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**UNITED STATES SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

**FORM 8-K**

**CURRENT REPORT  
PURSUANT TO SECTION 13 OR 15(d) OF THE  
SECURITIES EXCHANGE ACT OF 1934**

Date of report (Date of earliest event reported): November 7, 2006

**ADVENTRX Pharmaceuticals, Inc.**

(Exact Name of Registrant as Specified in Charter)

**Delaware**

(State or Other Jurisdiction  
of Incorporation)

**1-15803**

(Commission File No.)

**84-1318182**

(IRS Employer Identification No.)

**6725 Mesa Ridge Road, Suite 100  
San Diego, CA 92121**

(Address of Principal Executive Offices and Zip Code)

**N/A**

(Former name or former address if changed since last report)

Registrant's telephone number, including area code: **(858) 552-0866**

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
  - Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
  - Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
  - Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))
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**Item 7.01. Regulation FD Disclosure.**

Evan M. Levine, Chief Executive Officer of Adventrx Pharmaceuticals, Inc. (“Adventrx”), will present the information reflected in the slides attached as Exhibit 99.1 to this Current Report on Form 8-K (this “Report”) on November 7, 2006 at the CIBC World Markets 17th Annual Healthcare Conference at The Waldorf-Astoria Hotel in New York City. In addition, Mr. Levine will present the information reflected in certain selected slides attached as Exhibit 99.1 to this Report on November 7, 2006 at the Rodman and Renshaw 8th Annual Healthcare Conference at the Palace Hotel in New York City.

The information in this Report, including the slides attached hereto as Exhibit 99.1, is being furnished pursuant to this Item 7.01 and shall not be deemed “filed” for purposes of Section 18 of the Securities Exchange Act of 1934 (the “Exchange Act”) or otherwise subject to the liabilities of that section, and it shall not be deemed incorporated by reference in any filing under the Securities Act of 1933 or under the Exchange Act, whether made before or after the date hereof, except as expressly set forth by specific reference in such filing to this Report.

By filing this Report and furnishing this information, Adventrx makes no admission as to the materiality of any information in this Report. The information contained in the slides is summary information that is intended to be considered in the context of Adventrx’ filings with the Securities and Exchange Commission (the “SEC”) and other public announcements that Adventrx makes, by press release or otherwise, from time to time. Adventrx undertakes no duty or obligation to publicly update or revise the information contained in this Report, although it may do so from time to time as its management believes is appropriate. Any such updating may be made through the filing of other reports or documents with the SEC, through press releases or through other public disclosure.

*Adventrx cautions you that information included in the slides attached hereto as Exhibit 99.1 that are not a description of historical facts are forward-looking statements that involve risks, uncertainties, assumptions and other factors that, if they do not materialize or prove to be accurate, could cause Adventrx’s results to differ materially from historical results or those expressed or implied by such forward-looking statements. Such forward-looking statements are made based on management’s current expectations and beliefs and should not be regarded as a statement or representation by Adventrx that any of its plans, including its anticipated milestones, will be achieved on time or at all. The potential risks and uncertainties that could cause actual results to differ materially include, but are not limited to: the risk that Adventrx will be unable to raise sufficient capital to fund the projects necessary to meet its anticipated or stated goals and milestones; the potential to attract a strategic partner and the terms of any related transaction; the ability to timely enroll subjects in Adventrx’s current and anticipated clinical trials; the results of pending clinical trials for CoFactor® or Adventrx’s other product candidates; the potential for CoFactor® and Adventrx’s other product candidates to receive regulatory approval for one or more indications on a timely basis or at all, and the uncertain process of seeking regulatory approval; other difficulties or delays in developing, testing, manufacturing and marketing of and obtaining regulatory approval for CoFactor® or Adventrx’s other product candidates; the market potential for fluoropyrimidine biomodulators and other target markets, and Adventrx’s ability to compete in those markets; unexpected adverse side effects or inadequate therapeutic efficacy of CoFactor® or Adventrx’s other*

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*products that could delay or prevent regulatory approval or commercialization, or that could result in recalls or product liability claims; the risk that preclinical and clinical results are not indicative of the success of subsequent clinical trials and that products will not perform as preclinical and clinical data suggests or as otherwise anticipated; the potential for regulatory authorities to require additional preclinical work or other clinical requirements to support regulatory filings; the scope and validity of patent protection for CoFactor® and Adventrx's other product candidates; and other risks and uncertainties more fully described in Adventrx's press releases and periodic filings with the Securities and Exchange Commission. Adventrx's public filings with the Securities and Exchange Commission are available at <http://www.sec.gov>.*

*You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date when made. All forward-looking statements are qualified in their entirety by this cautionary statement and Adventrx assumes no obligation to revise or update any forward-looking statement, including any information included in the slides attached hereto as Exhibit 99.1, to reflect events or circumstances arising after the date on which it was made. This caution is made under the safe harbor provisions of Section 21E of the Securities Exchange Act of 1934.*

### **Item 9.01. Financial Statements and Exhibits.**

#### (d) Exhibits.

The list of exhibits called for by this Item is incorporated by reference to the Index to Exhibits filed with this report.

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**SIGNATURE**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, hereunto duly authorized.

**ADVENTRX PHARMACEUTICALS, INC.**

Dated: November 7, 2006

By: /s/ Evan M. Levine

Name: Evan M. Levine

Title: Chief Executive Officer

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INDEX TO EXHIBITS

99.1 Presentation Slides — dated November 7, 2006.





## Safe Harbor Statement



*ADVENTRX cautions you that information included in this presentation that is not a description of historical facts constitute forward-looking statements that involve risks, uncertainties, assumptions and other factors that, if they do not materialize or prove to be accurate, could cause ADVENTRX' results to differ materially from historical results or those expressed or implied by such forward-looking statements. Such forward-looking statements are made based on management's current expectations and beliefs and should not be regarded as a statement or representation by ADVENTRX that any of its plans, including its anticipated milestones, will be achieved on time or at all. The potential risks and uncertainties that could cause actual results to differ materially include, but are not limited to: the risk that ADVENTRX will be unable to raise sufficient capital to fund the projects necessary to meet its anticipated or stated goals and milestones; the potential to attract a strategic partner and the terms of any related transaction; the ability to timely enroll subjects in ADVENTRX' current and anticipated clinical trials; the potential for CoFactor® and ADVENTRX' other product candidates to receive regulatory approval for one or more indications on a timely basis or at all; the market potential for fluoropyrimidine biomodulators and other target markets; the risk that preclinical results are not indicative of the success of subsequent clinical trials; the scope and validity of patent protection for CoFactor® and ADVENTRX' other product candidates; and other risks and uncertainties more fully described in ADVENTRX' press releases and periodic filings with the Securities and Exchange Commission. All forward-looking statements are qualified in their entirety by this cautionary statement and ADVENTRX assumes no obligation to revise or update any forward-looking statement, including any information included in this presentation, to reflect events or circumstances arising after the date on which it was made.*

# Overview



ADVENTRX Pharmaceuticals is focused on commercialization of low development risk pharmaceuticals for cancer and infectious disease that enhance the efficacy and/or safety of existing therapies.

## Investment Highlights:

- CoFactor® in registration trial
  - Better safety profile
  - Better efficacy
  - Faster administration
  - Addresses >\$400M market
- ANX-530 (vinorelbine emulsion) entering registration trial in 2006
- Multiple pipeline products planned to enter clinical trials in 2007

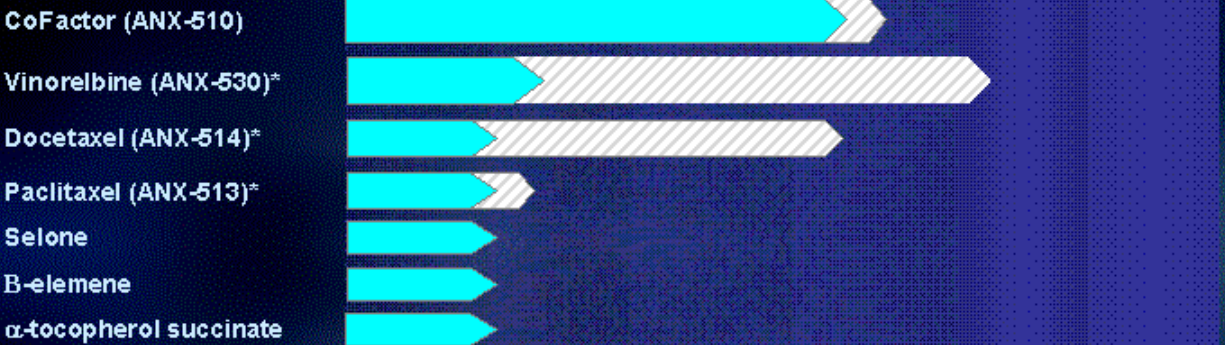


# ADVENTRX Pipeline



**PROGRAMS**      Preclinical      Ph I      Ph II      Pivotal      NDA      Market

## ONCOLOGY



## ANTI-VIRALS



## ANTIBIOTICS



Current status   
  Anticipated 2007 progress   
 \* 505(b)(2) registration strategy

# Lead Product: CoFactor



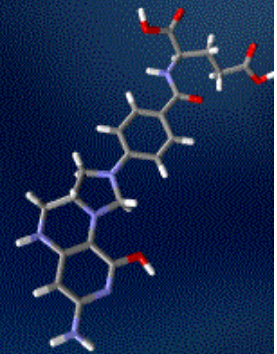
A new form of folate developed to replace leucovorin as the preferred biomodulator of 5-fluorouracil (5-FU)

## Leucovorin

- Indicated for use with intravenous 5-FU in metastatic colorectal and other cancers and in methotrexate rescue
- Requires multiple metabolic steps to become the active form of folate

## CoFactor®

- Directly delivers the active form of folate
- CoFactor increases stability and improves binding of the 5-FU / thymidylate synthase (TS) complex
- Two clinical trials demonstrated greater 5-FU efficacy with reduced toxicity
- Clinical evidence indicates utility in gastrointestinal and breast cancers

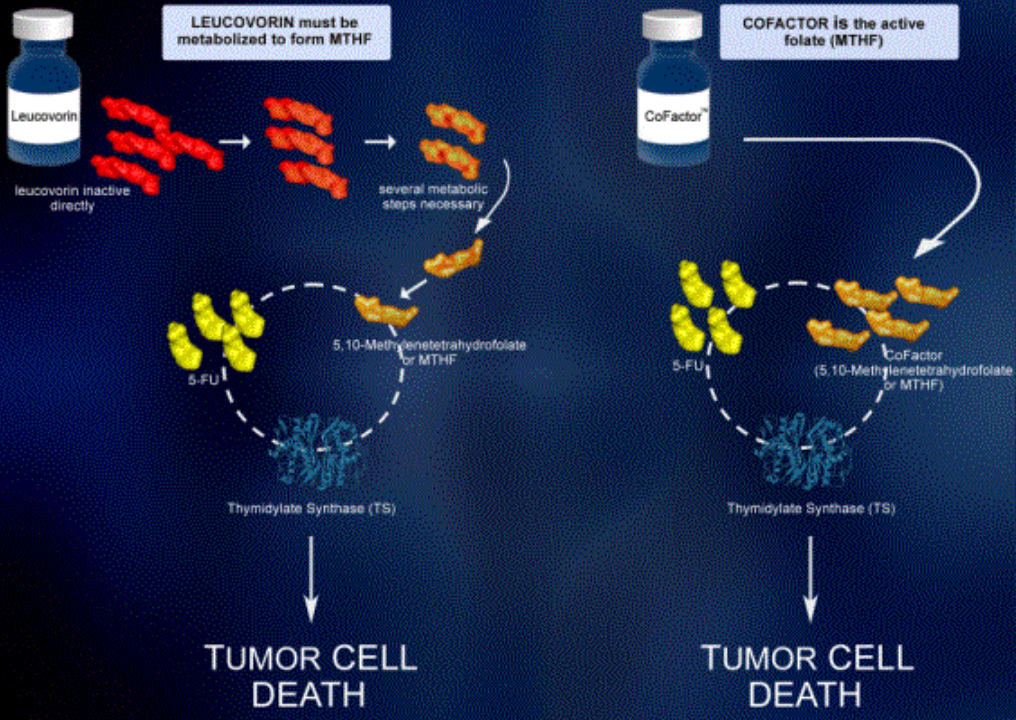


CoFactor (MTHF),  
495 Daltons

# Mechanism of Action



## CoFactor vs Leucovorin in 5-FU-Mediated Tumor Cell Death



## CoFactor Phase I/II Study Design

<b>Clinical Design:</b>	Single Arm, Open Label
<b>Dosing Regimen:</b>	Dose escalating study using CoFactor (100 or 200mg) and 5-FU (4 doses: 250-600g/m <sup>2</sup> ) IV bolus weekly
<b>Study Objectives:</b>	Assess safety, PK / PD, response rate, TTP and survival
<b>Study Population:</b>	62 patients with breast, pancreatic, gastric, colorectal or gall bladder cancer
<b>Clinical Site:</b>	1 (Göteborg, Sweden)
<b>Principal Investigator:</b>	Bengt Gustavsson, MD, PhD

# CoFactor 1st line mCRC clinical trial

Historical Comparison to 5-FU/LV Control Arms



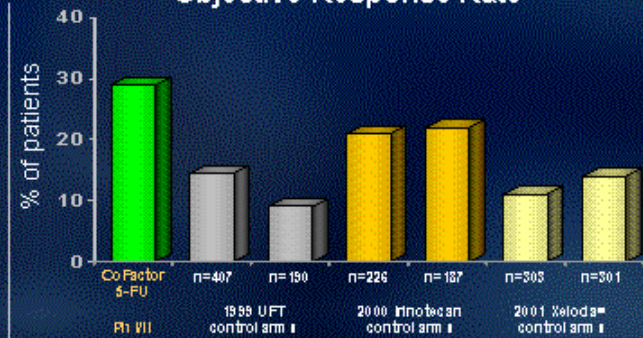
## Phase I/II clinical results:

Objective response in breast (56%), pancreatic (40%), gastric (33%) and colorectal (21%) cancers (1<sup>st</sup> + 2<sup>nd</sup> line)

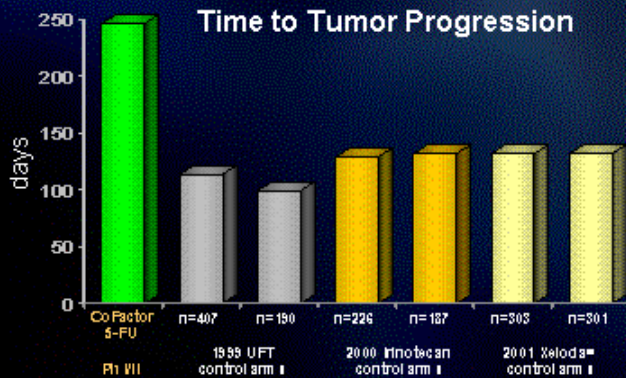
Greater response, TTP and overall survival compared historically to 5-FU plus LV treatment regimens

(Graphs represent all first-line mCRC, n = 24 patients)

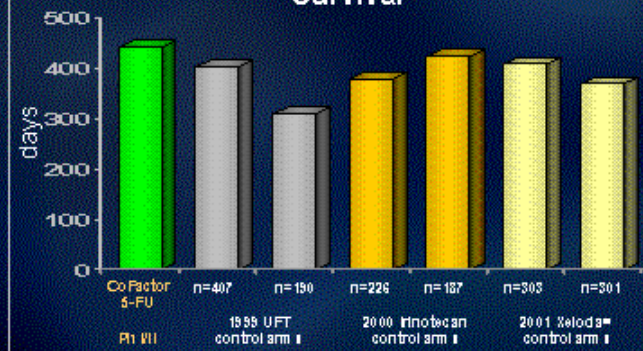
Objective Response Rate



Time to Tumor Progression



Survival



Source: All comparison data are from 1<sup>st</sup> line mCRC trials from product package inserts or (UFT) from Douillard et al JCO Sept 2002, Camichael et al JCO Sept 2002.

# Phase II CoFactor Trial



## CoFactor Phase II Study Design

<b>Clinical Design:</b>	Simon Two-Stage, Single Arm, Open Label
<b>Dosing Regimen:</b>	CoFactor 60mg/m <sup>2</sup> , 5-FU 450mg/m <sup>2</sup> IV bolus, administered weekly for 6 weeks
<b>Primary Endpoint:</b>	≥ 25% objective tumor response (WHO criteria)
<b>Secondary Endpoints:</b>	Safety, TTP and overall survival
<b>Study Population:</b>	50 patients enrolled, treatment naïve metastatic CRC, prior adjuvant treatment permitted
<b>Clinical Sites:</b>	9 (5 in USA and 4 in Serbia)
<b>Data Analysis:</b>	Blinded, third-party evaluations by CT scan or MRI
<b>Principal Investigator:</b>	Tony Reid, MD, PhD

5,10-methylenetetrahydrofolic acid with 5-fluorouracil as first line treatment in metastatic colorectal cancer: a phase II study. T. Reid, C. P. Spears, R. Quadro, M. Subramanian, L. Pawl, G. Jankovic, S. Jelic, N. Milinic, L. Muzikravic, JM Robbins. 2006 Gastrointestinal Cancers Symposium, San Francisco, Jan-28, 2006



# CoFactor 1st line mCRC clinical trial

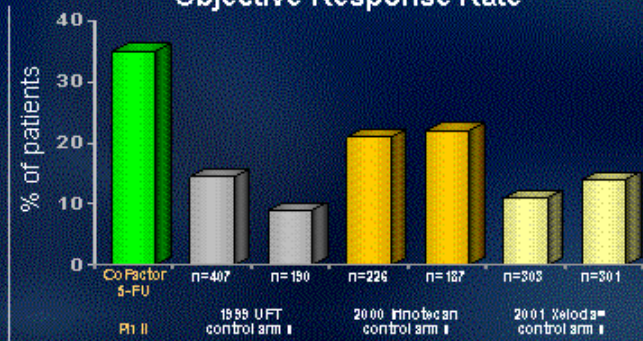
Historical Comparison to 5-FU/LV Control Arms



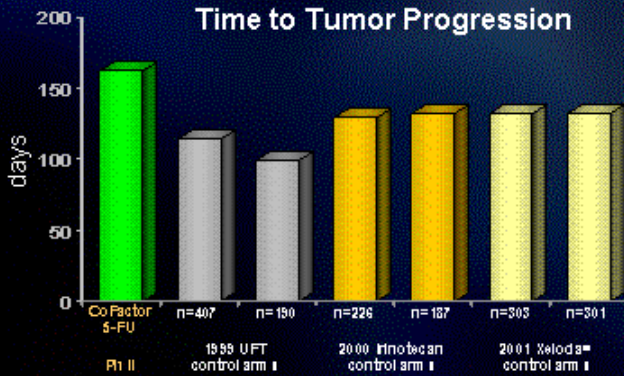
## Phase II clinical results:

- Tumor response of 35% exceeds primary endpoint of 25% (n=46)
- Median TTP of 162 days (n=49)
- Median survival of 459 days (n=50)
- Excellent toxicity profile

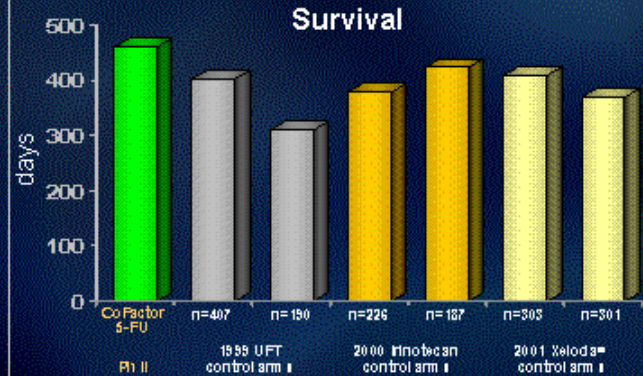
### Objective Response Rate



### Time to Tumor Progression



### Survival



\* Independently-determined

Source: All comparison data are from 1<sup>st</sup> line mCRC trials from product package inserts or (UFT) from Douillard et al JCO Sept 2002, Carmichael et al JCO Sept 2002.

## Response to second line treatment

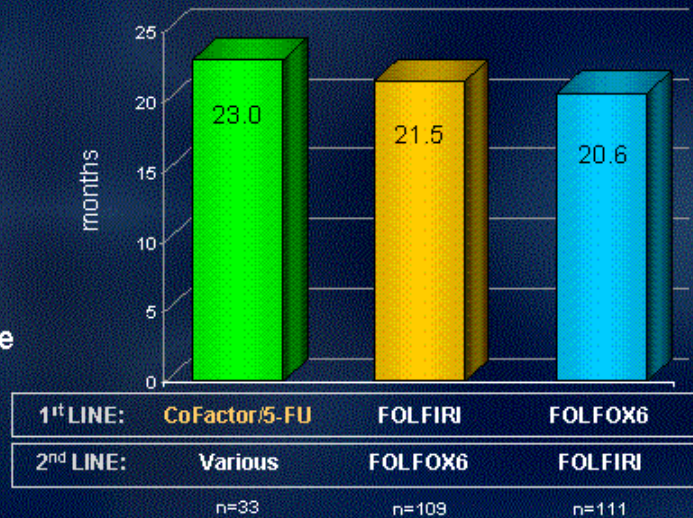
Following CoFactor/5FU as first line treatment



### Supplemental Phase II clinical results:

- 33 patients went on to 2<sup>nd</sup> line treatment
- 4 patients underwent surgical resection
- Results compared to those from recent study comparing sequence of typical 1<sup>st</sup>/2<sup>nd</sup> line therapies
- Suggests CoFactor/5-FU would make a good initial mCRC treatment in a sequential treatment strategy

### Median Survival Following Second-line Therapy for mCRC



Source: T. Reid, et al, 8<sup>th</sup> World Congress on GI Cancer June 28-July 1, 2006. Tournigand, TA, et al, J Clinical Oncology, 22:2, Jan 15, 2004, 229-237.

# Toxicity Profile Comparison (% Grades 3/4)\*

**ADVENTRX**  
PHARMACEUTICALS

Grade 3-4 Adverse Events (%)	Ph II 5-FU/CoFactor n=50	5-FU/LV cntl arm Xeloda n=593	Xeloda n=596	5-FU/LV cntl arm UFT n=394	5-FU/LV cntl arm UFT n=185	5-FU/LV cntl arm CPT-11 n=226	5-FU/LV cntl arm CPT-11 n=187
Diarrhea	0	12	15	16	11	13	6
Nausea/Vomiting	0	7	8	10	9	12	6
Stomatitis/Mucositis	0	15	2	19	16	17	3
Abdominal pain	0	5	9	nr	nr	12	1
Anemia	0	1	2	7	4	56	2
Neutropenia <sup>a</sup>	2	21	3	56	31	67	13
Epiphora/Conjunctivitis	2	nr	nr	nr	nr	nr	nr
Hyperbilirubinemia	0	6	23	8	10	8	11
Alopecia	0	nr	nr	nr	nr	nr	nr
Fatigue	0	4	4	nr	nr	nr	nr
Weight loss	0	nr	nr	nr	nr	nr	nr
Neuropathy	0	nr	nr	nr	nr	nr	nr
Hand-Foot Syndrome	0	1	17	0	0	nr	1

\*All comparison data from product package inserts or (UFT) from Douillard et al JCO Sept 2002, Carmichael et al JCO Sept 2002. Nausea/vomiting and stomatitis/mucositis were added if not given as combined.

<sup>a</sup> Single case of Grade 4 neutropenia was reported during the 30 day follow up period after the last dose of CoFactor plus 5-FU study therapy and after the patient started FOLFFOX with Avastin therapy.

# Toxicity Profile Comparison (% All Grades)\*

**ADVENTRX**  
PHARMACEUTICALS

Adverse Events (% ALL grades)	Ph II 5-FU/ CoFactor n=50	5-FU/LV cntl arm Xeloda n=593	Xeloda n=596	5-FU/LV cntl arm UFT n=394	5-FU/LV cntl arm UFT n=185	5-FU/LV cntl arm CPT-11 n=226	5-FU/LV cntl arm CPT-11 n=187
Diarrhea	42	61	55	76	60	69	45
Nausea/Vomiting	50	81	70	75	58	114	87
Stomatitis/Mucositis	10	62	25	75	55	76	29
Abdominal Pain	24	31	35	nr	nr	50	17
Anemia	8	79	80	87	89	99	91
Neutropenia <sup>‡</sup>	6	46	13	77	67	99	48
Epiphora/Conjunctivitis	12	nr	nr	nr	nr	nr	nr
Hyperbilirubinemia	2	17	48	22	23	92	36
Alopecia	0	21	6	nr	nr	27	17
Fatigue	28	46	42	nr	nr	nr	nr
Weight loss	10	nr	nr	nr	nr	nr	nr
Neuropathy	2	4	10	nr	nr	nr	nr
Hand-Foot Syndrome	4	6	54	5	4	nr	13

\*All comparison data from product package inserts or (UFT) from Douillard et al JCO Sept 2002, Carmichael et al JCO Sept 2002. Nausea/vomiting and stomatitis/mucositis were added if not given as combined.

‡ Single case of Grade 4 neutropenia was reported during the 30 day follow up period after the last dose of CoFactor plus 5-FU study therapy and after the patient started FOLFFOX with Avastin therapy.

# CoFactor Preclinical Results



Replacing leucovorin with CoFactor led to *longer survival* and *lower toxicity* in regimens that included oxaliplatin, anti-VEGF, irinotecan, UFT, Xeloda and gemcitabine

Xenografts modeled in immunocompromised mice:

- Greater tumor inhibition
- Longer survival
- Cancer models tested
  - colorectal (HT29, DLD-1)
  - pancreatic (AsPC-1)
  - gastric (HTB-135)



Toxicity modeled in immunocompetent mice:

- Significantly lower hematological toxicity (reduced thrombocytopenia, leukopenia, neutropenia and lymphopenia)
- Significantly lower gastrointestinal toxicity (reduced weight loss)



# CoFactor Clinical Development Plan



Trial	Indication	Design	2007	2008	2009
EU/India Phase IIb	1 <sup>st</sup> Line CRC	CoFactor/5-FU versus LV/5-FU	 Phase IIb		
US Phase III	1 <sup>st</sup> Line CRC	CoFactor/5-FU/Avastin versus LV/5-FU/Avastin	 Phase III		
US Phase II	Refractory breast	CoFactor/5-FU	 Phase II		

## CoFactor Phase IIb Study Design

<b>Clinical Design:</b>	Multi-national randomized two-armed open-label
<b>Study Population:</b>	1 <sup>st</sup> line metastatic colorectal cancer
<b>Dosing Regimen:</b>	de Gramont regimen (400mg/m <sup>2</sup> loading dose of 5-FU followed by 600 mg/m <sup>2</sup> 5-FU via 22 hr infusion for two consecutive days every 2 weeks), with either CoFactor 60mg/m <sup>2</sup> or leucovorin 200 mg/m <sup>2</sup> , each administered every 2 weeks for 12 cycles as a 2 hr infusion.
<b>Primary Endpoint:</b>	Incidence of Grade 3 or 4 hematological or gastrointestinal toxicity
<b>Secondary Endpoints:</b>	Safety, response rate, TTP and survival
<b>Number of Patients:</b>	300 (150 per arm)
<b>Clinical Sites:</b>	30, Europe and India
<b>Data Analysis:</b>	Tumor assessment every 8 weeks, strict regulations for dose modification
<b>Study Chair:</b>	James Cassidy, MD, MBChB, MSc, FRCP

## CoFactor Phase III Pivotal Study Design

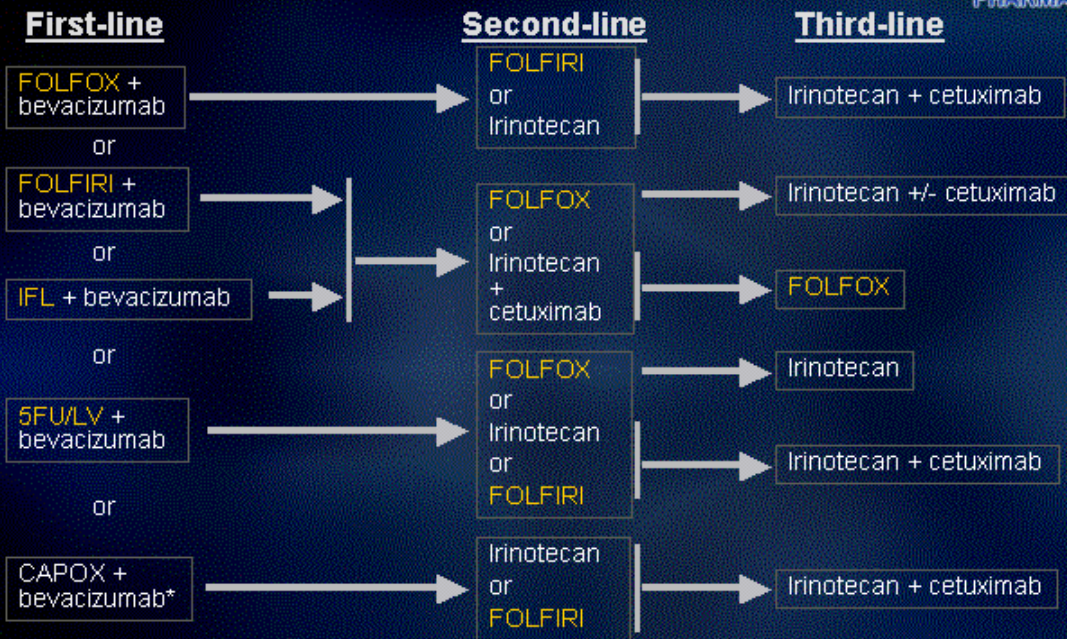
<b>Clinical Design:</b>	Multi-center, randomized, parallel group, open-label
<b>Study Population:</b>	1 <sup>st</sup> line metastatic colorectal cancer
<b>Dosing Regimen:</b>	* CoFactor 60mg/m <sup>2</sup> by <b>2-3 min</b> IV bolus. (Wait <b>20 min</b> .) * leucovorin 500mg/m <sup>2</sup> by <b>2 hour</b> infusion. (Wait <b>1 hour</b> ) followed by 5-FU 500mg/m <sup>2</sup> IV bolus administered weekly for 6 weeks. Avastin 5mg/kg continuous IV over 90 min. every 2 weeks
<b>Primary Endpoint:</b>	Improvement in progression-free survival of $\geq 28$ days; SPA with FDA
<b>Secondary Endpoints:</b>	Response rate, duration of response, overall survival and incidence and severity of AEs
<b>Number of Patients:</b>	1200 pts (600 per arm)
<b>Clinical Sites:</b>	100 planned, US
<b>Data Analysis:</b>	Tumor assessment every 8 weeks, strict regulations for dose modification. Power of 80%, $\alpha$ level of 0.05. Estimated median TTP is 9.44 mo in control arm. Two interim analyses are planned.
<b>Principal Investigator:</b>	M. Wasif Saif, MD, MBBS



## CoFactor Breast Cancer Study Design

<b>Clinical Design:</b>	Multi-center, open-label, single arm
<b>Study Population:</b>	Advanced breast cancer patients who failed anthracycline and taxane chemotherapy regimens
<b>Dosing Regimen:</b>	CoFactor 60mg/m <sup>2</sup> by IV bolus followed by 5-FU 500mg/m <sup>2</sup> IV bolus administered weekly for 6 weeks
<b>Primary Endpoint:</b>	Objective response rate (RECIST criteria)
<b>Secondary Endpoints:</b>	Duration of response, progression free survival, overall survival and incidence and severity of AEs
<b>Number of Patients:</b>	31 pts
<b>Clinical Sites:</b>	6 sites (Latin America, Europe, Russia)
<b>Study Assessments:</b>	Tumor and Safety assessments every 8 weeks Outcome to guide in design of Phase III study

# Treatment Guidelines for Advanced or Metastatic CRC



**5-FU and LV are widely used in combination chemotherapy regimens for CRC**

FOLFOX: oxaliplatin, leucovorin, 5-FU

IFL: irinotecan, leucovorin, 5-FU

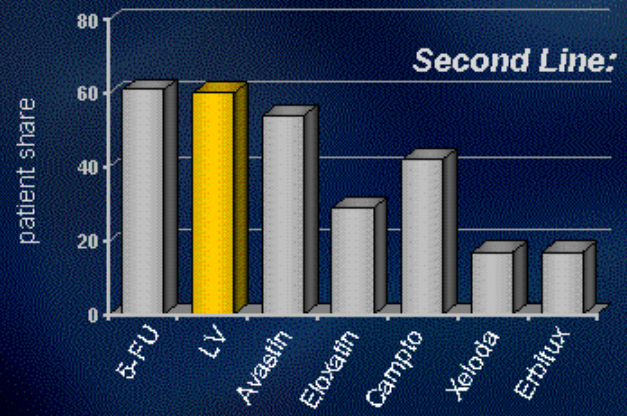
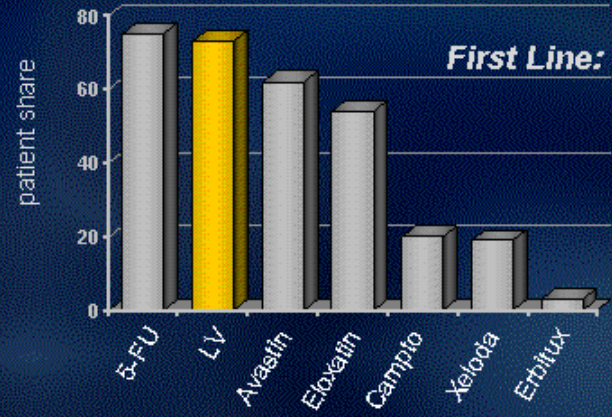
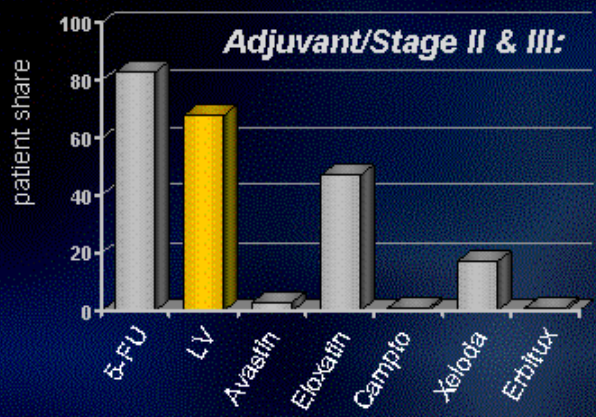
FOLFIRI: irinotecan, leucovorin, 5-FU

CAPOX: capecitabine, oxaliplatin

Source: NCCN Practice Guidelines in Oncology – v2.2008; [http://www.nccn.org/professionals/physician\\_gls/PDF/colon.pdf](http://www.nccn.org/professionals/physician_gls/PDF/colon.pdf)

\* Category 2B: There is nonuniform NCCN consensus based on lower-level evidence including clinical experience, that the recommendation is appropriate

# Metastatic CRC: Drug Market Share\*



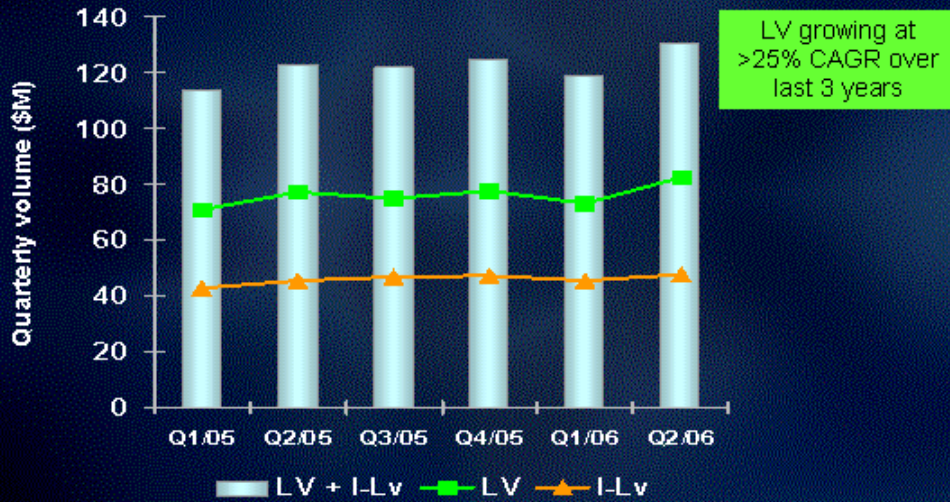
\*Based on most recent March 06 values

Source: Oncology, Inc.

# Leucovorin Market



## Global Market of >\$480M for Leucovorin & Calcium Levofolinate (I-Lv)



Source, IMS Health

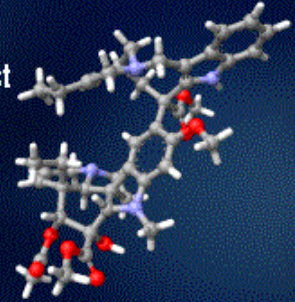
## ANX-530 (vinorelbine emulsion)



A new formulation of intravenous vinorelbine tartrate designed to reduce vein irritation

### Vinorelbine (Navelbine®)

- Indicated as single agent or in combination with cisplatin for first line treatment of unresectable advanced NSCLC
- Injection site reactions in approximately one-third of patients

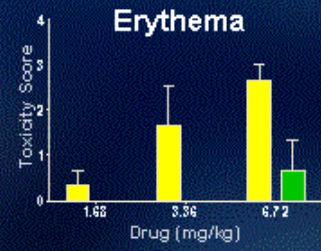
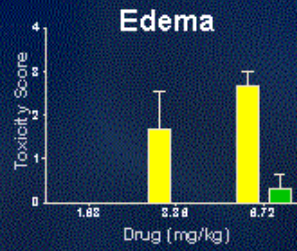
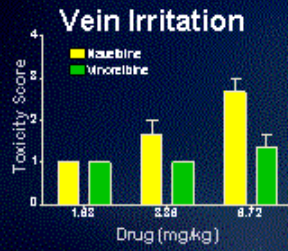


### ANX-530 (emulsion formulation)

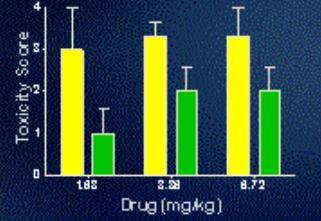
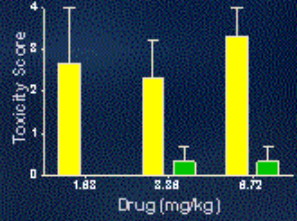
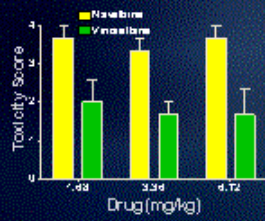
- FDA affirmation of single bioequivalency study as a marketing-enabling clinical trial
- Plan to assess vein irritation and additional safety parameters in human studies
- Reduced vein irritation in preclinical studies
- Pharmacokinetics and antitumor activity are similar to Navelbine in preclinical studies

## Lower vein irritation, edema and erythema in preclinical studies with ANX-530

1<sup>st</sup> Injection

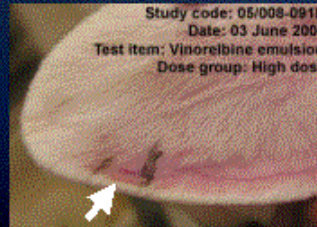


2<sup>nd</sup> Injection

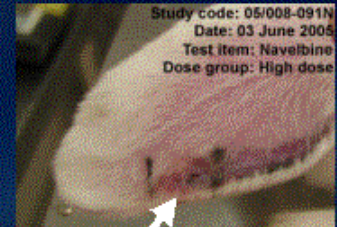


### Vein Irritation Score

1. Normal vein, same as control vehicle
2. More red than normal, slight vein thickening
3. Dark red, 2-3mm vein thickening
4. Dark blue/red, >3mm vein thickening



ANX-530 (vinorelbine emulsion)

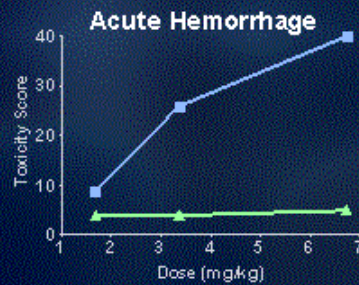
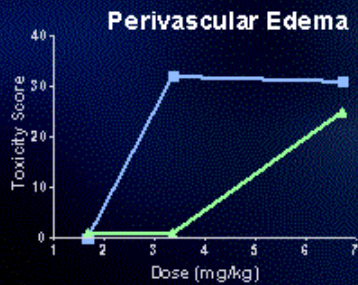
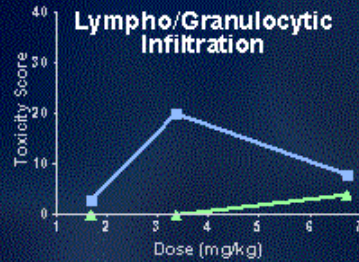
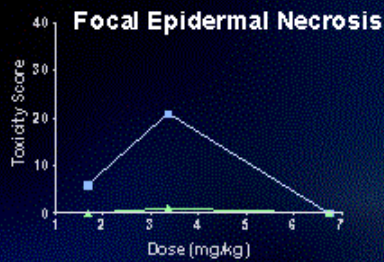


Navelbine® (vinorelbine)

# ANX-530 Ear vein histopathology



## Favorable histopathology for ANX-530 in preclinical studies



■ Vinorelbine solution  
▲ ANX-530

0 to 3 scale – no observable event to marked severity.  
Toxicity scores represent the sum of all ear sections and rabbits in a dosing group (n=7 per group)

### Pharmacokinetics unchanged for vinorelbine emulsion

Drug	t <sub>1/2α</sub> (hr)	t <sub>1/2β</sub> (hr)	Vd (L/kg)	CL (L/hr/kg)	AUC <sub>0-24</sub> (mg hr/L)	AUC <sub>0-∞</sub> (mg hr/L)
Vinorelbine Emulsion	0.28	11.2	24.1	1.5	2271.5	2717.6
Vinorelbine Solution	0.28	11.7	25.7	1.5	2106.2	2892.0

Source: Cantwell, MJ, Robbins, JM, Chen, AX; A novel emulsion formulation of vinorelbine attenuates venous toxicity while maintaining antitumor efficacy; AACR 2006

# Vinorelbine Market



## MARKET SIZE

- Lung cancer is the second most common cancer in the US.
- Non-small cell lung represents 80-85% of all lung cancers.
- Five year overall survival is 10-15%.

Lung cancer cases (US):	172,570
Deaths (US):	163,510



## GENERIC VINOURELBINE SALES

**Global ~\$160M**

**Unit sales growth worldwide >10% each year**

## MARKET GROWTH OPPORTUNITY

Potential for increased use in adjuvant setting; two landmark NSCLC studies demonstrated clear survival benefit (Winton et al and Douillard et al, ASCO 2005\*)

(Sources: NCI, ACS, IMS Health) \* ANITA and NCIC CTG BR10 studies ASCO 2005



# Taxane Emulsions

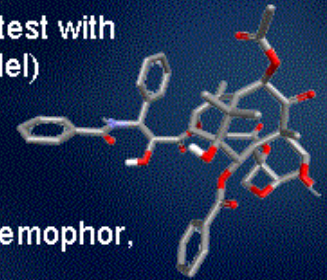


## ANX-514 (docetaxel emulsion)

- ANX-514 is a novel emulsion formulation of docetaxel free of polysorbate 80 or other detergents
- ANX-514 is intended to be non-allergenic and eliminate the need for multiday immunosuppressant premedication
- No reactions were observed in a guinea pig hypersensitivity test with ANX-514 for high or low dose (standard hypersensitivity model)

## ANX-513 (paclitaxel emulsion)

- A novel emulsion formulation of paclitaxel which is free of Cremophor, other detergents or macromolecules
- ANX-513 is designed to be non-allergenic and eliminate the need for immunosuppressant premedication
- No reactions were observed in a guinea pig hypersensitivity test with ANX-513 for high or low dose (standard hypersensitivity model)

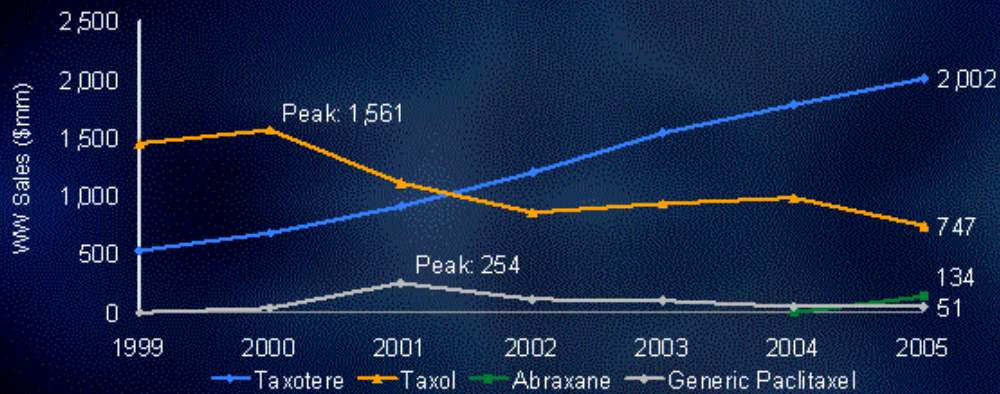


# Taxanes Market



Total Taxane pharmaceutical market nearly \$3 billion

Taxane Global Drug Sales 1999-2005\*



- Docetaxel is approved to treat breast, non-small cell lung, prostate and gastric cancers
- Paclitaxel approved to treat breast, ovarian & non-small cell lung cancers

\*Source: EvaluatePharma

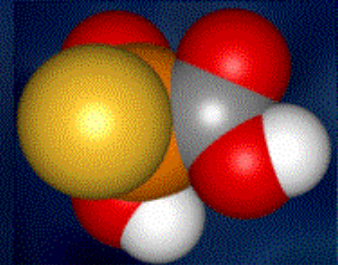
# Thiovir (ANX-201)



A broad spectrum antiviral and novel reverse transcriptase inhibitor to be used as a component of HAART for HIV/AIDS

## Foscarnet:

- Activity in HIV, HPV, herpes and influenza A
- Commercial limitations of foscarnet from delivery and toxicity



Thiovir  
(thiophosphonoformate, TPFA)

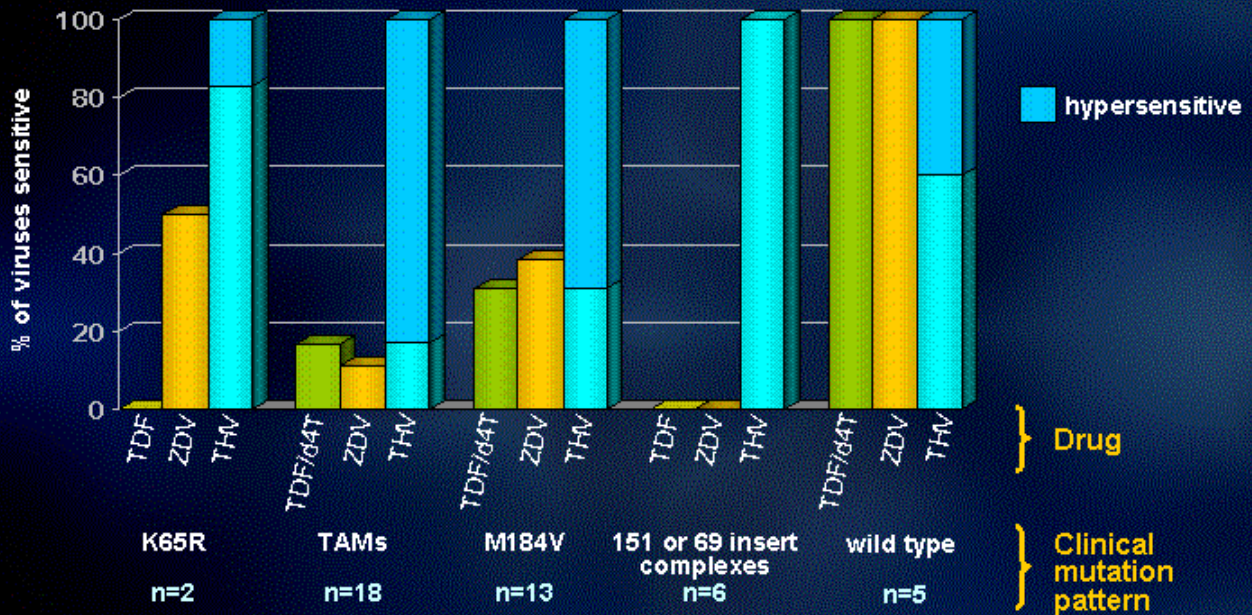
## Thiovir:

- Delivers TPFA, a prodrug for foscarnet (PFA)
- Synergistic with tenofovir (NRTI in Truvada<sup>®</sup> and Viread<sup>®</sup>) and zidovudine (NRTI in Combivir<sup>®</sup>, Trizivir<sup>®</sup>, Retrovir<sup>®</sup>)
- Demonstrates different resistance profile from multiple NRTIs and NNRTIs

# Thiovir



Percent of NRTI-resistant Virus Susceptible to Drug

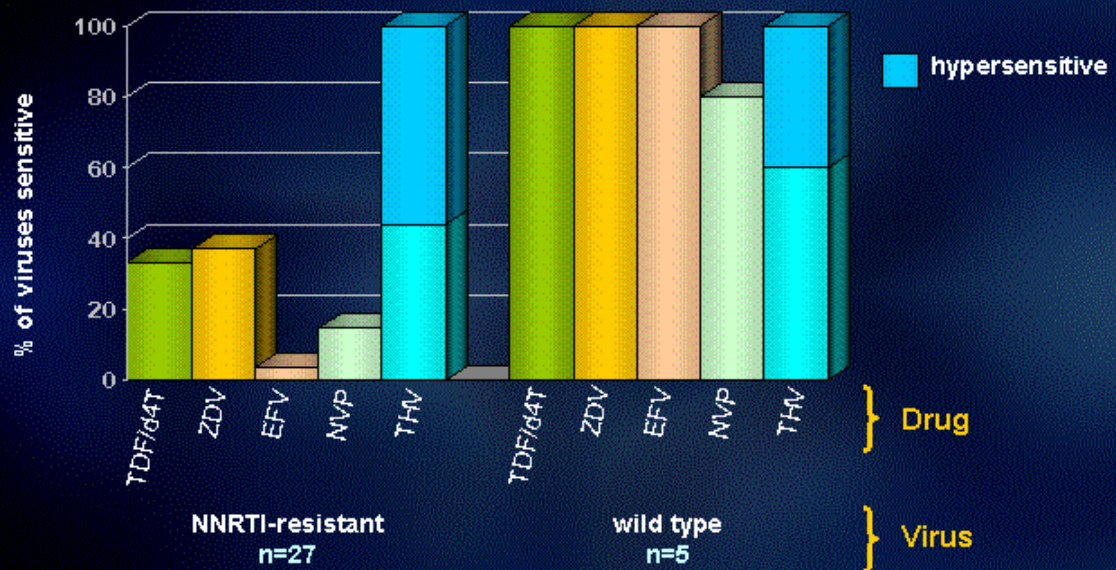


**DRUG KEY**

TDF tenofovir (Truvada®)	d4T stavudine (Zerit®)
ZDV zidovudine (Retrovir®)	EFV efavirenz (Sustiva®)
THV Thiovir	NVP nevirapine (Viramune®)

Source: Assays performed by Monogram Biosciences. Data on file. A virus is hypersensitive if it is more sensitive than a drug-sensitive standard (reference virus).

## Percent of NNRTI-resistant Viruses Susceptible to Drug



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# HIV/AIDS Market

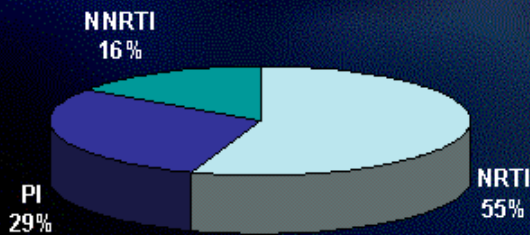


## MARKET SIZE\*

Number of HIV cases:

- US - 950,000 with 40,000 new cases each year
- North America and Western Europe - 1.8M
- Global - nearly 45M

## Portion of total sales by drug class:



## RTI SALES (US)

Drugs targeting HIV reverse transcriptase generate ~\$4.9B in sales (2004)

## MARKET GROWTH

HIV/AIDS is a chronic disease: Goal of treatment is lifelong viral suppression.

Approximately 35% of the US HIV population receive treatment (300-400K patients)

\*Sources: National Center for Health Statistics (2003), SG Cowen, Oct 2004, Pank Ziegel and Co., Dec 05

# ANX-211 (Chitosan gel)



- Chitosan-based intranasal/topical broad spectrum antiviral intended to reduce duration and severity of cold and flu for OTC market
- ANX-211 demonstrated efficacy against viruses responsible for the common cold, influenza and other respiratory tract infections in preclinical studies
- US rights licensed to Theragenex (Oct 06): \$1M licensing fee + milestones + up to 20% royalties on sales
- US market launch expected in 2007
- Leading US product, Zicam®, positioned for cold



HEK cells infected by adenovirus carrying  $\beta$ -gal gene. Virus-infected cells are blue from X-gal staining. ANX-211 was more effective than the zinc only preparation in protecting the cells against the adenovirus infection.

## ANX-211 Market

US annual estimated # of cases <sup>1</sup>	
influenza	20-50M
common cold	500M

Annual expenditure in US for OTC products to fight cold, flu & allergy:

Nearly \$3B<sup>2</sup>

1. Incidence and prevalence database.  
2. Mintel International group.

# ANX-015 (clarithromycin emulsion)

ADVENTRX  
PHARMACEUTICALS

A novel IV-delivered emulsion formulation of the macrolide antibiotic, clarithromycin, designed to reduce vein irritation

- ANX-015 is designed to reduce injection site reactions characterized by phlebitis and inflammation that are common with IV clarithromycin
- Clarithromycin is highly potent against a variety of aerobic and anaerobic Gram-positive and Gram-negative organisms

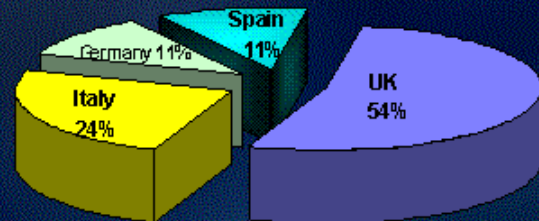
Clarithromycin for Injection Market:

Klacid® (clarithromycin 500mg for injection, Abbott Laboratories)

Global sales: >1.9M units

Four Countries Make Up Two-thirds of the Global Clarithromycin IV Market

(% of total unit sales)



Source: IMS Health, 2005



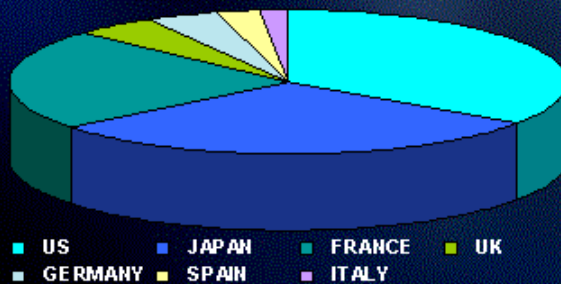
# ANX-016 (vancomycin emulsion)



ANX-016 is a novel emulsion IV formulation of the antibiotic, vancomycin designed to reduce vein irritation

- ANX-016 is designed to reduce vein irritation from IV-delivery of the drug.
- ANX-016 is intended for severe infections caused by susceptible strains of methicillin-resistant staphylococci (MRSA), penicillin-allergic patients and for infections caused by vancomycin-susceptible organisms that are resistant to other antimicrobial drugs.

## Vancomycin IV: \$375M Global Sales\*



\*IMS Health, 2005 figures

## Growing need - US Statistics:

2M new hospital-acquired infections  
90,000 deaths

## MRSA is an increasing problem



Sources: CDC, Merck Manual <http://www.merck.com/mixshare/mmanual/section13/chapter157/157a.jsp>; incidence and prevalence database, [www.emedicine.com](http://www.emedicine.com), National Nosocomial Infections Surveillance (NNIS) System

# Leadership



## **Evan M. Levine, Chief Executive Officer, Director**

Former Principal Brown Simpson Asset Management; Senior VP Dillon Read; VP, Hambrecht & Quist

## **James A. Merritt, M.D., President and Chief Medical Officer**

Imagine Pharmaceuticals, various senior positions at Introgen, Viagene, Idec Pharmaceuticals, Upjohn

## **Joan M. Robbins, Ph.D., Chief Scientific Officer, Executive Vice President**

Former VP, Product Development, Immusol; R&D Scientist, Chiron; NCI/NIH Laboratory of Tumor Immunology & Biology

## **Brian Culley, M.S., MBA, Senior VP, Business Development**

Former Director, Business Development and Marketing, Immusol, Inc., UCSD Technology Transfer and Intellectual Property Dept., Neurocrine Biosciences, Inc.

## **Patrick Keran, General Counsel**

Isis Pharmaceuticals, Heller Ehrman, LLP, Brobeck, Phleger & Harrison, LLP.

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President, CEO and Director, Arena  
Pharmaceuticals

Mark J. Pykett, V.M.D., Ph.D.

President and COO, Boston Life  
Sciences, Inc., Cofounder, Cytomatrix

## Investment Highlights:

- CoFactor® in registration trial
  - Better safety profile
  - Better efficacy
  - Faster administration
  - Addresses >\$400M market
- ANX-530 (vinorelbine emulsion) entering registration trial in 2006
- Multiple pipeline products planned to enter clinical trials in 2007





# ADVENTRX

## PHARMACEUTICALS

REFINING THERAPIES FOR LIFE

