Source BioScience

# Molecular Diagnostic Services

## Your Laboratory Service Partner for Precision Medicine

# About

Complete Healthcare Service for Molecular Diagnostics. Source BioScience provide an end-to-end clinical healthcare service from histopathology, including digital pathology and AI, through to molecular diagnostics services; bringing a unique clinical workflow for the delivery of precision therapeutics. Our expertise in histopathology, coupled with the latest technologies in molecular diagnostics, enables us to provide a comprehensive service to support your requirement for specialised diagnostics.

At Source BioScience, we are committed to working with our partners to further the targeted nature of precision medicine for improved patient outcomes. Our Histopathology services and Molecular Diagnostic tests are undertaken at our principal facility in Nottingham, UK, incorporating accreditation standards to ISO 15189:2012 supported by UKAS.

# Precision Diagnostics - Clinical Service Offerings with Market-Leading Turnaround Times

## Our expansive portfolio of diagnostic tests offers a seamless platform to diagnose and monitor disease, detect risk, and identify appropriate therapy options for individual patient needs.

Source BioScience provides the highest quality reporting and service standards with rapid turnaround times. Cases submitted under the molecular testing portfolio are routinely turned around in ≤3 days, with reflex tests (e.g HER2 FISH) turned around in an additional 2 days.

### Gene Targeted Mutation Analysis

Mutation analysis is carried out for the personalised selection of treatment for a range of different cancer types. Mutation detection tests include identification of mutations in EGFR, BRAF, NRAS and KRAS. Our mutation testing services are suitable for archival FFPE tissue samples.

### Routine and Specialist Immunohistochemistry Assays (IHC)

IHC based assays are vital in the molecular identification of biomarkers in cancer and other diseases. Our diagnostic offering enables protein expression to be determined immunohistochemically to define patient suitability for anti-cancer treatments e.g HER2/ALK/ROS-1/PD-L1/MMR. Confirmatory testing using FISH is available as an automated reflex test.

### Hormone Receptor Testing

The use of IHC assays in identifying Oestrogen and Progesterone to guide breast cancer treatment. Our commitment to clinical quality ensures we use CE-IVD/FDA approved antibodies and assays to meet our laboratory accreditation requirements and national guidelines.

### In-situ Hybridisation (ISH)

ISH uses labelled complementary DNA, RNA or modified nucleic acids strands to localise a specific DNA or RNA sequence in a portion or section of tissue or cells to identify disease-related biomarkers, applicable for HER2 testing in breast and gastric tumour.

### Toxicity Testing

ToxNav is an innovative germline DNA test which predicts patient toxicity to 5FU and Capecitabine based chemotherapy treatments. ToxNav uses 20 SNPs for greater specificity and sensitivity, delivered in collaboration with Oxford Cancer Biomarkers.

# Molecular Diagnostics - Test By Indication

| | |
|---|---|
| **Lung** | |
| Mutation Analysis | Pyrosequencing / NGS<br>• EGFR/BRAF/KRAS G12C<br>• EGFR mutation surveillance testing (T790M) |
| Immunohistochemistry | IHC<br>• ALK / ROS-1<br>• PD-L1 protein expression |
| PCR | • ALK/ROS-1/RET/MET Ex14 skipping PCR panel |
| **Breast** | |
| Immunohistochemistry | IHC<br>• HER2 overexpression. If the HER2 result shows 2+ IHC staining, reflex FISH will automatically be performed<br>• Hormone receptor test for ER/PR<br>• Test for PD-L1 expression (TNBC)<br>• Identification of Ki-67 status |
| In Situ Hybridisation | ISH<br>• HER2 overexpression |
| EndoPredict | qRT-PCR<br>• Prognostic breast test for adjuvant therapy benefit |
| **Colorectal** | |
| Mutation Analysis | Pyrosequencing / NGS<br>•KRAS/ NRAS/ BRAF |
| Immunohistochemistry | • MMR |
| Methylation Analysis | • MLH1 promoter hypermethylation |
| PCR | • MSI *(Idylla)* |
| **Melanoma** | |
| Mutation Analysis | Pyrosequencing / NGS<br>• NRAS/BRAF |
| **Gastric** | |
| Immunohistochemistry | • Test for PD-L1 expression<br>• HER2 overexpression. If the HER2 result shows 2+ IHC staining, reflex FISH will automatically be performed |
| In Situ Hybridisation | • HER2 overexpression |
| **Multiple** | |
| Toxicity Testing | NGS<br>• ToxNav - Predicts patient toxicity to 5FU and Capecitabine based chemotherapy treatments |

A comprehensive list of tests can be found on our website:
Diagnostic Services | Histopathology Services | Source Pathology | Source BioScience

# Myriad EndoPredict®
# Prognostic Breast Cancer Test

## Introducing a second generation gene expression test for superior prognostic power.

EndoPredict is designed for patients with ER+, HER2- primary breast cancer (node-negative or node-positive [micrometastases, 1-3 nodes], pre or postmenopausal). Our partnership with Myriad enables us to offer this NICE-approved breast cancer multigene assay to support effective adjuvant therapy decision making. Sample submissions for Myriad Genetics EndoPredict test are processed locally in our UK laboratory, facilitating a rapid and cost-effective testing workflow without the need to release human tissue outside of the UK/EU.

### One Test – Three Clinical Answers

EndoPredict is the only prognostic test that can help direct both short-term and long-term treatment plans for patients by answering the following questions:

1. **Can chemotherapy be avoided?**
   (Risk up to 15 years)
2. **What is the absolute benefit from chemotherapy?**
   (Chemotherapy benefits)
3. **Can endocrine therapy be stopped after 5 years?**
   (Risk between 5 and 15 years)

## Why Partner With Us?


## Contact the team

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**Scan the QR code for our website**