NHS
Manchester University
NHS Foundation Trust

Genomic Diagnostics Laboratory
Manchester Centre for Genomic Medicine,
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Oxford Road, Manchester M13 9WL
Tel: 0161 276 3265/6122
Email: mft.Pharmaco.GeneticsRequests@nhs.net
www.mangen.co.uk

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:	
Email[1]	

[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)*

*1. See overleaf for sample requirements. 2. If a hypermethylation test in addition to another test is required please send a **further** 4 x 5uM sections. 3. For KIAA1549:BRAF fusion, C110rf95:RELA fusion, and EGFRvIII transcript testing please send 4x 5µM rolls. 4. Please note that all genes are tested and reported and this test may identify pathogenic germline variants. 5. NGS panel testing also available for research or clinical trial support.*

	Required	For GDL use ONLY
1p19q FISH[1]		FISH
MGMT promoter hypermethylation[2]		Split for Bisulphite
KIAA1549:BRAF fusion[3]		RNA extraction
C11orf95:RELA fusion[3]		
EGFRvIII transcript[3]		
hTERT promoter mutations		DNA extraction
BRAF codon 600 mutation testing		
Meningioma/schwannoma panel[4] (NF2, SMARCB1, SMARCE1, SMARCA4, LZTR1)		
NGS Glioma sub-panel[4,5] – 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; TERT; TP53)		
NGS somatic cancer panel testing[4,5] – 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, TERT)		

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)

- We require a minimum of 4x5uM unstained slide mounted sections or rolls from a pathology block. If requesting testing for KIAA1549:BRAF fusion, C110rf95:RELA fusion, and EGFRvIII transcript testing, we require an additional (minimum) 4 x 5µM rolls from a pathology block.
- 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

Oncologist/MDT

Complete Sections 1-3 of request form (available for download from www.mangen.org.uk)

Securely send test request form to Pathology laboratory holding the specimen

Pathology Laboratory

Pathology Review – complete sections 4-5 of request form

Sample has >30% nuclei that are neoplastic[1]

Send 4 x 5uM unstained slide mounted sections[2]

Sample has <30% nuclei that are neoplastic[1]

Prepare H&E stained slide with area of neoplasia highlighted. Also prepare 4 x5uM unstained mounted sections[2,3]

Sample with <10% nuclei that are neoplastic & unsuitable for macrodissection – contact Genetics lab for advice

NOTE: we accept pathology blocks, however, unstained slides are preferred. If pathology blocks are sent, TAT may increase by up to 14 calendar days for sample processing.

[1] *Neoplastic cell content refers to the ratio of neoplastic nuclei as a proportion of total nuclei in the tissue section*
[2] *Change or clean microtome blade between samples to reduce cross contamination*
[3] *H&E and unstained sections should be neighbouring from the same block and in same orientation*

In case of queries contact Helene Schlecht (Helene.Schlecht@mft.nhs.uk), George Burghel (George.burghel@mft.nhs.uk)
Tel: 0161 276 3265 or Andrew Wallace (Andrew.wallace@mft.nhs.uk) Tel: 0161 701 4919