

Written Evidence Submitted by Tissue Solutions

(C190053)

Introduction

The company, based in Glasgow, is part of the Intelligent Tissue Group Limited, and provides a one-stop shop for ethical human biomaterial procurement and tissue related services. Over the last 12 years Tissue Solutions have supported researcher projects all over the world and now employ more than 40 staff, with the majority of employees being qualified to PhD and degree level. We are the only UK-owned virtual biobank in Great Britain. Last year, the company was awarded the Queen's Award for Enterprise in the International Trade category in recognition of their contribution.

Our work on COVID-19 samples

Tissue Solutions is working in partnership with Cambridge Blood and Stem Cell Biobank (CBSB) at the University of Cambridge. The partnership is maximising efficiency, global connections and expertise to ensure that those at the frontline of developing tests and vaccines can access COVID-19 samples as quickly as possible.

Tissue Solutions is working with CBSB to increase the turnaround time and usefulness of every COVID-19 sample donated. The two organisations are working together through Cambridge Enterprise (the commercialisation office of the University of Cambridge) having joined forces following the Tissue Directory and Coordination Centre's (TDCC) call for biobanks to record their capabilities online to make it easier to identify opportunities for collaboration. Tissue Solutions does not earn any profit from its provision of COVID-19 samples.

We have responded quickly to the unique set of challenges brought about by this global pandemic. The scientific community urgently needs COVID-19 samples and the company has adapted accordingly, completing sample orders within 24 hours and ensuring that there is no waste.

Samples are being distributed to researchers racing to increase our understanding of the virus and to those developing diagnostic tests and vaccines. Tissue Solutions is sourcing fresh blood samples on demand through its well-established network of international collection sites. The company's shipping and logistics team quickly arranges the delivery of the samples to CBSB, which then uses its laboratory facilities to expertly separate the highly infectious blood sample into its component parts. These blood fractions are more useful to scientists in labs, due to their increased stability. This lets them observe, more accurately, how different sample types behave in their investigations to increase the reliability of their study.

Thanks to the new partnership, a test tube of blood (the equivalent of one patient sample) can be divided into multiple plasma or serum samples before being sent on to several researchers.

Capacity and capability issues

Tissue Solutions is currently working with biobanks across England to provide researchers with vital COVID-19 samples for their research. The company is keen to engage with Scottish NHS biobanks to further expedite the process for Scottish life science companies and researchers. There is a need to ensure a consistent approach across the UK to ensure that companies, like Tissue Solutions, can provide an effective service. To date, there has been an unwillingness from Scottish biorepositories

to share access to tissue samples with private sector organisations, despite the clear need for all organisations to pull research capabilities to tackle the pandemic.

Flexibility and agility of institutions

The speed and urgency of the new partnership with CBSB is an example of how UK-based research institutions have demonstrated their ability to be agile and strike up new partnerships to deal with the pandemic. However, in contrast, Scottish research institutions have been less open to partnership working with private sector organisations.

It is important that biorepositories in the UK make blood, tissue and organ samples available to those who need it for research purposes, regardless of the type of organisation, providing that they are fully compliant with all of the ethical and quality safeguards.

Readiness to deal with future outbreaks

It is important that there is a free flow of both information and access to tissue samples if we are to ensure that the UK research and medical community are going to be in the best place to react to a future outbreak. A new partnership approach between the public and private sector would help break down any barriers and ensure optimal use of scarce resources.

A global pandemic brings with it particular challenges, potentially restricting access to otherwise readily available samples from international markets. It is therefore important that samples can flow easily and that we have ready access to domestic samples at all times. In addition, the UK, with its large medical research base, may be ideally placed to help deal with future international outbreaks. In such circumstances, companies like Tissue Solutions, with our international footprint, may be well placed to act as a conduit between UK research organisations and affected countries.

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