

Director of Laboratories: Dr L Gaunt

REQUEST FOR CNS TUMOUR TESTING

PLEASE COMPLETE SECTION 1-3 AND EITHER FORWARD TO THE PATHOLOGY LABORATORY HOLDING THE SAMPLE, OR IF YOU REQUIRE THE GENOMIC DIAGNOSTICS LABORATORY TO OBTAIN THE SPECIMEN PLEASE FORWARD TO mft.Pharmaco.GeneticsRequests@nhs.net. SECTION 4 IS INTENDED TO BE COMPLETED BY THE PATHOLOGY LABORATORY.

1. PATIENT DETAILS (affix a printed label if available)

Sex: M F

Forename(s):
 Surname:
 DoB:
 NHS No:
 Hosp No:
 Address:
 Postcode:

2. REFERRER DETAILS

Consultant:
 Date of request:
 Address for reporting/
 invoicing:
 Tel:
 Email¹

¹ Reports will be sent to multiple emails if required (requires account registration for secure email - contact laboratory for further information)

3. TEST REQUEST (please select options by placing a tick or cross next to each test required)

See overleaf for minimum sample requirements and additional information on sample preparation.

1. Please note that all genes are tested and reported and this test may identify pathogenic germline variants. 2. NGS panel testing also available for research or clinical trial support.

	Required	For GDL use ONLY
1p19q FISH		FISH
EGFR amplification		
MGMT promoter hypermethylation		Bisulphite treatment
KIAA1549:BRAF fusion		
C11orf95:RELA fusion		RNA extraction
EGFRvIII transcript		
hTERT promoter mutations		
BRAF codon 600 mutation testing		
Meningioma/schwannoma panel ¹ (NF2, SMARCB1, SMARCE1, SMARCA4, LZTR1)		
NGS Glioma sub-panel ^{1,2} – please circle any genes where analysis is a priority (AKT1; ALK; BRAF; CTNNB1; ERBB2; FGFR3; H3F3A; IDH1; IDH2; KIT; KRAS; MAP2K1; MET; NRAS; PIK3CA; PTEN; TP53)		DNA extraction
NGS somatic cancer panel testing ^{1,2} – please circle any genes where analysis is a priority (AKT1; ALK; AR; BRAF; CTNNB1; DDR2; EGFR; ERBB2; FGFR3; GNA11; GNAQ; IDH1; IDH2; KIT; KRAS; MAP2K1; MET; NRAS; PDGFRA; PIK3CA; PTEN; RET; STK11; TP53, H3F3A)		
Methylation arrays (on a research basis; please send an additional 4 x 5uM sections)		

4. PATHOLOGY AND CLINICAL DETAILS

Tumour Type/origin of organ:
 Pathologist:
 Hospital/Trust:
 Pathology Block/Sample No:
 Date sections sent to Genetics lab:

Please indicate the approximate % nuclei that are neoplastic in the sample sent for analysis:

(this information is important and is used to ensure the test carried out is appropriately sensitive)

<10%* 10-20%* 20-30%* >30%

*If sample is suitable for macrodissection, please include an H&E stained section with area(s) of tumour clearly circled and an estimate of % nuclei that are neoplastic within marked area _____%

INFORMATION FOR PATHOLOGY LAB (ALL SAMPLES)

- **Minimum sample requirements for each individual test:**

- FISH test: 4 x 3uM unstained slide mounted sections (**see below for information on sample preparation**)
- MGMT Hypermethylation test: 2 x 5uM unstained slide mounted sections or rolls
- Fusion test or EGFRvIII transcript: 4 x 5uM unstained slide unmounted **rolls**
- TERT promoter, BRAF codon 600 or NGS panel: 5 x 5uM unstained slide mounted sections or rolls

- Please note these are the minimum sample requirements. Should additional material be required this may delay testing.
- We accept pathology blocks, but unstained slides are preferred (if pathology blocks are sent, TAT may increase by up to 14 calendar days for sample processing).
- If insufficient tissue available please contact the laboratory for advice.
- **If % nuclei that are neoplastic is less <30% and sample suitable for macrodissection please also send a H&E stained slide with the area of tumour ringed and an estimate of % nuclei that are neoplastic within the marked area.**
- Sections should be cut under conditions that prevent cross contamination from other specimens.
- Slides carrying sections should be sent in a clean slide carrier. **Slides must be clearly marked with a patient or sample identifier that matches details on this form or accompanying Pathology report.** In addition please clearly label the container with **at least 2 patient identifiers.**
- Samples should be despatched as soon as possible as the patient's treatment is dependent on the results of Genomic analysis.
- Please send samples to the address at the letterhead above.

FISH TEST

- Prepare 4 unstained sections (3uM thick) floated on the surface of a purified water bath set at 40°C (+/-2°C).
- Mount on positively charged slides and allow to air-dry
- Also include 1 H&E slide with regions enriched for nuclei that are neoplastic marked by a Pathologist along with an estimate % nuclei that are neoplastic within the marked area(s)

GUIDANCE FOR SAMPLE PREPARATION

