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PRECISION MEDICINE

Order ID :	118877
Clinical ID :	NOP4455
Indication :	Non-Small Cell Lung Cancer(NSCLC)
Physician :	Dr. White
Patient Age :	70
Patient Gender :	Female
Patient Status :	Newly Diagnosed
Biopsy Date :	2019-09-20
Sample Type :	FFPE
Genomic Input :	Whole Exome Sequence
Additional Input :	NA

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Clinical ID: NOP4455 **Cellworks ID:** 118877 **Ref Physician:** Dr.White

Biopsy Sequence: 1 **Gender/Age:** Female / 70 **Date of Report:** Dec 19, 2019

Indication: Non-Small Cell Lung Cancer(NSCLC)

1. Drug Response Prediction

Therapies of Interest	Patient Predicted Response
CABOZANTINIB	Responder
CARBOPLATIN_ETOPOSIDE	Responder
CARBOPLATIN_GEMCITABINE	Responder
CARBOPLATIN_PACLITAXEL	Responder
CARBOPLATIN_PACLITAXEL_RADIATION	Responder
CARBOPLATIN_PEMETREXED	Responder
CARBOPLATIN_PEMETREXED_RADIATION	Responder
CISPLATIN_ETOPOSIDE	Responder
CISPLATIN_ETOPOSIDE_RADIATION	Responder
CISPLATIN_GEMCITABINE	Responder
CISPLATIN_PACLITAXEL	Responder
CISPLATIN_PEMETREXED	Responder
CISPLATIN_PEMETREXED_RADIATION	Responder
RADIATION	Responder
AFATINIB	Non-Responder
ALECTINIB	Non-Responder
BRIGATINIB	Non-Responder
CERITINIB	Non-Responder

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Therapies of Interest	Patient Predicted Response
CRIZOTINIB	Non-Responder
DABRAFENIB	Non-Responder
DABRAFENIB_TRAMETINIB	Non-Responder
ERLOTINIB	Non-Responder
GEFITINIB	Non-Responder
GEMCITABINE	Non-Responder
METHOTREXATE	Non-Responder
OSIMERTINIB	Non-Responder
PACLITAXEL	Non-Responder
PEMETREXED	Non-Responder
VANDETANIB	Non-Responder
VEMURAFENIB	Non-Responder

*For more details of actionable molecular target(s) and pathway(s), please check this link.

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2. Patient Disease Characteristics: Key Biomarker(s)

DDIT3	PFKM
CHEK2	PIK3CA
H2AFX	PRKCE
IKBKB	PTK2
PARP1	ROCK1

*For more details on selected biomarker(s) and its impact on patient's disease profile, please check this link.

3. Biomarker Impact Score

Therapies of Interest	Patient Biomarker Characteristics									
	DDIT3	CHEK2	H2AFX	IKBKB	PARP1	PFKM	PIK3CA	PRKCE	PTK2	ROCK1
CABOZANTINIB				✓		✓	✓	✓	✓	✓
CARBOPLATIN_ETOPOSIDE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
CARBOPLATIN_GEMCITABINE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
CARBOPLATIN_PACLITAXEL	✓	✓	✓	✓	✓	✓		✓	✓	✓
CARBOPLATIN_PACLITAXEL_RADIATION	✓	✓	✓	✓	✓	✓		✓	✓	✓
CARBOPLATIN_PEMETREXED	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
CARBOPLATIN_PEMETREXED_RADIATION	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
CISPLATIN_ETOPOSIDE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
CISPLATIN_ETOPOSIDE_RADIATION	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

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Therapies of Interest	Patient Biomarker Characteristics									
	DDIT3	CHEK2	H2AFX	IKBKB	PARP1	PFKM	PIK3CA	PRKCE	PTK2	ROCK1
CISPLATIN_GEMCITABINE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
CISPLATIN_PACLITAXEL	✓	✓	✓	✓	✓	✓		✓	✓	✓
CISPLATIN_PEMETREXED	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
CISPLATIN_PEMETREXED_RADIATION	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
RADIATION	✓	✓	✓	✓	✓	✓	✓	✓	✓	
AFATINIB				✓		✓	✓			
ALECTINIB				✓		✓	✓	✓	✓	✓
BRIGATINIB				✓		✓	✓	✓	✓	✓
CERITINIB				✓		✓	✓		✓	
CRIZOTINIB				✓		✓	✓		✓	✓
DABRAFENIB										
DABRAFENIB_TRAMETINIB				✓		✓		✓		✓
ERLOTINIB										
GEFITINIB										
GEMCITABINE				✓		✓		✓		✓
METHOTREXATE				✓		✓	✓			✓
OSIMERTINIB										
PACLITAXEL				✓	✓	✓		✓	✓	✓

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Therapies of Interest	Patient Biomarker Characteristics									
	DDIT3	CHEK2	H2AFX	IKBKB	PARP1	PFKM	PIK3CA	PRKCE	PTK2	ROCK1
PEMETREXED			✓	✓	✓	✓		✓		✓
VANDETANIB				✓		✓	✓	✓	✓	✓
VEMURAFENIB										

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4. Summary of Patient Genomic Profile

Input Data Type	Targeted Nucleotide Sequencing
Genetic Mutation(s)	51
Copy Number Variation(s)	59
Gene(s) Methylated	0

4.1 Detailed Information of Genomic Aberration(s) Modeled

4.1.1 Gene Mutation(s) with Gain of Function

ABCB1	CSF2RB	E2F4	FN1	KMT2A	MAP3K4	MYLK	NCOR1
POLM	PSPH	PTGS2	PTP4A3	PTPRG	SALL4	YBX3	

4.1.2 Gene Mutation(s) with Loss of Function

ABCB5	ALOX5AP	ARHGEF15	ASH2L	BAK1	CERS6	CES1	CHD4
DHX16	ESRRA	FOXM1	FOXO3	HSP90AA1	KAT6A	MKI67	MMP8
NOTCH1	NOTCH2	NOXO1	PIK3CG	RAD51C	RGS2	RIPK4	SETD2
SFRP1	SGPP1	SOX11	TBK1	TCF7L2	TDG	TF	TIMP2
WNK1	WWOX						

4.1.3 Gene Mutations(s) with Switch of Function

IDH2	TP53

4.1.4 Gene(s) with Increase in Copy Number Variation [CNV]

AGAP2	AMPD1	ARHGEF25	B4GALNT1	CDKN3	COPS6	CUL1	EIF3K
EPHB6	GPD1	GSTK1	HOXC6	ITGA5	LGALS7	MCM7	MIR25

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MIR29A	MIR29B1	MIR365A	MIR371A	MIR372	MIR373	MIR519B	MIRLET7I
NABP2	NFE2	NT5C1A	OS9	PIP4K2C	PLCG1	PRSS1	PSMA3
RYR1	SH2B2	SMARCC2	SMARCD1	TFPI2	TOP1	VASN	WDR77

4.1.5 Gene(s) with Decrease in Copy Number Variation [CNV]

ATP10A	CTSD	IGF2	INS	KLF13	MUC2	MUC5AC	NDN
NOP10	PTEN	RASA4	RASGRP1	ROS1	SEC23A	THBS1	TJP1
TOLLIP	UBE3A	ZNF91					

Clinical ID: NOP4455 **Cellworks ID:** 118877 **Ref Physician:** Dr.White

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5. Therapy Rationale(s)

Rationales provided in this section highlight the pathways connected to drug sensitivity and resistance and include references to supporting published literature.

Species in red denote drug impact points. Species highlighted in blue are the key biomarkers.

STATUS: **GOF:** Gain of Function Mutations; **LOF:** Loss of Function Mutations; **SOF:** Switch of Function Mutations; **AMP:** CNV Over-expression; **DEL:** CNV Knock-down;

TYPE: **R:** Resistant Gene/Loop for the Drug; **S:** Sensitive Gene/Loop for the Drug

AFATINIB				
Gene	Status	Type	Gene Status Drug Action Pathway(s)	Supporting PMID(s)
PTEN	DEL	R	**AFATINIB** ⊣ **EGFR** PTEN ⊣ PI345P3 → PDPK1 → AKT → PIKFYVE ⊣ EGFR	23757022 27902463 21779440 9895304 20361045

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CABOZANTINIB				
Gene	Status	Type	Gene Status Drug Action Pathway(s)	Supporting PMID(s)
PTEN	DEL	S	**CABOZANTINIB** ⊣ **KDR** PTEN ⊣ PI345P3 → PDPK1 → AKT ⊣ TSC1_TSC2 ⊣ RHEB → MTOR → HIF1A → KDR → CANCER PROGRESSION	21779440 24756794 25534569 19143635 16612574

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CARBOPLATIN				
Gene	Status	Type	Gene Status Drug Action Pathway(s)	Supporting PMID(s)
TP53	SOF	R	**CARBOPLATIN** → **ICL** → **DSB** → **DNA DAMAGE** Mut_TP53 → ABCB1 ⊣ CARBOPLATIN	22296372 11483599
RAD51C	LOF	S	**CARBOPLATIN** → **ICL** → **DSB** → **DNA DAMAGE** RAD51C → DNA REPAIR (HR) ⊣ DNA DAMAGE	28646019 3512077

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CISPLATIN				
Gene	Status	Type	Gene Status Drug Action Pathway(s)	Supporting PMID(s)
IDH2	SOF	S	**CISPLATIN** → **ICL** → **DSB** → **DNA DAMAGE** IDH2 ⊣ TET2 ⊣ CPGMET ⊣ BRCA1/2 → DNA REPAIR (HR) ⊣ DNA DAMAGE	21130701 21203981 15546503 11536045 29367755 21870267
TP53	SOF	R	**CISPLATIN** → **ICL** → **DSB** → **DNA DAMAGE** Mut_TP53 → ABCB1 ⊣ CISPLATIN	22296372 11483599
RAD51C	LOF	S	**CISPLATIN** → **ICL** → **DSB** → **DNA DAMAGE** RAD51C → DNA REPAIR (HR) ⊣ DNA DAMAGE	28646019 25058905

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DABRAFENIB				
Gene	Status	Type	Gene Status Drug Action Pathway(s)	Supporting PMID(s)
PTEN	DEL	R	**DABRAFENIB** ⊣ **RAF1** PTEN ⊣ PI345P3 → PDPK1 → AKT ⊣ RAF1	8413257 25700356 21858223 21725359 12048182 29607117 21779440 23251089

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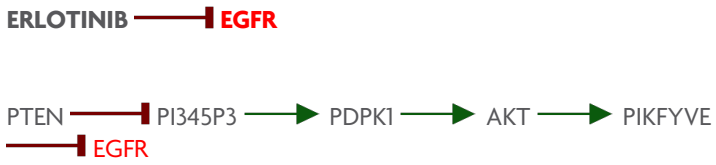
Indication: Non-Small Cell Lung Cancer(NSCLC)

ERLOTINIB				
Gene	Status	Type	Gene Status Drug Action Pathway(s)	Supporting PMID(s)
PTEN	DEL	R		27734950 19351834 22133747 19884556 19806185

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ETOPOSIDE				
Gene	Status	Type	Gene Status Drug Action Pathway(s)	Supporting PMID(s)
TP53	SOF	R	**ETOPOSIDE** → **TOP2CC** → **DSB** → **DNA DAMAGE** Mut_TP53 → TDP2 ⊣ TOP2CC	24766193 22508727
RAD51C	LOF	S	**ETOPOSIDE** → **TOP2CC** → **DSB** → **DNA DAMAGE** RAD51C → DNA REPAIR (HR) ⊣ DNA DAMAGE	19377506 20824055

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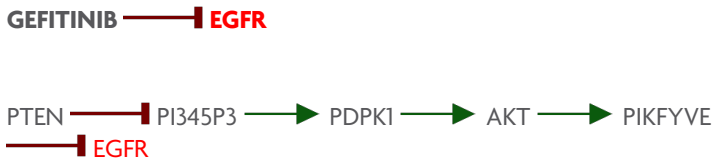
Biopsy Sequence: 1 **Gender/Age:** Female / 70 **Date of Report:** Dec 19, 2019

Indication: Non-Small Cell Lung Cancer(NSCLC)

GEFITINIB				
Gene	Status	Type	Gene Status Drug Action Pathway(s)	Supporting PMID(s)
PTEN	DEL	R		14555504 15695376

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GEMCITABINE				
Gene	Status	Type	Gene Status Drug Action Pathway(s)	Supporting PMID(s)
ABCB1	GOF	R	**GEMCITABINE** → **dFdCTP** → **DNA DAMAGE** ABCB1 ⊣ GEMCITABINE	10340887 19598259 25564970 18765824
NT5C1A	AMP	R	**GEMCITABINE** → **dFCDC** → **dFdCMP** → **dFdCDP** ⊣ **RRM1-RRM2** → **dCTP** ⊣ **REPLICATION STRESS** NT5C1A ⊣ dFdCMP	28077438 10340887
TP53	SOF	R	**GEMCITABINE** → **dFCDC** → **dFdCMP** → **dFdCDP** ⊣ **RRM1/2** Mut_TP53 ⊣ TP53 ⊣ MYC → MYC_MAX → DHODH → dCTP ⊣ DCK → dFdCMP	27048304 11802204 21804948 19010910 1406603 26067754

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METHOTREXATE				
Gene	Status	Type	Gene Status Drug Action Pathway(s)	Supporting PMID(s)
TP53	SOF	R	**METHOTREXATE** ⊣ **DHFR** Mut_TP53 → DHFR (High level of DHFR expression confers reduced sensitivity to Methotrexate)	12359872 9649296

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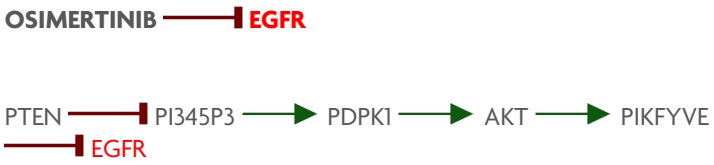
Biopsy Sequence: 1 **Gender/Age:** Female / 70 **Date of Report:** Dec 19, 2019

Indication: Non-Small Cell Lung Cancer(NSCLC)

OSIMERTINIB				
Gene	Status	Type	Gene Status Drug Action Pathway(s)	Supporting PMID(s)
PTEN	DEL	R		23757022 28565936 21779440 26473643 19351834

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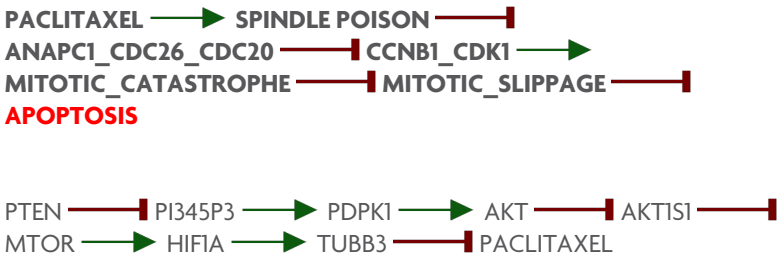
Indication: Non-Small Cell Lung Cancer(NSCLC)

PACLITAXEL				
Gene	Status	Type	Gene Status Drug Action Pathway(s)	Supporting PMID(s)
PTEN	DEL	R		18466115 17386266 18515545 18178340 17502379 23364970 19143635 15094766 14673156 22354785 21779440 20361045 19143636

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PEMETREXED				
Gene	Status	Type	Gene Status Drug Action Pathway(s)	Supporting PMID(s)
TP53	SOF	R	**PEMETREXED** ⊣ **TYMS** → **dCTP** ⊣ **DNA DAMAGE** Mut_TP53 ⊣ TP53 ⊣ MYC → TYMS (Increased levels of TYMS diminish the effective levels of PEMETREXED)	26502926 20628382 16107691 24040222

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RADIATION				
Gene	Status	Type	Gene Status Drug Action Pathway(s)	Supporting PMID(s)
SETD2	LOF	S	**RADIATION** → **DSB** → **DNA DAMAGE** SETD2 → H3K36 METHYLATION → BRCA1 → DNA REPAIR (HR) ⊣ DNA DAMAGE	24931610 25988165 12947386 17629934 24003211
PTEN	DEL	R	**RADIATION** → **DNA DAMAGE** PTEN ⊣ AKT → PRKDC → DNA REPAIR (NHEJ) ⊣ DNA DAMAGE	18644989 17513297 19404218 17431403 21779440
TP53	SOF	R	**RADIATION** → **DSB** → **DNA DAMAGE** Mut_TP53 → KMT2A → H3K4 METHYLATION → BRCA1 → DNA REPAIR (HR) ⊣ DSB	21670155 29343972 29662640 26331536 10373498 28375985 23849504
RAD51C	LOF	S	**RADIATION** → **DSB** → **DNA DAMAGE** RAD51C → DNA REPAIR (HR) ⊣ DNA DAMAGE	28646019 20490962 28076755

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TRAMETINIB				
Gene	Status	Type	Gene Status Drug Action Pathway(s)	Supporting PMID(s)
PTEN	DEL	R		12087097 15023437 23453810 21523318 24811175

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Biopsy Sequence: 1 **Gender/Age:** Female / 70 **Date of Report:** Dec 19, 2019

Indication: Non-Small Cell Lung Cancer(NSCLC)

VANDETANIB				
Gene	Status	Type	Gene Status Drug Action Pathway(s)	Supporting PMID(s)
PTEN	DEL	R	**VANDETANIB** ⊣ **EGFR** PTEN ⊣ PI345P3 → PDPK1 → AKT → PIKFYVE ⊣ EGFR	19491268 14555504

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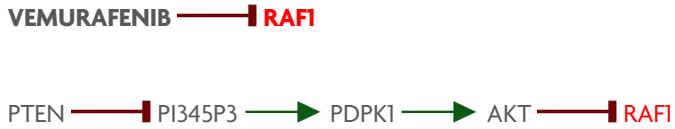
Biopsy Sequence: 1 **Gender/Age:** Female / 70 **Date of Report:** Dec 19, 2019

Indication: Non-Small Cell Lung Cancer(NSCLC)

VEMURAFENIB				
Gene	Status	Type	Gene Status Drug Action Pathway(s)	Supporting PMID(s)
PTEN	DEL	R		8413257 25700356 21858223 21725359 12048182 23116250 29607117 21779440

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Clinical ID: NOP4455 **Cellworks ID:** 118877 **Ref Physician:** Dr.White

Biopsy Sequence: 1 **Gender/Age:** Female / 70 **Date of Report:** Dec 19, 2019

Indication: Non-Small Cell Lung Cancer(NSCLC)

6. Genomic Aberration to Key Biomarker Pathway(s)

This section provides a snapshot of paths connecting the most significant gene aberrations with patient biomarkers and references to published research supporting these pathways.

RED: Gain of Function/Switch of Function Mutation(s) or Amplified Gene(s) BLUE: Loss of Function Mutation(s) or Deleted Gene(s)

TRANSCRIPTION FACTORS:

Key Biomarker(s)	Molecular Pathway Rationale for Biomarker(s)	Reference PMID(s)
DDIT3	EIF3K → EIF3E → EIF4E → MCL1 ⊣ BECN1 → MAP3K7 → MAP2K3 → MAPK14 → DDIT3	15273249 20978232 9430721
	SETD2 → BBC3 ⊣ BCL2 ⊣ MAP3K7 → MAP2K3 → MAPK14 → DDIT3	10748100 15273249 15694340 17322918 18585004 20978232 9430721
	COPS6 ⊣ MAP3K1 → MAP2K3 → MAPK14 → DDIT3	15273249 20978232 26237449 9430721
	PTEN → BBC3 ⊣ BCL2 ⊣ MAP3K7 → MAP2K3 → MAPK14 → DDIT3	10748100 15273249 15694340 17322918 20978232 21873427 9430721
	FOXO3 → BECN1 → MAP3K7 → MAP2K3 → MAPK14 → DDIT3	15273249 18054311 20978232 9430721
	AGAP2 ⊣ PRKAA1 → MAPK14 → DDIT3	16179588

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SINGULA™ PRECISION MEDICINE

Clinical ID: NOP4455 **Cellworks ID:** 118877 **Ref Physician:** Dr.White

Biopsy Sequence: 1 **Gender/Age:** Female / 70 **Date of Report:** Dec 19, 2019

Indication: Non-Small Cell Lung Cancer(NSCLC)

KINASE**:

Key Biomarker(s)	Molecular Pathway Rationale for Biomarker(s)	Reference PMID(s)
PFKM	AGAP2 ⊣ PRKAA1 → ULK1 ⊣ PFKM	21258367
PRKCE	SMARCC2 ⊣ PRDM1 ⊣ IL2 → IL2RB_JAK1 → JAK3 → PLCG1 → PRKCE	15039446 8026467 8598449
	PLCG1 → PRKCE	24692553
	AGAP2 ⊣ PRKAA1 ⊣ PRKCE	26797128
PTK2	SMARCC2 → MMP9 → IGFBP2 → ITGA5_ITGB1 → PTK2	16569642 19889638 20514406 8649427
	PLCG1 → PRKCA → VCL → ITGA1_ITGB1 → PTK2	11741957 12138200 19889638 8649427
	AGAP2 ⊣ PRKAA1 ⊣ PRKCA → VCL → ITGA1_ITGB1 → PTK2	11741957 12138200 19889638 8649427
IKBKB	SMARCC2 ⊣ PRDM1 ⊣ IL2 → IL2RB_JAK1 → JAK3 → PLCG1 → PRKCA → IKBKB	10022904 15039446 8026467 8598449
	PLCG1 → PRKCA → IKBKB	10022904
	AGAP2 ⊣ PRKAA1 ⊣ PRKCA → IKBKB	10022904
ROCK1	SMARCC2 ⊣ PRDM1 ⊣ IL2 → IL2RB_JAK1 → JAK3 → PLCG1 → PRKCE → RHOA → ROCK1	15039446 8026467 8598449
	PLCG1 → PRKCE → RHOA → ROCK1	23828571
	TJP1 → TJP1_TJP2 ⊣ RHOA → ROCK1	23828571
	AGAP2 ⊣ PRKAA1 ⊣ PRKCE → RHOA → ROCK1	23828571

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Key Biomarker(s)	Molecular Pathway Rationale for Biomarker(s)	Reference PMID(s)
PIK3CA	SMARCC2 → MMP9 → IGFBP2 → ITGA5_ITGB1 → PTK2 → PIK3CA	11114741 15539082 16569642 18039660 19889638 20514406 8649427
	PLCG1 → PRKCA → EZR → PIK3CA	10377409
	TJP1 → TJP1_TJP2 ⊣ RHOA → ROCK1 → EZR → PIK3CA	23828571
	FOXO3 → SIRT1 → SH2B2 → CBL ⊣ AXL → PIK3CA	11406619 11425860 11997497 15031295 15958209 16129412 22219356 8995358 9233773 9687507 9989826
	AGAP2 ⊣ PRKAA1 ⊣ JAK1 → PIK3CA	11438544 18281483 19230867

** Assayable key kinase biomarkers identified for this patient.

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7. Singula™ Assessment sections

1. Drug Response Prediction

This section illustrates predicted response to Standard Care therapy or any specific therapy of interest for an indication. The response is indicated as an easily interpretable, 'Responder' or 'Non-Responder'.

2. Patient Disease Characteristics: Key Biomarker(s)

Using biosimulation modeling, Cellworks determines key biomarkers in the patient's genomic profile. They are points of convergence of the pathways impacted by the mutations in the patient's profile. These key biomarkers are tumor promoter/suppressor genes that the drug needs to impact in order for the patient to repsond to treatment.

3. Biomarker Impact

This table shows the impact that the therapies of interest have on the 'Key Biomarkers' identified for the patient profile. The check symbol ('✓') implies that the therapy is predicted to be successful in impacting the biomarker. Not all therapies impact key biomarkers equally. Please see the therapy rationale in Section 5 for a more thorough explanation.

4. Summary of Patient Genomic Profile

This section provides an aggregated overview of the patient genomics used for therapy assessment. It shows the type of input received from the next generation sequencing data (NGS) with the number of genetic mutations, copy number variations (CNVs) and any epigenetic data that is reported.

4.1 Detailed Information of Genomic Aberration(s) Modeled

This section lists all the mutations, CNVs and epigenetic data which are modelled via the Cellworks biosimulation for the patient. This information forms the patient-specific input on which a Cellworks assessment is based.

5. Therapy Rationales

A therapy rationale illustrates the role of key mutations in causing sensitivity or resistance to drugs. A drug will have a therapy rationale for every mutation that contributes significantly to its sensitivity or resistance.

The first illustration in the rationale defines the mechanism of action of the drug.

The second illustration articulates the signalling or metabolic pathway by which the mutation of interest contributes to drug sensitivity or resistance including the point of intersection (if any) with the drug's mechanism of action.

SINGULA™
PRECISION MEDICINE

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The description is accompanied by relevant PMIDs that were used to determine the interaction.

6. Genomic Aberration to Key Biomarker Pathway(s)

This section illustrates moelecular biochemical pathways from a genomic aberration in the patient profile to critical biomarkers identified by Cellworks biosimulation. The description is accompanied by relevant PMIDs that were used to determine the interaction

Regarding Toxicity

The current assessment assumes that the drugs are faithfully delivered to the site of action. Cellworks considers all molecular interactions once delivered to the site of action (Pharmacodynamics of the drug compound). Cellworks does not account for absorption, distribution, metabolism & excretion (ADME) properties of the drug that determine how the drug is delivered to the site of action. Any toxicity in the delivery process, or pharmacokinetics, is not considered.

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8. Terms of Usage

Cellworks Therapeutic Solutions

The Cellworks proprietary workflow solution used to generate this test report from patient's medical records (Test Report), has not been approved by any regulatory or medical authority. Cellworks generated information is adjunctive information to physicians and molecular tumor boards. CELLWORKS DOES NOT ASSURE OR GUARANTEE THE SUCCESS OF ANY THERAPEUTIC OPTION IDENTIFIED IN THIS TEST REPORT. The therapeutic options provided in the Test Report are not ranked in order of efficacy, safety or cost-effectiveness and are sorted based on our model's analysis of the input data. All individual drugs included in therapy options identified in the Test Report have been cleared and approved by the United States Food and Drug Administration (FDA) for other indications. At the specific request of the patient or treating physician, the Test Report may identify drugs or therapy options that are also in an advanced stage of clinical trials and yet to be approved. This will provide adjunctive information to the physicians for selecting a clinical trial for the patient.

Therapeutic agents associated with potential benefit or lack of benefit, as indicated in the Test Report are based on biomarker results provided in the report and on published evidence with PMID references. This evidence in some cases may have been obtained from studies performed in the cancer type present in the tested patient's sample.

No Guarantee of Clinical Benefit

The finding of a biomarker expression does not necessarily indicate pharmacologic effectiveness or lack thereof. The agents identified may or may not be suitable for use with a particular patient and the Test Report does not guarantee or suggest that any particular agent will be effective with the treatment of any particular condition. The user of this Test Report remains responsible for the conduct of patient care and for evaluating the clinical relevance of information provided by the prediction software.

Intended Use

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