Drugs used in clinical trials for Covid-19 according to NIH

Amelia Carolina Sparavigna

Politecnico di Torino

Here we show the site ClinicalTrials.gov of NIH and its use to find the drugs involved in clinical trials for Covid-19. For what concerns the countries where the trials have been proposed, we considered Italy and France in details. Maps concerning some drugs are also given. In fact, a georeferentiation of the use of drugs is possible, in order to evidence any possible link between drugs and the local evolution of pandemic Covid-19.

Torino - 21 May 2020. DOI: 10.5281/zenodo.3837219

To search for diseases and related experimentations, it is possible to visit the site ClinicalTrials.gov of the National Institutes of Health (NIH). It is "a searchable registry and results database of federally and privately supported clinical trials conducted in the United States and around the world". Therefore, ClinicalTrials.gov gives information about "a trial's purpose, who may participate, locations, and phone numbers for more details. This information should be used in conjunction with advice from health care professionals". The link is the following:

https://www.nih.gov/health-information/nih-clinical-research-trials-you/finding-clinical-trial.

For instance, let us consider a search for "Covid" and "Italy", on May 20, 2020, we can obtain the results which are available according to the following link: https://clinicaltrials.gov/ct2/results? cond=COVID&term=&cntry=IT&state=&city=&dist=

The base information, given in the resulting web-page, concerns Status, Study Title, Conditions, Interventions and Locations. "URL" is giving a link to a web-page of NIH containing detailed information about the trial. Here, in the following snapshot, an example of a trial using Enoxaparin.

Row	Saved	S tatus	Study Title	Conditions	Interventions	Locations
2		Recruiting NEW	Comparison of Two Doses of Enoxaparin for Thromboprophylaxis in Hospitalized COVID-19 Patients	• Covid19	Drug: Enoxaparin	 Azienda Socio Sanitaria Territoriale Grande Ospedale Metropolitano Niguarda Milano, Italy

After a general search, we can extract information. For example, we can examine among the clinical trials, those where specific drugs are reported, for being investigated and used for Covid-19. However, several other analyses of topics, about the medical instrumentation for instance, are possible. There is also the possibility to have a geo-referentiation of drugs; that is, to find a link between the drug used in a given area where the trial is conducted and the local evolution of the COVID pandemic.

Here we consider only a specific example of the use of ClinicalTrials.gov. As told before, we consider the drugs. We give only the trials where a drug is explicitly mentioned in the title or in the intervention. It is possible that a more detailed analysis of all the records can reveal several other drugs involved, or that any mistake has been made, in preparing the following lists. Then, in the case of a specific interest, a detailed analysis of all reports is suggested. Hyper-immune plasma is

considered in the lists too. We have investigated Italy and France. Of course, it would be better to have an account obtained by means of an analysis on a larger geographical area. However, even from this small comparison, we can find that differences exist.

For what concerns investigations on continental or global scale, ClinicalTrials.gov is displaying maps, according to the search which has been made. Here we will show some examples of maps too. Therefore, in the following, we propose two lists concerning trials in Italy and France, with marked the drugs involved. Then, a few maps concerning some drugs are given.

Drugs used in Italy

Comparison of Two D Patients; Drug: Enoxa	Doses of Enoxaparin¹ for Thromboprophylaxis in Hospitalized COVID-19 aparin				
URL:	https://ClinicalTrials.gov/show/NCT04366960				
Clinical Study To Eva Favipiravir Other: Pla	luate The Performance And Safety Of Favipiravir² in COVID-19; Drug: cebo				
URL:	https://ClinicalTrials.gov/show/NCT04336904				
Baricitinib Therapy in	COVID-19; Drug: Baricitinib ³ 4 MG Oral Tablet				
URL:	https://ClinicalTrials.gov/show/NCT04358614				
Use of Ascorbic Acid	in Patients With COVID 19; Dietary Supplement: Vitamin C ⁴				
URL:	https://ClinicalTrials.gov/show/NCT04323514				
ACE Inhibitors, Ang	iotensin II Type-I Receptor Blockers ⁵ and Severity of COVID-19				
URL:	https://ClinicalTrials.gov/show/NCT04318418				
Hyperimmune Plasma for Critical Patients With COVID-19; Other: hyperimmune plasma					
URL:	https://ClinicalTrials.gov/show/NCT04321421				
15	Treatment of COVID-19; Dietary Supplement: SivoMixx (200 billion); Drug: hydroxychloroquine ⁶				
URL:	https://ClinicalTrials.gov/show/NCT04368351				
Efficacy and Safety of	f Tocilizumab ⁷ in the Treatment of SARS-Cov-2 Related Pneumonia				
URL:	https://ClinicalTrials.gov/show/NCT04332913				
Colchicine in COVID	-19: a Pilot Study; Drug: Colchicine ⁸ 1 MG Oral Tablet				
URL:	https://ClinicalTrials.gov/show/NCT04375202				
DAS181 for STOP CO	OVID-19; Drug: DAS181 ⁹ Drug: Placebo				
URL:	https://ClinicalTrials.gov/show/NCT04354389				

¹ https://en.wikipedia.org/wiki/Enoxaparin_sodium

² https://en.wikipedia.org/wiki/Favipiravir

³ https://en.wikipedia.org/wiki/Baricitinib

⁴ https://ods.od.nih.gov/factsheets/VitaminC-HealthProfessional/

⁵ https://www.mayoclinic.org/diseases-conditions/high-blood-pressure/in-depth/ace-inhibitors/art-20047480

⁶ Sparavigna, Amelia Carolina. (2020, May 17). On the association of Hydroxychloroquine and Azithromycin in treating Covid-19 in Italy. Zenodo. http://doi.org/10.5281/zenodo.3831174

⁷ https://en.wikipedia.org/wiki/Tocilizumab

⁸ https://en.wikipedia.org/wiki/Colchicine

⁹ https://biopharmadealmakers.nature.com/users/114908-ansun-biopharma/posts/37800-developing-das181-forinfluenza-and-other-infections; https://www.clinicaltrialsarena.com/projects/fludase/; https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4736611/; https://journals.plos.org/plosone/article? id=10.1371/journal.pone.0007838

An Observational Case-control Study of the Use of Siltuximab¹⁰ in ARDS Patients Diagnosed With **COVID-19** Infection

https://ClinicalTrials.gov/show/NCT04322188 URL:

Baricitinib Compared to Standard Therapy in Patients With COVID-19; Drug: Baricitinib Oral Tablet

URL: https://ClinicalTrials.gov/show/NCT04393051

Renin-Angiotensin System Inhibitors¹¹ and COVID-19

URL: https://ClinicalTrials.gov/show/NCT04331574

Compassionate Use Open-Label Anti-CD14 Treatment in Patients With SARS-CoV-2 (COVID-19); Biological: IC14, a monoclonal antibody against CD14¹²

URL: https://ClinicalTrials.gov/show/NCT04346277

Transfusion of **Convalescent Plasma** for the Early Treatment of pneumonIa Due to SARSCoV2; **Biological: CONVALESCENT PLASMA**

URL: https://ClinicalTrials.gov/show/NCT04393727

Oxvgen-Ozone as Adjuvant Treatment in Early Control of COVID-19 Progression and Modulation of the Gut Microbial Flora; Other: Oxygen-ozone therapy, probiotic supplementation and Standard of care | Dietary Supplement: SivoMixx (200 billion) | Drug: Azithromycin | Drug: hydroxychloroquine

URL: https://ClinicalTrials.gov/show/NCT04366089

The Effect of Sitagliptin Treatment in COVID-19 Positive Diabetic Patients; Drug: Sitagliptin¹³

URL: https://ClinicalTrials.gov/show/NCT04365517

Protect: Study With Hydroxychloroquine for Prevention and Early Phase Treatment of Coronavirus Disease (COVID-19); Drug: Hydroxychloroquine

https://ClinicalTrials.gov/show/NCT04363827 URL:

TOFAcitinib in SARS-CoV2 Pneumonia; Drug: Tofacitinib¹⁴

URL: https://ClinicalTrials.gov/show/NCT04332042

Early transfusIon of Convalescent Plasma in Elderly COVID-19 Patients. to Prevent Disease Progression; Biological: COVID-19 Convalescent Plasma

URL: https://ClinicalTrials.gov/show/NCT04374526

Colchicine Counteracting Inflammation in COVID-19 Pneumonia; Drug: Colchicine

URL: https://ClinicalTrials.gov/show/NCT04322565

Phase II RCT to Assess Efficacy of Intravenous Administration of Oxytocin¹⁵ in Patients Affected by COVID-19; Drug: Oxytocin|Drug: Standard of Care

https://ClinicalTrials.gov/show/NCT04386447 URL:

Baricitinib in Symptomatic Patients Infected by COVID-19: an Open-label, Pilot Study; Drug: Baricitinib

13 https://en.wikipedia.org/wiki/Sitagliptin

¹⁰ https://en.wikipedia.org/wiki/Siltuximab

¹¹ https://www.nejm.org/doi/full/10.1056/NEJMsr2005760;

https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)31030-8/fulltext

¹² https://pubmed.ncbi.nlm.nih.gov/11717588/; https://pubmed.ncbi.nlm.nih.gov/11207321/

¹⁴ https://en.wikipedia.org/wiki/Tofacitinib

¹⁵ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7177061/

URL: https://ClinicalTrials.gov/show/NCT04320277 Efficacy of Methylprednisolone¹⁶ for Patients With COVID-19 Severe Acute Respiratory Syndrome; Drug: Methylprednisolone|Other: standard care URL: https://ClinicalTrials.gov/show/NCT04323592 Enhanced Platelet Inhibition in Critically Ill Patients With COVID-19; Drug: Tirofiban¹⁷ Injection Drug: Clopidogrel¹⁸ | Drug: Acetylsalicylic acid¹⁹ | Drug: Fondaparinux²⁰ URL: https://ClinicalTrials.gov/show/NCT04368377 Escin in Patients With Covid-19 Infection; Drug: Escin²¹ | Drug: standard therapy https://ClinicalTrials.gov/show/NCT04322344 URL: Tocilizumab for SARS-CoV2 (COVID-19) Severe Pneumonitis; Drug: Tocilizumab https://ClinicalTrials.gov/show/NCT04315480 URL: Efficacy and Safety of Emapalumab and Anakinra²² in Reducing Hyperinflammation and Respiratory Distress in Patients With COVID-19 Infection; Biological: Emapalumab|Biological: Anakinra URL: https://ClinicalTrials.gov/show/NCT04324021 Bevacizumab in Severe or Critical Patients With COVID-19 Pneumonia; Drug: Bevacizumab²³ Injection URL: https://ClinicalTrials.gov/show/NCT04275414 Sitagliptin Treatment in Diabetic COVID-19 Positive Patients; Drug: Retrospective case-control analysis URL: https://ClinicalTrials.gov/show/NCT04382794 Hyperimmune Plasma in Patients With COVID-19 Severe Infection; Other: plasma hyperimmune|Drug: standard therapy https://ClinicalTrials.gov/show/NCT04385043 URL: Convalescent Antibodies Infusion in Critically Ill COVID 19 Patients; Biological: Anticoronavirus antibodies (immunoglobulins)obtained with DFPP from convalescent patients URL: https://ClinicalTrials.gov/show/NCT04346589 Tocilizumab in COVID-19 Pneumonia (TOCIVID-19); Drug: Tocilizumab Injection URL: https://ClinicalTrials.gov/show/NCT04317092 Acalabrutinib²⁴ Study With Best Supportive Care Versus Best Supportive Care in Subjects Hospitalized With COVID-19; Drug: Acalabrutinib URL: https://ClinicalTrials.gov/show/NCT04346199 Efficacy of Early Administration of Tocilizumab in COVID-19 Patients; Drug: Tocilizumab URL: https://ClinicalTrials.gov/show/NCT04346355 16 https://www.healthline.com/health/methylprednisolone-oral-tablet 17 https://en.wikipedia.org/wiki/Tirofiban 18 https://en.wikipedia.org/wiki/Clopidogrel 19 https://en.wikipedia.org/wiki/Aspirin 20 https://www.uptodate.com/contents/fondaparinux-dosing-and-adverse-effects 21 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6776292/; https://www.sciencedirect.com/topics/neuroscience/escin

23 https://en.wikipedia.org/wiki/Bevacizumab

24 https://en.wikipedia.org/wiki/Acalabrutinib

²² https://salute.regione.emilia-romagna.it/farmaci/covid-19/farmaci-e-studi-clinici/anakinra-emapalumab

Study to Evaluate the Safety and Antiviral Activity of **Remdesivir**²⁵ (GS-.5734TM) in Participants With Severe Coronavirus Disease (COVID-19); Drug: Remdesivir|Drug: Standard of Care

URL: https://ClinicalTrials.gov/show/NCT04292899

Study to Evaluate the Safety and Antiviral Activity of **Remdesivir** (GS-5734TM) in Participants With Moderate Coronavirus Disease (COVID-19) Compared to Standard of Care Treatment; Drug: Remdesivir|Drug: Standard of Care

URL: https://ClinicalTrials.gov/show/NCT04292730

A Study to Evaluate the Safety and Efficacy of **Tocilizumab** in Patients With Severe COVID-19 Pneumonia; Drug: Tocilizumab (TCZ)|Drug: Placebo

URL: https://ClinicalTrials.gov/show/NCT04320615

Expanded Access Treatment Protocol: **Remdesivir** (RDV; GS-5734) for the Treatment of SARS-CoV2 (CoV) Infection (COVID-19); Drug: Remdesivir

URL: https://ClinicalTrials.gov/show/NCT04323761

Sarilumab COVID-19; Drug: Sarilumab²⁶ SAR153191|Drug: Placebo

URL: https://ClinicalTrials.gov/show/NCT04327388

Drugs used in France

Low Dose of IL-2 In Acute Respiratory DistrEss Syndrome Related to COVID-19; Drug: 1: **ILT101**²⁷ | Drug: 2: Placebo Comparator

URL: https://ClinicalTrials.gov/show/NCT04357444

Hydroxychloroquine Azithromycin COVID-19 Pregnancy Trial; Drug: Hydroxychloroquine and azithromycin treatment | Other: conventional management of patients

URL: https://ClinicalTrials.gov/show/NCT04365231

Avdoralimab²⁸ an Anti-C5aR Antibody, in Patients With COVID-19 Severe Pneumonia (FORCE); Biological: avdoralimab|Other: Placebo

URL: https://ClinicalTrials.gov/show/NCT04371367

Epidemiology of SARS-CoV-2 and Mortality to Covid19 Disease in French Cancer Patients;

Drug: Hydroxychloroquine | Drug: Azithromycin

URL: https://ClinicalTrials.gov/show/NCT04341207

Efficacy of **Convalescent Plasma** to Treat COVID-19 Patients, a Nested Trial in the CORIMUNO-19 Cohort; Drug: Transfusion of COVID-19 convalescent plasma

URL: https://ClinicalTrials.gov/show/NCT04345991

Repurposing of **Chlorpromazine**²⁹ in Covid-19 Treatment; Drug: CHLORPROMAZINE (CPZ)| Combination Product: Standard of Care (SOC)

URL: https://ClinicalTrials.gov/show/NCT04366739

Multicenter, Retrospective Study of the Effects of **Remdesivir** in the Treatment of Severe Covid-19 Infections; Drug: Remdesivir

25 https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)31022-9/fulltext

26 https://en.wikipedia.org/wiki/Sarilumab

²⁷ https://lupusnewstoday.com/2017/06/01/servier-iltoo-pharma-agree-to-develop-commercialize-ilt-101-as-lupus-treatment/

²⁸ https://fr.wikipedia.org/wiki/Avdoralimab

²⁹ https://www.drugs.com/mtm/chlorpromazine.html

ABX464³⁰ in Treating Inflammation and Preventing Acute Respiratory Failure in Patients With COVID-19; Drug: ABX464|Drug: Placebo

URL: https://ClinicalTrials.gov/show/NCT04393038

Trial Evaluating Efficacy and Safety of **Nivolumab**³¹ (Optivo®) in Patients With COVID-19 Infection, Nested in the Corimmuno-19 Cohort; Drug: Nivolumab Injection

URL: https://ClinicalTrials.gov/show/NCT04343144

Randomised, Double-blind, Placebo-controlled Phase 2 Study Evaluating the Efficacy of **Hydroxychloroquine** and **Azithromycine** in Patients With COVID-19 and Hematological Malignancies; Drug: Hydroxychloroquine Sulfate 200 MG [Plaquenil] | Drug: Azithromycin 250 MG Oral Capsule|Drug: Placebo oral tablet|Drug: Placebo oral capsule

URL: https://ClinicalTrials.gov/show/NCT04392128

Efficacy of **Hydroxychloroquine**, **Telmisartan**³² and **Azithromycin** on the Survival of Hospitalized Elderly Patients With COVID-19; Drug: Hydroxychloroquine|Drug: Azithromycin| Drug: Telmisartan

URL: https://ClinicalTrials.gov/show/NCT04359953

Povidone Iodine³³ Mouthwash, Gargle, and Nasal Spray to Reduce Naso- Pharyngeal Viral Load in Patients With COVID-19; Drug: Povidone-Iodine

URL: https://ClinicalTrials.gov/show/NCT04371965

Drug Management of Rheumatoid Arthritis in Covid-19 Context : Impact on Therapeutic Deescalation [patients are assuming drugs for sure, therefore this study is very important]

URL: https://ClinicalTrials.gov/show/NCT04393233

Efficacy and Safety of Aerosolized Intra-tracheal Dornase Alpha Administration in Patients With COVID19-induced ARDS (COVIDORNASE); Drug: **Dornase Alfa³⁴** Inhalation Solution [Pulmozyme]|Procedure: standard procedure

URL: https://ClinicalTrials.gov/show/NCT04355364

Proactive Care of Ambulatory COVID19 Patients; Other: consultation|Drug: Azithromycin

URL: https://ClinicalTrials.gov/show/NCT04371107

Dexamethasone and Oxygen Support Strategies in ICU Patients With Covid-19 Pneumonia; Drug: **Dexamethasone**³⁵ injection|Drug: placebo|Procedure: conventional oxygen|Procedure: CPAP| Procedure: HFNO|Procedure: mechanical ventilation

URL: https://ClinicalTrials.gov/show/NCT04344730

Almitrine³⁶ and COVID-19 Related Hypoxemia

URL: https://ClinicalTrials.gov/show/NCT04380727

Efficacy of Intravenous **Almitrine** in Reducing the Need for Mechanical Ventilation in Patients With Hypoxemic Acute Respiratory Failure Due to Covid-19-related Pneumonia; Drug: Almitrine| Drug: Placebo

³⁰ https://www.nature.com/articles/s41598-018-37813-y

³¹ https://en.wikipedia.org/wiki/Nivolumab

³² http://www.informazionisuifarmaci.it/telmisartan

³³ https://en.wikipedia.org/wiki/Povidone-iodine

³⁴ https://www.cochrane.org/CD001127/CF_dornase-alfa-inhaled-drug-treating-lung-disease-cystic-fibrosis

³⁵ https://en.wikipedia.org/wiki/Dexamethasone

³⁶ https://en.wikipedia.org/wiki/Almitrine

Long-term Use of Drugs That Could Prevent the Risk of Serious COVID-19 Infections or Make it Worse; Other: - Synthetic anti-malarial drugs

URL: https://ClinicalTrials.gov/show/NCT04356417

Protective Role of **Inhaled Steroids** for Covid-19 Infection; Drug: 2: Usual practice + **SYMBICORT RAPIHALER**³⁷ | Other: 1: Usual practice

URL: https://ClinicalTrials.gov/show/NCT04331054

Covid-19 in **Lupus Patients** Interventions: [in the Search Result, no intervention is detailed; however, it is sure that Lupus patients are assuming drugs, therefore this study is very important]

URL: https://ClinicalTrials.gov/show/NCT04355702

Dexamethasone Treatment for Severe Acute Respiratory Distress Syndrome Induced by COVID-19; Drug: **Dexamethasone**³⁸ and **Hydroxychloroquine** | Drug: Hydroxychloroquine

URL: https://ClinicalTrials.gov/show/NCT04347980

Use of a Respiratory Multiplex PCR and **Procalcitonin³⁹** to Reduce Antibiotics Exposure in Patients With Severe Confirmed COVID-19 Pneumonia; Procedure: Combined use of a respiratory broad panel multiplex PCR and procalcitonin|Other: Usual antibiotic treatment

URL: https://ClinicalTrials.gov/show/NCT04334850

Polyvalent Immunoglobulin in COVID-19 Related ARds; Drug: **Human immunoglobulin**⁴⁰ | Drug: Placebo

URL: https://ClinicalTrials.gov/show/NCT04350580

A Study of Trans Crocetin in Patients With Acute Respiratory Distress Syndrome Due to COVID-19 Disease (LEAF-4L7520/4L6715); Drug: LEAF-4L6715⁴¹ | Drug: LEAF-4L7520

URL: https://ClinicalTrials.gov/show/NCT04378920

Treatments to Decrease the Risk of Hospitalization or Death in Elderly Outpatients With Symptomatic SARS-CoV-2 Infection (COVID-19); Dietary Supplement: Vitamins | Drug: **Hydroxychloroquine** | Drug: **Imatinib**⁴² | Drug: **Favipiravir** | Drug: **Telmisartan**

URL: https://ClinicalTrials.gov/show/NCT04356495

Use of Dexmedetomidine in Light to Moderate Sedation in the Patient in the Palliative Situation of a Sars-cov-2 / COVID-19 Infection; Drug: Treatment with **Dexmedetomidine**⁴³

URL: https://ClinicalTrials.gov/show/NCT04350086

Anakinra for COVID-19 Respiratory Symptoms; Drug: Anakinra⁴⁴ plus oSOC|Drug: oSOC

URL: https://ClinicalTrials.gov/show/NCT04364009

Covid-19 in Patients With **Chronic Inflammatory Rheumatism**, **Auto-immune** or Autoinflammatory Rare and Non-rare Diseases; Interventions: [in the Search Result, no intervention is detailed; however, it is sure that these patients are assuming drugs, therefore this study is very important]

³⁷ https://www.nps.org.au/medicine-finder/symbicort-rapihaler-50-3-metered-dose-inhaler

³⁸ https://en.wikipedia.org/wiki/Dexamethasone

³⁹ https://en.wikipedia.org/wiki/Procalcitonin

⁴⁰ https://en.wikipedia.org/wiki/Immunoglobulin_therapy

⁴¹ No info available on LEAF-4L7520/4L6715 ; https://www.medchemexpress.com/Transcrocetin.html

⁴² https://en.wikipedia.org/wiki/Imatinib

⁴³ https://en.wikipedia.org/wiki/Dexmedetomidine

⁴⁴ https://en.wikipedia.org/wiki/Anakinra

Trial Evaluating Efficacy and Safety of Anticoagulation in Patients With COVID-19 Infection, Nested in the Corimmuno-19 Cohort; Drug: **Tinzaparin**⁴⁵ or **unfractionated heparin**⁴⁶

URL: https://ClinicalTrials.gov/show/NCT04344756

ACE Inhibitors or ARBs Discontinuation in Context of SARS-CoV-2 Pandemic; Drug: 1: discontinuation of RAS blocker therapy | Drug: 2: continuation of RAS blocker⁴⁷ therapy

URL: https://ClinicalTrials.gov/show/NCT04329195

Efficacy of Intravenous **Anakinra** and **Ruxolitinib**⁴⁸ During COVID-19 Inflammation (JAKINCOV); Drug: Anakinra alone (stages 2b/3)|Drug: Anakinra and Ruxolitinib (overcome stage 3)|Other: Standard of care

URL: https://ClinicalTrials.gov/show/NCT04366232

CORIMUNO19-ECU: Trial Evaluating Efficacy and Safety of **Eculizumab**⁴⁹ (Soliris) in Patients With COVID-19 Infection, Nested in the CORIMUNO-19 Cohort; Drug: Eculizumab

URL: https://ClinicalTrials.gov/show/NCT04346797

Azithromycin+Amoxicillin/Clavulanate vs Amoxicillin/Clavulanate in COVID19 Patients With Pneumonia in Non-intensive Unit; Combination Product: **Azithromycin⁵⁰** with amoxicillin/clavulanate|Drug: **amoxicillin/clavulanate**⁵¹

URL: https://ClinicalTrials.gov/show/NCT04363060

Cell Therapy Using Umbilical Cord-derived Mesenchymal Stromal Cells in SARS-CoV-2-related ARDS; Biological: Umbilical cord Wharton's jelly-derived human⁵² | Other: NaCl 0.9%

URL: https://ClinicalTrials.gov/show/NCT04333368

Efficacy of **BCG Vaccination**⁵³ in the Prevention of COVID19 Via the Strengthening of Innate Immunity in Health Care Workers; Biological: BCG GROUP | Other: PLACEBO GROUP

URL: https://ClinicalTrials.gov/show/NCT04384549

Hydroxychloroquine Plus Azithromycin Versus **Hydroxychloroquine** for COVID-19 Pneumonia (COVIDOC Trial); Drug: Hydroxychloroquine + placebo|Drug: hydroxychloroquine + azithromycin

URL: https://ClinicalTrials.gov/show/NCT04345861

Efficacy of **Convalescent Plasma** Therapy in the Early Care of COVID-19 Patients; Drug: Transfusion of SARS-CoV-2 Convalescent Plasma. Drug: Transfusion of standard Plasma.

URL: https://ClinicalTrials.gov/show/NCT04372979

IMATINIB IN COVID-19 DISEASE IN AGED PATIENTS; Drug: Experimental drug

URL: https://ClinicalTrials.gov/show/NCT04357613

Phase II RCT to Assess Efficacy of Intravenous Administration of **Oxytocin** in Patients Affected by COVID-19; Drug: Oxytocin|Drug: Standard of Care

⁴⁵ https://www.rxlist.com/innohep-drug.htm

⁴⁶ https://en.wikipedia.org/wiki/Heparin

⁴⁷ https://www.ema.europa.eu/en/medicines/human/referrals/renin-angiotensin-system-ras-acting-agents

⁴⁸ https://www.osservatoriomalattierare.it/news/attualita/15942-covid-19-ruxolitinib-entra-nel-programma-di-uso-compassionevole

⁴⁹ https://en.wikipedia.org/wiki/Eculizumab

⁵⁰ https://en.wikipedia.org/wiki/Azithromycin

⁵¹ https://www.rxlist.com/augmentin-drug.htm

⁵² https://en.wikipedia.org/wiki/Wharton%27s_jelly

⁵³ https://en.wikipedia.org/wiki/BCG_vaccine

OUTpatient Treatment of COVID-19 in Patients With Risk Factor for Poor Outcome; Drug: Azithromycin | Drug: Hydroxychloroquine | Drug: Lopinavir 200Mg/ Ritonavir⁵⁴ 50Mg Tab

URL: https://ClinicalTrials.gov/show/NCT04365582

Study of Immune Modulatory Drugs and Other Treatments in COVID-19 Patients: Sarilumab, Azithromycin, Hydroxychloroquine Trial - CORIMUNO-19 - VIRO; Drug: Sarilumab | Drug: Azithromycin|Drug: Hydroxychloroquine

URL: https://ClinicalTrials.gov/show/NCT04341870

SOLIRIS® (Eculizumab) Treatment of Participants With COVID-19; Biological: eculizumab

URL: https://ClinicalTrials.gov/show/NCT04355494

DYNAMIC Study (DoxycYcliNe AMbulatoIre COVID-19); Drug: Doxycycline⁵⁵ | Drug: Placebo

URL: https://ClinicalTrials.gov/show/NCT04371952

Cohort Multiple Randomized Controlled Trials Open-label of Immune Modulatory Drugs and Other Treatments in COVID-19 Patients - **Sarilumab** Trial - CORIMUNO-19 - SARI; Drug: Sarilumab

URL: https://ClinicalTrials.gov/show/NCT04324073

Impact of Long-term **Protease Inhibitors**⁵⁶ in Patients Living With HIV on the Incidence of COVID-19 (COVIP); Other: No intervention

URL: https://ClinicalTrials.gov/show/NCT04357639

Chemoprophylaxis of SARS-CoV-2 Infection (COVID-19) in Exposed Healthcare Workers; Drug: **Hydroxychloroquine** | Drug: Placebo of Hydroxychloroquine|Drug: Lopinavir and ritonavir | Drug: Placebo of LPV/r Tablets

URL: https://ClinicalTrials.gov/show/NCT04328285

Corticosteroids During Covid-19 Viral Pneumonia Related to SARS-Cov-2 Infection; Drug: **Prednisone**⁵⁷ | Other: Control group

URL: https://ClinicalTrials.gov/show/NCT04344288

Study to Evaluate the Safety and Antiviral Activity of **Remdesivir** (GS-5734[™]) in Participants With Severe Coronavirus Disease (COVID-19); Drug: Remdesivir|Drug: Standard of Care

URL: https://ClinicalTrials.gov/show/NCT04292899

Study to Evaluate the Safety and Antiviral Activity of **Remdesivir** (GS-5734TM) in Participants With Moderate Coronavirus Disease (COVID-19) Compared to Standard of Care Treatment; Drug: Remdesivir|Drug: Standard of Care

URL: https://ClinicalTrials.gov/show/NCT04292730

A Study to Evaluate the Safety and Efficacy of **Tocilizumab** in Patients With Severe COVID-19 Pneumonia; Drug: Tocilizumab (TCZ)|Drug: Placebo

URL: https://ClinicalTrials.gov/show/NCT04320615

Acalabrutinib Study With Best Supportive Care Versus Best Supportive Care in Subjects Hospitalized With COVID-19; Drug: Acalabrutinib

URL: https://ClinicalTrials.gov/show/NCT04346199

55 https://www.drugs.com/doxycycline.html

⁵⁴ https://www.humanitas.it/enciclopedia/principi-attivi/antivirali/combinazione-lopinavir-ritonavir ; https://it.wikipedia.org/wiki/Lopinavir/ritonavir

⁵⁶ https://en.wikipedia.org/wiki/Protease_inhibitor_(pharmacology)

⁵⁷ https://it.wikipedia.org/wiki/Prednisone

Prospective Study in Patients With Advanced or Metastatic Cancer and SARS-CoV-2 Infection; Drug: Chloroquine analog (GNS651)⁵⁸ | Drug: Nivolumab |Drug: Tocilizumab | Other: Standard of care

URL: https://ClinicalTrials.gov/show/NCT04333914

Prevention of SARS-CoV-2 in Hospital Workers s Exposed to the Virus; Drug: **hydroxychloroquine** | Drug: **azithromycin** | Drug: hydroxychloroquine placebo

URL: https://ClinicalTrials.gov/show/NCT04344379

Weight-Adjusted vs Fixed Low Doses of Low Molecular Weight Heparin For Venous Thromboembolism Prevention in COVID-19; Drug: **Enoxaparin**

URL: https://ClinicalTrials.gov/show/NCT04373707

Efficacy of **Captopril⁵⁹** in Covid-19 Patients With Severe Acute Respiratory Syndrome (SARS) CoV-2 Pneumonia (CAPTOCOVID); Drug: captopril 25mg

URL: https://ClinicalTrials.gov/show/NCT04355429

Expanded Access Treatment Protocol: **Remdesivir** (RDV; GS-5734) for the Treatment of SARS-CoV2 (CoV) Infection (COVID-19); Drug: Remdesivir

URL: https://ClinicalTrials.gov/show/NCT04323761

Trial of Treatments for COVID-19 in Hospitalized Adults; Drug: **Remdesivir** | Drug: **Lopinavir/ritonavir** | Drug: **Interferon Beta-1A**⁶⁰ | Drug: **Hydroxychloroquine** | Other: Standard of care

URL: https://ClinicalTrials.gov/show/NCT04315948

Sarilumab COVID-19; Drug: Sarilumab SAR153191|Drug: Placebo

URL: https://ClinicalTrials.gov/show/NCT04327388

Evaluation of Activity and Safety of Oral **Selinexor**⁶¹ in Participants With Severe COVID-19 Infection; Drug: Selinexor|Other: Placebo

URL: https://ClinicalTrials.gov/show/NCT04349098

COvid-19 and Vitamin D Supplementation: a Multicenter Randomized Controlled Trial of High Dose Versus Standard Dose **Vitamin D3**⁶² in High-risk COVID-19 Patients (CoVitTrial); Drug: cholecalciferol 200,000 IU|Drug: cholecalciferol 50,000 IU

URL: https://ClinicalTrials.gov/show/NCT04344041

Hydroxychloroquine in Outpatient Adults With COVID-19; Drug: Hydroxychloroquine SAR321068|Drug: Placebo

URL: https://ClinicalTrials.gov/show/NCT04333654

Hydroxychloroquine Versus Placebo in COVID-19 Patients at Risk for Severe Disease; Drug: Hydroxychloroquine|Drug: Placebo

URL: https://ClinicalTrials.gov/show/NCT04325893

Role of **Ibuprofen**⁶³ and Other Medicines on Severity of Coronavirus Disease 2019; Other: Questionnaire

⁵⁸ https://www.genosciencepharma.com/2020/04/05/important-advances-in-novel-covid-19-antiviral-program/

⁵⁹ https://it.wikipedia.org/wiki/Captopril

⁶⁰ https://en.wikipedia.org/wiki/Interferon_beta-1a

⁶¹ https://en.wikipedia.org/wiki/Selinexor

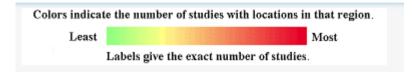
⁶² Sparavigna, Amelia Carolina. (2020, May 12). Vitamin D for Covid-19?. Zenodo. http://doi.org/10.5281/zenodo.3822187

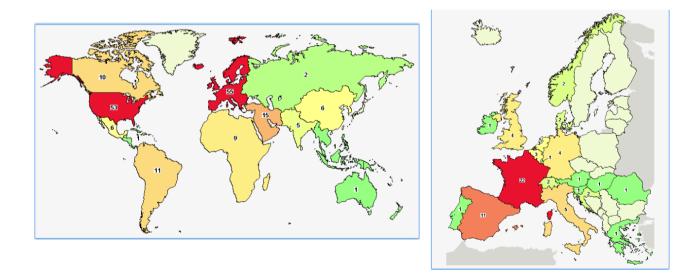
⁶³ https://en.wikipedia.org/wiki/Ibuprofen

URL:https://ClinicalTrials.gov/show/NCT04383899CORIMUNO-19 - Tocilizumab Trial - TOCI (CORIMUNO-TOCI);Drug: TocilizumabURL:https://ClinicalTrials.gov/show/NCT04331808

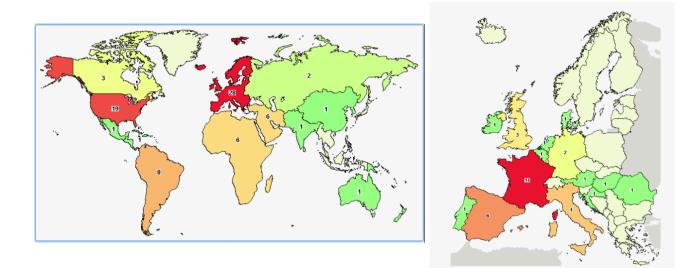
From the lists given above, we can see that some drugs are largely involved in trials, so it could be useful to observe the related maps of them, on global and continental (Europe) scale.

Maps (Courtesy ClinicalTrials.gov)

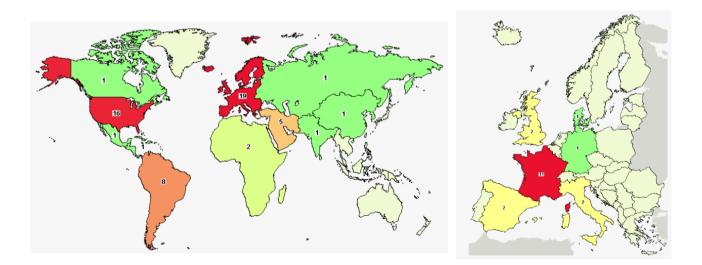




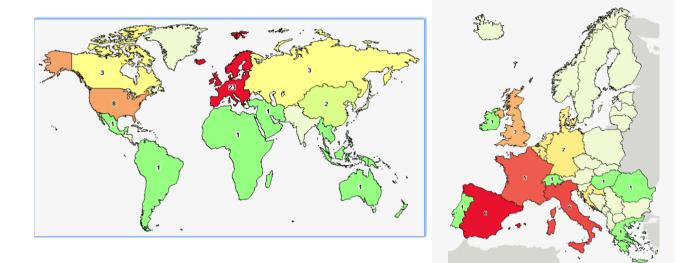
Maps of the clinical trials using Hydroxychloroquine



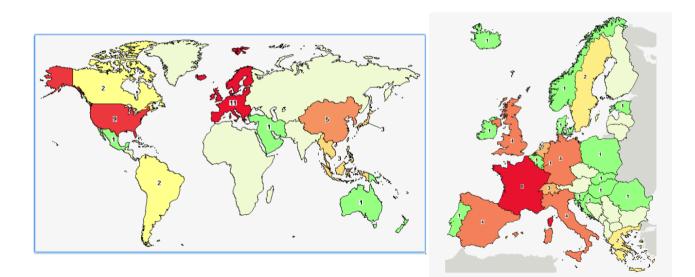
Maps of the clinical trials using Azithromycin



Maps of the clinical trials using the association of Hydroxychloroquine and Azithromycin



Maps of the clinical trials using Tocilizumab



Maps of the clinical trials using Remdesivir