Feasibility of large-scale population testing for SARS-CoV-2 detection by self-testing at home.

Paula Iruzubieta, Tatiana Fernández-Lanas, Laura Rasines, Lorena Cayon, Ana Álvarez-Cancelo, Álvaro Santos-Laso, Agustín García-Blanco, Soraya Curiel-Olmo, Joaquín Cabezas, Reinhard Wallmann, Emilio Fábrega, Víctor M. Martínez-Taboada, José L. Hernández, Marcos López-Hoyos, Jeffrey V Lazarus, Javier Crespo.

# **Appendix S1: FULL COPY OF THE QUESTIONNAIRE**

This questionnaire had an online format. Here we transcribe the questions.

## SOCIODEMOGRAPHIC DATA

1. Kit number:					
2. Current date:					
3. Date of birth:					
4. Gender					
☐ Male ☐ Female					
5. Zip code from your habitual residence:					
6. Home-related information:					
• How many people live in your habitual residence (including you)?					
$\square$ 1 $\square$ 2 $\square$ 3 $\square$ 4 $\square$ 5 or more					
• Dwelling size (in square meter – m <sup>2</sup> –):					
Number of bedrooms:					
• Are there individuals who do not belong to the household who visit your habitual residence regularly?					
$\square$ Yes, the domestic assistant					
☐ Yes, the caregiver of a dependent person					
☐ Yes, others					

$\square$ No
7. In case of living with someone:
a. Has any partner had respiratory symptoms (cough, shortness of breath or fever) in the last months?
□ No
□ Yes
b. Has any partner been diagnosed with infection by the new coronavirus?
□ No □ Yes
8. Do you work in any of these sectors?
☐ Shop assistant
☐ Transport service
☐ Security corps and forces, firefighter, civil protection
☐ Cleaning service
☐ Health personnel with clinical assistance to patients
☐ Social services personnel
☐ Caregiver of a dependent person at home
☐ Other face-to-face services during the pandemic period
9. Have you been in contact with someone who has been diagnosed with infection by the new
coronavirus?
□ No □ Yes
CLINICAL DATA
10. Weight (kg):
11. Height (cm):
12. Are you a smoker or have been a smoker (more than 1 cigarette a day) in the last 5 years?
☐ Yes ☐ No
13. Do you take medication for the following health problems?
☐ High blood pressure

	☐ Diabetes (high blood levels of glucose)				
	☐ Chronic lung disease (such as COPD or chronic bronchitis)				
	☐ Heart disease (such as heart attack or angina pectoris)				
		• •		etion that lowers your defenses	
	•			•	
	(immunosuppressants) including corticost	teroids, azatl	hioprine, me	ethotrexate, tacrolimus, infliximab,	
	etc				
14.	4. Have you been diagnosed with cancer in the last 5 years?				
	☐ Yes ☐ No	1 20	20 1	II h. l C.d C.ll	
		ebruary 1, 20	20 to today:	Have you had any of the following	
	symptoms?				
	Symptom		swer	4	
	Fever	☐ Yes	□ No	_	
	Cough	□ Yes	□ No	_	
	Fatigue or shortness of breath	☐ Yes	□ No	4	
	Severe asthenia (you felt very tired)	□ Yes	□ No	4	
	Muscle or joint pain  Sore throat	□ Yes	□ No	-	
	Headache	□ Yes	□ No	-	
	Loss of smell	□ Yes	□ No	-	
	Disturbance of flavors perception	☐ Yes	□ No	$\dashv$	
	Nausea or vomiting	□ Yes	□ No	$\dashv$	
	Diarrhea Diarrhea	□ Yes	□ No	-	
	Others:	103		_	
		_			
16	16. Have you ever been tested to detect if you were infected with coronavirus by taking a sample from you				
10.		were infected	i with colone	whus by taking a sample from your	
	throat or nose?				
	□No				
	☐ Yes, with a negative result				
	☐ Yes, with a positive result				
17.	If your previous answer (question 16) is aff	firmative, ple	ease, specify	the reason why it was done.	
	☐ Have symptoms of respiratory infection	(cold or pne	umonia)		
	☐ Contact with a person infected by corona	_	<i></i>		
	☐ Be health personnel				
☐ Others (specify)					
18.	. If your previous answer (question 16) is affirmative, please, specify the approximate date you were tested for coronavirus infection.			he approximate date you were tested	
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19. If your previous answer (question 16) is affirmative:

a.	A medical doctor prescribed you specific medication (not pain-relief treatment such acetaminophen)?  Yes  No					
b.	Were you hospitalized?					
	□ Yes					
	□ No					
c. Were you admitted to an Intensive Care Unit (ICU)?						
	□ Yes					
	□ No					
	SATISFACTION QUESTIONNAIRE					
Pl	ase, indicate your degree of satisfaction with the following aspects regarding:					
•	Information received:					
	1. The information received to access and complete the survey has been adequate.    Very dissatisfied     Neutral     Satisfied     Very satisfied     Very satisfied     Very dissatisfied     Dissatisfied     Dissatisfied     Neutral     Satisfied     Very satisfied     Neutral     Satisfied     Very satisfied     Very satisfied     Very satisfied     Very satisfied     Very dissatisfied     Dissatisfied     Dissatisfied     Dissatisfied     Neutral     Satisfied     Neutral     Satisfied     Very satisfied					
• Online form:						
	<ul> <li>1. Access to the form has been easy.</li> <li>□ Very dissatisfied</li> <li>□ Dissatisfied</li> <li>□ Neutral</li> <li>□ Satisfied</li> <li>□ Very satisfied</li> </ul>					
	<ul><li>2. The form format is simple.</li><li>□ Very dissatisfied</li><li>□ Dissatisfied</li></ul>					

as

	YES, always	☐ NO, it is not necessary	☐ I don't know			
• Do you think that this kind of test should be carried out by health care personnel?						
	Very satisfied					
□ Satisfied						
	Dissatisfied Neutral					
	☐ Very dissatisfied					
• I really appreciate, in this pandemic situation, for this test-performing system at home.						
Your opinion is important, please answer the following aspects or questions:						
	☐ Very easy					
	□ Easy					
	□ Normal					
	☐ Very difficul☐ Difficult☐	t				
3.	-	ling of the rapid test has been:				
	☐ Very easy					
	□ Normai □ Easy					
	☐ Difficult ☐ Normal					
	☐ Very difficul		,			
2.	The handling of the	pipette (tube to transfer blood	from finger to well) has been:			
	□ Very easy					
	□ Normai □ Easy					
	☐ Difficult ☐ Normal					
	☐ Very difficul					
1.		lancet (stinging device to obtain	in a small amount of blood) has been:			
• Rapid	antibodies test:					
	☐ Very easy					
	□ Easy					
	☐ Difficult ☐ Normal					
	☐ Very difficul	t				
4.	Pictures uploading h	nas been a procedure:				
	☐ Very satisfied	d				
	☐ Satisfied					
	<ul><li>☐ Dissatisfied</li><li>☐ Neutral</li></ul>					
	☐ Very dissatis	fied				
3.	_	been easy to understand.				
	☐ Very satisfied	d				
	☐ Satisfied					
	☐ Neutral					

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Appendix S2: FULL COPY OF THE PAPER-BASED INSTRUCTION FOR USE					
GUIDELINES	Record ID:				
	Kit number:				

Please, in this envelope you can find all the documents and materials required for participate in the study you already know, since you have agreed to participate in it by telephone. However, and in compliance with the corresponding code of ethics, we should kindly ask you to, please, sign the document *Informed Consent* and send it back to us by ordinary postal mail, as explained below. Herein, you will find all the information about the content of the envelope and the steps that you should follow for performing the test.

Therefore, please, read this document carefully and in detail.

What aspect/s of the study would you improve?

### **CONTENT OF THE ENVELOPE:**

- I. Documents:
  - a) Patient Information Sheet
  - b) Informed Consent (2 identical copies)
- II. Materials for self-performing the antibodies test (see the images below):
  - a) Lancet
  - b) Test
  - c) Pipette
  - d) Liquid-containing tube (i.e., buffer)

### STEPS TO FOLLOW:

#### I. Documents:

- 1°) You will find the Patient Information Sheet and two copies of the Informed Consent. In case of any of these documents are missing, please do not hesitate to contact us immediately (using the telephone number indicated at the end of this document). Please, read carefully and in detail the Patient Information Sheet that provides you information about the study.
- 2°) Fill in, at least, one of the *Informed Consent* copies (the another one is for you). Please, take into consideration the following indications to correctly fill in the *Informed Consent* document:
  - In the first page, you should write your name and surname in CAPITAL LETTERS, as well as, you should answer the 4 questions, that you will find in the above mentioned document, choosing between the options "Yes" or "No".
  - In the second page, you should sign the document and write the current date in the space reserved for it (i.e., up to the right). **IMPORTANT:** At the moment, you **do not should** complete the last part of this document (i.e., withdrawal of consent); this part should be only completed later on if you want to withdraw your consent to participate in the study.

3°) Introduce the signed *Informed Consent* in the envelope containing the Valdecilla's Hospital address and deposit it in any mailbox or post office.

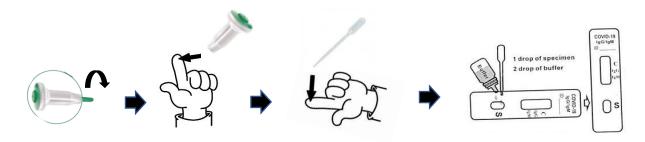
### II. Materials for performing both the test and survey:

1°) Use an electronic device (i.e., computer, smartphone or tablet) to access the following URL, where you will find a survey and a video tutorial:

https://digestivovaldecilla.typeform.com/to/BKqrXL (this is the link that you should have received in your smartphone or email account)

Watch carefully the video that you will find at the beginning of the survey and which will explain you, in detail, the usefulness of each instrument and how to perform the test yourself.

2°) Please, follow these instructions: Wash your hands with hot water. Spin the green tip of the lancet and remove it. Place the lancet on your finger and tight. Use the pipette to suck an enough volume of blood (i.e., large drop of blood) and place it into the test well. Subsequently, add the liquid contained in the tube to the drop of blood and consequently, to the same well of the test, using the same pipette. IT IS CRUCIAL THAT YOU BE CAREFUL and follow each and every one of the mentioned steps. If necessary, watch the video as many times as you need or contact us; only one kit per participant will be sent.



- 3°) Once you have watched the video and understood the procedure, on the next screen you will find the survey with the questions that you should answer. First of all, do not forget to write both, the Record ID and the kit number, in the corresponding fields. Importantly, you can find these data at the top right of the first page of this document. Then, answer the questions clicking on "continue" to move forward.
- 4°) Take a picture of the test <u>immediately after putting in the test well both, the drop of blood and the liquid contained in the tube</u>, and, please, attached it clicking the button [ [↑] choose file]. Finally, click on "accept".
- 5°) The test takes 20 minutes to reveal the results. During this time, you can answer the remaining questions by selecting the corresponding option in the drop-down list or by completing them with numbers. You should click on "continue" at the bottom of each page.
- 6°) Once the 20 minutes have elapse, you should take a second picture of the test indicating the final result. Please, be sure to take a high-quality picture with enough natural light. You can upload the picture just taken to the online application, using your smartphone or computer, or failing that, you can directly connect the camera of your smartphone and take the picture. In case of choosing the last option, the image will be automatically uploaded.
- 7°) Once the survey is finished and the picture has been correctly uploaded, please, click on "send".

### Thank you very much for participate on this study

If you need assistance, please, do not hesitate to contact us calling the phone (+34) from Monday to Friday from 9:00 - 17:00h