

Asterand – human tissues and services to support oncology research

Developing therapeutic approaches to treat cancer remains a key focus for pharmaceutical companies and funded research organisations.

The increasing need for effective cancer therapeutics is fuelled by the increasing incidence of new cancers, with over 0.25 million and 1.4 million new cases diagnosed in 2008 in the UK and USA respectively.

These numbers are augmented further by the growing diagnosis and treatments in emerging countries, including China, India and South America.

As such, the global market for oncology is growing and according to a recent report from IMS Health, is set to double in the next decade, and estimated to reach \$75-80 billion by 2012.

The 'top four' cancers, prostate, breast, lung and colon, account for almost 50 per cent of all diagnosed cancers.

According to the US National Cancer Institute (NCI): "Today, the outcomes of cancer research have the power to transform the vision of the National Cancer Act of 1971 into an ambitious but achievable goal: the elimination of the suffering and death due to cancer by 2015."

However, the NCI has also identified the lack of access to appropriately collected and annotated human tissue as one of the major barriers to realising the promise of developing targeted cancer diagnostics, preventives, and therapies.

Asterand plc is the leading global supplier of high quality, well characterised human tissue and human tissue-based research services to drug discov-

ery scientists. Our mission is to accelerate target discovery and compound validation and enable pharmaceutical and biotechnology companies to take safer and more effective drugs into the clinic.

Asterand has unparalleled access to human tissue through our worldwide network of collaborative donor institutions.

This has allowed us to develop XpressBANK™, our human tissue biobank, which contains several hundred thousand specimens from a broad range of therapeutic areas and with diverse ethnic representation. XpressBANK™ comprises frozen and fixed tissues together with biofluids and tissue derivatives such as DNA and RNA.

A core strength of Asterand's XpressBANK™ is in the number and quality of human tumour tissues available to support oncology research, in particular through the availability of samples from the 'top four' tumour types.

Of particular relevance to oncology research, Asterand's unique QuadSet™ Plus biospecimen collection protocol has been designed to maximize scientific value for cancer researchers. Quad Set™ Plus biospecimens collections consist of a tumor and normal sample, each then sliced into two pieces.

We preserve one piece in Liquid Nitrogen or Isopentane and the other is fixed in formalin and is available as FFPE sample.

In addition, serum and plasma samples from the same clinical case are available. Quad Set™ Plus biospecimens are accompanied by extensive clinical data making them ideal for biomarker

validation studies.

Asterand's biospecimens are obtained using stringent standard operating procedures and ethical protocols to provide assurance to the researcher that the material will meet their scientific needs. Our renowned quality assurance procedures provide rigorous controls on characterization of samples and their corresponding clinical data.

As part of this process, we independently confirm pathology and assess RNA integrity of all samples.

These data are provided to researchers so they can select samples that will best meet their specific scientific requirements.

Added value for researchers is the quantity of material provided, which allows scientists to conduct multiple experiments using a single specimen.

To tailor for very specific oncology programmes, Asterand provides ProCURE™ service to establish collections of biospecimens for specific disease types / stages or using specialized collection protocols.

In addition to provision of human tissues and biofluids to support oncology research, Asterand also provides PhaseZERO® research services to support target validation for customers. For over 10 years, we have delivered high quality target validation data (quantitative gene expression, ISH and IHC) to many top tier pharmaceutical companies.

This fee for service support allows us to provide additional resource for research programmes and ensures that all IP remains with the study sponsor.



Experience **THE HUMAN** Difference

Asterand is the leading global supplier of human tissue and human tissue-based research services to support those engaged in drug discovery and development.

- ✓ THINK R & D PRODUCTIVITY
- ✓ THINK CONFIDENCE
- ✓ THINK SPEED
- ✓ THINK HUMAN
- ✓ THINK ASTERAND

XpressBANK™
Accelerate Your Discovery

Human Tissues and Biofluids

ProCURE™
Your Needs. Our Network.

Custom Human Tissues and Biofluids

PhaseZERO®
Empowering Human Drug Discovery

Target Validation Services/
Compound Evaluation Services

 **Asterand®**
Partners in Human Tissue Research