

AMY AND THE BREAST CANCER TEST

You are a genetic counsellor at the hospital where Mark will be getting his *BRCA1* genetic test. You have to draw a pedigree diagram based on the family's history of breast cancer. This can be used to determine the risk of Amy inheriting a *BRCA1* mutation.

1. Use the information provided by Mark to draw a pedigree. Make sure you include each person's name, age and relationship to Mark.

FAMILY HISTORY QUESTIONNAIRE

Patient name: Mark Smith Age: 45

How many children do you have? Are all the children with the same partner?

1 daughter called Amy, 15 years old. Only child with my wife Julie, 43 years old.

Provide details of your parents. Have they been affected by breast cancer?

Mother Anne died of breast cancer 15 years ago at 58 years. Father David is 74 years old and has not been affected with cancer.

Provide details of your mother siblings, and if they have any history of cancer.

My mother had 1 brother, Alan. He was heavy smoker and died last year at the age of 70 from lung cancer. He was married to Patricia (Pat) who's 68 years old. Their daughter, May, is 40. May is unmarried and has no children.

Provide details of any brothers or sisters, their spouses and their children.

I have 1 sister, Linda, who's 48. Recently been diagnosed with breast cancer and has tested positive for *BRCA1* mutation. Linda is married to John Brown, 52. They have 2 children. A son James (22) and daughter, Jessica (20).

Provide details of your mother's parents (maternal grandparents) and her siblings.









My grandmother, Alice, died of pneumonia in 1995 at the age of 80 years old. She had no siblings. My grandfather Patrick, died of prostate cancer in 1985. He was 70 years old.

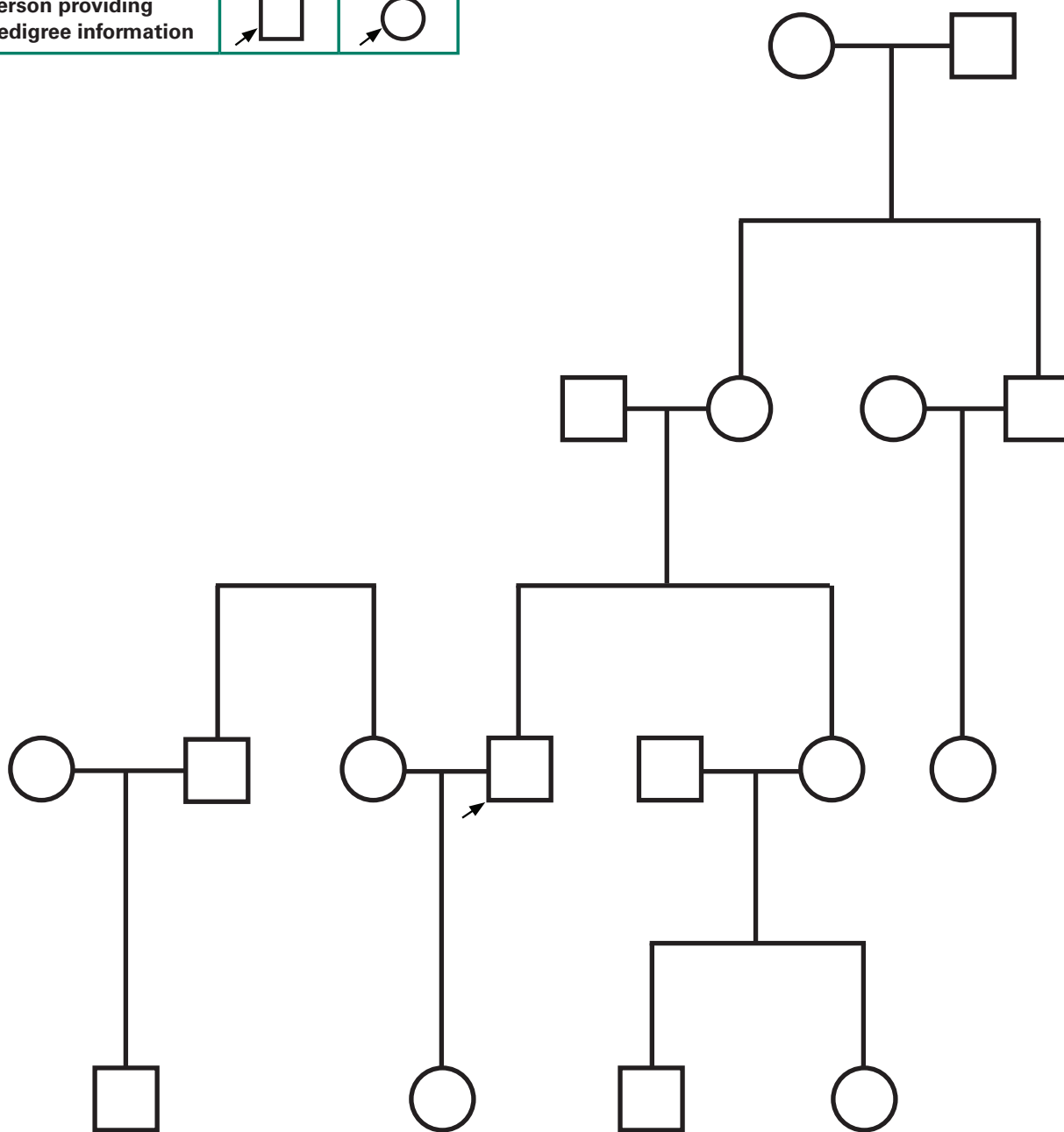
Provide details of your wife's family.

1 brother called Michael who is 50. Married to Sue (46). 1 son, Frank, 16 years old. No history of cancer in the family.

GENOME GENERATION

Scenario 1 follow up activity

	Male	Female
Individual		
Affected Individual (symbol coloured in)		
Deceased		
Person providing pedigree information		



GENOME GENERATION

Scenario 1 follow up activity

2. The test results reveal that Mark is a carrier of the *BRCA1* mutation. Add this to the pedigree.
3. Which other family members are possibly at risk of having the *BRCA1* mutation?
What is their risk of having the *BRCA1* mutation?