The PIK3CA mutation, 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. But it’s also important to know your tumor’s mutation status, such as PIK3CA.

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

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<tr>
<th>HR+/HER2-</th>
<th>HR+/HER2+</th>
<th>HR-/HER2-</th>
<th>HR-/HER2+</th>
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<td>71% of breast cancer patients</td>
<td>~40%</td>
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~40% of people with HR+/HER2- breast cancer have a PIK3CA mutation in their tumor

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.

- Your tumor’s PIK3CA mutation status may affect how your doctor manages your cancer care.

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?

**MUTATIONS ARE LIKE TYPLOS IN YOUR DNA**

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In cancer, mutations may affect how the tumor grows.

What are the types of mutations?

**Sporadic Mutations:**

occurs at random and is not passed down from parent to child. *PIK3CA* is a sporadic mutation.

**Inherited Mutations:**

passed down from parent to child. *BRCA1/2* is an inherited mutation.

In cancer, mutations may affect how the tumor grows.

MBC Mutation Myth vs. Fact

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

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

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

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

**FACT:** The *PIK3CA* mutation is not inherited, which means your tumor may have it regardless of your family history.

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