

DBT-THSTI develops bioresources to help study COVID-19 pandemic

New Delhi, Aug 03: The Department of Biotechnology's Faridabad-based Translational Health Science and Technology Institute (DBT-THSTI) has established a set of patient cohorts as a part of the National Bioresource Centre for COVID-19, which is an initiative of DBT, its autonomous institutions, and hospitals in Delhi and other parts of the National Capital Region.

The Biorepository facility at THSTI has developed the following COVID-19 Bioresources:

- Standardized well phenotyped serum panel for testing of antibodies (development and evaluation sera panels)
- Pooled samples to develop calibrators/controls (both positive and negative for SARSCoV2 for diagnostic assays)
- Standardized nasopharyngeal/oropharyngeal panels for testing of antibodies and
- Viral strains, and inactivated virus



Over 4,000 samples have been collected from participants who were suspected of SARS-CoV2 infection, irrespective of whether they tested positive or negative. Almost 2,000 people who have tested positive are being followed up with about 250 people having given samples 6-10 weeks after being diagnosed.

The THSTI's Biorepository has received 20 requests from academia and industry. It has responded to 12 requests and others are being processed through an external access control

committee, established by DBT, that independently decides the merit of each application. The requests include those for COVID-19 positive sera and plasma, COVID-19 negative samples, and sera and nasopharyngeal/oropharyngeal swabs in viral transport medium.

In response to the requests, the Biorepository has provided a total of about 2,400 sera samples and 130 naso- and oro-pharyngeal swabs to date. Eight development sera panels (including samples from 100 participants), two naso-oro-pharyngeal panels (75 samples), four evaluation panels (samples from 100 participants), pooled positive standard and pooled negative standard have been shared.

In addition, DBT-THSTI offers diagnostic performance evaluations, and most recently has evaluated ELISafe 19 IgG ELISA for SARS-CoV-2 developed by Syngene International Ltd/Himedia for 3 manufacturing batches by a 'beta-testing panel' and a Q-Line IgG Rapid card for SARS-CoV-2 developed by POCT Services Pvt. Ltd. and RGCB by a 'development panel.'

Various SOPs related to the THSTI Biorepository bioresource on COVID-19 are available at https://thsti.res.in/covid_bioresources.php

Contact person: Dr. Siuli Mitra (smitra@thsti.res.in)

Link: <https://thsti.res.in/>