



R.G.C.C. - RESEARCH GENETIC CANCER CENTRE S.A.

Assessment of the results:

Patient Name: [REDACTED]	Type of cancer: liver
Physician: Dr Ly Srey Vyna	Stage: N/A

Risk of relapse:

CTC concentration

Measured: **isolated 4.2cells/ml, SD +/- 0.3cells**

Cut off point <= 5cells/ml

Resistance markers:

MDR1: 45%

MRP: 55%

LRP: 2%

GST: 15%

Metastases/angiogenesis risk related markers

FUNCTION	CLINICAL RISK	MARKERS	RESULTS	OUTCOME
Migration-invasion	HIGH RISK	MMPs	35%	HIGH RISK
		KISS-1-r	normal	LOW RISK
		Nm23	normal	LOW RISK
Angiogenesis	HIGH RISK	VEGFr	25%	HIGH RISK
		FGFr	40%	HIGH RISK
		PDGFr	30%	HIGH RISK

Proliferation related markers:

MECHANISM	CLINICAL RISK	MARKERS	RESULTS	OUTCOME
Signal transduction pathways	HIGH PROLIFERATIVE SIGNAL	Ras/raf/MEK/Erk1-2	35%	HIGH RISK
		mTOR	20%	HIGH RISK
Growth factor receptors	HIGH PROLIFERATIVE SIGNAL	EGFr	40%	HIGH RISK
		TGF-β1/2	30%	HIGH RISK
		c-erb-B2	normal	LOW RISK
Hormone receptors	HORMONE INDEPENDENT	Estrogen Receptor	normal	LOW RISK
		Progesterone Receptor	normal	LOW RISK
		NC3R4-A	normal	LOW RISK
		NC3R4-B	normal	LOW RISK
Cell cycle rate	RAPID	P27	10%	LOW RISK
		P16	25%	HIGH RISK
		P53	20%	HIGH RISK

Resistance phenotype markers:

MARKERS	RESULTS	OUTCOME	PHENOTYPE
Dnmt1	normal	LOW RISK	NON RESISTANT
06-methyl-DNA-tran.	normal	LOW RISK	
HAT	normal	LOW RISK	
Histone deacetylase	normal	LOW RISK	

Therapeutic options***Conventional cytostatics:***

Non cell cycle depended	S phase of cell cycle				Metaphases
Alkylating agents	Inhibitors of topoisomerase I	Inhibitors of topoisomerase II	antimetabolites	Inhibitors of tubulin polymerization	Spindle poisoning agents
Cisplatin Carboplatin Oxaliplatin			Capecitabine Fudr		Abraxane

Targeted therapies

Moab (Monoclonal Antibodies)	SMW (Small Molecular Weight molecule)
	Erlotinib as inhibitor of EGFr. Regorafenib as inhibitor of angiopoietin 1, PDGF r and RET. Sorafenib as inhibitor of Ras/Raf/MEK/Erk transaction pathway.

***Radiotherapy/Hyperthermia sensitivity:***

Marker	Result (%)	Clinical outcome per marker	Clinical outcome
HSP90	-10%	SENSITIVE	SENSITIVE
HSP72	-25%	SENSITIVE	
HSP27	-15%	SENSITIVE	

Follow-up options:

YES	✓
NO	

Time interval (when)

After 3 months	After 6 months	After 12 months
✓		

Test for follow-up

ONCOTRAILS							ONCOTRACE	ONCOCOUNT
Breast	Lung	Sarcoma	Colon	GI	Prostate	melanoma		
								✓