

Guidance for Referral to Genetic Service

The West of Scotland Cancer Genetics service is based at Southern General Glasgow and holds a peripheral clinic here in Dumfries.

Please send **all** referrals to:

West of Scotland Cancer Genetics Service
Department of Clinical Genetics
Level 2A, Laboratory Medicine Building
Southern General Hospital
1345 Govan Road
Glasgow G51 4TF
Phone: 0141 354 9200 (reception)

When making a referral, please include as much information as possible about the:

- Type of cancer
- Relationship of any affected relatives to the patient being referred
- Name(s) of the affected relative(s); especially those previously seen in the genetics clinic
- Age(s) at diagnosis of the affected relative(s)
- Family History Questionnaire available from the West of Scotland Cancer Network Internet Site

In most families, a genetic test for cancer predisposition will **not** be available unless a gene alteration has already been identified in an affected relative. If this has been identified, please include in your referral the name and date of birth of the affected relative, and which genetic centre was involved in identifying the gene so that we can access the relevant information in order to offer a test to your patient. In other families, we usually need to test an affected relative first.

For breast cancer, the majority of families will not have an alteration in the known genes BRCA1 and BRCA2, and testing will not be available to relatives.

Families eligible for testing include those with an individual with breast cancer under 30, 2 breast cancers under 40, 3 breast cancer under 50 or 4 breast cancers under 60, or individuals with triple negative breast cancer under 40, or high grade serous ovarian cancer at any age.

The Service

The service is for those who are well but at moderate or high risk of cancer (see guidance).

However:

- Some individuals at low risk of cancer may still request a referral despite reassurance from their doctor or nurse. Please highlight this within the referral letter so that the genetics service is aware or the patient will not be given an appointment.
- If someone has a complex family history of several unusual cancers (**not** covered by this guidance) then please consider referral.

Cancer Risk (* see notes regarding first degree relatives)

Breast Cancer	Low risk	Moderate Risk	High Risk
1 Relative: Over 40 years at time of diagnosis	Reassure		
Under 40 years at time of diagnosis*		Refer	
With bilateral breast cancer *		Refer	
Who is male (Male breast cancer) *		Refer	
With both breast & ovarian cancer (double primary) *			Refer
2 Relatives: 2 relatives over 60 years	Reassure		
2 relatives under 60 years*		Refer	
1 under 60 years & 1 relative with ovarian cancer		Refer	
1 relative under 40 years and 1 relative with a childhood cancer			Refer
3 relatives: Any age*		Refer	
4 or More Relatives: 4 or more relatives under 60 years			Refer

Ovarian Cancer	Low Risk	Moderate Risk	High Risk
1 Relative: Any age	Reassure		
2 Relatives: Or more *			Refer
1 relative with ovarian cancer (any age) and 1 relative with breast cancer under 50 years *		Refer	
3 Relatives: 1 relative with ovarian cancer (any age) and 2 relatives with breast cancer under 60 years *		Refer	
4 Relatives: 3 with colorectal cancer (1 under 50 years) and 1 relative with ovarian cancer *			Refer

Colorectal Cancer	Low Risk	Moderate Risk	High Risk
1 Relative: Over 50 years	Reassure		
1 Relative: Under 50 years		Refer	
2 Relatives: With average age under 60 years * or 2 relatives at any age where both are 1 st degree relatives		Refer	
3 or More Relatives: All over 50 years *		Refer	
With 1 diagnosed under 50 years *			Refer

Notes:

* One relative must be a **first degree** relative unless through an intervening male and all on the same side of the family.

- **1st Degree** = Mother, sister, daughter, father, brother, son.
- **2nd Degree** = grandmother, granddaughter, aunt, niece, grandfather, grandson, uncle, nephew.

Manchester score

Modified Manchester Score:-

*score patient and affected relatives on the same side of the family individually

**bilateral cancers each count separately even if synchronous

Age at diagnosis	BRCA 1 & 2 score	Total
Patient breast cancer < 30 years	Offer analysis	
Female relative breast cancer < 30 years	11	
Female (pt or rel) breast cancer 30 – 39 years	8	
Female (pt or rel) breast cancer 40 – 49 years	6	
Female (pt or rel) breast cancer 50 – 59 years	4	
Female (pt or rel) breast cancer > 60 years	2	
Triple negative breast cancer (pt or rel)	4	
Patient with Triple negative breast cancer < 50 years	Offer analysis	
Male (pt or rel) breast cancer < 60	13	
Male (pt or rel) breast cancer > 59 years	10	
Patient with high grade serous ovarian cancer	Offer analysis	
Ovarian cancer < 60 years (pt or rel)	13	
Ovarian cancer > 60 years (pt or rel)	10	
Pancreatic cancer (pt or rel)	1	
Prostate cancer < 60 years (pt or rel)	2	
Prostate cancer > 59 years (pt or rel)	1	

(adapted from Evans et al 2011)

Eligibility criteria for BRCA 1 gene and BRCA 2 gene analysis

Refer for BRCA 1 & BRCA 2 mutation analysis to families where there is a “Manchester score” of ≥ 15 . Genetics requires a blood sample from a living affected individual 4mls blood in EDTA tube sent to Duty Scientist L2/B Molecular Genetics Laboratory Medicine Queen Elizabeth University Hospital.

A patient contact telephone number is especially helpful.

Please note a score of 15 equates to only a 10% likelihood of there being a gene fault. Ashkenazi Jewish ancestry is associated with BRCA mutations.

