

# COVID19 pandemic: response from the Andalusian Public Health System Biobank and the Donors Registry



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## ABSTRACT

**Introduction:** Similarly to other fields and regions, the COVID19 pandemic has supposed a challenge for the andalusian health and research institutions, which have had to deal with the coronavirus impact invoking their flexibility and management skills.

**Methods:** When the alarm state was declared in Spain due to the quickly increase of infected people, priority was given to clinical activities in Andalucía. Consequently, the equipments, consumables and technical staff from the Andalusian Public Health System Biobank were made available to diagnostics. After this early response, in terms of supporting diagnostic validation activities, clinical trials and experimental projects using human biological samples, the Biobank has adapted their procedures, facilities and consumables in order to guarantee the availability, quality, biosafety and preservation of biospecimens derived from COVID19 patients, minimizing the intervention on the clinical processes.

**Results:** The Biobank has elaborated a protocol for the integration and electronic tracking of retrospective COVID19 samples from the diagnostic laboratories, and the prospective collection of samples, including the Informed Consent process taking in consideration the difficult donors' conditions. In addition, a specific record was designed to control the circulation of samples from hospitals to research laboratories and companies. On the other hand, the Donors Registry has initiated a campaign for the recruitment of COVID19 patients who have overcome the illness.

**Conclusions:** All previous actions has shown the capacity of adaptation and contribution of the Andalusian Public Health System Biobank, integrated inside the health and research institutions it belongs, and recovering its functions in an strengthened way.

## EARLY RESPONSE March 2020

### IMMEDIATE AVAILABILITY FOR CLINICAL ACTIVITIES OF:

Consumibles and reactivos	Instruments	Technicians
<b>To Civil Protection corp:</b> <ul style="list-style-type: none"> <li>• Disposable nitrile gloves</li> <li>• Masks</li> <li>• Disposable coats</li> </ul> <b>To Hospital:</b> <ul style="list-style-type: none"> <li>• Nucleic acids isolation kits</li> <li>• Filter tips</li> <li>• PCR plates and tubes</li> </ul>	<b>To Hospital:</b> Temporary transfer of QIAcube and rotor adapters	<b>List of volunteers for:</b> Training and performance of diagnostic tests  <b>Searching for:</b> Multiplex PCR protocols published for COVID19 diagnosis

## CURRENT RESPONSE May- November 2020

COLLECTION OF COVID19 SAMPLES	Number of donors recruited	Number of samples collected
Positive cases	876	2496
Negative cases	160	475
COVID19 like-symptoms; no PCR test	6	16
Pending diagnosis	111	226
<b>TOTAL</b>	<b>1153</b>	<b>3213</b>

MANAGEMENT OF SAMPLES FOR COVID19 PROJECTS	Number of requests	Number of samples provided
Received	27	--
In paperwork phase	4	--
On delivery	4	425
Satisfactorily closed	1	25
Non-satisfactorily closed	3	--
<b>TOTAL</b>	<b>39</b>	

### Donors Registry for Biomedical Research



For additional information, see: **POSTER "If I have overcome COVID-19, how can I help? It is the question that many citizens ask themselves"**

## NEXT RESPONSE April-May 2020

### 1) Biobank facilities and biosafety considerations

- ✓ Evaluation of staff biosafety risks:
  - Personal and colective protective equipment.
  - Desinfectant solutions.
  - Residues decontamination.
- ✓ Facilities adaptation to BSL2 level when it is needed: equipment reorganization and acquisition.
- ✓ Consumibles: screw-cap pre-coded tubes acquisition.
- ✓ Laboratory protocols revision for sample handling:
  1. Immediate reception of samples and documents, avoiding interpersonal contact.
  2. Processing in BSC, minimizing aerosol generation.
  3. Internal and external transport, and biocustody.

### 2) Consulting and management services for COVID19 projects

- ✓ COVID19 networking activities.
- ✓ Preparation of proposals.

### 3) Andalusian institutional instructions for the Health System in relation with the Biobank activity

- ✓ Specific record to control COVID19 projects involving biological samples from the Andalusian Public Health System: information about the project, collaborators, biosafety considerations and destination of the samples.
- ✓ Several options for the management of retrospective and prospective diagnostic sample surpluses for research:

OPTION		Processing	Aliquoting	Storage	Biobank LIMS*
1	Clinical laboratories	X	X	X	
	Biobank				X
2	Clinical laboratories	X	X		
	Biobank			X	X
3	Clinical laboratories	X			
	Biobank		X	X	X
4	Clinical laboratories				
	Biobank	X	X	X	X

\*Massive integration of retrospective records

- ✓ Availability of pre-analytical information.

### 4) Specific COVID19 procedure elaborated by the Biobank, highlighting:

- ✓ Biobank records of donors and samples performed in several steps in function of the information available.
- ✓ Informed consent (IC) process:
  - Oral consent with witnesses, but all the details included in the clinical records.
  - Signed or oral consent with witnesses by the patient's relatives, but all the details included in the clinical records. Future confirmation by the patient.
- ✓ In case of IC is missing (diagnostic samples):
  - Samples without clinical information: ethical committee approval.
  - Samples AND clinical information: to try to contact to patients for IC process, and ethical committee approval.

## CONTACT INFORMATION

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