive tool to design COVID-19 patient management. - Development of aptamers for therapeutic purposes of COVID-19. - Multi-approach epidemiology, diagnosis and therapy by drug repositioning. - Building of a RedCap data base for COVID-19 patients, including clinical and molecular data.
25	University of Lisboa	PT	<ul style="list-style-type: none"> - Currently reinforcing the COVID-19 testing capacity with 300 tests/ day and scaling up to 750 tests/ day, in strict collaboration with Hospital de Santa Maria (one of the first-line central hospitals to treat COVID-19). Collection and processing of patient samples through the hospital biobank. - Biomarker discovery project: specific detection of viral nucleic acids (including RNA extraction, primer set optimisation and eventual adjustments to natural virus sequence variation); specific detection of antibodies for immunoassays (including production of SARS-CoV-2 protein and antigens coating). - Validation of sensitivity and specificity of assays to detect virus infection (nucleic acid detection) and immunological status (virus specific seroconversion). - Development of in vitro and in vivo infection models to identify novel therapeutic targets and study the safety and efficacy of treatments. - Vaccine design and development - Clinical trials of novel COVID-19 treatments. - Epidemiologic studies.
26	Leiden University Medical Centre	NL	<ul style="list-style-type: none"> - The virology lab at LUMC (www.lumc.nl) has been working on SARS-CoV and MERS-CoV since these emerged in the human population: combination of basic and translational research on these viruses. Focus on thoroughly understanding these viruses and their interactions with host cells, and use this knowledge to develop innovative antiviral strategies, including vaccines and antivirals. Analyses of infections in both cell culture as well as mouse models are possible in the BSL-3 facilities, including testing the efficacy of vaccines and antivirals.
27	University of Helsinki/FIMM	FI	<ul style="list-style-type: none"> - Development of virus tests to detect infected people (collaboration with UH dept. of Virology). - Development of Serological Tests to detect people who already have protective antibodies against SARS-CoV-2 virus (collaboration with UH dept. of Virology). - Drug development programme (small molecules, antibodies) in collaboration with UH dept. of Virology. - Human genetics to understand why some people get serious COVID-19 symptoms. - Virus sequencing (collaboration with UH dept. of Virology). <p>- Communication and effort facilitation, problem solving (network, public, government, funding bodies, Bio-Industry) (industry, FIMM, collaboration with UH/Dept. Virology).</p>
28	AIBILI- Coimbra	PT	<ul style="list-style-type: none"> - Regulatory Support available: Personnel available to perform submission (according to the fast-track procedure), contracts negotiation (agreements), monitoring activities, remote monitoring and can setup on-site visits if needed. - Data Centre (certified by ECRIN-ERIC) able to develop/provide eCRF and data management activities.
29	Instituto de Investigación Biomédica de Málaga (IBIMA)	ES	<ul style="list-style-type: none"> - Randomised phase 3 study to assess the safety and antiviral activity of remdesivir (GS-5734TM) in participants with severe COVID-19 infection. Sponsor: Gilead Sciences
30	Health-RI	NL	<p>Data services and tools to facilitate COVID-19 research - Finding the right data sets, curating them where necessary, making them accessible to researchers, linking - data from many different sources and making rich data sets reusable often is nontrivial. Making data findable</p> <p>Health-RI is inventorying existing COVID-19 related data collections, images and samples. As a next step, all relevant data sets will be labeled as 'COVID-19' in BBMRI.nl catalogue. In time, new data sets will be added and enhanced with information on what specifics make these data or samples relevant.</p> <p><i>-Providing access to data</i> Podium, a 'webshop' system will give access to data collections, efficiently and safely. It can be used by researchers and organizations alike to manage and facilitate the research request workflow of data/samples/images.</p> <p><i>-Making data interoperable</i> Data are located at various places. Health-RI can help researchers with using the Personal Health Train principles to make optimal use of the distributed data. Health-RI also offers expertise on more traditional methods of connecting data.</p> <p><i>-Sharing Radiology images</i> Health-RI hosts and supports a solid pipeline for managing large quantities of radiology images, pseudonymisation of DICOM images and making these available for research (CTP and XNAT).</p> <p><i>-ELSI service desk</i></p> <p>To answer questions about Ethical, Legal and Social Implications. Important if you want to use health data for research purposes, particularly in the current context of COVID-19. For example, someone who is on life support will not be able to give consent for research purposes.</p> <p><i>- Overview of Dutch COVID-19 initiatives is available online : https://www.health-ri.nl/covid-19-related-data-initiatives</i></p>
31	University of Modena and Reggio Emilia	IT	<p>Can provide ex-vivo human airway models for testing drugs and for virus - cells interaction. The models are 3D engineered human airway tissues, from different donors, containing ciliated cells as well as the other differentiation lineages. This group can provide if needed, for drug or virus interaction studies, or can test the effect produced on the tissue. Specifically, can provide human airway tissue, highly proliferating or fully differentiated with clara, goblet, epithelial and ciliated cells, for testing.</p> <p>These tissues can be available from three different donors. They can provide the tissue, the lab receiving the tissue should administer the virus and the drugs; they can lyse the tissues or fix them and then can analyze results only after lysis or fixation (i.e. after viral inactivation), since they do not have the possibility to insert living coronavirus infected cells in the lab.</p> <p>They can provide reagents, methods and suggestions for the short intermediate step in the receiving lab or in a lab equipped for living virus infected cells handling.</p>
32	Inserm	FR	<p>Participates in reasearch by giving access to their neuroinflammation platform for the assessment of infected blood samples: http://www.neuroinflammation.fr/</p>

33	The Institute for Health Science Research Germans Trias i Pujol (IGTP)	ES	<p>Testing of respiratory devices: 1) RESPIRA developed by GAPInnova; 2) OxyGEN developed by Prototy.xyz; 3) GasN2 autonomous ventilation device (DAR)</p> <p>In vivo validation of new devices for invasive ventilation (3 models as above) ABSL3 facilities for Research on animal models BSL3 facilities for Research on in vitro models Diagnostic Platform to evaluate and clinically validate new technology and introduce them into the diagnostic routine immediately:</p> <p>1) To evaluate the usefulness of a system for collecting and transporting samples, which preserves viral RNA to facilitate the screening of patients and contacts throughout the territory. 2) To assess rapid tests (point-of-care) for detecting viral antigens as a screening system. 3) To validate and evaluate molecular techniques for detecting viral genetic material. 4) To increase the knowledge of the immune response to the virus, in order to better assess the response to the infection, to the treatment and also in the post-infection period. We assess the response mounted by B-cells and T-cells, and we will explore the role of the oxidative stress during the COVID19.</p>
34	Biodonostia	ES	<ul style="list-style-type: none"> - An international randomized trial to evaluate unlicensed treatments for COVID-19 in hospitalized patients receiving conventional treatment for COVID offered at each hospital. - Clinical Trial: Use of colchicine for the prevention of the inflammatory response in COVID-19 infection. - Coronavirus detection using oligonucleotide probe in clinical samples of symptomatic and asymptomatic patients. - Diagnosis of COVID-19 by PCR in 15 minutes for use in hospitals and health centres. - Design and preclinical evaluation of ACE2 sub-domains as antiviral against SARS-CoV-2. - Immunosenescence as a risk factor for SARS-CoV-2 infection. - Molecular approach to identify the impact of coronavirus. - Search for SARS-CoV2-susceptible polymorphisms. - Identification of molecular alterations associated with the presence of coronavirus.
35	INCLIVA	ES	<ul style="list-style-type: none"> -NEURO-COVID-19 Study : Acute Encephalopathy in critically ill patients with SARS-COV-2 infection. -Evaluation of the efficacy of different treatments in hospitalized COVID19 patients. -CovidSurg-Cancer: an international cohort study assessing the safety of surgery for all types of cancer during the COVID-19 pandemic and the impact of the pandemic in cancer delay and treatment pathways. -Sevoflurane for Sedation in Acute Respiratory Distress Syndrome: A Multicenter Prospective Randomized Trial -Clinical Trial for the prevention of Coronavirus infection in health workers -Development of a diagnostic kit to determine the presence of the SARS-Cov-2 in patients and the particular strain.
36	TNO	NL	<p>Molecular biology:</p> <ul style="list-style-type: none"> - Infrastructure for sample handling (BSL2/liquid handlers) - SARS CoV-2 RT-qPCR - Development of Isothermal detection methods for SARS CoV-2 - LAMP based point of care testing - Next Gen Sequencing - LAMP-seq: Mass sequencing of barcoded LAMP products <p>Personal protection device testing</p> <ul style="list-style-type: none"> - Particle Filtration Efficiency (PFE) Test of masks and clothing