What is Cancer?

Cancer is the uncontrolled growth of abnormal cells that have originated from normal tissue. Most cancers result from the accumulation of genetic changes (mutations) in cells over time. Approximately 5-10% of cancers are hereditary in nature, suggesting that genetic predisposition is one of the important factors in the development of cancer. The most common inherited cancers include breast and ovarian cancers and colon cancer.

Am I at Risk for Inherited or Familial Cancer?

The characteristics of genetic cancer families include:

- early age at diagnosis of cancer
- multiple cancers in one affected individual
- bilateral tumours
- several family members affected

Genetic Services are available to individuals who have a likelihood of carrying a genetic change predisposing them to a higher cancer risk.

Familial Cancer Services in Hong Kong Sanatorium & Hospital

Familial Cancer Services aim to promote the prevention and early detection of cancer in affected families. The Hospital provides one-stop services including:

- Risk assessment
- Genetic counselling
- Genetic testing
- Risk reduction through surveillance and preventive treatments

The services are run in collaboration with the Stanford Clinical Cancer Genetics Program of the Stanford University . Clients can choose to have counselling through teleconference from genetic counsellors and oncologists at Stanford with extra cost or choose to have local specialists to take care of them.

What is Cancer Genetics Evaluation?

Risk Assessment and Counselling

A careful evaluation of the family history is the most important factor in determining the risk of inherited cancer predisposition. A well trained health care professional will help to assess your risk of having an inherited cancer, and introduce to you the available genetic testing.

Genetic Testing

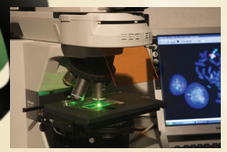
Genetic testing is carried out to look for genetic changes (mutations) that are known to cause the particular cancer of concern. A positive test result indicates an increased risk of developing cancer. The benefits and limitations as well as the impact of test results will be evaluated and explained.

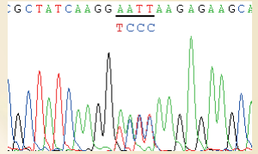
Risk Reduction Plan

A tailor made risk reduction plan will be designed and recommended to the individual depending on personal medical history and the type of cancer in question. The common cancer prevention strategies for at risk individuals include periodic screening, medication or preventive surgery.

Common Hereditary Cancers

- Breast & ovarian cancers
- Colorectal cancers
  - *Hereditary non-polyposis colorectal cancer (HNPCC)*
  - *Familial adenomatous polyposis (FAP)*

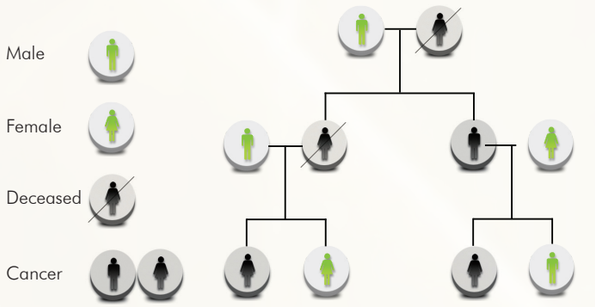




Genetic Mutation carriers have an increased lifetime risk of cancer.

Cancer Type	Gene Involved	Lifetime Risk	
		General Population	Mutation Carriers
Breast Cancer	BRCA1 BRCA2	2-7%	30-80%
Colorectal Cancer	HNPCC: MLH1, MSH2	2-6%	80%
	FAP: APC	2-6%	80-100%

High Risk Cancer Family Pedigree Example



Comprehensive Oncology Centre

Service Hour
Monday-Friday: 9:00 am-5:00 pm
Saturdays: 9:00 am-1:00 pm
Closed on Sundays and Public Holidays
For enquiry, please contact us at:
Tel: 2835 8877
Fax: 2892 7520
Email: oncology@hksh.com

Molecular Pathology Division
Department of Pathology

Service Hour
Monday-Friday: 8:00 am-6:00 pm
Saturdays: 8:00 am-12:00 pm
Closed on Sundays and Public Holidays
For enquiry, please contact us at:
Tel: 2835 8790; 2835 8779
Fax: 2835 8799
Email: lab@hksh.com

Hong Kong Sanatorium & Hospital,
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STANFORD UNIVERSITY MEDICAL CENTER
Stanford Hospital & Clinics
Lucile Salter Packard Children's Hospital

養和醫院
HONG KONG SANATORIUM & HOSPITAL
Molecular Pathology Division
Comprehensive Oncology Centre

家族遺傳性癌症服務
Familial Cancer Services

本院此項服務是與
史丹佛大學之「臨床基因癌症研究計劃」合作

in collaboration with
Stanford Clinical Cancer Genetics Program.

什麼是癌症？

癌症是指一些源於正常組織的異常細胞失控地增生之現象。多數癌症是由於細胞的遺傳突變累積而成。約有百分之五至十的癌症個案均有遺傳性，顯示先天遺傳是癌症發病的主要因素之一。最常見的遺傳性癌症包括乳癌、卵巢癌和結腸癌等。

我有患上遺傳性癌症或家族性癌症的風險嗎？

遺傳性癌症家族的特點：

- 癌症發病年齡早
- 同一人患上多種癌症
- 雙側腫瘤
- 家族中多個成員患癌

任何可能由於基因突變，以致具有較高患癌風險之人士，就須接受遺傳基因的檢查服務。

養和醫院家族遺傳性癌症服務

家族遺傳性癌症服務以癌症高危家族成員爲主要服務對象，協助他們預防癌症，並且能及早發現癌症。本院提供之一站式服務包括：

- 患癌風險評估
- 遺傳性癌病診症
- 遺傳基因測試
- 透過監測及預防性治療減低患癌風險

此服務與史丹佛大學癌症臨床基因項目合作，求診者可選擇由史丹佛大學的遺傳諮詢專家或腫瘤學家以視像會議形式診症(需額外收費)，或由本地專家親自診症。

什麼是癌症遺傳評估？

風險評估及諮詢

如要確定求診者是否患上遺傳性癌症的高危人士，最重要的是深入了解其家族史。本院的醫護人員具備豐富經驗，能助您評估患上遺傳性癌症的風險，以及建議您接受相關的基因測試。

遺傳基因測試

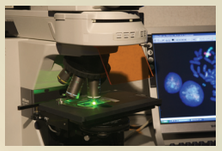
透過遺傳基因測試，可找出求診者有否可導致癌症的基因突變。如測試結果屬陽性，表示求診者是患癌的高危人士。專家將詳細評估及解釋有關測試結果的優點、局限性及影響。

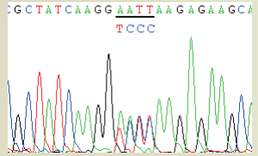
降低患癌風險計劃

根據其家族病史及高危患上的癌症種類，爲求診者建議一個降低患癌風險計劃。一般高危人士預防癌症的建議包括：定期檢查、藥物治療或預防性手術治療。

常見遺傳性癌症

- 乳癌和卵巢癌
- 結腸直腸癌
  - *遺傳性非息肉性結腸直腸癌(HNPCC)*
  - *家族性結直腸息肉綜合症(FAP)*

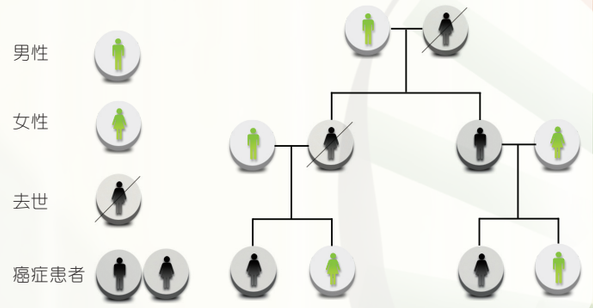




帶有突變基因者癌症發病率較高

癌症種類	相關基因	發病率	
		正常人	帶有突變基因者
乳癌	BRCA1 BRCA2	2-7%	30-80%
結腸直腸癌	HNPCC: MLH1, MSH2	2-6%	80%
	FAP: APC	2-6%	80-100%

高危患癌家族圖(例子)



綜合腫瘤科中心

辦公時間
星期一至星期五：上午九時至下午五時
星期六：　　上午九時至下午一時
(星期日及公眾假期休息)
如有查詢，歡迎聯絡我們
電話：　2835 8877
傳真：　2892 7520
電郵：　oncology@hksh.com

香港跑馬地山村道二號養和醫院
http://www.hksh.com

分子病理部
病理部

辦公時間
星期一至星期五：上午八時至下午六時
星期六：　　上午八時至中午十二時
(星期日及公眾假期休息)
如有查詢，歡迎聯絡我們
電話：　2835 8790; 2835 8779
傳真：　2835 8799
電郵：　lab@hksh.com

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