**Referrals to be sent by email to:** **gst-tr.geneticsreferrals@nhs.net**

**Type of referral** (circle preference)**:**  Is the patient terminally ill? Y/N

Rapid Routine \*Has DNA sample been stored? Y/N

**Patient details** (failure to provide a working telephone number may result in rejection of referral)**:**

Full name: Date of birth: NHS number:

Address:

Email:

Telephone number: Mobile:

Hospital number:

GP name: GP telephone number:

GP address:

**Diagnosis and treatment plan:**

**Cancer type: Age of diagnosis: Previous primary cancer:**

**Other significant medical/surgical history:**

**Name of oncologist (if known): Please send a copy of the histology report/receptor status**

**Treatment details** (dates are mandatory for rapid test requests. A failure to provide them will result in routine testing)**:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Tick as applicable** | **Treatment** | **Planned start date for treatment** | **Other details** |
|  | Will chemotherapy be changed based on genetic result? |  |  |
|  | Will genetic result influence surgical management? |  |  |
|  | Will genetic result influence trial eligibility? |  |  |

**Genetic testing eligibility** (tick as appropriate)**:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Female with breast cancer** | **Unaffected Female/Male**  | **Ovarian/Uterine cancer** | **Male with BRCA related cancer** | **Pancreatic adenocarcinoma** |
|  | Bilateral BC and both diagnosed <50  |  FDR relative with breast or serous ovarian cancer and a family history with pathology- adjusted Manchester score ≥20.  |  Histology consistent with non-mucinous epithelial ovarian cancer(serous, clear cell, endometrioid, mixed, undifferentiated, carcinosarcoma) Serous uterine cancer  |  Male BC any age Prostate cancer and a family history with pathology-adjusted Manchester score ≥15 Metastatic castrate resistant prostate cancer Prostate cancer < 50 |  Pancreatic adenocarcinoma <50 Pancreatic adenocarcinoma <60 AND BC/melanoma <60 or ovarian cancer Pancreatic adenocarcinoma <60 and ≥ 1FDR with pancreatic adenocarcinoma <60 Pancreatic adenocarcinoma <60 and ≥ 2 FDR/SDR with any of BC <60, melanoma <60 or ovarian cancer |
|  | Triple negative BC <60 |
|  | BC < 45 and a FDR with BC <45 |
|  | Breast cancer <30 |
|  | Triple positive breast cancer ≤35 |
|  | Ashkenazi Jewish ancestry and BC any age |
|  | BC and a family history with pathology-adjusted Manchester score ≥15 |

*First degree relatives (FDR): children, siblings, parents of patient Manchester score: guidance attached on page 2*

*Second degree relatives (SDR): grandparents, aunts, uncles on same side of family*

*Triple negative breast cancer: Quick score ≤3/8 for ER/PR & HER2-negative*

**Psychosocial Issues:**

**Referrer details:**

Name and specialty:

Email: Telephone number:

I have discussed this referral with the patient Signature: Date:

**The Manchester Scoring System**

The Manchester Scoring System (MSS) allows the calculation of the probability for the presence of mutations in the *BRCA1* and *BRCA2* genes in families suspected of having hereditary breast and ovarian cancer (Evans et al, 2004).



**How to calculate the Manchester Score?**

* Establish gender
* Establish cancer type in each affected relative
* Establish age at diagnosis
* For each relative with a BRCA related cancer, assign a score based on their age at diagnosis. (Example: woman with breast cancer aged 56 gets a score of 4, man with prostate cancer aged 44 gets a score of 2)
* If a relative has had more than one primary cancer, assign a score for each cancer episode. These cancers must not be recurrences or secondary cancers (Example: woman with breast cancer aged 32 and ovarian cancer aged 66 gets a score of 8+10 = 18)
* Do not assign a score for any mucinous and/or borderline ovarian cancers
* Adjust the score for pathology for the proband only. If the proband is unaffected, adjust for affected first degree relative
* Assess the maternal and paternal lineages as two separate entities
* Add up the scores for each affected relative with a BRCA related cancer on the maternal side
* Add up the scores for each affected relative with a BRCA related cancer on the paternal side
* You can allow one intervening female relative unaffected by cancer in the calculation
* You can allow more than one intervening female relative unaffected by cancer if one of them has had risk reducing surgery at an age less than 50
* If you would like assistance in doing this calculation please ring the on call cancer clinician on 02071881364

***Reference:*** *Evans DG et al, 2017. Pathology update to the Manchester Scoring System based on testing in over 4000 families. J Med Genet 54: 674-681*

**\*How to organise the storage of a DNA sample?**

* A 5ml blood in potassium sample (EDTA) can be collected locally and sent to our laboratory for storage
* If you would like assistance please ring the on call cancer clinician on 02071881364