



Solid tumour test menu

Information for Medical Specialists

The Sonic Genetics solid tumour test menu ranges from single gene FISH probes to comprehensive genomic profiling.



BASE
SUBSTITUTION



INSERT/DELETION



COPY NUMBER
ALTERATIONS



REARRANGEMENTS



GENE EXPRESSION

Comprehensive genomic profiling

FoundationOne CDx® provides coverage of more than 300 genes using technology which completely interrogates the genetic coding regions within those genes, providing a platform that evaluates base substitutions, insertions, deletions, copy number alterations and rearrangements, together with tumour mutational burden (TMB) and microsatellite instability (MSI). This premium service provides a comprehensive and personalised genomic profile of your patient's tumour, with targeted therapies recommended where available. FoundationOne CDx also links your patient's mutation status and tumour type to clinical trials, both nationally and internationally.

Cost: \$5,950*

Genomic profiling

The Contextual Genomics Full FIND IT® Cancer Hotspot Panel provides coverage of more than 120 hotspots (targets) across more than 30 genes. The Full FIND IT panel is designed to provide clinically relevant and actionable information for common mutations found in most solid tumour types, for \$595.*

If the patient has NSCLC, metastatic melanoma or metastatic colorectal cancer, and meets the appropriate Medicare rebate criteria, they will be able to access the full FIND IT panel at a discounted price of \$395.*

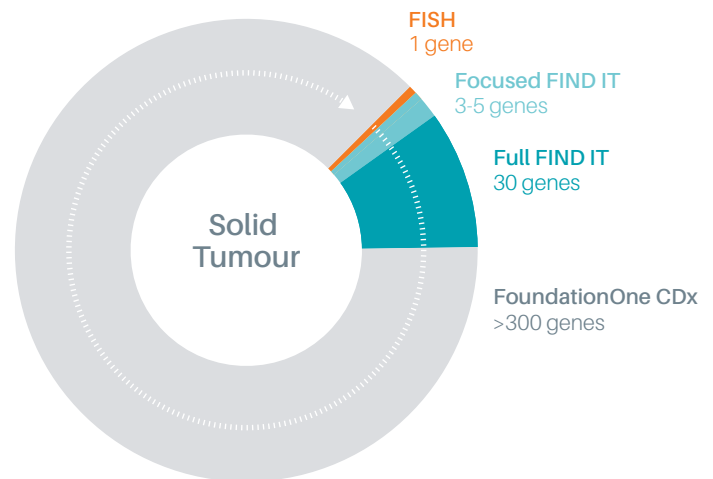
Both the focused (detailed below) and full FIND IT panel provide guidance when choosing targeted therapies. They can also identify resistance mutations and include potentially relevant clinical trial options¹ for your patient.

Focused mutation testing (including EGFR, KRAS/NRAS and BRAF)

The focused Contextual Genomics FIND IT Cancer Hotspot Panel provided by Sonic Genetics test key genes for non-small cell lung cancer (NSCLC), melanoma and colorectal cancer, at no cost to the patient.²

1. Clinical trial options are Australian only and identified based on mutation status and tumour type only.
2. Focused panels are only accessible by patients that meet relevant Medicare rebate criteria.

*Correct at time of printing.



FISH probes (e.g. ROS1, ALK, PTEN)

FISH probes provide genetic information on specific gene loci, identifying additions, deletions, rearrangements and copy number alterations. This testing methodology allows for quick turnaround times compared to NGS technology. Costing of FISH testing is complex, due to the numerous Medicare rebates available. For accurate and up-to-date pricing, please contact Sonic Genetics or your local Sonic Healthcare pathology laboratory.

A comprehensive library of FISH probes is available. Please review our website or contact your local Sonic Healthcare pathology laboratory if you are interested in a specific gene or FISH test. For further information, please visit www.sonicgenetics.com.au/our-tests/cancer-genetics.

Gene signature assay

Prosigna® is a clinically validated gene expression assay, designed to assess the risk of distant recurrence in post-menopausal women with hormone receptor-positive breast cancer. Prosigna also determines the tumour's intrinsic subtype (luminal A, luminal B, HER2-enriched, basal-like), which can provide insight into the patient's potential response to chemotherapy. This information can be used to help in decision-making regarding adjuvant chemotherapy.

Prosigna testing is performed in Australia to ensure a 10 business day turnaround time.

Cost: \$2,900*

Solid tumour test menu

Genetic testing by tumour type		
Tumour type	Molecular testing	FISH/IHC testing
Lung cancer	Focused FIND IT panel; Full FIND IT panel; FoundationOne CDx	ALK IHC, ALK FISH; ROS1 IHC, ROS1 FISH; PD-L1 IHC
Colon cancer	Focused FIND IT panel; Full FIND IT panel; FoundationOne CDx	MLH1 IHC, MSH2 IHC, MSH6 IHC, PMS2 IHC
Melanoma	BRAF only gene testing; Focused FIND IT panel; Full FIND IT panel; FoundationOne CDx	
Sarcoma	Currently N/A	Please refer to the FISH probe table below or contact your local Sonic Healthcare Histopathologist.
Breast cancer	Prosigna; BRCA germline testing; Full FIND IT panel; FoundationOne CDx	ER, PR, HER2 IHC; HER2 ISH
Any solid tumour	Full FIND IT panel; FoundationOne CDx	Please refer to our FISH catalogue at www.sonicgenetics.com.au or contact your local Sonic Healthcare Histopathologist.

Comprehensive genomic profiling		
Name	Genes tested	Clinical utility
FoundationOne CDx	Pan-cancer (>300 genes)	Provides a comprehensive genomic profile. This can assist in therapy selection and identifies potentially relevant global clinical trials.

Genomic profiling		
Name	Genes tested	Clinical utility
Full FIND IT panel*	Pan-cancer (>30 genes)	Provides information on hotspot mutations. This can assist in therapy selection and identifies potentially relevant national clinical trials.

*Partial rebate may be available, subject to Medicare criteria being met.

Focused mutation testing		
Name	Genes tested	Clinical utility
NSCLC FIND IT panel†	BRAF, EGFR, ERBB2, KRAS	Provides information on hotspot mutations. This can assist in therapy selection and identifies potentially relevant national clinical trials.
Melanoma FIND IT panel†	BRAF, KIT, NRAS	Provides information on hotspot mutations. This can assist in therapy selection and identifies potentially relevant national clinical trials.
Colorectal FIND IT panel†	BRAF, KRAS, NRAS, PIK3CA	Provides information on hotspot mutations. This can assist in therapy selection and identifies potentially relevant national clinical trials.

†Medicare rebates available, subject to Medicare criteria being met.

FISH probes		
Name	Relevant tumour type	Additional supporting tests
ALK FISH	Lung cancer	ALK IHC; PD-L1 IHC
CIC/DUX4 FISH	Ewing-like sarcoma	DUX4 IHC
EGFR FISH	Relevant for a number of tumour types, but primarily useful in gliomas	
FOXO1 FISH (a.k.a FKHR)	Alveolar rhabdomyosarcoma (RMS)	
FUS/DDIT3 FISH	Myxoid liposarcomas	
MDM2 FISH	Soft tissue tumours, osteosarcomas, oesophageal carcinomas Also useful to distinguish between lipomas/lipomatous tumour/ well-differentiated liposarcomas; malignant undifferentiated tumours/dedifferentiated liposarcomas; variety of benign tumours and liposarcomas	
MYCN FISH	Neuroblastomas	
PTEN FISH	Glioblastomas	
ROS1 FISH	NSCLC	ROS1 IHC
SS18 FISH	Synovial sarcoma	
EWS FISH	Ewing sarcoma	
USP6 FISH	Primary aneurysmal bone cyst, nodular fasciitis, or myositis ossificans	
1p/19q co-deletion FISH	Oligodendrogliomas and oligoastrocytomas	IDH1 R132H IHC