WellLab

R.G.C.C.-RESEARCH GENETIC CANCER CENTRE LTD

Assessment of the results:

Patient Name: Mr _____	**Type of cancer:** Gastric
Physician: Dr _____	**Stage:** IV

Risk of relapse:
CTC concentration
Measured: **isolated____cells/ml, SD +/- 0.3cells**
Cut off point <= 5cells/ml

Resistance markers:
MDR1: 65%
MRP: 40%
LRP: 2%
GST: 25%

Metastases/angiogenesis risk related markers

FUNCTION	CLINICAL RISK	MARKERS	RESULTS	OUTCOME
Migration-invasion	HIGH RISK	MMPs	**45%**	HIGH RISK
		KISS-1-r	**normal**	LOW RISK
		Nm23	**normal**	LOW RISK
Angiogenesis	HIGH RISK	VEGFr	**60%**	HIGH RISK
		FGFr	**30%**	HIGH RISK
		PDGFr	**40%**	HIGH RISK

Proliferation related markers:

MECHANISM	CLINICAL RISK	MARKERS	RESULTS	OUTCOME
Signal transduction pathways	HIGH PROLIFERATIVE SIGNAL	Ras/raf/MEK/Erk1-2	**55%**	HIGH RISK
		mTOR	**10%**	HIGH RISK
Growth factor receptors	HIGH PROLIFERATIVE SIGNAL	EGFr	**55%**	HIGH RISK
		TGF-β1/2	**30%**	HIGH RISK
		c-erb-B2	**normal**	LOW RISK
Hormone receptors	HORMONE INDEPENDED	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	**30%**	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	

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Therapeutic options

Conventional cytostatics:

Non cell cycle depended	S phase of cell cycle				Metaphases
Alkyliating agents	***Inhibitors of topoisomerase I***	***Inhibitors of topoisomerase II***	***antimetabolites***	***Inhibitors of tubulin polymerization***	***Spindle poisoning agents***
➢ Cisplatin ➢ Oxaliplatin ➢ Mitomycin	➢ CPT11		➢ Fudr		➢ Docetaxel

Targeted therapies

Moab (Monoclonal Antibodies)	**SMW (Small Molecular Weight molecule)**
➢ **Cetuximab** as inhibitor of EGFr. ➢ **Bevacizumab** as inhibitor of neo-angiogenesis. ➢ **Panitumumab** as inhibitor of EGFr.	

Biological/natural substances:

Class I (cytotoxic agents)	Class II (immuno-modulatory effect)	Class III (growth factors inhibitors)
➢ Lycopene ➢ Super Artemisinin ➢ Amygdalin – (B17) ➢ Poly-MVA ➢ C-statin ➢ Ascorbic Acid ➢ DCA (dichloroacetate) ➢ Artecin	➢ Research Aloe Extract ➢ PME	➢ Paw – Paw ➢ Curcumin (turmeric)

It is recommended to use in a monthly base one agent from each class and the witch them after a month with the next potent agent from the same class in order to avoid secondary resistance.

Radiotherapy/Hyperthermia sensitivity:

Marker	Result (%)	Clinical outcome per marker	Clinical outcome
HSP90	**-25**	SENSITIVE	SENSITIVE
HSP72	**-40**	SENSITIVE	
HSP27	**-30**	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		
				✓				

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