

PredicineRNA™

88-Gene cfRNA Liquid Biopsy Assay

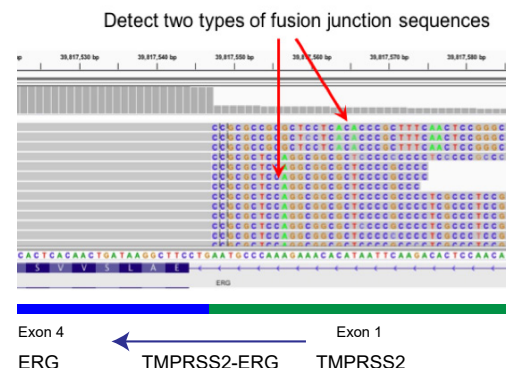
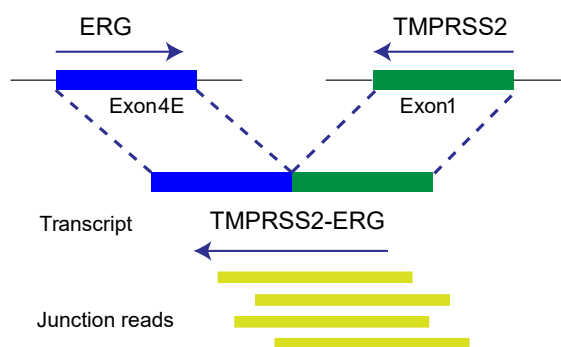
cfRNA panel for detection of RNA-level fusions and splicing variants

88

Fusion genes and splicing variants interrogated

53kb

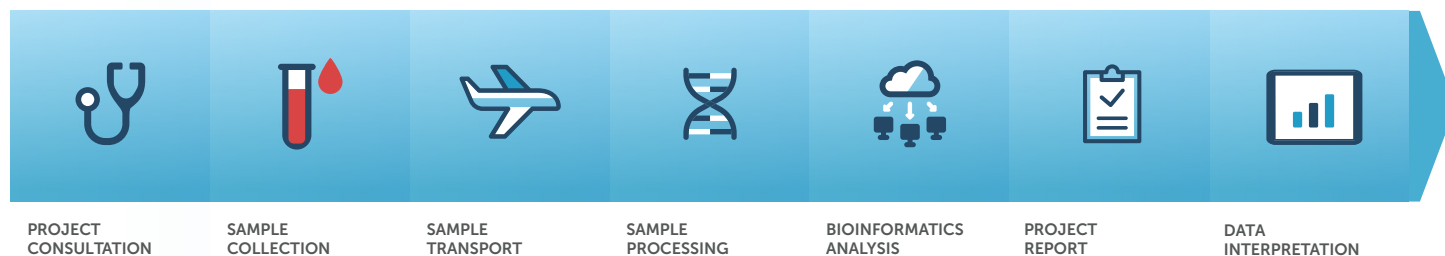
Broad genome coverage



Methods and Reporting

- Identifies RNA-based fusions and splicing variants
- Detects known and novel fusions
- A complementary approach to DNA fusion gene detection
- Uses a proprietary hybrid capture-based NGS methodology combined with in-house proprietary computational algorithms that enable accurate and sensitive detection of cancer variants
- Test results are provided in a report with clinically relevant genomic findings listed
- Research Use Only (RUO)

Workflow



PROJECT CONSULTATION

SAMPLE COLLECTION

SAMPLE TRANSPORT

SAMPLE PROCESSING

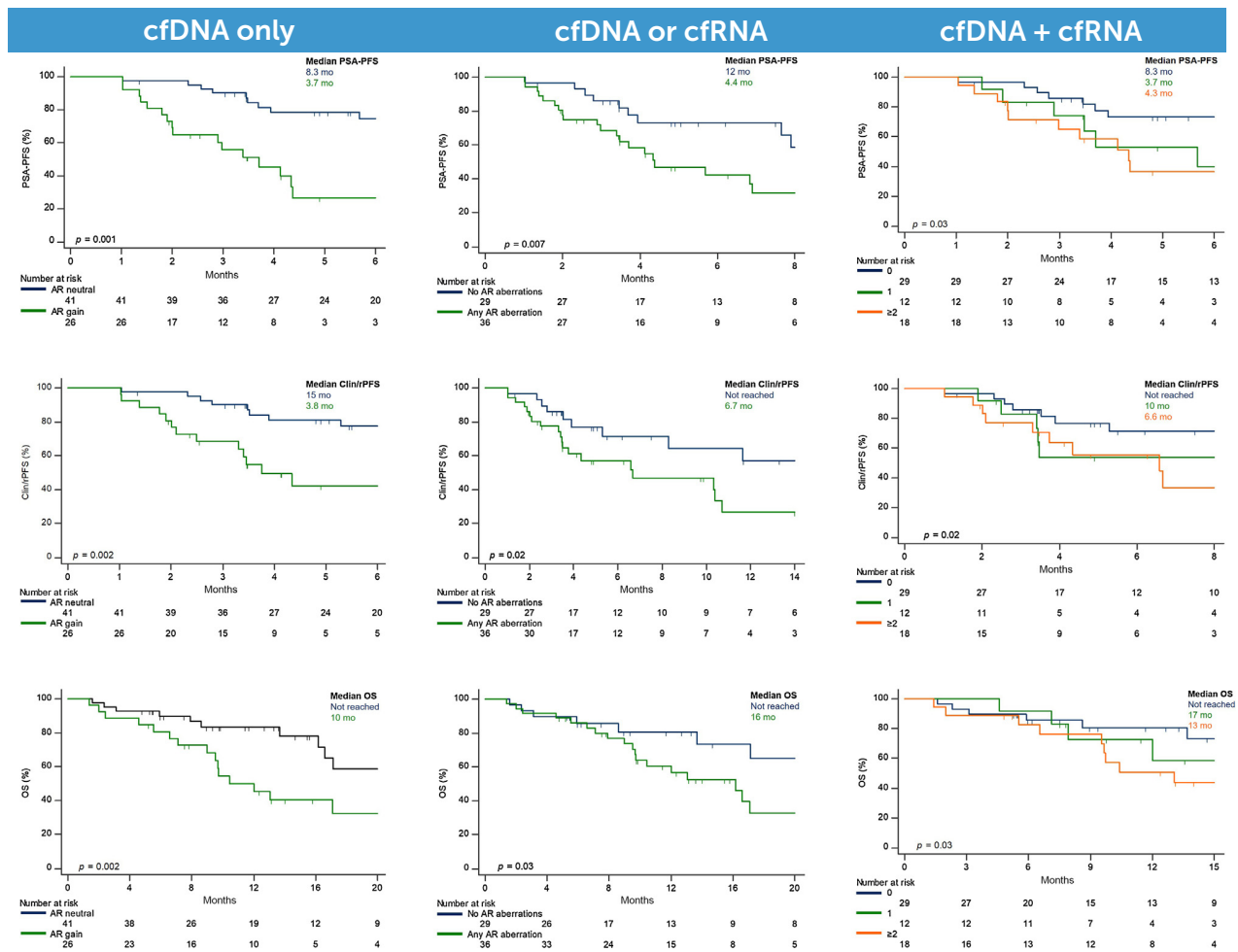
BIOINFORMATICS ANALYSIS

PROJECT REPORT

DATA INTERPRETATION

PERFORMANCE SPECIFICATIONS	
Specimen Type and Requirement	2-5 mL plasma 4-10 mL blood
Turnaround Time	14 days
Regions Analyzed	88 genes
Panel Size	53 kb
Sequencing	Illumina NGS

Case Study: Concurrent cfDNA and cfRNA profiling in mCRPC patients*



Kaplan-Meier analysis of PSA-PFS (top), clinical or radiographic PFS (middle), and overall survival (bottom), according to AR copy number status (left), the presence of at least one of AR gain, AR splice variant, or AR somatic mutation (centre), and the total number of AR aberrations (0, 1, 2) present (right). Two and eight patients were excluded from analysis for any AR aberration and total AR aberrations, respectively, due to insufficient information on AR-V expression. AR = androgen receptor; AR-V = AR splice variant; Clin/rPFS = clinical/radiographic progression-free survival; OS = overall survival; PFS = progression-free survival; PSA = prostate-specific antigen.

Conclusions

- The data suggest that combined cfDNA and cfRNA sequencing may have high clinical value in metastatic castration-resistant prostate cancer (mCRPC).
- Using PredicineRNA™ assay in two independent cohorts, the authors identified a novel poor prognosis subgroup harbouring concurrent androgen receptor (AR) gain and expression of the AR-V splice variant.

*Fettke, et al. Combined Cell-free DNA and RNA Profiling of the Androgen Receptor: Clinical Utility of a Novel Multianalyte Liquid Biopsy Assay for Metastatic Prostate Cancer. *European Urology*. 2020; 78(2): 173-180.