Guiding PARP inhibitor treatment in ovarian cancer

Patient guide
What is next for your ovarian cancer?

Your experience of ovarian cancer is personal to you, and Myriad Genetics believes your treatment should be too. Powerful medicines called PARP inhibitors now exist which can slow or even shrink your tumors, and we can test to see if they could work for you.

Myriad Genetics’ MyChoice CDx Plus HRD Companion Diagnostic Test is a type of DNA test to reveal if PARP inhibitor treatment is right for you.

What are PARP inhibitors?

PARP inhibitors are a type of oral medicine that blocks a DNA repair pathway in cancer cells.

Alone this isn’t enough. Another pathway called homologous recombination (HR) also fixes DNA damage. The HR pathway is controlled by many genes, the most important being BRCA1 and BRCA2. When the HR pathway is broken, for example due to a mutation in BRCA1, this is called HR deficiency (HRD).

In people who are HRD positive (HRD+), PARP inhibitors are more likely to work because without either of these DNA repair pathways working, the cancer cell dies.¹

Around half of ovarian cancers are HRD positive (HRD+).²

To find out if you can benefit from PARP inhibitor treatment, you need to know your HRD status.
What is your HRD status?

You can find out your status by using the MyChoice CDx Plus test, which will measure your tumour for:

1. Mutations in \textit{BRCA1} and \textit{BRCA2} genes
2. Your genomic instability score — created by Myriad Genetics, this score shows how vulnerable your cancer is to HRD

MyChoice CDx Plus represents an important step forward in identifying more patients for treatment compared to traditional \textit{BRCA} testing.

What do your results mean?

MyChoice CDx Plus provides clear answers to HRD status by giving you either a HRD- or HRD+ result.

- HRD- result means you are less likely to benefit from PARP inhibitor treatment. Your doctor will explain your options to you, which may still include going on one PARP inhibitor.
- HRD+ result means you should benefit from a wider range of PARP inhibitor treatments, and your doctor will discuss which one is best for you.
**HRD Status:** If the MyChoice CDx Plus test is positive, you are more likely to benefit from PARP inhibitor therapy.

**Tumor Mutation:** If a BRCA mutation is found in the tumor, you are more likely to benefit from PARP inhibitor therapy. This information will help your doctor discover whether the mutation is inherited with an additional blood test.

Myriad Genetics is committed to illuminating your pathway to the right treatment at the right time.
When will your treatment start?

We understand you want to start your treatment as soon as possible so it’s important to get a quick result back from MyChoice CDx Plus. Fortunately, your doctor will receive the result in less than two weeks after we receive your sample, giving you time to make the right decision.

Does MyChoice CDx Plus tell you if your BRCA gene mutation was inherited?

Mutations found in tumors can either be inherited (germline) or occur only in the tumor (somatic), but current technology only allows us to tell that a mutation exists. Fortunately, a follow-up blood test can answer if the mutation is inherited and Myriad Genetics can help with this test. If your result has a mutation make sure to ask your doctor about next steps.
Do you need to get tested more than once?

No. You only needed to be tested once with MyChoice CDx Plus, and this result will help guide future treatment decisions.

What are the other causes of HRD?

There are many causes of HRD. The most common are mutations of the \textit{BRCA} gene, which Myriad Genetics helped discover and which we test for with MyChoice CDx Plus. Other genes may also cause HRD and there are still many causes yet to be discovered. Myriad Genetics overcame this by developing a test that measures all the genetic damage created by these causes in the tumor. This way we don’t miss undiscovered causes, and give you a better chance of a positive result.

Where can you find out more?

You can find out more on Myriad Genetics’ genetic testing services and how they can help guide your ovarian cancer journey at our website

\url{www.myriadgenetics.eu}

For more information on ovarian cancer in general, you can visit

\url{www.cancerresearchuk.org}

References:

Myriad Genetics is committed to providing the right results at the right time so you can make the right decisions for your journey

About Myriad Genetics

Myriad Genetics is a leading genetic testing and precision medicine company dedicated to advancing health and wellbeing for all, empowering individuals with vital genetic insights and enabling doctors to better detect, treat and prevent disease.

Myriad Genetics is committed to illuminating the treatment pathway for every individual. Myriad discovers and provides genetic tests that determine the risk of developing disease, assess the risk of disease progression, and guide treatment decisions across medical specialties where critical genetic insights can significantly improve patient care and provide access to the right treatments.

For more information, visit the company’s website: www.myriadgenetics.eu
**Intended use**

Myriad Genetics MyChoice® CDx Plus is a next generation sequencing based in vitro diagnostic device that provides sequencing and large rearrangement analyses on a panel of genes and/or detects genomic instability using DNA extracted from tumor specimens. Homologous Recombination Deficiency (HRD) is determined by assessing the results of a subset of these genes and/or the Genomic Instability Score (GIS) Status. The test may be used as a companion diagnostic to identify patients who are or may become eligible for treatment with specific therapies in accordance with the approved therapeutic product labeling. Results are to be used by qualified health care professionals in accordance with professional guidelines in oncology for patients with malignant solid tumors.