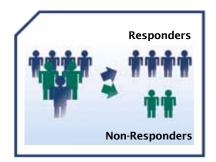
With Cancer, the Difference Between Life and Death May Simply Be an Informed Decision

Treatment Selection That Works!

# The Ex Vivo Analysis of Programmed Cell Death EVA-PCD® FUNCTIONAL PROFILE

# **CLINICAL APPLICATION**

Distinguish Responders from Non-responders

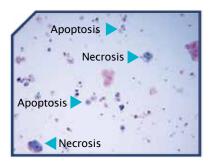


## WHEN YOU THINK BIOPSY, THINK EVA-PCD



## **BENEFITS OF EVA-PCD**

- Significantly improved response
- Improved time to progression
- Potential to diminish toxicity



#### Published results of cell death assays in common human solid tumor malignancies\*

Disease	n	Overall Response Rate	Positive Predictive Accuracy	Negative Predictive Accuracy
Breast	194	64.9%	82.9%	88.9%
Colon	54	16.6%	80.0%	97.7%
NSCLC	47	29.7%	66.7%	93.1%
Gyn	345	56.2%	77.0%	87.9%
SCLC	19	26.0%	50.0%	84.6%
TOTAL	659	50.6%	78.4%	90.1%

#### Clinical application of assay-directed therapy

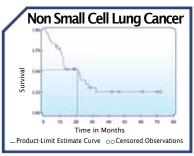
(Performance characteristics calculated from the aggregate results)

Literature reported response rate	Response rate for assay (+) patients	Response rate for assay (-) patients	Fold advantage, assay (+) vs assay (-)
10%	46.0%	2.6%	17.6
30%	77.0%	9.3%	8.3
50%	88.9%	19.3%	4.6
70%	94.8%	35.8%	2.6

\* References available upon request.

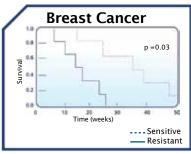
# **COMPARE RESULTS IN NSCLC**

	EVA-PCD	Standard Therapy	p Value
Response	64.5%	30.0%	p = 0.00015
Time to Progression	8.5 Months	6.0 Months	
Median Survival	21.3 Months	12.5 Months	

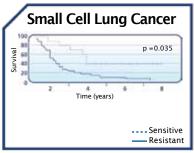


Nagourney RA, AntiCancer Research, 32:4453-4460, 2012

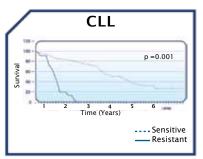
# ASSAY RESULTS CORRELATE WITH SURVIVAL



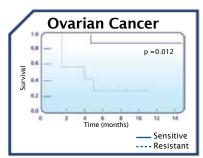
Nagourney RA, JCO Vol 18, June 2000, 2245 - 2249



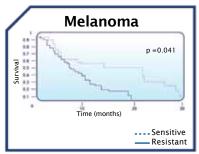
Cortazar, P., Clin Cancer Research V3, 741-747, 1997



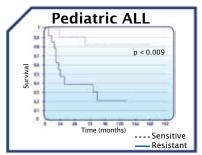
Bosanquet, et al BrJHem: 106, 71-77, 1999



Nagourney RA Gyn Oncol, 88; 35 - 39, 2003



Ugurel, et al, Clin Cancer Research 2006; 12(18) Sept. 15, 2006



Nagourney R, Leukemia 9:531, 1995

### Drugs/Pathways Available for Analysis with EVA-PCD Functional Profile

5FU (5-Fluorouracil)	Clofarabine	Epothilone B	Nitrogen Mustard	Trimetrexate	
Asparaginase	Cosmegen	Etoposide	Octreotide	Vinblastine	
Bendamustine	Cytarabine	Fludarabine	Oxaliplatin	Vincristine	
Bleomycin	Dacarbazine	Gemcitabine	Paclitaxel	Vinorelbine	
Carboplatin	Dactinomycin	Interferon A	Streptozocin		
Carmustine	Dexamethasone	Irinotecan	Tamoxifen		
Cisplatin	Docetaxel	Mitomycin-C	Temozolamide		
Cladribine	Doxorubicin	Mitroxantrone	Topotecan		

### EVA-PCD<sup>°</sup> Chemotherapies

## TARCET Targeted Therapies

Afatanib	Dasatinib	Gefitinib	Regorafenib	Vemurafenib
Bortezomib	Deoxyazacytidine	Imatinib	Sorafenib	Vismodegib
Cabozanatinib	Erlotinib	Lapatanib	Sunitinib	Vorinostat
Crizotinib	Everolimus	Pazopanib	Vandetanib	

### TRANSLATIONAL Investigational Pathways

Abl	c-KIT	HDAC	mTOR	RAF
АКТ	EGFR	Hedgehog	Notch	RET
ALK	Erb2	HER2	PARP 1, 2	SRC
BCL, xl, 2, W	ERK 1,2	HSP90	PDGFR-B	VEGF
BCR-abl	FGFR	МАРК	P13K	WNT
ВТК	FLT-3	MEK	РКС	RAF
CDK	GSK-3	MET	Proteasome	RET

Patient drug panels are disease specific and based on previous treatment history. A typical panel consists of 8-16 drugs/ combinations and is chosen from the available list. The quantity of drugs analyzed is dependent upon the quantity and quality of the tumor received.

Our drug compendium is continuously updated with new targeted and investigational agents. Please contact the laboratory if you have particular agents of interest.



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