

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: _____ PIMS number (GSTT only): _____

GP name: _____ GP telephone number: _____

GP address: _____

Diagnosis and treatment plan:

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

Other significant medical/surgical history:

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
<input type="checkbox"/>	Will chemotherapy be changed based on genetic result?		
<input type="checkbox"/>	Will genetic result influence surgical management?		
<input type="checkbox"/>	Will genetic result influence trial eligibility?		

Genetic testing eligibility (tick as appropriate):

Female with breast cancer (for BRCA1, BRCA2, PALB2, common CHEK2 mutation test)	Unaffected Female/Male	Ovarian/Uterine cancer	Male with BRCA related cancer	Female/Male with Ashkenazi Jewish/Polish ancestry
<input type="checkbox"/> Bilateral BC and both diagnosed <50	<input type="checkbox"/> and a family history with Manchester score ≥17. Patient eligible for testing must have a first degree relative with a BRCA related cancer and there are no living affected relatives	<input type="checkbox"/> Histology consistent with non-mucinous epithelial ovarian cancer (serous, clear cell, endometrioid, mixed, undifferentiated, carcinosarcoma)	<input type="checkbox"/> and a family history with Manchester score ≥15	{BRCA founder mutation test only}
<input type="checkbox"/> Triple negative BC ≤59 and ovarian cancer				
<input type="checkbox"/> Bilateral BC and relative with BC <60		<input type="checkbox"/> Serous uterine cancer		<input type="checkbox"/> BRCA related cancer and Manchester score ≥10
<input type="checkbox"/> and relative with BC, both diagnosed <45				
<input type="checkbox"/> diagnosed <30				
<input type="checkbox"/> and family history with Manchester score ≥15				

First degree relatives: children, siblings, parents of patient

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

Manchester score: guidance attached on page 2

Psychosocial Issues:

Referrer details:

Name and Specialty: _____ Telephone number: _____

Email: _____ Address: _____

Treatment centre: _____

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).

Manchester Score		
Cancer	Age at diagnosis	Score
♀ Breast Cancer	<30	11
♀ Breast Cancer	30-39	8
♀ Breast Cancer	40-49	6
♀ Breast Cancer	50-59	4
♀ Breast Cancer	>59	2
♂ Breast Cancer	<60	13
♂ Breast Cancer	>59	10
Ovarian Cancer	<60	13
Ovarian Cancer	>59	10
Pancreatic Cancer		1
Prostate Cancer	<60	2
Prostate Cancer	>59	1

N.B: One unaffected intervening allowed. Further unaffected ♀ allowed if had risk reducing surgery <50 years.

Reference: Evans et al, 2004. *Medical genetics in practice: A new scoring system for the chances of identifying a BRCA1/2 mutation outperforms existing models including BRCAPRO.* *J Med Genet* 41 (6): 474-480.

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)
- 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

*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

^Rapid Referrals

- Rapid appointments are arranged within one working week of referral
- The laboratory issues results for Rapid tests (*BRCA1/2* or breast cancer panel) within 3-4 weeks.