

Whole Genome Sequencing: Paediatric leukaemia pathway

Eligibility

- Age <18y and known to paediatric consultant
- Haematological malignancy (known/suspected)
- Bone Marrow Aspirate (planned/undertaken)

Colour key

- Piam Brown staff
- Pathology labs
- WGS service

Patient identified at Leukaemia MDT

CCLG patient information for paediatric oncology WGS to be given to parents.

Record of Discussion (ROD) to be completed by trained clinician or clinical nurse specialist.

1. Download form
2. Upload ROD to edocs (entitled – WGS Record of Discussion)
3. Email ROD to uhs.wgswessexgenomics@nhs.net

eQuest:

1. Bone Marrow Request eQuest: 'WGS Haem Onc Tumour'
2. Germline Request eQuest: 'WGS Haem Onc Germline'

Germline sample: To be taken once circulating blast count has fallen, i.e. week 6. For germline please take:

- A saliva sample, skin biopsy or peripheral blood sample (if MRD <1%). (NB: Blood sample – obtain at least 1ml EDTA for an infant and 3ml EDTA for a paediatric patient)
- Germline sample to be delivered to D level main pathology reception.

To be completed by pathology

3. GMS Test Order Form (TOF)
4. email to uhs.wessexgenomics@nhs.net

Record WGS process on MS Teams shared patient list and patient summary front sheet.

Tumour sample: Fresh bone marrow aspirate.

- EDTA bottle with Minimum of 1ml
- 08:30-17:00:** Deliver sample to – D level specimen reception

Out of hours: Deliver to D level specimen reception you MUST bleep on-call biomedical scientist via UHS switchboard.

Samples processed and sent to Birmingham for analysis with RoD

Birmingham lab – DNA extraction, immune-sequencing, etc

Results discussed at genomic tumour advisory board

Finalised report:

1. Copy sent to consultant
2. Lab report issued onto CHARTS
3. APEX database updated

Review report, discussion with patient /family, etc (and update MS Teams)