A close-up, profile view of a man in a white lab coat looking intently at a tablet computer. He is holding a pen to his chin in a thoughtful pose. The background is a blurred laboratory with a microscope and a molecular structure diagram. The overall color scheme is a cool blue.

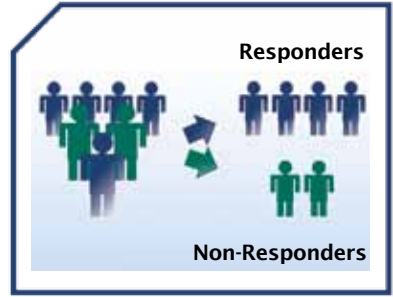
With Cancer,
the Difference Between
Life and Death
May Simply Be an
Informed Decision

**Treatment Selection
That Works!**

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

CLINICAL APPLICATION

Distinguish Responders
from Non-responders

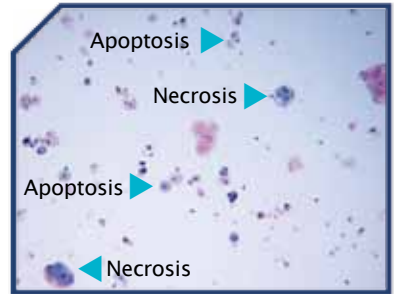


WHEN YOU THINK BIOPSY, THINK EVA-PCD



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

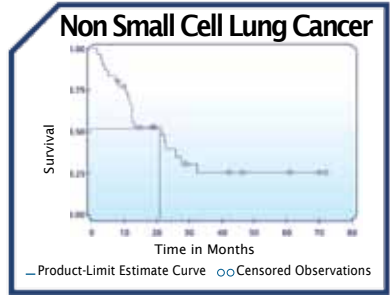
(Performance characteristics calculated from the aggregate results)

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.

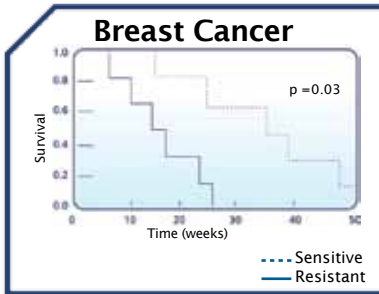
COMPARE RESULTS IN NSCLC

	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	

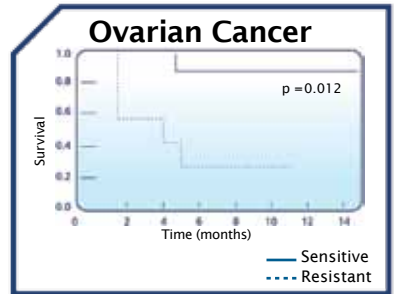


Nagourney RA, AntiCancer Research, 32:4453-4460, 2012

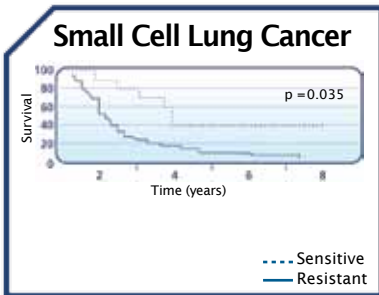
ASSAY RESULTS CORRELATE WITH SURVIVAL



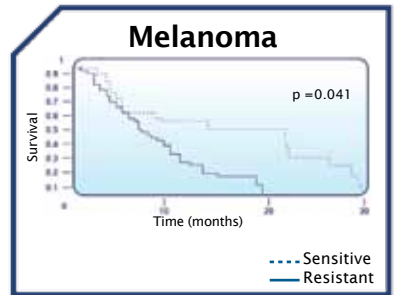
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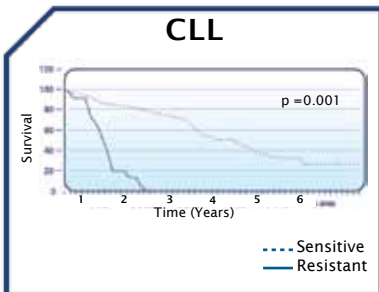
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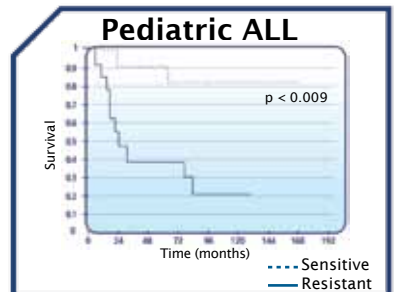
Cortazar, P., Clin Cancer Research V3, 741-747, 1997



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



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



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

EVA-PCD[®] Chemotherapies

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	Mitoxantrone	Topotecan	

TARGET Targeted Therapies

Afatinib	Dasatinib	Gefitinib	Regorafenib	Vemurafenib
Bortezomib	Deoxyzacytidine	Imatinib	Sorafenib	Vismodegib
Cabozantinib	Erlotinib	Lapatinib	Sunitinib	Vorinostat
Crizotinib	Everolimus	Pazopanib	Vandetanib	

TRANSLATIONAL Investigational Pathways

Abl	c-KIT	HDAC	mTOR	RAF
AKT	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	MAPK	P13K	WNT
BTK	FLT-3	MEK	PKC	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.



www.rational-t.com

750 East 29th Street Long Beach, CA 90806-1402
562.989.6455 or 800.542.HELP (4357) FAX 562.989.8160

Robert A. Nagourney, MD
Laboratory Director

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