

OncoHRD® is a cutting-edge test specifically designed to detect homologous recombination deficiency (HRD) in solid tumors and offers essential insights to guide the use of PARP inhibitors and platinum-based chemotherapy, ultimately aiming to improve patient outcomes.



## What is HRD (Homologous Recombination Deficiency)?

- HRD refers to a defect in the ability of cells to repair DNA double-strand breaks through homologous recombination.
- Commonly seen in cancers such as breast, ovarian, pancreatic, and prostate but is a pan-cancer aspect.

## Why HRD: Some key concerns in ovarian cancer treatment?

- Homologous recombination deficiency (HRD) is identified in approximately 48% of ovarian cancer tumors, typically due to mutations specific to the tumor.
- Assessing HRD status is crucial, as it provides valuable insights into the potential benefits of PARP inhibitor therapy.

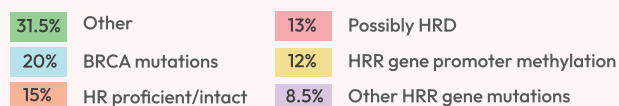
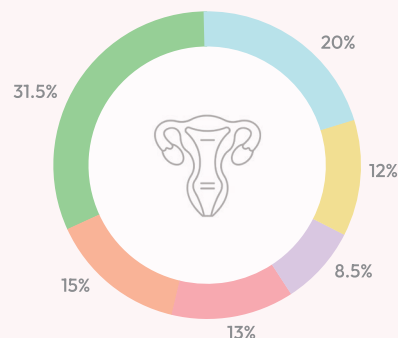



Figure. While 50% of High-grade serous ovarian carcinoma (HGSOC) samples have a positive HRD status, contributing genomic markers are found to be beyond BRCA mutations


## Defects in the homologous recombination repair pathway



**Ovarian Cancer**

**High-grade serous ovarian cancer (HGS-OvCa)**


- 17% carried germline mutations in BRCA1/2
- 3% somatic mutations in BRCA1/2



**Breast Cancer**

**Triple-negative breast cancer (TNBC)**


- 20% had either somatic or germline mutations in BRCA1/2



**Prostate Cancer**

**Metastatic castration resistant prostate cancer (mCRPC)**

- ~19% had mutations in BRCA1/2, BRCA2, ATM, CDK12




**Pancreatic Cancer**

**Pancreatic ductal adenocarcinoma (PDAC)**


- 17% had germline mutations in BRCA2
- 24% germline or somatic mutations in BRCA1/2, PALB2
- 8% had mutations in ATM

## Types of Genomic Scars included


**Loss of heterozygosity (LOH)**



**Telomeric-allelic imbalance (TAI)**



**Large-scale state transitions (LST)**



## Advancing Precision Oncology with Next-Gen HRD Insights



### Comprehensive Genomic Insights

Analyzes 50+ genes, detecting SNVs, INDELs, CNVs, and structural variants



### Advanced HRD Scoring

Provides HRD scores with LOH, TAI, and LST for precise tumor profiling



### AI-Powered Reporting

Utilizes iCARE™ for accurate, dynamic AI-powered reports



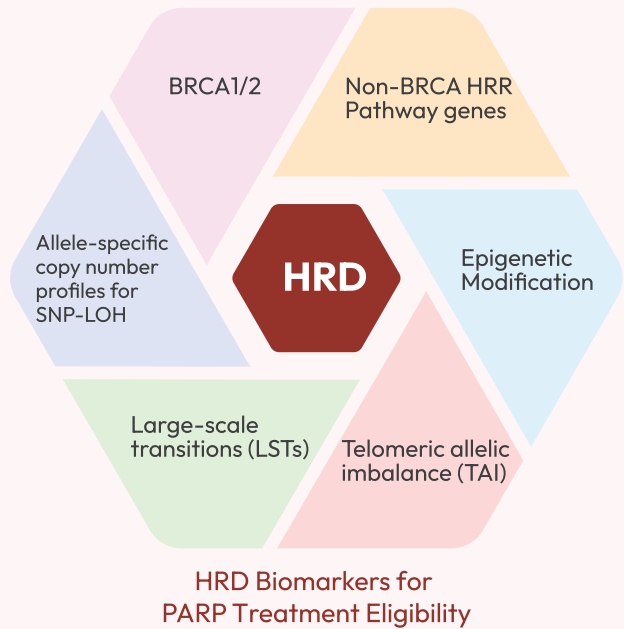
### Optimized Treatment Guidance

Supports PARP inhibitors and platinum-based therapies for improved outcomes

# Homologous recombination repair (HRR) gene

More than 50 HRR genes covered in OncoHRD® test

ARID1A	CDK12	FANCF	POLE	RPA1
ARID1B	CHEK1	FANCG	POLH	SMARCA1
ATM	CHEK2	FANCI	PPP2R1A	TP53
ATR	DNMT1	FANCL	PPP2R2A	TP53BP1
ATRX	ERCC1	FANCM	PTEN	WRN
AURKA	ERCC4	HDAC2	RAD50	XRCC1
BAP1	ERCC5	IRS1	RAD51	XRCC2
BARD1	EXO1	MLH1	RAD51B	XRCC3
BLM	FANCA	MRE11	RAD51C	
BRCA1	FANCC	NBN	RAD51D	
BRCA2	FANCD2	PALB2	RAD54B	
BRIP1	FANCE	POLD1	RAD54L	



## HRD testing is applicable to a variety of cancers, including:

**Breast Cancer**  
Especially useful for BRCA-mutated or triple-negative breast cancers.

**Ovarian Cancer**  
A key predictor for treatment with PARP inhibitors.

**Prostate Cancer**  
Helps identify those who may benefit from targeted treatments.

**Pancreas Cancer**  
Guiding the use of targeted therapies in case of HRD positive cases.

## Benefits of OncoHRD® test

**Affordable Solution**  
Affordable NGS-based test with deep coverage of 50+ genes, detecting SNVs, INDELs, CNVs, and structural variants

**Swift Results**  
Easily comprehensible report generated with the HRD score, genetic alterations using AI-powered dynamic reporting through iCARE™

**Associated Drugs**  
Drug associations based on rigorous, peer-reviewed literature ensuring evidence-backed insights, linking treatments to scientifically validated research.

**Targeted Therapy**  
Targeted Therapy Selection by identifying HRD-positive tumors, this test enables oncologists to select highly effective treatments such as PARP inhibitors

**Improved Survival**  
HRD-positive cancer patients often experience better responses to targeted therapies, leading to improved overall and progression-free survival

## Is OncoHRD® Clinically Relevant for Your Patients?

Patients with a Family History of Cancer

Patients with Advanced Cancers

Patients Seeking Personalized Therapy