

# Referral Survey

Please complete the survey below.

Thank you!

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You are being asked to participate in a research study to understand the patterns of referral for cancer genetic consultation based on family cancer history. This study is being conducted by Brandon Welch, MS, PhD, Associate Professor in Biomedical Informatics at the Medical University of South Carolina.

- ☐ I agree  
☐ I do not agree

Understanding these patterns will allow us to evaluate the extent to which patients are being referred for cancer genetic consultation based on clinical practice guideline criteria. These findings will lead to better tools to help assist providers in evaluating patient family cancer histories according to established clinical practice guidelines.

There is a risk of loss of confidentiality as a result of participation. There will be no direct benefit to you but we hope that these findings will lead to better tools to help assist providers in evaluating patient family cancer histories according to established clinical practice guidelines.

The study should take 10 minutes. Your participation in this research study is voluntary and will not constitute any element of your job performance or become part of your record.

Your consent is implied by completing the survey. If you would like to participate in this survey, please select "I agree" to continue. If you have any questions about this research, email Dr. Welch (welchbm@musc.edu).



**About you**

Are you male or female?

- ☐ Male  
☐ Female  
☐ prefer not to say

What type of healthcare professional are you?

- ☐ Genetic Counselor  
☐ Oncologist  
☐ Primary care  
☐ OB/GYN  
☐ Other

If you chose 'other', please specify

\_\_\_\_\_

How many years have you been practicing as a(n)  
[provider\_type]?

\_\_\_\_\_

How many years have you been practicing as a(n)  
[other\_provider\_type]?

\_\_\_\_\_



**Please consider each of the following family history cases and record whether or not the patient (proband) should be referred for genetic counseling and/or testing.**

Should the patient (proband) in the following pedigree be referred for a cancer genetic consultation based on the available information?

## Executive Summary

Proband is a **41 year old** female with

- **No** reported personal history of cancer
- African American Ancestry
- **No** reported personal gene mutation
- **No** reported family gene mutation history
- Family history of **Melanoma, Colorectal cancer**

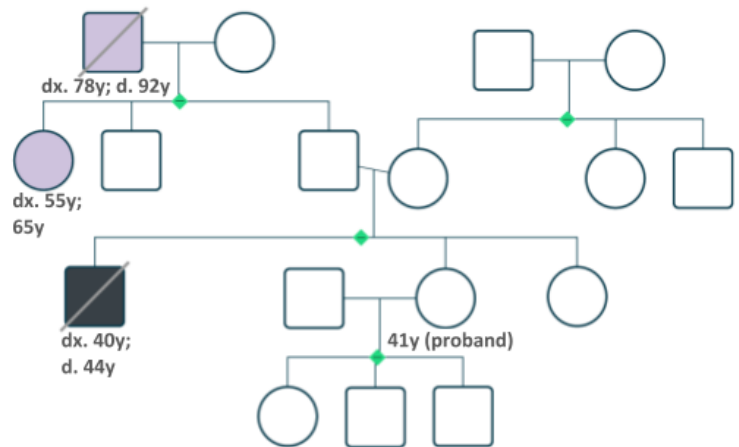
## Family Cancer History

### Colorectal Cancer

- Paternal Grandfather diagnosed at **78 years old**
- Paternal Aunt diagnosed at **55 years old**

### Melanoma

- Brother diagnosed at **40 years old**



### Color index

■ Colorectal cancer

■ Melanoma

- ☐ YES, this patient should be referred for genetic counseling or testing
- ☐ NO, this patient should NOT be referred for genetic counseling or testing



**FHx case 2/18**

Should the patient (proband) in the following pedigree be referred for a cancer genetic consultation based on the available information?

## Executive Summary

Proband is a **52 year old** female with

- Personal history of of **Cervical cancer** at **49 years old**
- European Ancestry
- **No** reported personal gene mutation
- **No** reported family gene mutation history
- Family history of **Prostate cancer, Breast cancer**

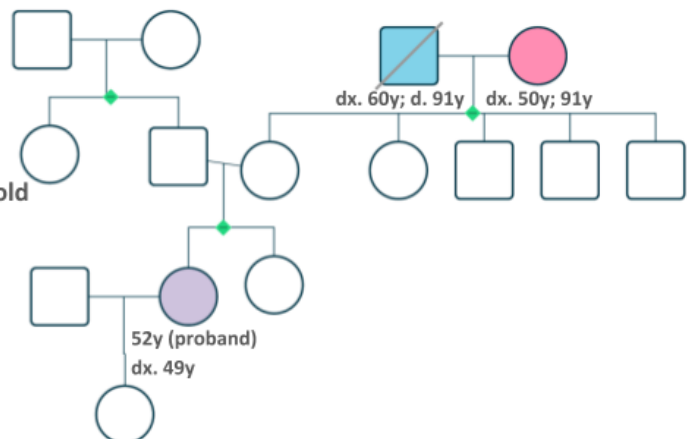
## Family Cancer History

### Breast Cancer

- Maternal Grandmother diagnosed at **50 years old**

### Prostate Cancer

- Maternal Grandfather diagnosed at **60 years old**



### Color index

- Cervical cancer
- Prostate cancer
- Breast cancer

- ☐ YES, this patient should be referred for genetic counseling or testing
- ☐ NO, this patient should NOT be referred for genetic counseling or testing



Should the patient (proband) in the following pedigree be referred for a cancer genetic consultation based on the available information?

- ☐ YES, this patient should be referred for genetic counseling or testing
- ☐ NO, this patient should NOT be referred for genetic counseling or testing



**FHx case 4/18**

Should the patient (proband) in the following pedigree be referred for a cancer genetic consultation based on the available information?

## Executive Summary

Proband is a **59 year old** female with

- Personal history of of **Squamous cell lung cancer** at **43 years old**
- European Ancestry
- **No** reported personal gene mutation
- **No** reported family gene mutation history
- Family history of **Ewing's sarcoma**, **Breast cancer**

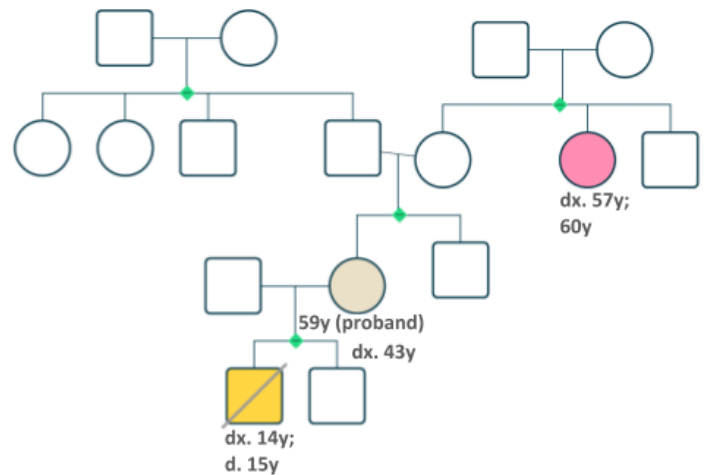
## Family Cancer History

### Breast Cancer

- Maternal Aunt diagnosed at **57 years old**

### Ewing's Sarcoma

- Son diagnosed at **14 years old**



### Color index

- Squamous cell lung cancer
- Breast cancer
- Ewing's sarcoma

- ☐ YES, this patient should be referred for genetic counseling or testing
- ☐ NO, this patient should NOT be referred for genetic counseling or testing



**FHx case 5/18**

Should the patient (proband) in the following pedigree be referred for a cancer genetic consultation based on the available information?

## Executive Summary

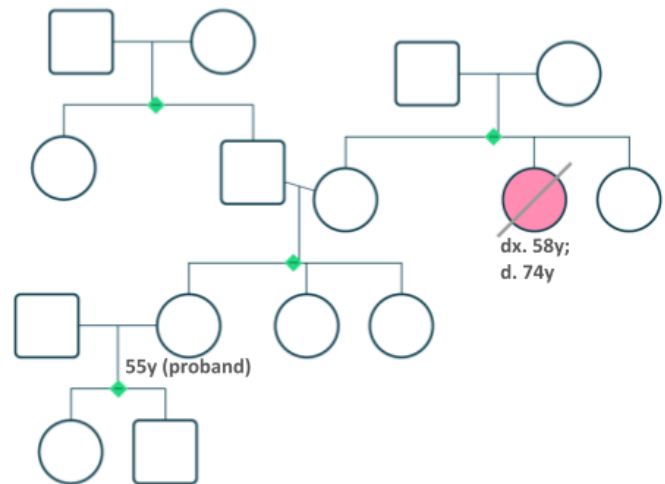
Proband is a **55 year old** female with

- **No** reported personal history of cancer
- **Ashkenazi Jewish** Ancestry
- **No** reported personal gene mutation
- **No** reported family gene mutation history
- Family history of **Breast cancer**

## Family Cancer History

### Breast Cancer

- Maternal Aunt diagnosed at **58 years old**
  - ER negative
  - PR negative
  - HER2 negative
  - Unilateral



### Color index

■ Breast cancer

- ☐ YES, this patient should be referred for genetic counseling or testing
- ☐ NO, this patient should NOT be referred for genetic counseling or testing



**FHx case 6/18**

Should the patient (proband) in the following pedigree be referred for a cancer genetic consultation based on the available information?

## Executive Summary

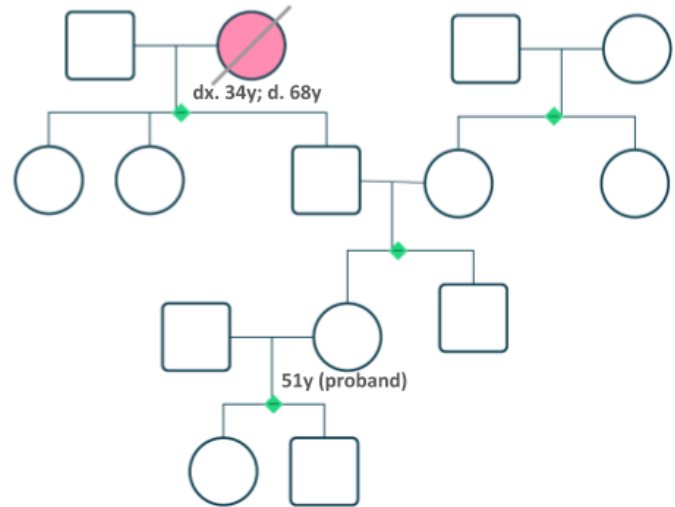
Proband is a **51 year old** female with

- **No** reported personal history of cancer
- **Ashkenazi Jewish** Ancestry
- **No** reported personal gene mutation
- **No** reported family gene mutation history
- Family history of **Breast cancer**

## Family Cancer History

### Breast Cancer

- Paternal Grandmother diagnosed at **34 years old**
  - Bilateral



### Color index

■ Breast cancer

- ☐ YES, this patient should be referred for genetic counseling or testing
- ☐ NO, this patient should NOT be referred for genetic counseling or testing



**FHx case 7/18**

Should the patient (proband) in the following pedigree be referred for a cancer genetic consultation based on the available information?

## Executive Summary

Proband is a **60 year old** female with

- Personal history of of **Breast cancer** at **56 years old**
- African American Ancestry
- **No** reported personal gene mutation
- **No** reported family gene mutation history
- Family history of **Brain cancer, Bone cancer, Breast cancer**

## Family Cancer History

### Breast Cancer

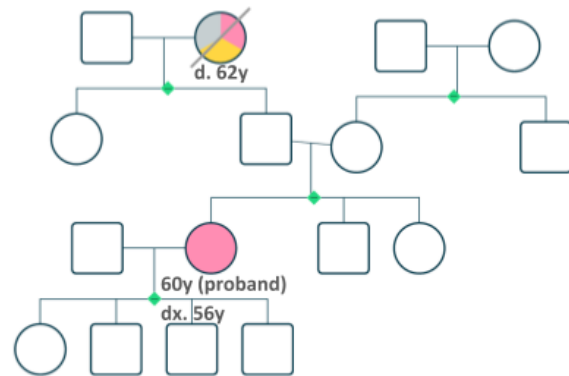
- Paternal Grandmother diagnosed at **56 years old**

### Bone Cancer

- Paternal Grandmother diagnosed at **62 years old**

### Brain Cancer

- Paternal Grandmother diagnosed at **62 years old**



### Color index

- Breast cancer
- Bone cancer
- Brain cancer

- ☐ YES, this patient should be referred for genetic counseling or testing
- ☐ NO, this patient should NOT be referred for genetic counseling or testing



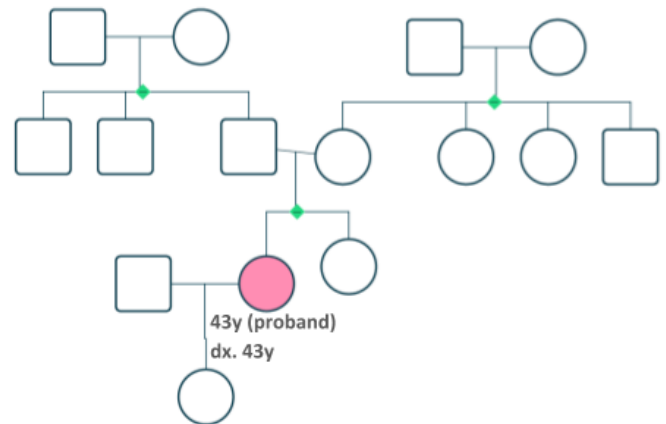
**FHx case 8/18**

Should the patient (proband) in the following pedigree be referred for a cancer genetic consultation based on the available information?

**Executive Summary**

Proband is a **43 year old** female with

- Personal history of of **Breast cancer** at **43 years old**
- European Ancestry
- **No** reported personal gene mutation
- **No** reported family gene mutation history
- **No** Family history of cancer

**Color index**

■ Breast cancer

- ☐ YES, this patient should be referred for genetic counseling or testing
- ☐ NO, this patient should NOT be referred for genetic counseling or testing



**FHx case 9/18**

Should the patient (proband) in the following pedigree be referred for a cancer genetic consultation based on the available information?

## Executive Summary

Proband is a **60 year old** female with

- **No** reported personal history of cancer
- European Ancestry
- **No** reported personal gene mutation
- **No** reported family gene mutation history
- Family history of **Breast cancer, Pancreatic cancer**

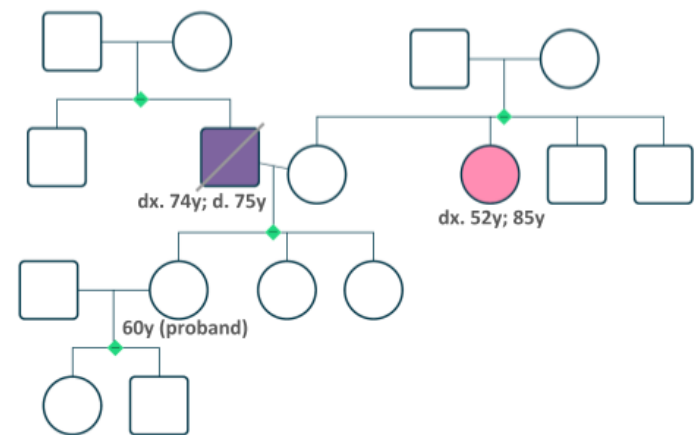
## Family Cancer History

### Breast Cancer

- Maternal Aunt diagnosed at **52 years old**

### Pancreatic Cancer

- Father diagnosed at **74 years old**



### Color index

■ Pancreatic cancer

■ Breast cancer

- ☐ YES, this patient should be referred for genetic counseling or testing
- ☐ NO, this patient should NOT be referred for genetic counseling or testing



**FHx case 10/18**

Should the patient (proband) in the following pedigree be referred for a cancer genetic consultation based on the available information?

**Executive Summary**

Proband is a **60 year old** female with

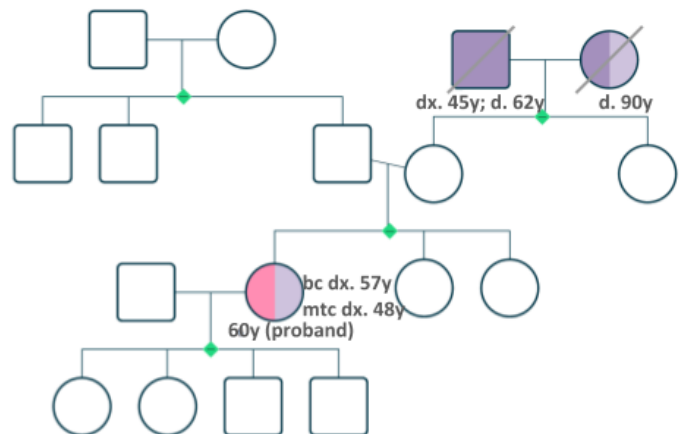
- Personal history of **Medullary thyroid cancer** at **48 years old**, **Breast cancer** at **57 years old**
- European Ancestry
- **No** reported personal gene mutation
- **No** reported family gene mutation history
- Family history of **Medullary thyroid cancer**, **Stomach cancer**

**Family Cancer History****Medullary thyroid cancer**

- Maternal Grandmother diagnosed at **45 years old**

**Stomach cancer**

- Maternal Grandmother diagnosed at **49 years old**
- Maternal Grandfather diagnosed at **60 years old**

**Color index**

- Medullary thyroid cancer
- Breast cancer
- Stomach cancer

- ☐ YES, this patient should be referred for genetic counseling or testing
- ☐ NO, this patient should NOT be referred for genetic counseling or testing



**FHx case 11/18**

Should the patient (proband) in the following pedigree be referred for a cancer genetic consultation based on the available information?

## Executive Summary

Proband is a **49 year old** female with

- Personal history of of **Cervical cancer** at **35 years old**
- European Ancestry
- **No** reported personal gene mutation
- **No** reported family gene mutation history
- Family history of **Breast cancer, Osteosarcoma, Colon cancer**

## Family Cancer History

### Breast Cancer

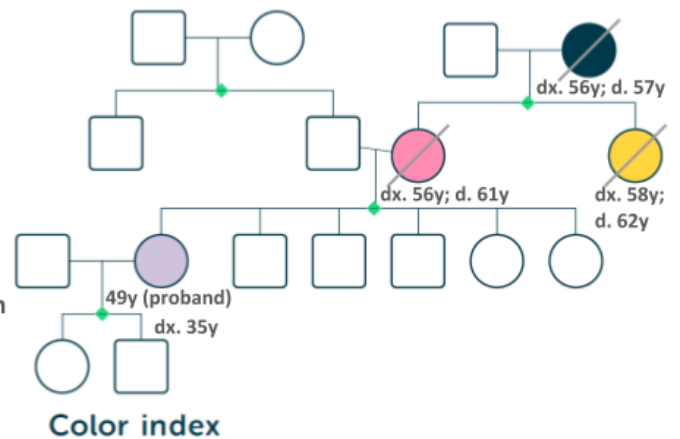
- Mother diagnosed at **56 years old**

### Colon Cancer

- Maternal Grandmother diagnosed at **56 years old**

### Osteosarcoma

- Maternal Aunt diagnosed at **58 years old**



- ☐ YES, this patient should be referred for genetic counseling or testing
- ☐ NO, this patient should NOT be referred for genetic counseling or testing



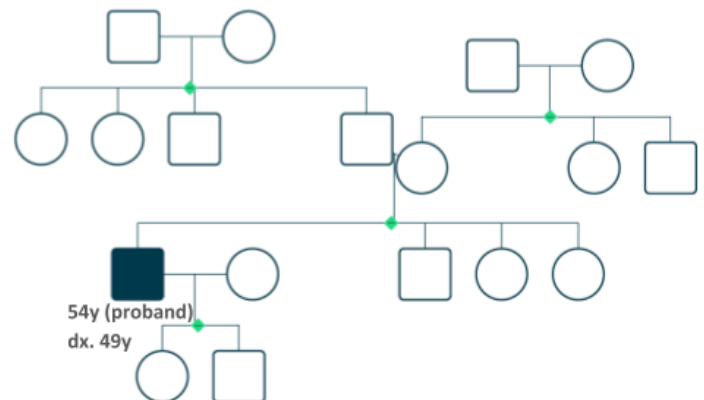
**FHx case 12/18**

Should the patient (proband) in the following pedigree be referred for a cancer genetic consultation based on the available information?

**Executive Summary**

Proband is a **54 year old** female with

- Personal history of of **Colon cancer** at **49 years old**
- African American Ancestry
- **No** reported personal gene mutation
- **No** reported family gene mutation history
- **No** Family history of cancer

**Color index**

■ Colon cancer

- ☐ YES, this patient should be referred for genetic counseling or testing
- ☐ NO, this patient should NOT be referred for genetic counseling or testing



**FHx case 13/18**

Should the patient (proband) in the following pedigree be referred for a cancer genetic consultation based on the available information?

## Executive Summary

Proband is a **49 year old** female with

- Personal history of **Non-Hodgkin's lymphoma** at **48 years old**
- European Ancestry
- **No** reported personal gene mutation
- **No** reported family gene mutation history
- Family history of **Ovarian cancer, Small cell lung cancer, Hodgkin's lymphoma, Breast cancer, Pancreatic cancer**

## Family Cancer History

### Breast Cancer

- Paternal Grandmother diagnosed at **68 years old**

### Hodgkin's lymphoma

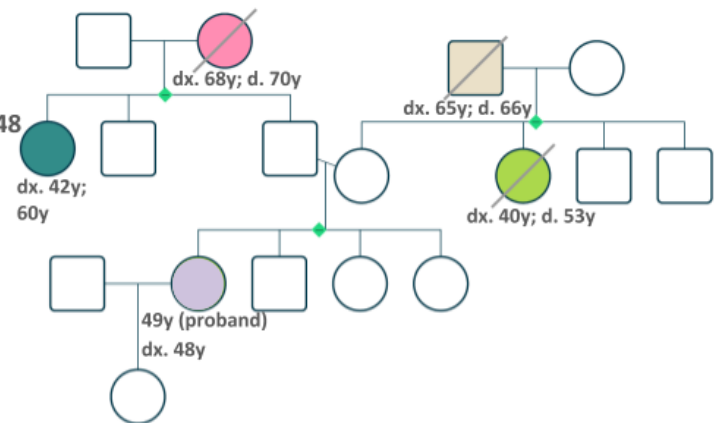
- Maternal Aunt diagnosed at **40 years old**

### Ovarian Cancer

- Paternal Aunt diagnosed at **42 years old**

### Small cell lung cancer

- Maternal Grandfather diagnosed at **65 years old**



### Color index

- Non-Hodgkin's lymphoma
- Breast cancer
- Small cell lung cancer
- Hodgkin's lymphoma
- Ovarian cancer

- ☐ YES, this patient should be referred for genetic counseling or testing
- ☐ NO, this patient should NOT be referred for genetic counseling or testing



**FHx case 14/18**

Should the patient (proband) in the following pedigree be referred for a cancer genetic consultation based on the available information?

## Executive Summary

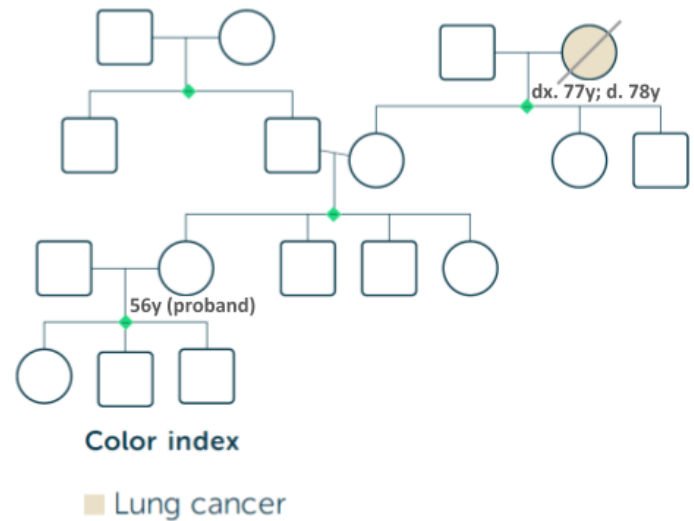
Proband is a **56 year old** female with

- **No** reported personal history of cancer
- European Ancestry
- **No** reported personal gene mutation
- **No** reported family gene mutation history
- Family history of **Lung cancer**

## Family Cancer History

### Lung Cancer

- Maternal Grandmother diagnosed at **77 years old**



- ☐ YES, this patient should be referred for genetic counseling or testing
- ☐ NO, this patient should NOT be referred for genetic counseling or testing



**FHx case 15/18**

Should the patient (proband) in the following pedigree be referred for a cancer genetic consultation based on the available information?

## Executive Summary

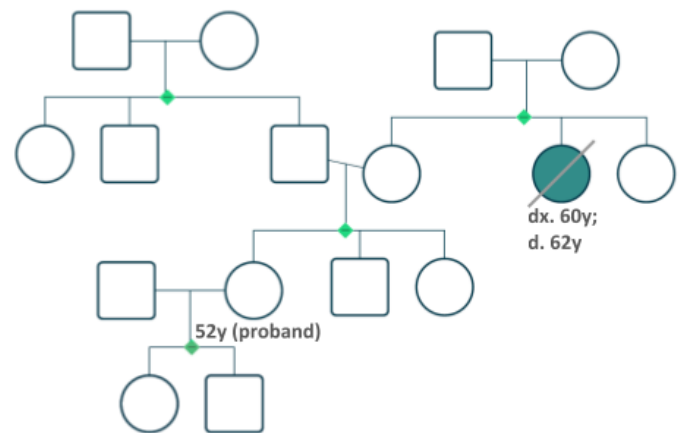
Proband is a **52 year old** female with

- **No** reported personal history of cancer
- European Ancestry
- **No** reported personal gene mutation
- **No** reported family gene mutation history
- Family history of **Ovarian cancer**

## Family Cancer History

### Ovarian Cancer

- Maternal Aunt diagnosed at **60 years old**



### Color index

■ Ovarian cancer

- ☐ YES, this patient should be referred for genetic counseling or testing
- ☐ NO, this patient should NOT be referred for genetic counseling or testing



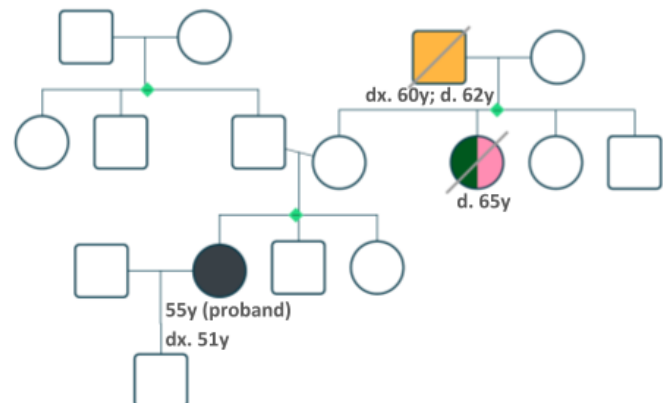
**FHx case 16/18**

Should the patient (proband) in the following pedigree be referred for a cancer genetic consultation based on the available information?

**Executive Summary**

Proband is a **55 year old** female with

- Personal history of of **Squamous cell skin cancer** at **51 years old**
- European Ancestry
- **No** reported personal gene mutation
- **No** reported family gene mutation history
- Family history of **Liver cancer, Chronic myelogenous leukemia (CML), Breast cancer**

**Family Cancer History****Breast Cancer**

- Maternal Aunt diagnosed at **60 years old**

**Chronic myelogenous leukemia (CML)**

- Maternal Grandfather diagnosed at **60 years old**

**Liver Cancer**

- Maternal Aunt diagnosed at **65 years old**

**Color index**

- Squamous cell skin cancer
- Chronic myelogenous leukemia (CML)
- Breast cancer
- Liver cancer

- ☐ YES, this patient should be referred for genetic counseling or testing
- ☐ NO, this patient should NOT be referred for genetic counseling or testing



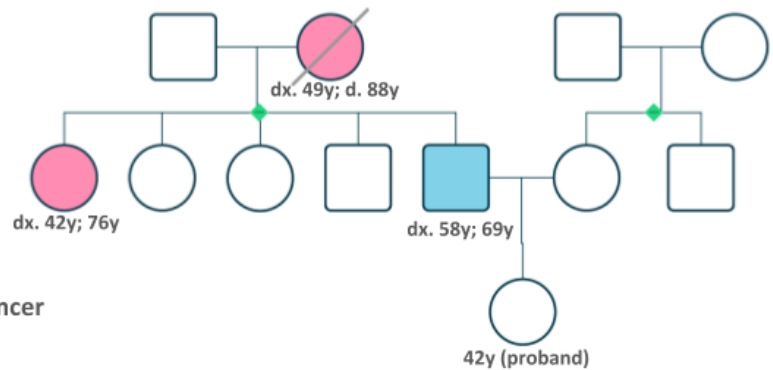
**FHx case 17/18**

Should the patient (proband) in the following pedigree be referred for a cancer genetic consultation based on the available information?

## Executive Summary

Proband is a **42 year old** female with

- **No** reported personal history of cancer
- European Ancestry
- **No** reported personal gene mutation
- **No** reported family gene mutation history
- Family history of **Prostate cancer, Breast cancer**



## Family Cancer History

### Breast Cancer

- Paternal Grandmother diagnosed at **49 years old**
- Paternal Aunt diagnosed at **42 years old**

### Prostate Cancer

- Father diagnosed at **58 years old**
  - Gleason score: **8**

### Color index

■ Prostate cancer

■ Breast cancer

- ☐ YES, this patient should be referred for genetic counseling or testing
- ☐ NO, this patient should NOT be referred for genetic counseling or testing



**FHx case 18/18**

Should the patient (proband) in the following pedigree be referred for a cancer genetic consultation based on the available information?

### Executive Summary

Proband is a **50 year old** female with

- **No** reported personal history of cancer
- European Ancestry
- **No** reported personal gene mutation
- **No** reported family gene mutation history
- Family history of **Lung cancer, Bladder cancer**

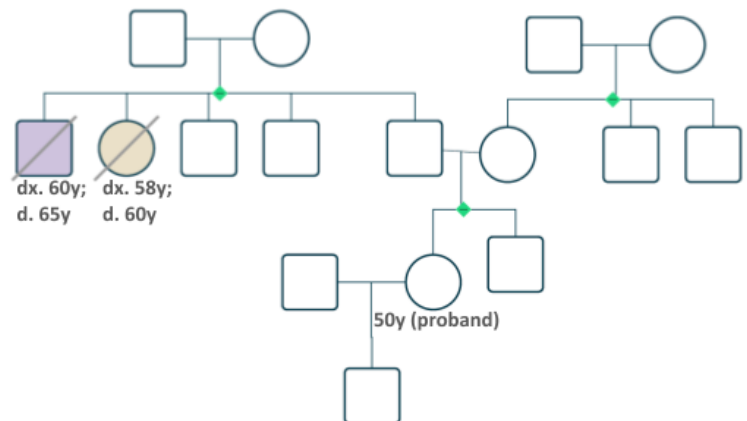
### Family Cancer History

#### Bladder Cancer

- Paternal Uncle diagnosed at **60 years old**

#### Lung Cancer

- Paternal Aunt diagnosed at **58 years old**



#### Color index

■ Bladder cancer

■ Lung cancer

- ☐ YES, this patient should be referred for genetic counseling or testing
- ☐ NO, this patient should NOT be referred for genetic counseling or testing



**Thank you!**

If you wish to receive a \$10 Amazon eGift card you must provide your email address. An email from giftbit.com will contain the eGift card.

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