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# DNA TEST REPORT— MEDGENOME LABORATORIES

Sample Type: Blood (2.5ml) in EDTA tube Order ID/Sample ID: 103744/250536 Full Name/Ref no: Mr. Mast Ramji Date & time of Sample Collection: NA Referring Clinician: Date & time of Sample Receipt: 06-03-2019; 04:25 PM Dr. Amit Verma, Molecular Quest Healthcare Pvt.Ltd, Order date & time: 18-03-2019; 04:16 PM Date & Time of report: 09-04-2019; 06.30 PM Haryana. Additional family member (investigational) testing (MGM277) **Test Requested:** 

# CLINICAL DIAGNOSIS / SYMPTOMS / HISTORY

The index patient, Ms. Krishnadevi Bhardwaj was found to harbor a heterozygous variation in *BRCA2* gene and father of the index patient is being evaluated for the same variation.

# **RESULT SUMMARY**

Analysis for: Variation detected by Next Generation Sequencing in the BRCA2 gene of Ms. Krishnadevi Bhardwaj (90971)								
SI. no.	Sample ID	Name, Gender, Age	Relationship to the index patient	Gene Name	Exon / Intron	Variation reported in index patient	Variation detected in family member*	Clinical condition of family member
1.	250536	Mr. Mast Ramji, Male, 85yrs	Father	BRCA2	Exon 3	chr13:32893238G>G/ A (HET); c.92G>G/A; p.Trp31Ter	Absent	Asymptomatic

<sup>\*</sup> The variant analysis in Sanger sequencing is based on the *BRCA2* reference sequence ENST00000544455 [1]. The exon number and nucleotide numbers will differ based on the reference file chosen and the database used.

# **INTERPRETATION**

A heterozygous nonsense variation in exon 3 of the *BRCA2* gene (chr13:32893238G>G/A; c.92G>G/A) that results in a stop codon and premature truncation of the protein at codon 31 (p.Trp31Ter) was detected in Ms. Krishnadevi Bhardwaj (Sample ID: 90971) by NGS and was further validated by Sanger sequencing (Fig. 1 A).

The same pathogenic variation was not detected in the asymptomatic father of the index patient, Mr. Mast Ramji (Fig. 1 B).

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# **TEST METHODOLOGY**

Exon 3 of BRCA2 gene was PCR-amplified and the product was sequenced using Sanger sequencing. The detection limits of Sanger sequencing for presence of variation is ~12%. The sequence was aligned to available reference sequence ENST00000544455 [1] to detect variation using variant analysis software programs.

Report prepared by:

Results verified by:

Report released by:

Jamparasol

Gargi G. Nanda, PhD

Senior Genome Analyst

Dr. Sheetal Sharda, MD

(Paediatrics), DM (Medical Genetics),

MNAMS.

Consultant - Clinical Geneticist

V L Ramprasad, PhD

**Chief Operating Officer** 

# **REFERENCE**

1. ENSEMBL: http://www.ensembl.org

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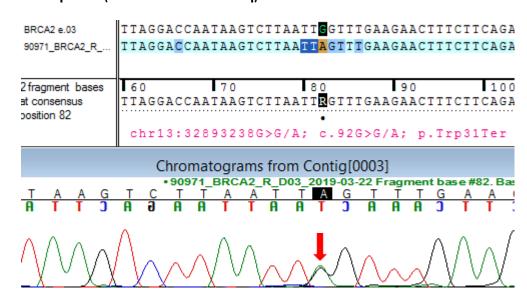
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#### **ANNEXURE-I**

Fig.1: Sequence chromatogram and alignment to the reference sequence showing the variation in exon 3 of *BRCA2* gene (chr13:32893238G>G/A; c.92G>G/A; p.Trp31Ter) detected in heterozygous condition in the index patient, Ms. Krishnadevi Bhardwaj (A) and not detected in the father of the index patient, Mr. Mast Ramji (B).

#### A. 90971 - Index patient (Ms. Krishnadevi Bhardwaj)



### B. 250536 — Father of the index patient (Mr. Mast Ramji)

