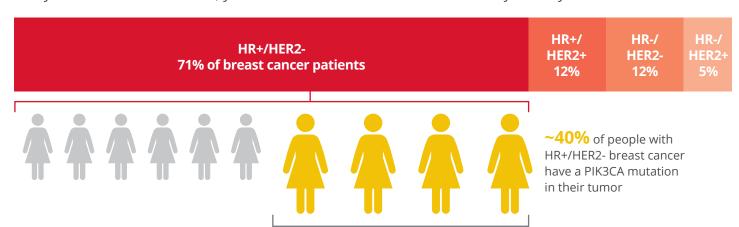
# The PIK3CA mutations, and why it may matter for your cancer care

Knowing what type of metastatic breast cancer (MBC) you have and what causes your cancer to grow is important. If you're living with MBC, you may already know your MBC type, often defined by your tumor's hormone receptor (HR+/-, also known as ER+/- or PR+/-) and HER2 protein (HER2+/-) status. There may also be mutations in genes that can affect your tumor growth.

It is important to know your tumor's mutation status, such as mutations to the PIK3CA gene. PIK3CA is the most commonly mutated gene in MBC.

Like your HR and HER2 status, your tumor's PIK3CA mutation status may affect your cancer care.



## Understanding PIK3CA, and what it means for you



#### What it is

A PIK3CA mutation is not inherited (cannot be passed down to children). The PIK3CA gene is the most commonly mutated gene in HR+/HER2- breast cancer, affecting about 40% of people with that subtype. PIK3CA mutations have been linked to cancer growth.



#### Why it matters

Just as your tumor's HR and HER2 status inform your doctor whether certain proteins fuel your cancer, your tumor's PIK3CA mutation status tells your doctor whether a gene mutation may be contributing to the growth of your cancer.



#### What you can do

Talk to your doctor about how you can find out your tumor's mutation status.

 Identifying the PIK3CA mutation can help your doctor understand your disease better and plan your personalized care.



### Questions you might want to ask your doctor include:

- How do I know if my tumor has a PIK3CA mutation?
- How does having a PIK3CA mutation impact my cancer care?

### Let's talk more about mutations in MBC.

#### What is a mutation?



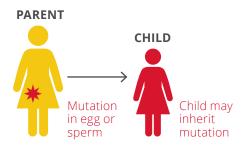
In cancer, mutations may affect how the tumor grows.

#### What are the types of mutations?

# **Sporadic Mutations:** occur at random and are not passed down from parent to child. Mutations in PIK3CA are sporadic mutations.



# Inherited Mutations: passed down from parent to child. BRCA1/2 is an inherited mutation.



# **MBC Mutation Myth vs Fact**

**MYTH:** I already know my MBC type—I do not need to know anything else about my cancer.

FACT: There may be PIK3CA mutations in your tumor that could impact your cancer care. Talk to your doctor to learn more about your tumor's PIK3CA mutation status.

**MYTH:** All MBC mutations are passed down from parent to child.

**FACT:** Not all MBC mutations are passed down from parent to child. Mutations in PIK3CA are not inherited, which means your tumor may have a mutation regardless of your family history.

**MYTH:** Mutations in cancer do not affect course of disease (or disease prognosis).

**FACT:** PIK3CA mutations have been linked to cancer growth, and are associated with poorer prognosis in MBC.



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