## EARLY DOMICILIARY TREATMENT OF COVID-19

# Proposal for an integrated pharmacological and biological therapy

to accelerate the recovery and to prevent the hospitalisation of patients infected with Sars-Cov-2

#### **PREMISE**

19 months have passed by since January 30, 2020, the beginning of the epidemic in Italy. Nevertheless, until present no measures for an **early home-therapy** have officially been taken. To this day the ministerial directives recommend "Paracetamol and cautionary awaiting" which leads to the result of an exacerbation in those patients who suffer a **permanent oxidative stress**, which is different from temporary stress. As a result, these patients are hospitalized when their illness has already reached an advanced phase. **In such a condition the organism struggles to recoup the reducing system**: the redox (reducing/oxidant) relationship must be in balance so as to avoid the activation of the virus and its reproduction in the organism. The human organism is equipped with a molecular shield which consists of three cycles, that protect us from viruses and carcinogens. When an organism goes into **permanent oxidative stress**, the functioning of these cycles is compromised. In this condition the virus becomes activated and replicates. In the case of oncogenes, the blockage of the cycles triggers the development of neoplasms.

For this reason, the stage of "cautionary awaiting" of patients suffering from permanent oxidative stress, who are in isolation at home with the first signs of covid 19 disease, could prove lethal to them. At the time of hospitalisation, their clinical picture could be compromised: too low saturation, chronic interstitial pneumonia accompanied by a progressive worsening of the condition, resuscitation and in many cases the death of the patient.

At the onset of the first light symptoms of Covid-19 infection, a prompt domiciliary-treatment could help to accelerate the recovery and to reduce the number of hospitalisation of patients, without waiting for the outcome of the nose swab PCR test. Even In case of positive test result, we could reach a complete remission obtaining negativization. This assumption is confirmed in the article "A simple, home-therapy algorithm to prevent hospitalisation for Covid-19 patients: A retrospective observational matched-cohort study<sup>1</sup>", co-signed among others by professor Fredy Suter, who for many years worked as Chief of Unit of Infective Diseases in the hospital formerly named Ospedali Riuniti and who today is the Chief Emeritus of the hospital "Papa Giovanni XXIII of Bergamo, and by professor Giuseppe Remuzzi, head of the Pharmacological Research Institute "Mario Negri" Irccs<sup>2</sup>.

"The accurate domiciliary treatment of the patients by general practitioners, has been reflected in a decrease from 13 to 2 patients in need of hospitalization, and in a reduction of over 90% of the days of hospitalization and of the related treatment costs. The study has been published on

<sup>2</sup> To cure at home Covid-19 ("Curare a domicilio il Covid-19"), www.marionegri.it/magazine/cure-domiciliari-covid-19

<sup>&</sup>lt;sup>1</sup> https://pubmed.ncbi.nlm.nih.gov/34127959/ PUBMED – Various authors

EClinicalMedicine [...]. Findings of the clinical study, resulting from the collaboration between the family doctor groups of Varese and Teramo, show the importance of an early intervention at the onset of the first mild symptoms of the disease, without waiting for the result of the swab. In the first 2-3 days, in fact, the Covid-19 is in the incubation phase: the individual does not exhibit any symptoms yet. In the following 4-7 days the viral load increases, thus displaying the first symptoms (coughing, fever, tiredness, muscular pain, sore throat, nausea, vomit, diarrhoea). To intervene in this phase, beginning to take care of themselves at home as it would be done with every other respiratory infection, before the result of the swab could be available, could help to accelerate recovery and reduce the number of hospitalizations<sup>3</sup>".

## **GOALS**

The goal of the present document is to suggest an early domiciliary therapeutic scheme, a protocol of integrated pharmacological and biological medicine, to promptly manage Covid-19 in the phases 0, 1, and 2 (schemes from p. 2) at home, thus avoiding patients' hospitalization and reducing the lethality rate.

This protocol comes from the synergy between the C.R.A.Pu.-Therapy (Complementary Reducing Antidegenerative Puccio<sup>4</sup>), and the pharmacological therapy developed by Dr. Giuseppe Franco Cusumano, who in the last 19 months has treated close to 1200 patients applying this protocol, with only three of them needing to be hospitalized.

The **C.R.A.Pu-Therapy** (<u>integrated biological medicine</u>) serves the purpose of re-establishing the cellular homeostatic redox relationship and the chelating system, which binds heavy metals and poisons in order to re-activate the vital cycles (which represent the molecular shield consisting of 3 cycles), and to block the replication of the virus. The **pharmacological therapy**, on the other hand, is based on the changing modulation throughout the different physiopathological stages of the virus together with the combination of anti-inflammatories, anti-biotic, anti-rheumatic, and anticoagulant medications, corticosteroids, and oxygen therapy.

The indications presented below constitute the guidelines to which the doctors of the "domiciliary therapy groups", "ippocrate.org", and of the "Emmanuele" association refer. "Every therapeutic scheme is a suggestion. This means that the therapy should be individualized and adapted to the patient's condition and characteristics<sup>5</sup>" and must be conducted under medical prescription and supervision.

The sources from which the guidelines draw, are the following:

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<sup>&</sup>lt;sup>3</sup> Covid-19. Early domiciliary treatment is strategic. The results of Mario Negri's study and those of the Hospital of Bergamo – Quotidianosanita.it

<sup>&</sup>lt;sup>4</sup> Covid-19. From Sicily the innovative treatment of Dr. Cusumano, which integrates the C.R.A.Pu.-Therapy of the researcher Giovanni Puccio and his studies on viruses and bacteria already published in 2009.

<sup>&</sup>lt;sup>5</sup> Covid-19: the domiciliary therapies, AINAT News, No.9, March 2021.

- 1. synthesis of international experiences gained in the professional field, facing Covid-19 since January 2020;
- 2. comparison of experiences gained by clinicians, pneumologists, infectivologists, who have been treating infections with similar effects (interstitial pneumonia) already for more than 40 years;
- 3. experiences gained by various Italian medical groups since the beginning of the epidemic in Italy;
- 4. contribution of the Emmanuele Association in the fight against **resistant bacteria and viruses** of 2009<sup>6</sup>, studies and researches on **permanent oxidative stress**.

The **GUIDELINES** displayed below are aimed at providing with an explanatory and educational support based on the experience gained by Dr. Cusumano in the domiciliary treatment of Covid-19 patients. The drugs and supplements listed below together with their relative dosage shall be determined by the treating physician, who will follow up the patient dependent upon age, weight, severity of the disease, pre-existing pathologies, and – to what possible extent – contraindications.

## **GUIDELINES CHART**

STAGE	PHYSIOPHATOLOGICAL PICTURE	CLINICAL PICTURE
Stage 0	Subject with positive result to the swab but asymptomatic	No symptoms
Stage 1	Multiplication of the virus and/or lung involvement without hypoxia	Flu-like symptoms (fever, general malaise, arthralgia, myalgia, headache, rhinorrhoea, coughing, dyspnoea, polypnea, thoracic pain)
Stage 2	Lung involvement with hypoxia	Coughing, dyspnoea, polypnea, thoracic pain
Stage 3	Cytokine storm and DIC	ARDS, vasculitis, multi-organ failure, disseminated microthrombi, microemboli

**Consideration 1:** Our suggestion is to extend the therapy shown in phase 0 also to close contacts.

**Consideration 2**: <u>During phase 1 of the disease, Paracetamol should not be used</u> as it causes <u>glutathione depletion</u><sup>7</sup>, and moreover it is not a medical product of the NSAIDs-class. <u>"Cautional awaiting"</u> should not be followed, but instead a rapid action of supporting the organism should be <u>taken</u>.

<sup>7</sup> Could glutathione depletion be the Trojan horse of Covid-19 mortality? A. Khanfar, B. Al Qaroot, National Center for Biotechnology Information.

<sup>&</sup>lt;sup>6</sup> Drug-resistant viruses and bacteria, Giovanni Puccio, La Leva.org, 2009.

**Consideration 3:** The approach suggested in phase 1 of the disease, as a consequence, is that of an **early treatment of inflammatory symptoms**, by involving means of proven effectiveness, in combination with antibiotics, so as to act promptly.

**Consideration 4:** According to the conclusions of the groups of doctors who deal with domiciliary therapies, the antivirals proposed for the treatment of Covid-19 have proven to be not at all effective.

**Consideration 5:** Recent studies assume the importance of the involvement of the intestinal microbiota in Covid-19, together with the associated symptomatology<sup>8</sup> (3).

STAGE 0
(asymptomatic positive subject)

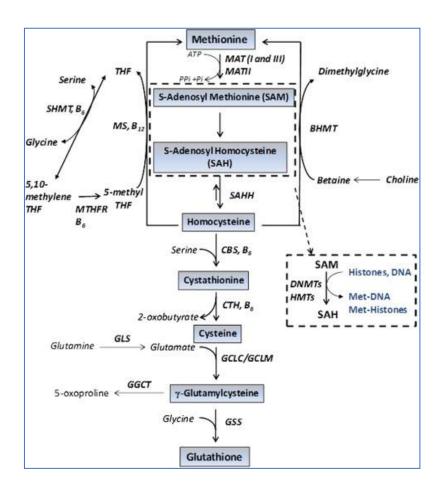
SUBSTANCE	POSOLOGY	CONTRAINDICATIONS
Betaine Anhydrous (Trimethylglycine)	500 mg/day every 2 days	
Betame Amiyurous (Timethyigiyeme)	until negativization	
B1	0.9 mg/day every 2 days	
Bi	until negativization	
B6	1.4 mg/day every 2 days	
ВО	until negativization	
B9	200 mcg/day every 2 days	
D9	until negativization	
B12	2.5 mcg/day every 2 days	
D12	until negativization	
	50 mcg – 2.000 IU/day	
Vitamin D3	every 2 days until	
	negativization	
Zina alasa nata	15 mg x N/day every 2	
Zinc gluconate	days until negativization	
NAC (N. A cotyleysteine on	600 mg/day every 2 days	
NAC (N-Acetylcysteine or	(if not integrated in the	
Acetylcysteine)	IV) until negativization	
Vitamin D	50.000 units for 6 days	severe CKD
Vitainin D		Hypercalcaemia
Lastafamia	200 mg x 2/day for 10	
Lactoferrin	days	

Asymptomatic individuals, with a positive test result, who in this phase had contacts with positively tested symptomatic individuals, should be treated with preventive cures as follows: for 3 days with Azithromycin 500 mg/day and Hydroxychloroquine 200 mg/day.

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<sup>&</sup>lt;sup>8</sup> A case of personalized and precision medicine: Pharmacometabolonic applications torare cancer, microbiological investigation, and therapy.

**Consideration 6:** In the absence of the above-mentioned supplements which serve to build up the vitamin B complex, it is possible to provide the names of some companies. As explained in the studies of Giovanni Puccio, vitamin B complex serves the purpose of maintaining the 3 vital cycles of folic acid, S-Adenosyl methionine and Glutathione.



Therefore, as explained by researcher Giovanni Puccio, the mechanism of cellular defence against the oxidizing agents can be outlined as follows:

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Ascorbate + Oxidizing Agent \rightarrow Dehydroascorbate + H<sub>2</sub>O<sub>2</sub>
Dehydroascorbate + 2 GSH \rightarrow Ascorbate + GSSG
H<sub>2</sub>O<sub>2</sub> + 2 GSH \rightarrow 2 H<sub>2</sub>O + GSSG
GSSG + NADPH + H<sup>+</sup> \rightarrow 2 GSH + NADP<sup>+</sup>
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The missing availability of GSH is in turn directly responsible for important alterations in the red blood cells, which mainly concern the integrity of the membrane and the haemoglobin. But, above all, it leads the organism to **temporary oxidative stress**. If in such a situation the cellular redox-homeostatic relationship is not re-established, there won't be any type of specific therapy that will definitively work against degenerative diseases. In fact, relapses are common. It is also counterproductive and sometimes even harmful to administer supplements without having studied

the biochemical system through hematochemical tests. For this reason, it is always preferable to contact experts before consuming supplements that could also become out pro-oxidants.

 ${\bf STAGE~1} \\ {\bf (flu-like~symptoms~and~/~or~lung~involvement~without~hypoxia)}$ 

SUBSTANCE	POSOLOGY	CONTRAINDICATIONS
Betaine Anhydrous (Trimethylglycine)	500 mg/day every 2 days until negativization	
B1	0.9 mg/day every 2 days until negativization	
B6	1.4 mg/day every 2 days until negativization	
B9	200 mcg/day every 2 days until negativization	
B12	2.5 mcg/day every 2 days until negativization	
Vitamin D3	50 mcg – 2.000 IU/day every 2 days until negativization	
Zinc gluconate	15 mg x N/day every 2 days until negativization	
NAC (N-Acetylcysteine or Acetylcysteine)	600 mg/day every 2 days (if not integrated in the IV) until negativization	
Vitamin D	50.000 units for 6 days	severe CKD Hypercalcaemia
Lactoferrin	200 mg x 2/day for 10 days	

SUBSTANCE	POSOLOGY	CONTRAINDICATIONS
Phlebloclysis C.R.A.Pu.		
<b>Therapy</b> - compose a drip with		
the following elements:		
• 500ml 0.9% physiological	1/die fino a quando la	
solution	temperatura non diventa < di	
• n. 3 vials of 600 mg of GSH;	38 °C, poiché sotto tale temperatura il virus non si	
• n. 2 vials of 300 mg of N-	replica.	
acetylcysteine;		

• n. 1 vial of 1 gr. of ascorbic	Severe chronic renal failure,
acid, must be increased up to	G6PDH
4 grams depending on the	
neutrophils or the high LDH	
value, to block peroxides and	
avoid damage to the heart	
muscle	

Anti-inflammatory drugs that could be used (NOT IN COMBINATION)		Gastritis, ulcers
NSAID: Ketoprofen	bag 80 mg x 2/day for 5 days (to be taken with food)	
NSAID: Nimesulide	bag 100 mg x 2/day for 5 days (to be taken with food)	
NSAID: Acetylsalicylic Acid	500 mg x 2/day for 5 days (to be taken with food)	
Gastro-protective drugs to		
prevent gastric lesions due to		
NSAIDs or corticosteroids		
PPI mono-therapy	At the discretion of the physician according to the medical history	
Antiparasitic-antirheumatic		
drugs		
Hydroxychloroquine	200 mg/day for 5 days if necessary up to 15 days	Arrhythmias, retinopathies Def. G6PDH
Antibiotics		
Azithromycin	500 mg/day for 6 days if necessary up to 9 days	Long QT syndrome
If necessary, in combination with Azithromycin if a bacterial superinfection is suspected, a 3 <sup>rd</sup> generation cephalosporin like Cefixime	400 mg/day for 5 days	
Anticoagulants		
Enoxaparin sodium	4.000 IU x 1-2/day for 10 days	

In this phase we noticed, that if the therapy was applied at the onset of the first symptoms, without waiting for the PCR test results before doing so, after 9 days in average the patients were negative. After 20 days the serological test verifies the antibody response. We notice the absence of antibodies,

which leads us to the following conclusion: if the virus is blocked after the occurrence of the first symptoms, it won't replicate, and our antibody-system will not need to produce antibodies. On the other hand, the medullary memory will remain.

**Consideration 7:** A syrup (Liposomal Glutathione) has been developed for those cases in which there is no possibility to administer the drip according to the **C.R.A.Pu. Therapy**. A drip of this therapy equals to a spoonful of the above-mentioned product. It uses the **liposomes** to encapsulate the active ingredients so as to assure that the respective compounds can reach the cells without causing damage to them during the transport there and without compromising their functionality.

# STAGE 2 (lung involvement with hypoxia)

Usually in this phase are managed patients who seek care late. The complete therapy of phase 1 plus the following therapy must be conducted:

SUBSTANCE	POSOLOGY	CONTRAINDICATIONS
Corticosteroids:		Hypertension, hyperglycaemia,
Prednisone	12.5 mg/morning and 25 mg/evening for 5 days	
Oxygen Therapy		
FR > 14/min + SpO2 < 92% AA SpO2 < 90% AA Or Start with 3 L/min and regulate the flow rate every 30-60 min (each flow-increase of 1 L/min may increase 2-3% SpO2) to reach SpO2 > 92%	5 L/min (evaluate SpO2/4h) Evaluate continuation of home-therapy after 4 days treatment if: saturation < 90% or saturation < 88% in COPD	

If O2-flows > 6 L/min or SpO2 persistently < 92%



## MANDATORY HOSPITALIZATION

## CONCLUSIONS

The guidelines illustrated above have been followed by several colleagues of the <a href="https://home-therapy.group">home-therapy.group</a>, <a href="https://ippocrate.org">ippocrate.org</a> and by the <a href="https://emanuele.Association">Emmanuele.Association</a>. The aim of the above illustrated protocol is to provide the physicians with essential information to be applied in an early home-therapy for patients who show symptoms of Covid-19, who are suffering from it and who are in home-isolation. The given recommendations are based on evidence and on experiences gained in the last 19 months and are a result of long-term research. These recommendations could be subject to modifications by newly obtained data, deriving from experience or from literature.

## **OTHER CONSIDERATIONS**

**Dr. Cusumano:** "In 2021 scientific proof was obtained for the involvement of human microbiota in the development of COVID-19 disease. The presence of RNA SARS-CoV-2 has been observed in human faecal samples as well as the activity of SARS-CoV-2 in faecal samples of patients infected with Covid-19. From these studies, see publication<sup>9</sup>, we can infer that the nature of SARS-CoV-2 is similar to that of a bacteriophage that has never been detected and described before. This is the reason why the viral replication follows the bacterial growth and is influenced by the administration of specific antibiotics. The peptides related to SARS-CoV-2 have been detected and identified in 30 days old bacterial cultures. During the last 19 months I have treated about 1200 patients, with only 3 hospitalisations. Due to prior explicit agreement of a group of about 200-300 patients, with respect to the treatment of their personal data, it is possible to obtain references and contact-data to verify their testimony".

I am always at your disposal to provide further information regarding the studies carried out. We welcome this opportunity to send you our most cordial greetings.

Dr. Giuseppe Cusumano, general practitioner in Campobello di Mazara

Puccio Giovanni<sup>10</sup> - Association for Scientific Research "Emmanuele"

<sup>&</sup>lt;sup>9</sup> Increase of SARS-CoV-2 RNA load in faecal samples prompts for rethinking of SARS-CoV-2 biology and COVID-19 epidemiology (Mauro Petrillo and others) – NIH National Library of Medicine - PubMed

<sup>&</sup>lt;sup>10</sup> Giovanni Puccio, independent researcher, co-founder of the Association for Scientific Research "Emmanuele", publications and personal page on Researchgate: <a href="www.researchgate.net/profile/Giovanni-Puccio-2">www.researchgate.net/profile/Giovanni-Puccio-2</a>

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