

SWGLH – Cancer Genomics Test Request Form

Sarcoma

Please complete electronically: type or click in the boxes, send this request to the appropriate Histopathology laboratory as soon as possible.

Patient Details: Paste patient demographics here or fill in fields below:

| | | |
|-------------------------|---------|--|
| Patient name: | | Referring Consultant: |
| Address: | | Department and Hospital: |
| Postcode: | | Report destination (nhs.net e-mail/s): |
| DOB: | Gender: | Pathologist: |
| NHS number: | | Date of resection/biopsy: |
| Pathology block number: | | Date sample sent to SW GLH: |
| Hospital number: | | Date of MDT for discussion of result: |

Clinical summary:

Refer to the National Genomics Test Directory for Cancer: <https://www.england.nhs.uk/publication/national-genomic-test-directories/> for the full sarcoma test directory. If testing is not present as an option on this referral form, please email the laboratory directly at nbn-tr.SWGLHcancer@nhs.net prior to sending samples. Please note some tests will be exported to other genomic laboratory hubs for testing.

| Code | Clinical Indication | Test Code | Test Name | Sample Type* |
|------|---|---------------------------------|--|--------------|
| M42 | Alveolar Rhabdomyosarcoma | M42.1 <input type="checkbox"/> | FOXO1 rearrangement FISH | B |
| | | M42.5 <input type="checkbox"/> | Multi-target NGS panel – structural variant (PAX3-FOXO1, PAX7-FOXO1, NTRK1, NTRK2, NTRK3) | A |
| M43 | Alveolar Soft Part Sarcoma | M43.1 <input type="checkbox"/> | TFE3 rearrangement FISH | B |
| M45 | Angiomatoid Fibrous Histiocytoma | M45.1 <input type="checkbox"/> | EWSR1 rearrangement FISH | B |
| | | M45.2 <input type="checkbox"/> | FUS rearrangement FISH | B |
| | | M45.4 <input type="checkbox"/> | Multi-target NGS panel – structural variant (EWSR1, NTRK1, NTRK2, NTRK3) | A |
| M48 | Clear Cell Sarcoma of Soft Tissue | M48.1 <input type="checkbox"/> | EWSR1 rearrangement FISH | B |
| | | M48.3 <input type="checkbox"/> | Multi-target NGS panel – structural variant (EWSR1, NTRK1, NTRK2, NTRK3) | A |
| M49 | CNS Ewing Sarcoma Family Tumour with CIC Alteration | M49.1 <input type="checkbox"/> | Multi-target NGS panel – structural variant (CIC, NTRK1, NTRK2, NTRK3) [EXPORT] | C |
| M78 | Undifferentiated Round Cell Sarcoma of Infancy | M78.1 <input type="checkbox"/> | | |
| M50 | Dermatofibrosarcoma Protuberans | M50.1 <input type="checkbox"/> | COL1A1-PDGFB rearrangement FISH | B |
| M51 | Desmoid-Type Fibromatosis | M51.1 <input type="checkbox"/> | Multi-target NGS panel – small variant (APC, CTNNB1) | A |
| M52 | Desmoplastic Small Round Cell Tumour | M52.1 <input type="checkbox"/> | WT1 rearrangement FISH [EXPORT] | B |
| | | M52.3 <input type="checkbox"/> | Multi-target NGS panel – structural variant (WT1, NTRK1, NTRK2, NTRK3) [EXPORT] | C |
| M53 | Endometrial Stromal Sarcoma | M53.1 <input type="checkbox"/> | PHF1 rearrangement FISH (PHF1) | B |
| | | M53.2 <input type="checkbox"/> | JAZF1 rearrangement FISH (JAZF1) | B |
| M203 | Uterine Sarcoma (inc. Endometrial) | M203.4 <input type="checkbox"/> | YWHAE rearrangement FISH | B |
| M54 | Epithelioid Haemangioendothelioma | M54.2 <input type="checkbox"/> | Multi-target NGS panel – structural variant (WWTR1-CAMTA1) [EXPORT] | C |
| M55 | Ewing Like Sarcoma/PNET | M55.1 <input type="checkbox"/> | | C |
| M57 | Ewing Like Soft Tissue Sarcoma | M57.1 <input type="checkbox"/> | Multi-target NGS panel – structural variant (BCOR, BCOR-CCNB3, NTRK1, NTRK2, NTRK3) [EXPORT] | |
| M61 | High-Grade Neuroepithelial Tumour- Bcor Group | M61.1 <input type="checkbox"/> | | |
| M72 | Primitive Mesenchymal Myxoid Tumour of Infancy | M72.3 <input type="checkbox"/> | | |
| M58 | Extraskelatal Myxoid | M58.3 <input type="checkbox"/> | Multi-target NGS panel – structural variant | C |

| | | | | |
|--|---|---------------------------------|---|---|
| | Chondrosarcoma | | (NR4A3, NTRK1, NTRK2, NTRK3) [EXPORT] | |
| M62 | Infantile Fibrosarcoma | M62.3 <input type="checkbox"/> | Multi-target NGS panel – structural variant (ETV6-NTRK3, NTRK1, NTRK2, NTRK3) | A |
| M63 | Inflammatory Myofibroblastic Tumour | M63.3 <input type="checkbox"/> | Multi-target NGS panel – structural variant (ALK, TPM4-ALK, TPM3-ALK, NTRK1, NTRK2, NTRK3) | A |
| M64 | Low Grade Fibromyxoid Sarcoma | M64.1 <input type="checkbox"/> | FUS rearrangement FISH | B |
| M65 | Mesenchymal Chondrosarcoma | M65.3 <input type="checkbox"/> | Multi-target NGS panel – structural variant (HEY1-NCOA2, NTRK1, NTRK2, NTRK3) [EXPORT] | C |
| M66 | Myoepithelial Tumours of Soft Tissue | M66.1 <input type="checkbox"/> | EWSR1 rearrangement FISH | B |
| | | M66.3 <input type="checkbox"/> | Multi-target NGS panel – structural variant (EWSR1, NTRK1, NTRK2, NTRK3) | A |
| M67 | Myxoid/Round Cell Liposarcoma | M67.1 <input type="checkbox"/> | DDIT3 (CHOP) rearrangement FISH | B |
| M68 | Myxoinflammatory Fibroblastic Sarcoma | M68.1 <input type="checkbox"/> | TGFB3-MGEA5 rearrangement FISH [EXPORT] | B |
| | | M68.3 <input type="checkbox"/> | MDM2 copy number FISH | B |
| | | M68.4 <input type="checkbox"/> | Multi-target NGS panel – structural variant (TGFB3-MGEA5, NTRK1, NTRK2, NTRK3) [EXPORT] | C |
| M69 | Nodular Fasciitis | M69.2 <input type="checkbox"/> | Multi-target NGS panel – structural variant (USP6) [EXPORT] | C |
| M71 | Phosphaturic Mesenchymal Tumour | M71.3 <input type="checkbox"/> | Multi-target NGS panel – structural variant (FN1, NTRK1, NTRK2, NTRK3) [EXPORT] | C |
| M74 | Radiation Induced Angiosarcoma | M74.1 <input type="checkbox"/> | MYC copy number FISH | B |
| M75 | Round Cell Sarcoma Nos | M75.1 <input type="checkbox"/> | Multi-target NGS panel – structural variant (CIC, BCOR-CCNB3, NTRK1, NTRK2, NTRK3) [EXPORT] | C |
| M76 | Sclerosing Epithelioid Fibrosarcoma | M76.1 <input type="checkbox"/> | FUS rearrangement FISH | B |
| M77 | Synovial Sarcoma | M77.1 <input type="checkbox"/> | SS18 rearrangement FISH | B |
| M78 | Undifferentiated Round Cell Sarcoma of Infancy | M78.1 <input type="checkbox"/> | Multi-target NGS panel – structural variant (CIC, NTRK1, NTRK2, NTRK3) [EXPORT] | C |
| M79 | WellDifferentiated/Dedifferentiated Liposarcoma | M79.1 <input type="checkbox"/> | MDM2 copy number FISH | B |
| M197 | Round Cell Sarcoma of Soft Tissue Differential | M197.1 <input type="checkbox"/> | Multi-target NGS panel – structural variant (BCOR, CIC, DDIT3, EWSR1, FOXO1, WT1, BCOR-CCNB3, HEY1-NCOA2, PAX3-FOXO1, PAX7-FOXO1, NTRK1, NTRK2, NTRK3) [EXPORT] | C |
| M198 | Vascular Soft Tissue Tumour Differential | M198.1 <input type="checkbox"/> | MYC copy number FISH | B |
| | | M198.5 <input type="checkbox"/> | Multi-target NGS panel – structural variant (SERPINE1-FOSB, WWTR1-CAMTA1, NTRK1, NTRK2, NTRK3) [EXPORT] | C |
| M199 | Spindle Cell Soft Tissue Tumour Differential | M199.1 <input type="checkbox"/> | Multi-target NGS panel – small variant (APC, CTNNB1) | A |
| | | M199.2 <input type="checkbox"/> | Multi-target NGS panel – structural variant (ALK, BCOR, CIC, EWSR1, FUS, SS18, USP6, COL1A1-PDGFRB, TPM3-ALK, TPM4-ALK, ETV6-NTRK3, NTRK1, NTRK2, NTRK3) [EXPORT] | C |
| | | M199.5 <input type="checkbox"/> | MDM2 copy number FISH | B |
| M200 | Myxoid Soft Tissue Tumour Differential | M200.1 <input type="checkbox"/> | Multi-target NGS panel – structural variant (BCOR, DDIT3, FUS, NR4A3, TGFB3-MGEA5, BCOR-CCNB3, NTRK1, NTRK2, NTRK3) [EXPORT] | C |
| M201 | Adipocytic Soft Tissue Tumour Differential | M201.1 <input type="checkbox"/> | DDIT3 rearrangement FISH | B |
| | | M201.2 <input type="checkbox"/> | MDM2 copy number FISH | B |
| M202 | Epithelioid Soft Tissue Tumour Differential | M202.7 <input type="checkbox"/> | Multi-target NGS panel – structural variant (EWSR1, FUS, SS18, TFE3, WWTR1-CAMTA1, NTRK1, NTRK2, NTRK3) [EXPORT] | C |
| M203 | Uterine Sarcomas (Inc Endometrial) | M203.6 <input type="checkbox"/> | Multi-target NGS panel – structural variant (EPC1-PHF1, JAZF1-PHF1, JAZF1-SUZ12, NUTM2B-YWHAE, NTRK1, NTRK2, NTRK3) [EXPORT] | C |
| NTRK fusion analysis (NTRK1, NTRK2, NTRK3) | | M227.1 <input type="checkbox"/> | Please specify clinical indication: | A |
| Paediatric Pan-Cancer Panel | | <input type="checkbox"/> | Multi-target NGS panel – small variant | A |

Whole genome sequencing for germline and tumour is available for sarcoma, please refer to the link below for requesting details

<https://www.nbt.nhs.uk/south-west-genomic-laboratory-hub/swglh-sample-test-information/swglh-whole-genome-sequencing-service>

Histopathology Report: (please include a copy of the histopathology report for this patient) ☐

***Sample Requirements Key:**

A (DNA or RNA extraction only)

- ☐ Sample with **>20%** neoplastic cells: send one tube (Eppendorf or Universal): containing 5 x 10µm sections (curls/scrolls) OR
☐ Sample with **<20%** neoplastic cells: send 10 x 5µm slide mounted sections along with H&E with regions of >20% neoplastic cells highlighted.

B (FISH)

- ☐ Please send 2 x 4µm sections on 'APES' or 'sticky' slides **per test** required with an accompanying H&E section with the tumour area clearly marked

C (SLIDES EXPORTED)

- ☐ Please send 5 x 10µm mounted sections on (unstained, uncharged) with an accompanying H&E section with the tumour area clearly marked

Samples should be dispatched as soon as possible as the patient's treatment may be dependent upon the molecular analysis.

Send paperwork and sample to:

Bristol Genetics Laboratory, Pathology Sciences, Southmead Hospital, Bristol BS10 5NB

Phone: 0117 414 6168

Email: nbn-tr.SWGLHcancer@nhs.net

CONSENT STATEMENT It is the referring clinician's responsibility to ensure that the patient/carer knows the purpose of the test and that the DNA sample will be retained in long term storage and may be used for future diagnostic tests. Completing this form is an indication that the clinician has obtained consent for testing and storage. The patient should be advised that the sample may be used anonymously for quality assurance and training purposes. Please advise us of any restrictions.