

AmoyDx[®] HRD Complete Panel

A comprehensive homologous recombination deficiency (HRD) test to accelerate PARPi clinical research



Single Assay Solution to Detect All HRD Parameters

HRR Genetic Profiling

SNVs/InDels (HRRm)+Homozygous Deletion (HD) of 20 HRR genes:

ATM, BARD1, BRCA1, BRCA2, BRIP1, CDH1, CDK12, CHEK1, CHEK2, FANCA, FANCL, HDAC2, PALB2, PPP2R2A, PTEN, RAD51B, RAD51C, RAD51D, RAD54L, TP53

Tumor BRCA1/2 analysis

HRR: homologous recombination repair

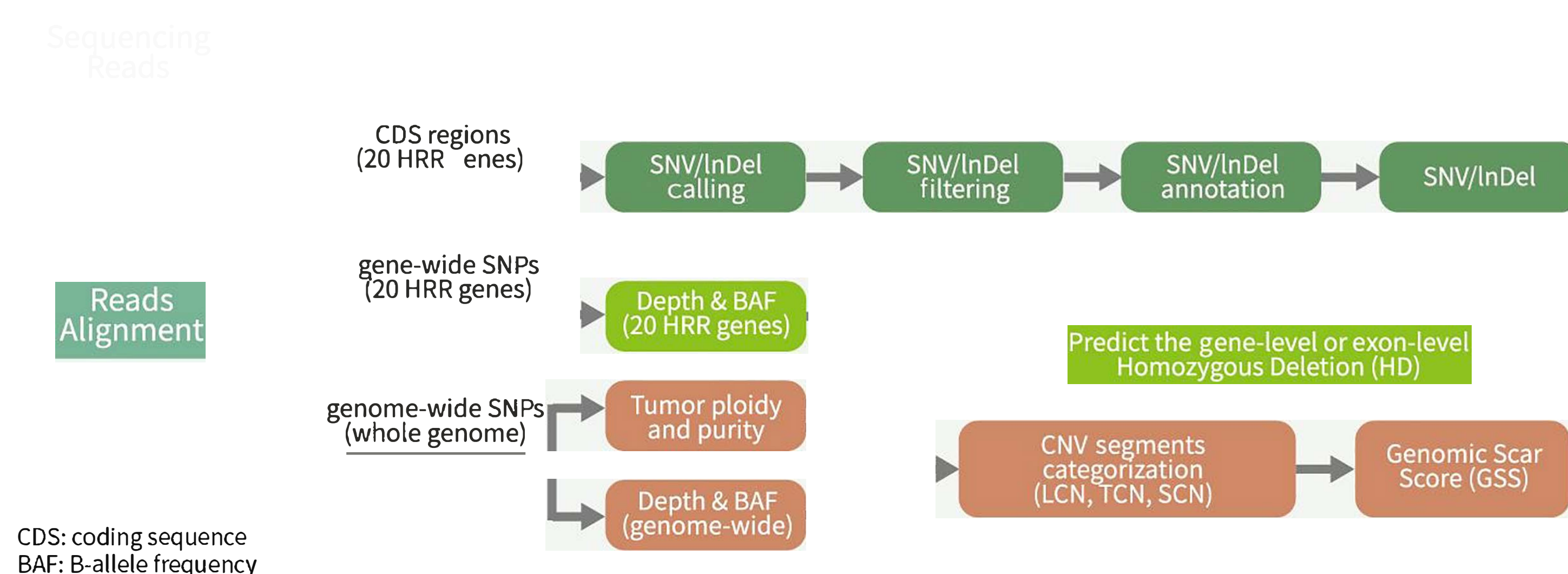
Genomic Instability Assessment

Genomic Scar Score (GSS)

HRD Status Assessment		
	GSS positive	
tBRCA positive	GSS negative	HRD positive
tBRCA negative	GSS positive	
tBRCA negative	GSS negative	HRD negative



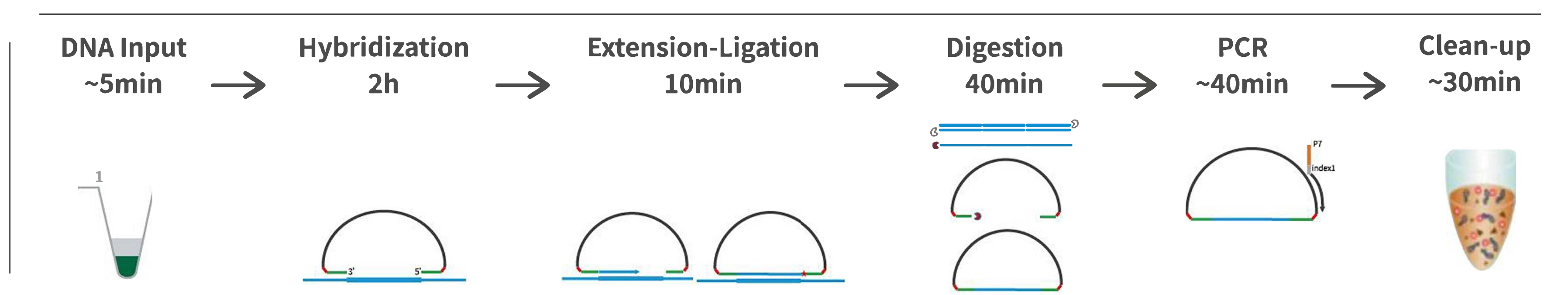
HRD Complete Panel Analysis Pipeline



Making Complex NGS Testing Easy to HANDLE

Innovative NGS technology:

Halo-shape **A**nnealing and **D**efer-**L**igation **E**nrichment (**HANDLE**)



- Turnaround time (TAT) from sample to report: within 3 days
- Easy workflow and low cost, as simple as PCR assay
- One-tube, hands-on time < 1 hour, total library construction time < 5 hours



Comprehensively Designed GSS Algorithm

The AmoyDx proprietary GSS algorithm is a machine learning-based model which assesses genomic instability by analyzing different types of copy number events across the genome.¹

Length of Copy Number (LCN)

- Large (>15 Mb)
- Middle (10–15 Mb)
- Small (5–10 Mb)

Type of Copy Number (TCN)

- Loss of Heterozygosity (LOH)
- Allele-specific CNV
- Allele-balanced CNV

Site of Copy Number (SCN)

- Telomere
- Centromere
- Other

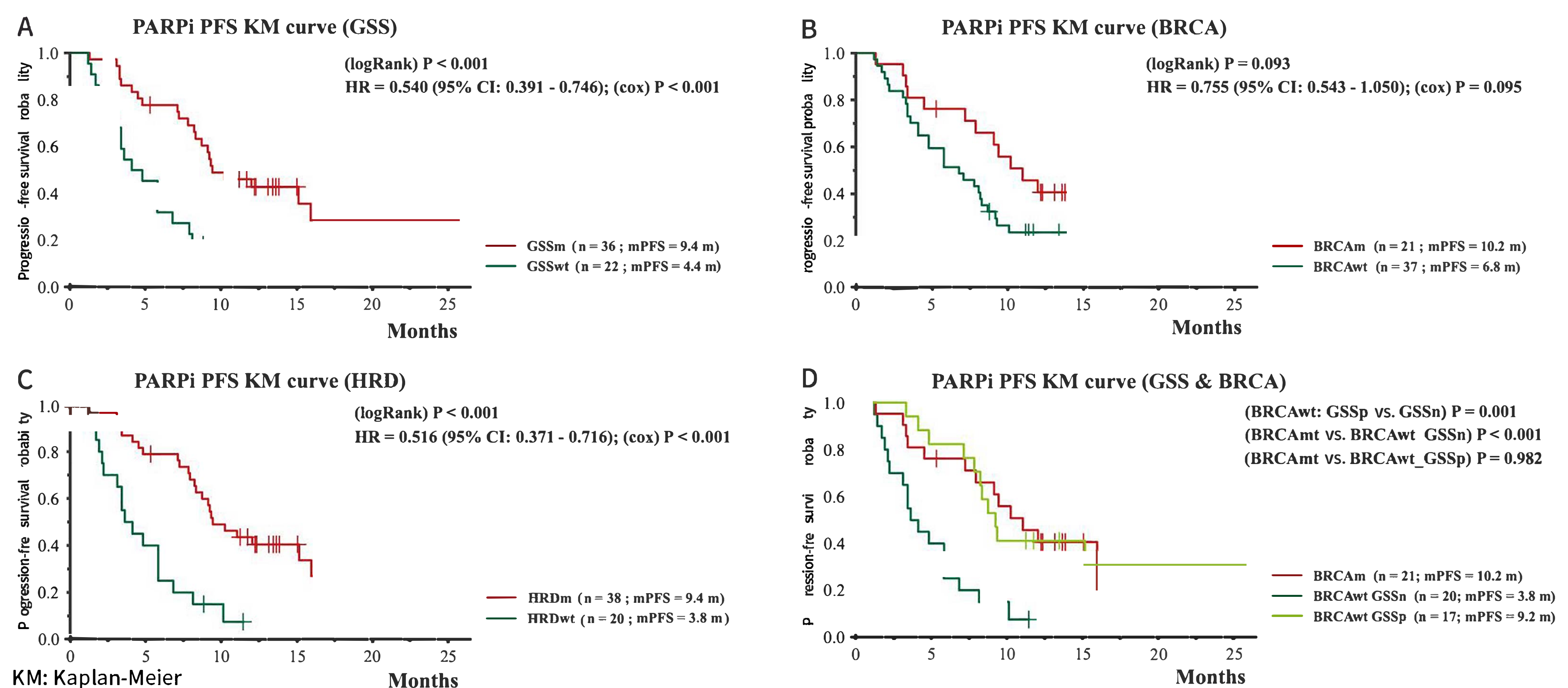
Number of Breakpoints (NB)

Copy number events are counted only once, resulting in no information redundancy.

$$\text{Genomic Scar Score} = \text{SVM}\left(\sum_1 w(\text{LCN}, \text{TCN}, \text{SCN}, \text{NB}) * \text{CNV}(n)\right)$$



Longer PFS with PARPi Treatment for GSS-positive Group¹



The study highlights the promising value of GSS in identifying patients who may respond favorably to PARPi treatment.



Decentralized ANDAS Server Enables Fast and Secure In-house Analysis

ANDAS: AmoyDx NGS Data Analysis System



Pre-installed software



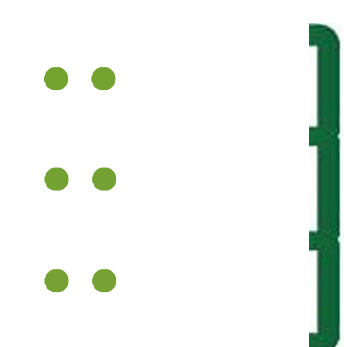
Automatic analysis pipeline



Regularly updated database



Data security



Local end-to-end solution

1. Yuan W, Ni J, Wen H, *et al.* Genomic Scar Score: A robust model predicting homologous recombination deficiency based on genomic instability. *BJOG*. 2022;129 Suppl 2:14-22. doi:10.1111/1471-0528.17324.

For Research Use Only. Not for use in diagnostic procedures.