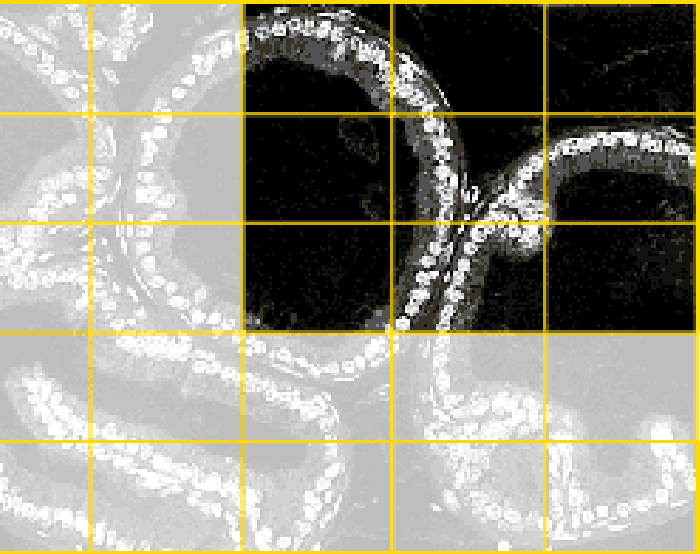
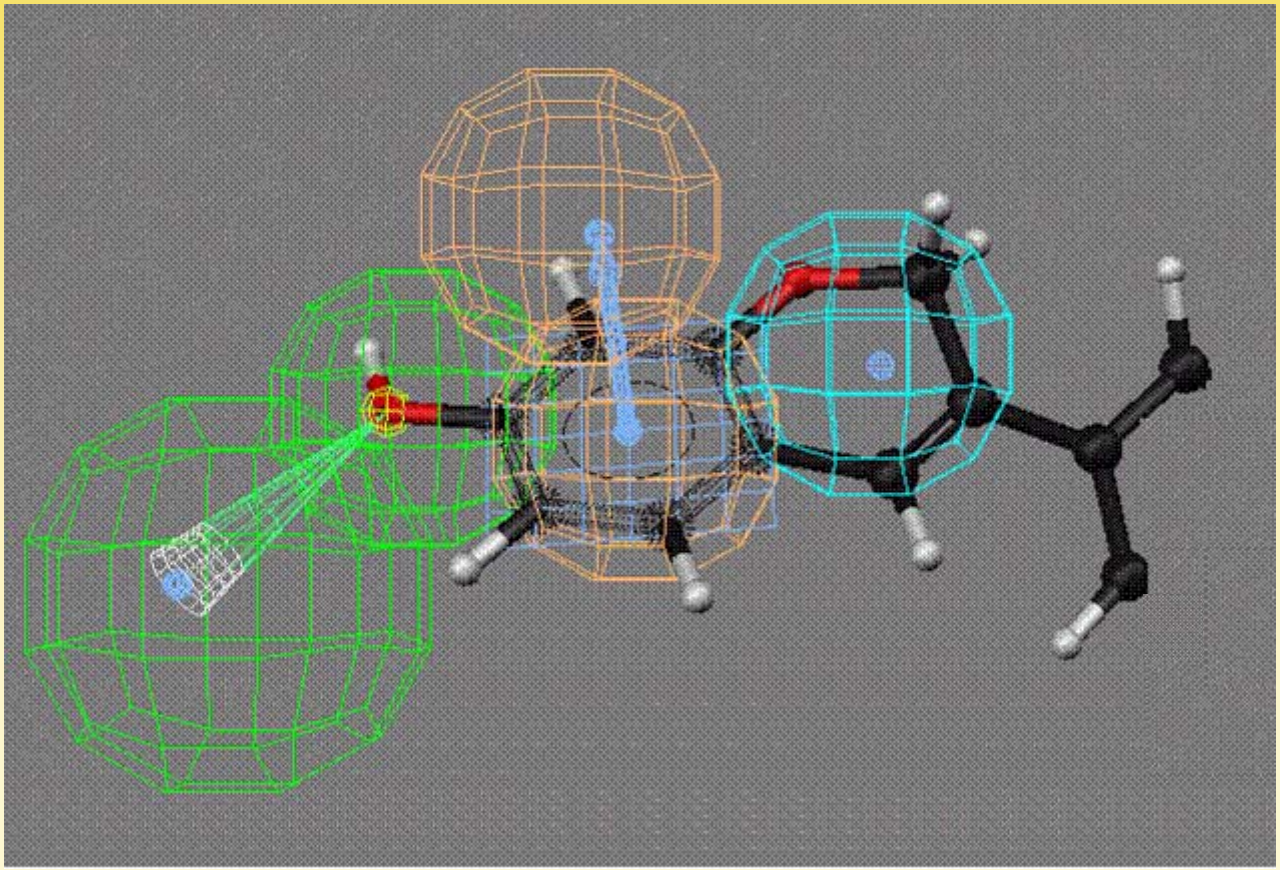


Marshall Edwards Inc

Using QSAR to identify the anti-cancer active sites



Current Drug Candidates

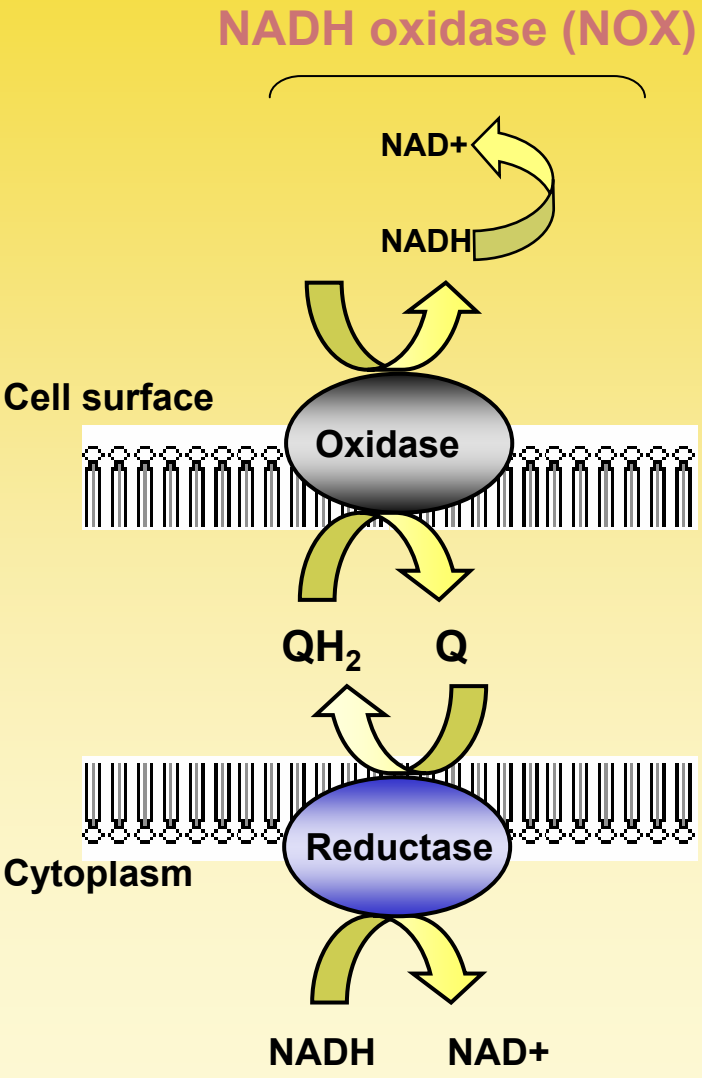
- Phenoxodiol
- NV-196
- NV-143

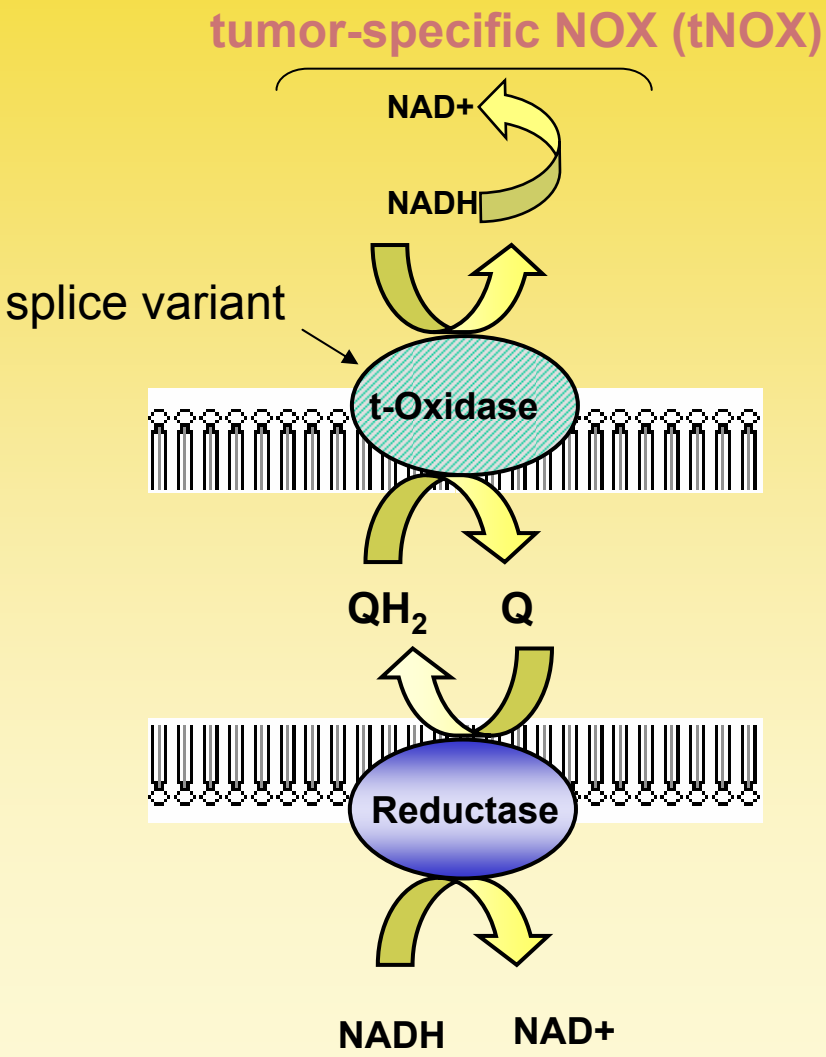
Phenoxodiol: potential benefits…

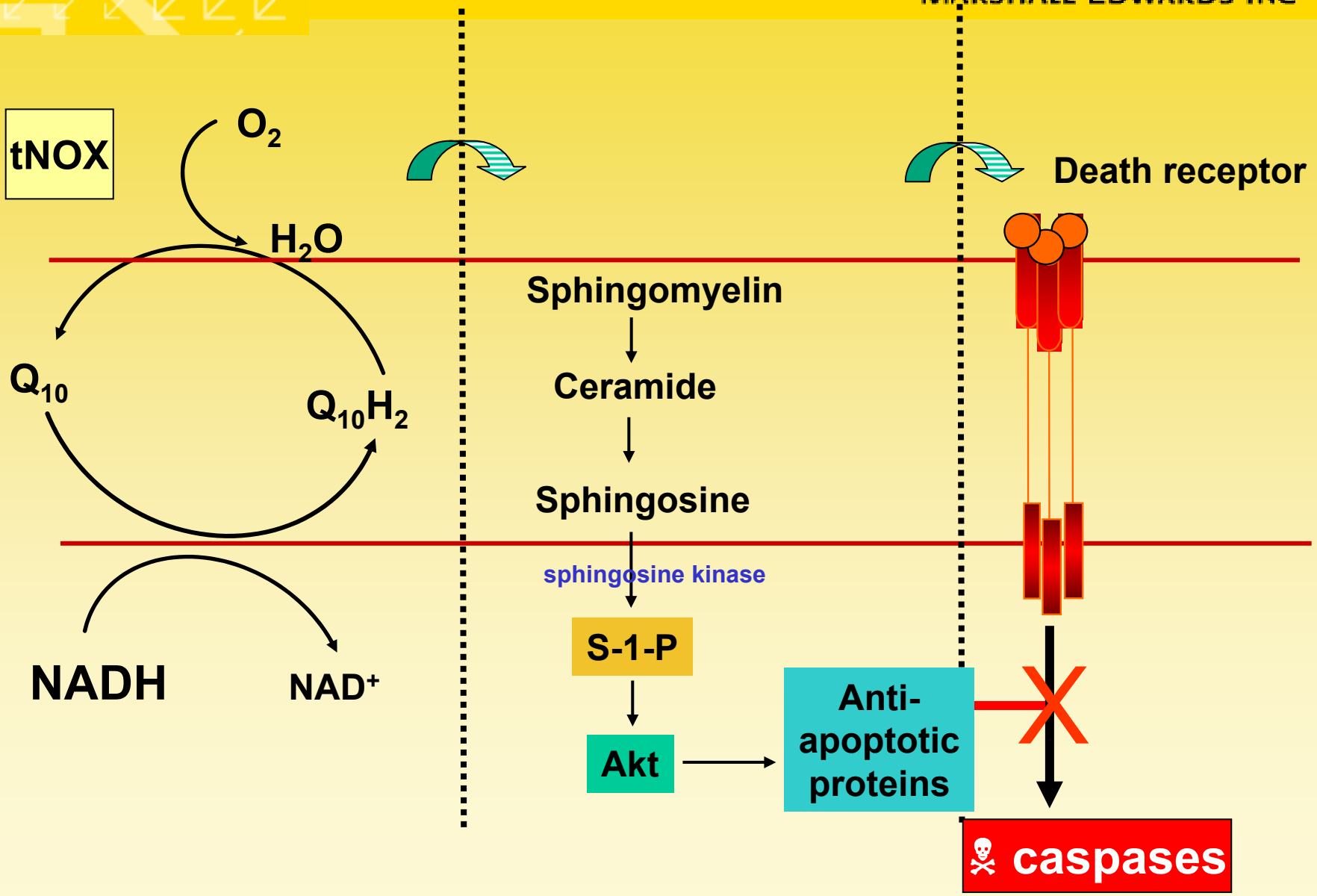
- Safe but effective – no significant drug-related adverse events observed
- Active in broad range of cancers
- Current targets: ovarian, prostate and cervical

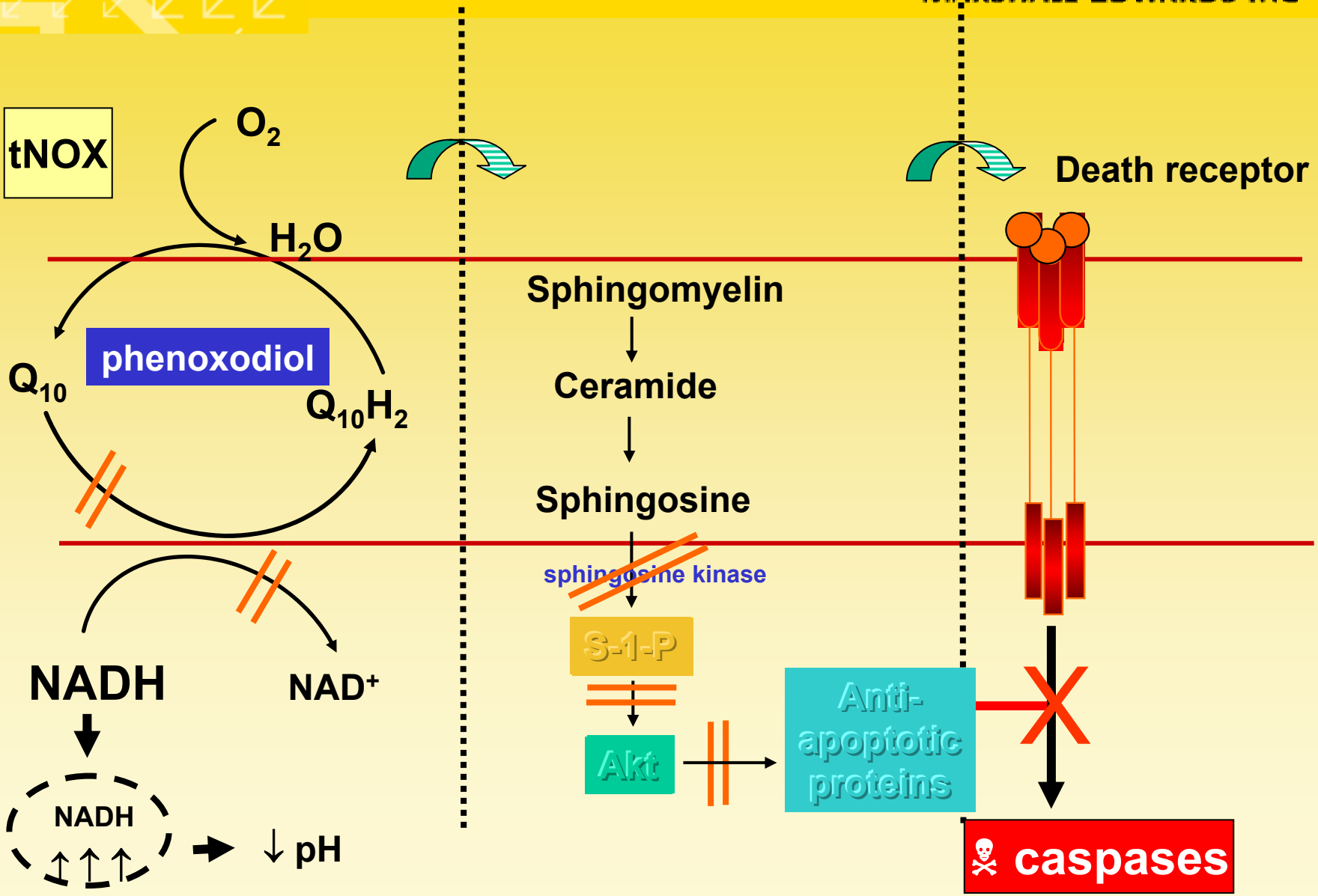
Mechanism of action

- Phenoxodiol is a pan kinase inhibitor with specific activity for tumor cells as a result of inhibition of a trans-membrane redox pump specific for cancer cells.
- The resulting acidotic effect has been shown to reverse chemo-resistance in tumor cells
- It does this in a highly-selective manner because it only targets the redox pump in cancer cells
- Expected common mechanism of action for the pipeline compounds


NADH oxidase (NOX)
NAD+
NADH
Cell surface
Oxidase
QH2
Q
Reductase
Cytoplasm
NADH
NAD+
NORMAL CELL


tumor-specific NOX (tNOX)
NAD+
NADH
splice variant
t-Oxidase
QH2
Q
Reductase
NADH
NAD+
CANCER CELL


tNOX
O_2
H_2O
Q_{10}
$Q_{10}H_2$
NADH
NAD^+
Sphingomyelin
Ceramide
Sphingosine
sphingosine kinase
S-1-P
Akt
Anti-apoptotic proteins
Death receptor
caspases


tNOX
O_2
H_2O
phenoxodiol
Q_{10}
$Q_{10}H_2$
NADH
NAD^+
NADH
↓ pH
Death receptor
Sphingomyelin
Ceramide
Sphingosine
sphingosine kinase
S-1-P
Akt
Anti-apoptotic proteins
caspases

Phenoxodiol

- On basis of current trial data, FDA granted Fast Track Status for
  - ovarian cancer refractory to chemotherapy
  - hormone refractory prostate cancer
- For ovarian cancer, Phase III OVATURE study, CRO appointed, trial site selection in progress, agreement on protocol reached with FDA under SPA process
- Joint study with Sanofi-Aventis in combination therapy for chemoresistant ovarian cancer at Yale (recruitment at 25% of target)

Phase II: NV06-0037 Ovarian Cancer Combination Therapy

Preliminary Results Announced 24 March 2006, SGO Meeting

Best Response (RECIST)	Cisplatin + PXD
No. patients	21
Complete Response	0
Partial Response	6
Objective Response Rate	29%
Stable Disease	9
Progressive Disease	6
Disease Control Rate	71%

Phase II: Ovarian Cancer Combination Therapy

Preliminary Results Announced 24 Oct. 2005:

- Median survival:

  PXD+cisplatin arm = 62 weeks

  Compares with median survival reported for patients on standard therapy of only 28 to 40 weeks (*Ann. Oncol*. 15:100-103, 2004)

- The PXD/cisplatin combinations were well tolerated, with no unexpected toxicities encountered

Phase III Pivotal Study: OVATURE

Patients with Platinum-Resistant or Platinum-Refractory Late-Stage Epithelial Ovarian, Fallopian or Primary Peritoneal Cancer Following at Least Second Line Therapy

Treatment Group: PXD oral 400mg tid + weekly carboplatin ($10xIC_{50}$)
Control Group: Placebo + weekly carboplatin

- Responded to platinum previously; <6 months since progression following last platinum therapy
- Treatment cycle = 4 wks; CT scan at commencement, then at 8 wk intervals; if response, confirmed by follow-up CT within 4 wks
- N = 235 per group
- Primary endpoint: Progression free survival
- Secondary endpoint: Overall survival
- Interim analysis when all patients recruited and 95 events recorded
- Enrolment commenced

Phase III Pivotal Study: OVATURE

Australian Sites:

- 5 sites Sydney (2), Melbourne (1), Brisbane (1), Adelaide (1)
- All sites have been initiated and recruitment commenced
- Drs Michael Friedlander (Prince of Wales, Sydney) and Geraldine Goss (Royal Women's, Melbourne) appointed as co-lead investigators for Aust.

EU/UK Sites:

	Total contacted	Accepted	Patient No's
Belgium	8	3	28
Netherlands	7	1	10
Poland	7	7	59
Spain	14	5	27
UK	20	4	42
Italy	11	0	6
	67	**20**	**172**

- Dr Hani Gabra appointed as lead investigator for UK/EU

US sites:

- 9 sites confirmed (incl. Yale and US Oncology Research, Inc., network listed as 2 sites but comprising 10-15 hospitals)
- Expected first site start up February 07 with the majority starting in March 07.
- Drs Thomas Rutherford (Yale) and Deborah Armstrong (Johns Hopkins) appointed as co-lead investigators for US.

Phase II: Prostate Cancer Oral Dose Form

Monash Medical Centre, Sir Charles Gairdner Hospital, Aust.: Oral Phenoxodiol in patients with late stage hormone-refractory prostate cancer (data presented at AACR 18/11/05):

Dose	n	PSA Response	PSA Doubling Time (wks)	Time to Progression (wks)
20	6	0	14	13
80	6	0	22	17
200	5	1	66*	57*
400	9	2	39**	44**

*One patient remaining on PXD as at Nov 06

** Two patients remaining on PXD therapy as at Nov 06

Prostate Cancer: Phase II Studies Planned

Strategy to be pursued as Phase II study:

PXD as first-line drug therapy in men who have “biochemical recurrence” (rising PSA levels) following prostatectomy or irradiation

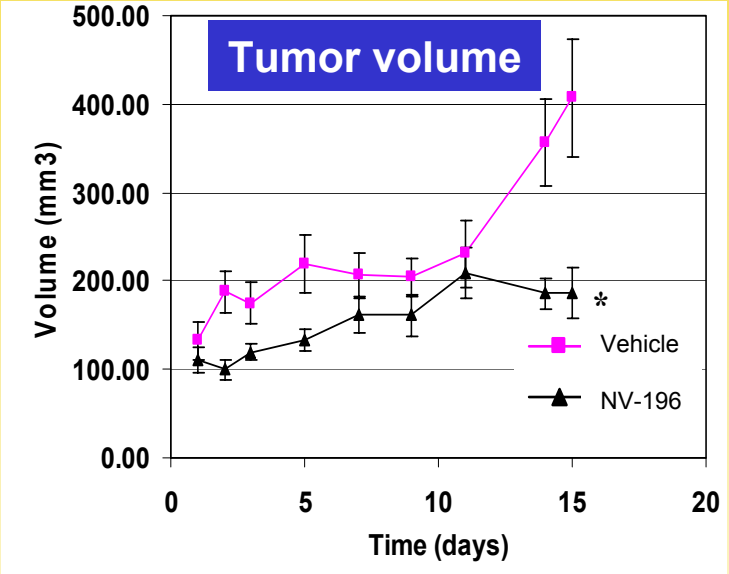
Phase I: Cervical Cancer Oral Monotherapy (Yale University)

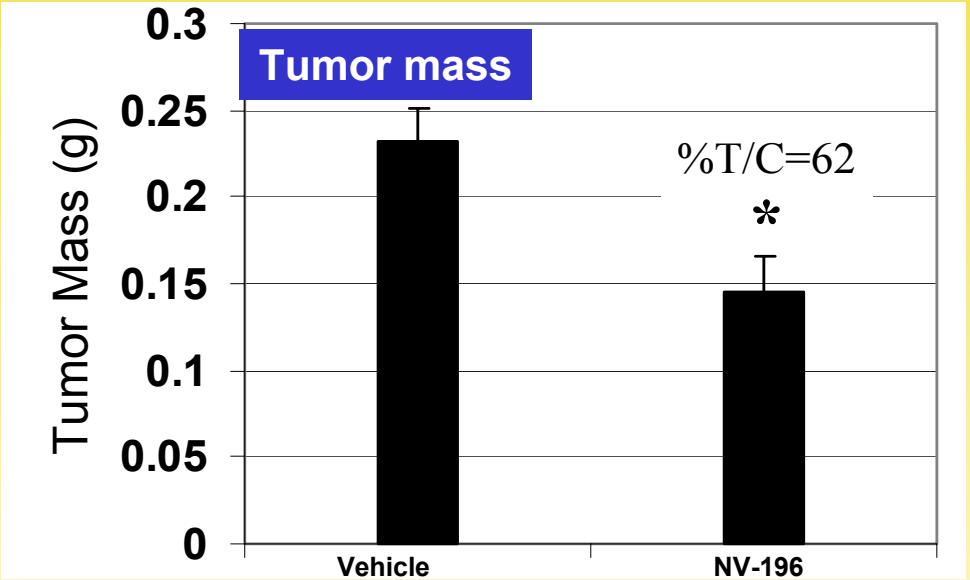
Patient Number	Dose	% Change in Tumor Size (RECIST)	Classification
01	50	8.89%	SD
02	50	7.78%	SD
03	50	34.18%	DP
04	50	13.43%	SD
05	50	-4.76%	SD
06	50	0.00%	SD
11	200	15.48%	SD
13	200	-16.67%	SD
14	200	0.66%	SD
15	200	-7.55%	SD
16	200	-4.35%	SD
18	200	-17.65%	SD
19	200	10.81%	SD
20	200	11.94%	SD
21	400	5.19%	SD
22	400	36.51%	DP

- 14/16 SD despite relatively short treatment time (28-day)
- No phenoxodiol-related toxicity was observed in any patients
- Study continues at 400 mg per dose

NV-196 : Targets: pancreatic cancer, cholangiocarcinoma

NV-196 in vivo Efficacy in HPAC tumor bearing mice





100 mg/kg, p.o.Qdx15

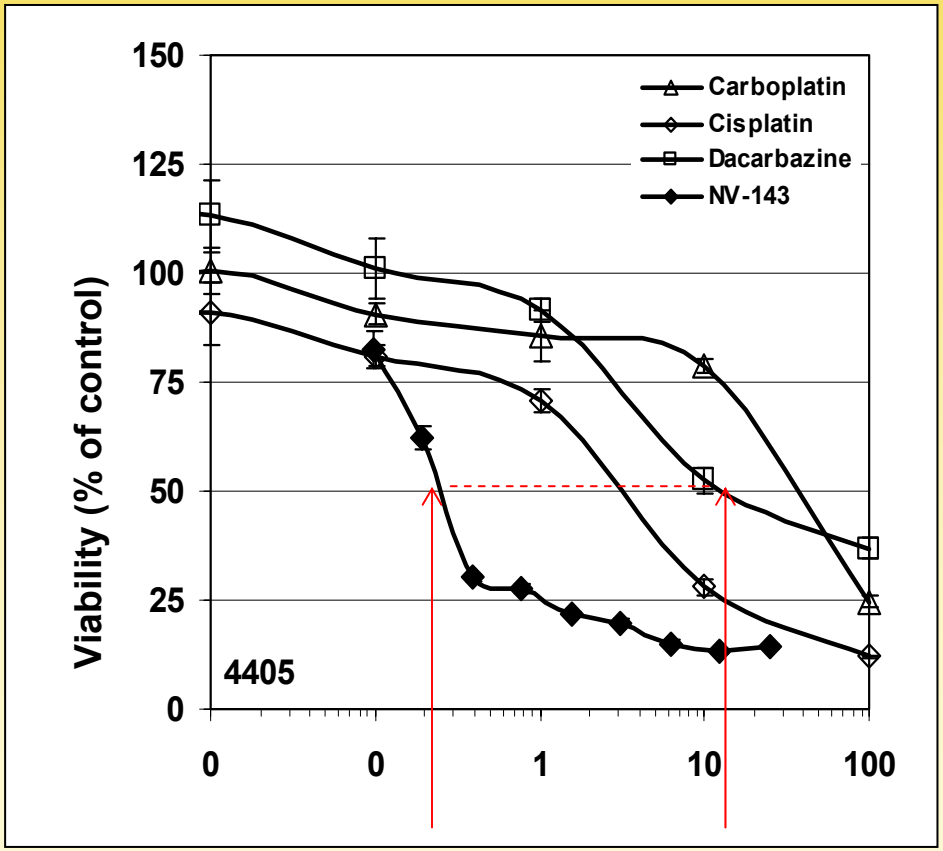
NV196.001: Phase Ib - Bio-availability, Pharmacokinetic and Acute Safety

Oral NV-196 in Patients with Solid Tumors, Brisbane Mater, Hospital

Day 1, 100 mg single oral dose; Day 3-8 100 mg 8-hourly (300mg/day total dose)
Target 12 patients.

NV-143 : Targets: malignant melanoma

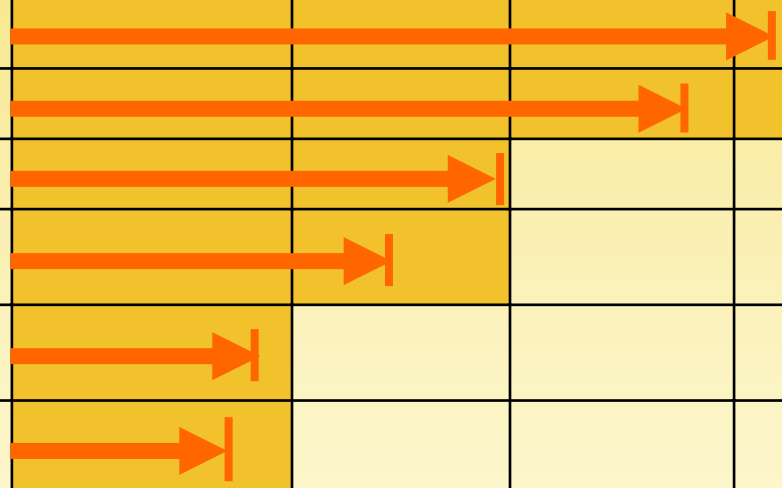
NV-143 in vitro efficacy against the melanoma cell line 4405 compared to other cytotoxic drugs



NV-143 is ~100-fold more effective than dacarbazine (standard of care in melanoma)

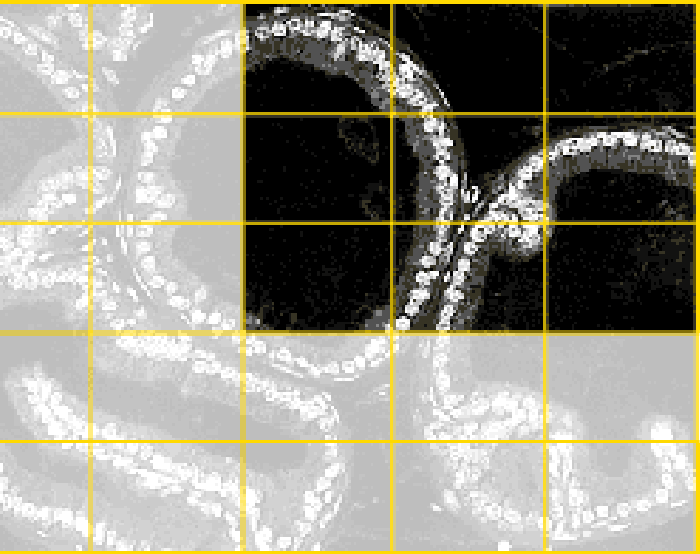
Clinical Progress Summary

		Preclinical	Phase I	Phase II	Phase III	Target
MSHL	**Phenoxodiol:**					Ovarian, prostate, cervical cancers
	Ovarian Cancer					
	Prostate Cancer					
	Cervical Cancer					
	NV-196					Pancreatic cancer, cholangiocarcinoma
	NV-143					Melanoma
NOVOGEN	**NV-128**					NSCLC, breast



MSHL has first and last refusal rights over any Novogen oncology compound at entry to clinical phase development

Novogen synthetic chemistry program has produced over 220 novel isoflavonoid compounds



Marshall Edwards Inc