NHS
Manchester University
NHS Foundation Trust

Director of Laboratories: Dr L Gaunt

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Oxford Road, Manchester M13 9WL
Tel: 0161 276 3265/6122
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REQUEST FOR TUMOUR DNA 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. SECTIONS 4-5 TO BE COMPLETED BY THE PATHOLOGY LABORATORY.

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

Forename(s):

Surname:

DoB: Sex: M/F

NHS No: Hosp No:

Address:

Postcode:

2. REFERRER DETAILS

Consultant:

Date of request:

Address for reporting/invoicing:

Tel:
[1]Email 1:
Email 2:
[1]Reports will be sent to multiple emails if required

Report by: Email ☐ *(account registration for secure email required - contact laboratory for further information)*

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

*1. Please note that all genes are tested and reported and this test may identify pathogenic germline variant. 2.NGS panel testing also available for research or clinical trial support; 3. If a hypermethylation test in addition to another test is required please send a **further** 4 x 5uM sections; 4. See overleaf for sample requirements.*

Test/Gene	Required	Test/Gene	Required
EGFR mutation testing (NSCLC)		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)	
RAS/BRAF/PIK3CA mutation testing (CRC)			
BRAF codon 600 mutation testing			
NRAS mutation testing (Melanoma)			
KIT mutation screen (Melanoma)		MSI testing	
KIT/PDGFRA mutation screen (GIST)		MLH1[3] promoter hypermethylation	
FFPE BRCA1/2 mutation screen - treatment focussed in ovarian cancer[1]		MGMT[3] promoter hypermethylation	
FFPE Somatic Colorectal Cancer NGS screen[1] (APC, BMPR1A, CDH1, CTNNB1, MSH6, SMAD4, MLH1, MSH2, MUTYH, POLD1, POLE, PTEN, STK11)		ALK re-arrangement by FISH testing(NSCLC)[4]	
		ROS1 re-arrangement FISH testing (NSCLC)[4]	

4. PATHOLOGY AND CLINICAL DETAILS

Tumour type/organ of origin

_____

PLEASE INCLUDE A COPY OF THE PATHOLOGY REPORT

Pathologist:

Hospital/Trust:

Pathology block/sample no:

CLINICAL URGENCY – EGFR referrals *(see overleaf for TAT)*

Standard ☐
Urgent* (treatment) ☐
**not to exceed 10% of requests*

5. PATHOLOGY

Date sections sent to Genetics lab:

Please circle 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 a H&E stained section with area(s) of tumour clearly circled and an estimate of % nuclei that are neoplastic within marked area _____%*

For NSCLC and Melanoma only

Lung cancer	Information
Confirmed NSCLC	Yes/No
TTF1 +ve	Yes/No
Sample type	

Melanoma	Information
Stage of disease	1/2/3/4

INFORMATION FOR PATHOLOGY LAB (ALL SAMPLES)

- We require a minimum of 4x5uM unstained slide mounted sections or 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.

ALK/ROS1 RE-ARRANGEMENT FISH TEST

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

EGFR Turn-around times (TAT): standard TAT is 14 calendar days, but URGENT cases can be reported within 7 calendar days.

GUIDANCE FOR SAMPLE PREPARATION

Oncologist/MDT

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

Pathology Laboratory

Pathology Review – complete sections 4-5 of request form

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

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

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



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