
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): April 25, 2007

ADVENTRX Pharmaceuticals, Inc.

(Exact Name of Registrant as Specified in Charter)

Delaware
(State or Other Jurisdiction
of Incorporation)

001-32157
(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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TABLE OF CONTENTS

[Item 7.01. Regulation FD Disclosure](#)

[Item 9.01. Financial Statements and Exhibits](#)

[SIGNATURE](#)

[INDEX TO EXHIBITS](#)

[EXHIBIT 99.1](#)

[Table of Contents](#)

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”) at the 7th Annual Fortis Biotech Conference on Wednesday, April 25 at 1:45 p.m. British Summer Time (8:45 a.m. Eastern Daylight Time).

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 constitutes 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. The potential risks and uncertainties that could cause actual results to differ materially include, but are not limited to: ADVENTRX’s ability to raise sufficient capital to fund the projects necessary to meet its anticipated or stated goals; 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, and the uncertain process of seeking regulatory approval; other difficulties or delays in developing, testing, manufacturing and marketing and obtaining regulatory approval for CoFactor® and 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 products that could delay or prevent regulatory approval or commercialization; 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.

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: April 25, 2007

By: /s/ Gregory P. Hanson

Name: Gregory P. Hanson

Title: Chief Financial Officer

INDEX TO EXHIBITS

99.1 Presentation Slides – dated April 25, 2007.

ADVENTRX PHARMACEUTICALS



Refining therapies for life

Fortis 7th Annual Global Healthcare Conference
Evan M. Levine, Chief Executive Officer
April 25, 2007

AMEX: ANX

Safe Harbor Statement

ADVENTRX cautions you that information included in this presentation that is not a description of historical facts constitutes 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. The potential risks and uncertainties that could cause actual results to differ materially include, but are not limited to: ADVENTRX's ability to raise sufficient capital to fund the projects necessary to meet its anticipated or stated goals; 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, and the uncertain process of seeking regulatory approval; other difficulties or delays in developing, testing, manufacturing and marketing and obtaining regulatory approval for CoFactor® and 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 products that could delay or prevent regulatory approval or commercialization; 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 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.

Mission

ADVENTRX is a biopharmaceutical research and development company focused on commercializing proprietary product candidates for the treatment of cancer and infectious diseases.

The Company seeks to improve the performance and safety of existing treatments by addressing significant problems such as drug metabolism, bioavailability, excessive toxicity and treatment resistance.

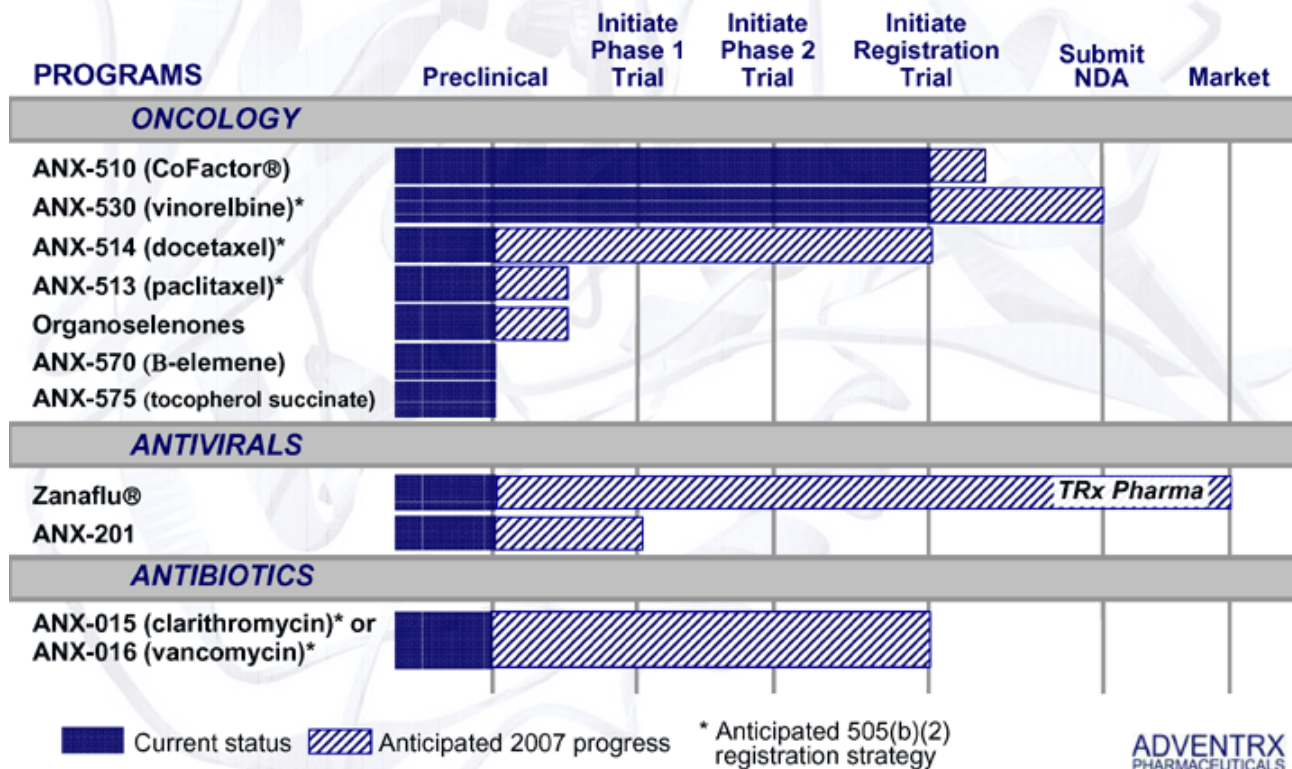


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Investment Highlights

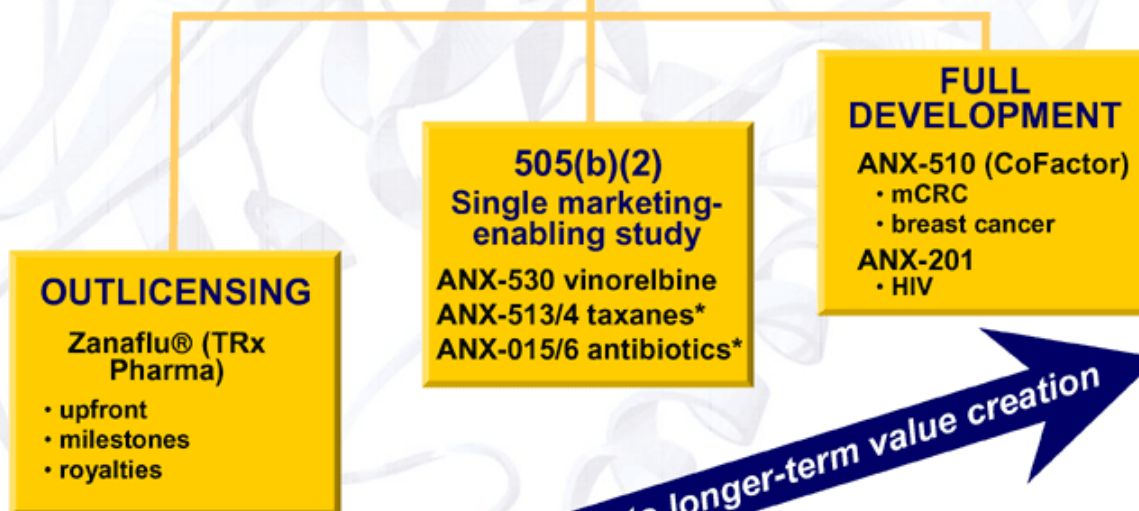
- **Two oncology product candidates in registration trials**
- **Multiple pipeline compounds planned to enter the clinic in 2007**
- **Anticipated launch of Zanaflu® for 2007/2008 cold and flu season**
- **Numerous partnership opportunities**

ADVENTRX Pipeline and 2007 Goals



Diverse Path to Future Revenues

ADVENTRX's diversified approach to creating value



* pending appropriate regulatory approvals

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ANX-510 (CoFactor)

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

Leucovorin (LV)

- Indicated for use with intravenous 5-FU in metastatic colorectal and other cancers
- Requires multiple metabolic steps to become active
- Global market approximately \$500M

CoFactor®

Two clinical trials and preclinical studies have demonstrated

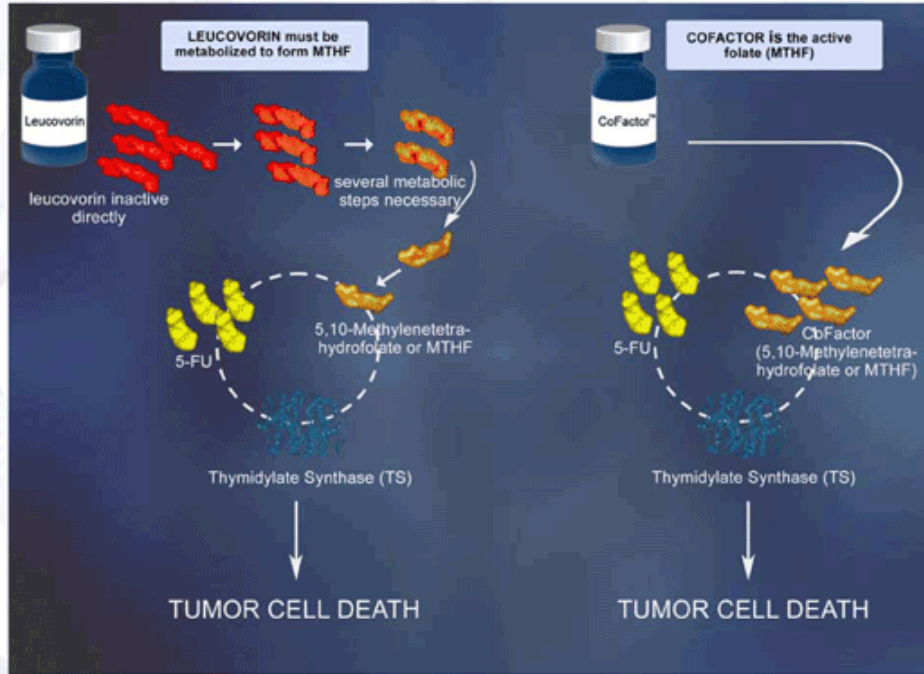
- Superior efficacy
- Reduced toxicity
- Faster administration



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Mechanism of Action

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



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Phase 1/2 CoFactor Trial Design

Clinical Design:	Single Arm, Open Label
Dosing Regimen:	Dose escalating study using CoFactor and 5-FU IV bolus weekly
Study Objectives:	Assess safety, PK / PD, response rate, TTP and survival
Study Population:	62 patients with breast, pancreatic, gastric, colorectal or gall bladder cancer
Clinical Site:	1 (Sweden)
Principal Investigator:	Bengt Gustavsson, MD, PhD

Phase I-II Study Of Weekly 5-Fluorouracil And 5,10-Methylene-Tetrahydrofolate In Patients With Advanced Gastrointestinal And Breast Cancer: G. Carlsson, E. Odin, P-A. Larsson, R. Frösing, C.P. Spears, B., Gustavsson: The Cancer Journal, Vol 10 No. 5 September-October 1997.

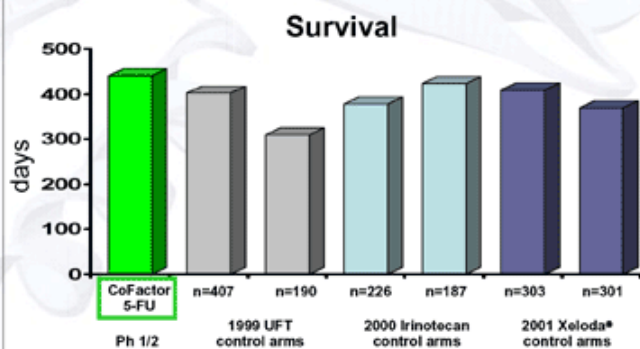
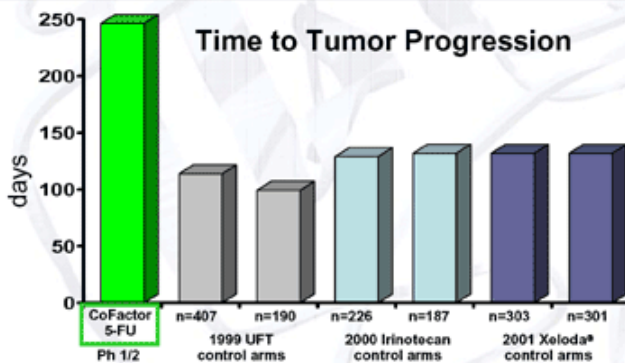
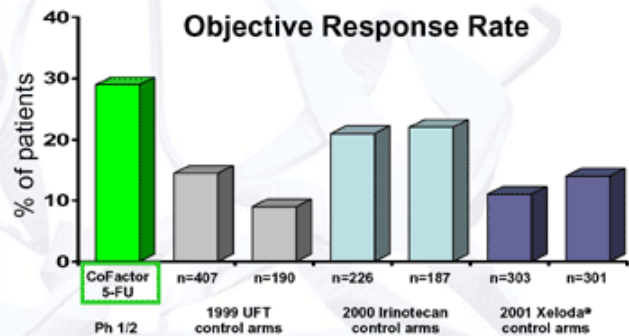
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CoFactor RR, TTP and Survival Favorable When Compared to 5-FU/LV Control Arms

Phase 1/2 clinical results

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

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



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

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Phase 2 CoFactor Trial Design

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

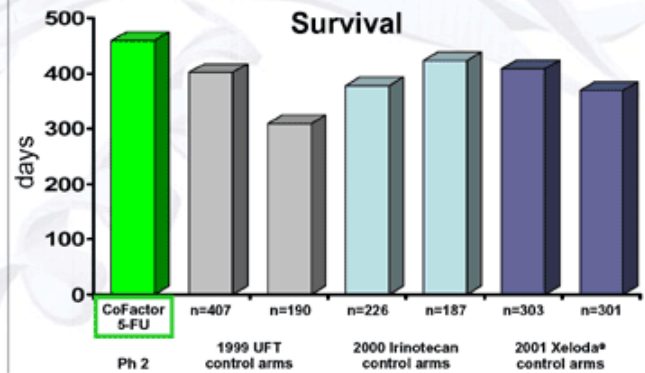
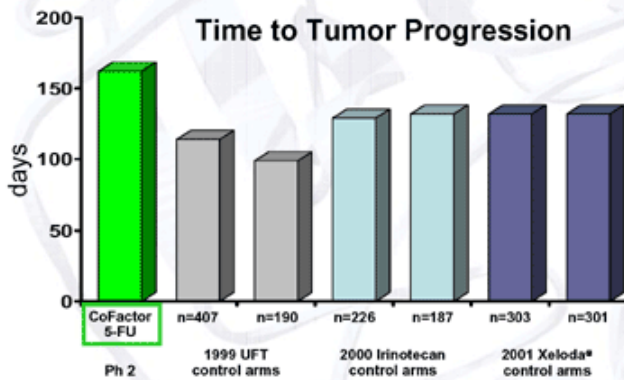
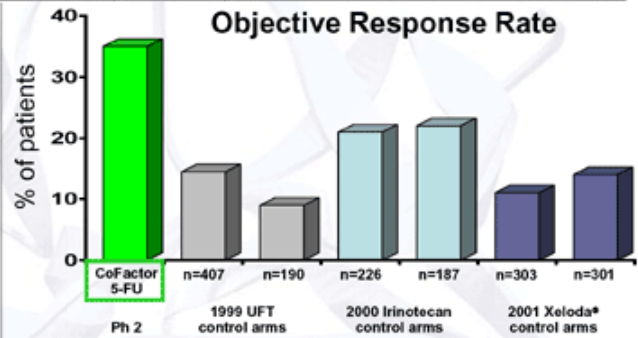
5,10-methylenetetrahydrofolic acid with 5-fluorouracil as first line treatment in metastatic colorectal cancer: a phase II study. T. Reid, C. P. Spears, R. Quadro, M. Subramanian, L. Pawl, G. Jankovic, S. Jelic, N. Milinic, L. Muzikravic, JM Robbins. 2006 Gastrointestinal Cancers Symposium, San Francisco.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

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CoFactor RR, TTP and Survival Favorable When Compared to 5-FU/LV Control Arms

Phase 2 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



* Independently-determined

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

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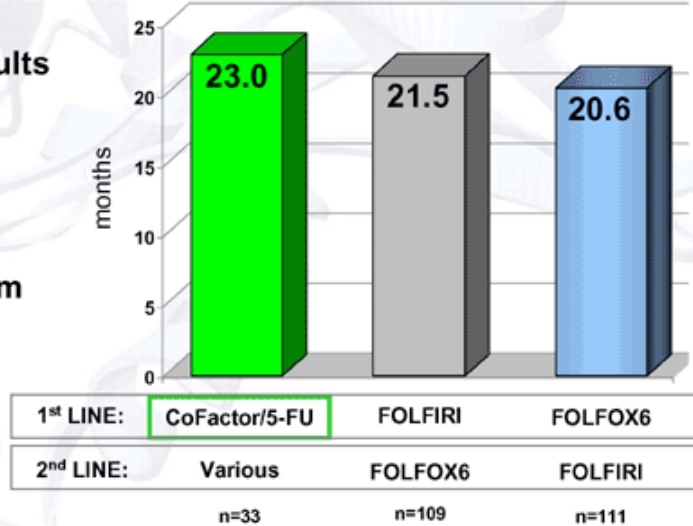
Response to Second-line Treatment

Encouraging supplemental data suggest CoFactor/5-FU would make a good initial mCRC treatment in a sequential treatment strategy

Supplemental Phase 2 clinical results

- 33 patients went on to 2nd line treatment
- 4 patients underwent surgical resection
- Results compared to those from recent study comparing sequence of typical 1st/2nd line therapies

Median Survival Following Second-line Therapy for mCRC



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

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Toxicity Profile Comparison (% Grades 3/4)*

Lower percentage of grade 3/4 adverse events with
CoFactor/5-FU compared with LV/5-FU

Grade 3-4 Adverse Events (%)	Ph 2 5-FU/ CoFactor n=50	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	5-FU/LV cntl arm Xeloda n=593	Xeloda n=596
Diarrhea	0	16	11	13	6	12	15
Nausea/Vomiting	0	10	9	12	6	7	8
Stomatitis/Mucositis	0	19	16	17	3	15	2
Anemia	0	7	4	56	2	1	2
Neutropenia ^a	2	56	31	67	13	21	3
Hyperbilirubinemia	0	8	10	8	11	6	23
Neuropathy	0	nr	nr	nr	nr	nr	nr
Hand-Foot Syndrome	0	0	0	nr	1	1	17

nr = not reported

*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.

^a 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 FOLFOX with Avastin therapy

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Toxicity Profile Comparison (% All Grades)*

Lower percentage of all adverse events with
CoFactor/5-FU compared with LV/5-FU

Adverse Events (% ALL grades)	Ph 2 5-FU/ CoFactor n=50	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	5-FU/LV cntl arm Xeloda n=593	Xeloda n=596
Diarrhea	42	76	60	69	45	61	55
Nausea/Vomiting	50	75	58	114	87	81	70
Stomatitis/Mucositis	10	75	55	76	29	62	25
Anemia	8	87	89	99	91	79	80
Neutropenia ^a	6	77	67	99	48	46	13
Hyperbilirubinemia	2	22	23	92	36	17	48
Neuropathy	2	nr	nr	nr	nr	4	10
Hand-Foot Syndrome	4	5	4	nr	13	6	54

nr = not reported

*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.

^a 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 FOLFOX with Avastin therapy

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Positive Preclinical Activity

Replacing leucovorin with CoFactor led to longer survival with lower toxicity in regimens that included oxaliplatin, anti-VEGF, irinotecan, UFT, capecitabine (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)



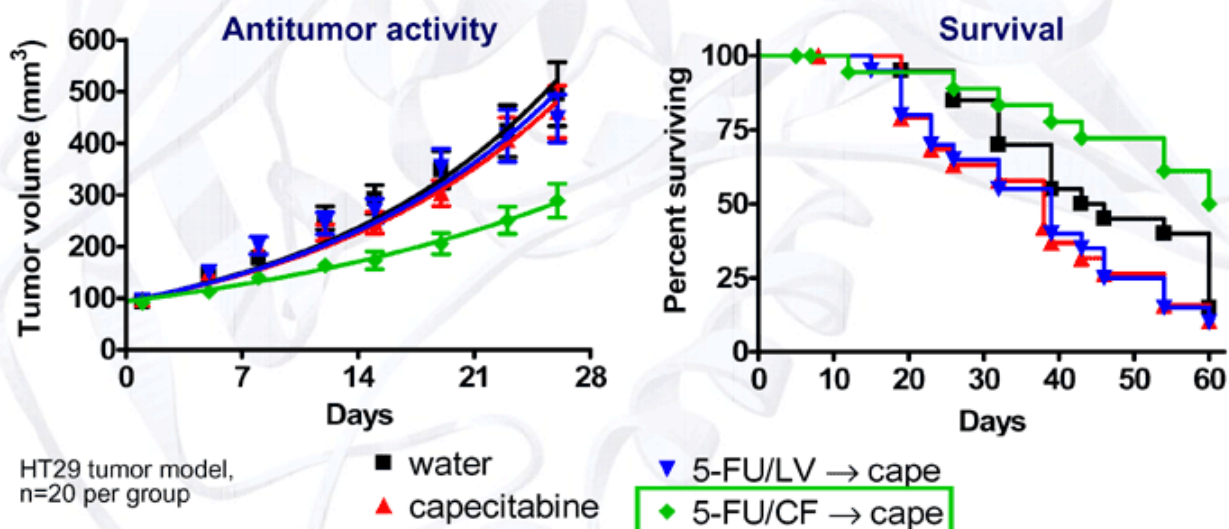
Toxicity modeled in immunocompetent mice:

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



Preclinical: Hybrid treatment regimen

Better efficacy profile with CoFactor/5-FU/capecitabine hybrid treatment regimen compared with LV/5-FU/capecitabine or capecitabine alone

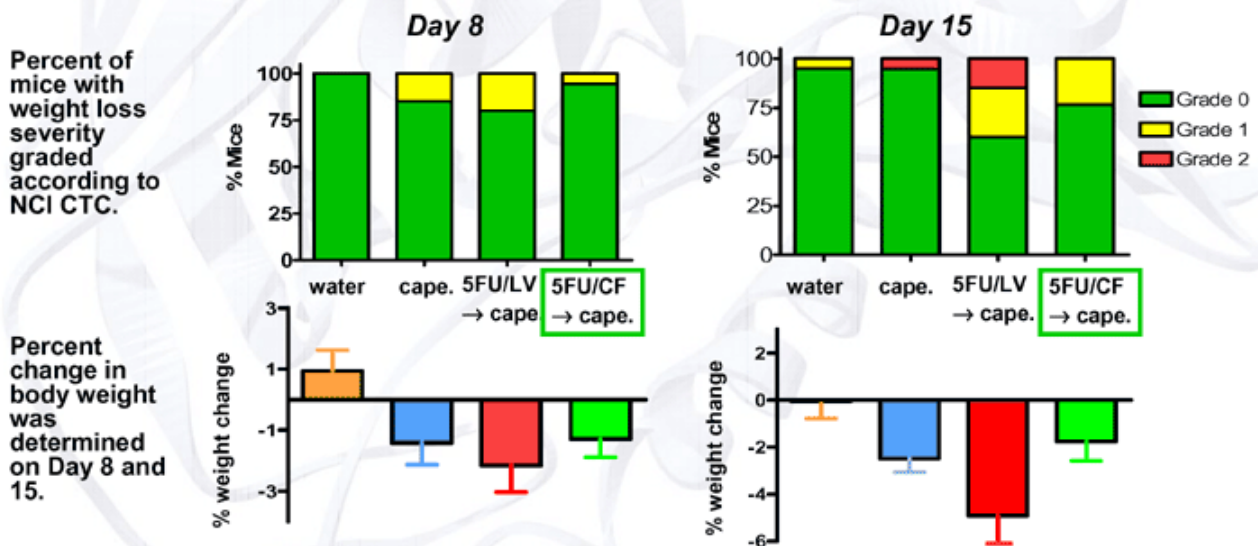


Source: Cantwell, MJ and Robbins, JM, AACR Annual Meeting 2007.

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Preclinical: Hybrid treatment regimen

Better toxicity profile with CoFactor/5-FU/capecitabine hybrid treatment regimen compared with LV/5-FU/capecitabine or capecitabine alone



Source: Cantwell, MJ and Robbins, JM, AACR Annual Meeting 2007.

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CoFactor Clinical Development*

Trial	Indication	Design	2007	2008	2009
Phase 2b	1 st Line mCRC	CoFactor/5-FU versus LV/5-FU			
Phase 3	1 st Line mCRC	CoFactor/ 5-FU/Avastin versus LV/5-FU/Avastin			
Phase 2	Advanced breast cancer	CoFactor/5-FU			

* Graphical presentations do not depict or indicate achievement of any particular milestone and are solely to assist in understanding the anticipated timelines of each trial relative to the others.

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Phase 2b mCRC Trial

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

Phase 3 mCRC Trial Design

Clinical Design:	Multi-center, randomized, parallel group, open-label
Study Population:	1,200 patients (600 per arm) with mCRC (1st line)
Dosing Regimen:	* CoFactor 60mg/m ² by <u>2-3 min</u> IV bolus. (Wait 20 min.) * leucovorin 500mg/m ² by <u>2 hour</u> IV bolus. (Wait 1 hour) followed by 5-FU 500mg/m ² IV bolus administered weekly for 6 weeks. Avastin 5mg/kg continuous IV over 90 min. every 2 weeks
Primary Endpoint:	Improvement in progression-free survival of ≥ 28 days; SPA with FDA
Secondary Endpoints:	Response rate, duration of response, overall survival and incidence and severity of AEs
Clinical Sites:	100 planned in the US; additional overseas
Data Analysis:	Two interim analyses are planned. Tumor assessment every 8 weeks, strict regulations for dose modification. Power of 80%, α level of 0.05. Estimated median TTP is 9.44 mo in control arm.
Principal Investigator:	M. Wasif Saif, MD, MBBS

Phase 2 Advanced Breast Cancer Trial Design

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

Standard of Care in CRC

5-FU and LV are widely used in adjuvant-2nd-line chemotherapy regimens

Adjuvant Chemotherapy

Capecitabine* or 5-FU/LV* or 5-FU/LV/oxaliplatin*

5-FU/LV/oxaliplatin or capecitabine or 5-FU/LV

either neoadjuvant or post surgery therapy with FOLFIRI or FOLFOX or CapeOX + bevacizumab

systemic therapy FOLFIRI or FOLFOX or CapeOX + bevacizumab

Drug Key
FOLFOX:
 oxaliplatin, leucovorin, 5-FU
FOLFIRI:
 irinotecan, leucovorin, 5-FU
IFL:
 irinotecan, leucovorin, 5-FU
CAPOX:
 capecitabine, oxaliplatin

patient can tolerate intensive therapy

patient cannot tolerate intensive therapy

First-line

FOLFOX + bevacizumab or CapeOX + bevacizumab

FOLFIRI + bevacizumab

5FU/LV + bevacizumab

Capecitabine+/- bevacizumab**

5FU/LV +/- bevacizumab

Second-line

FOLFIRI or Irinotecan or FOLFIRI + cetuximab* or Cetuximab + irinotecan*

FOLFOX or CapeOX or Cetuximab or panitumumab or Cetuximab + irinotecan

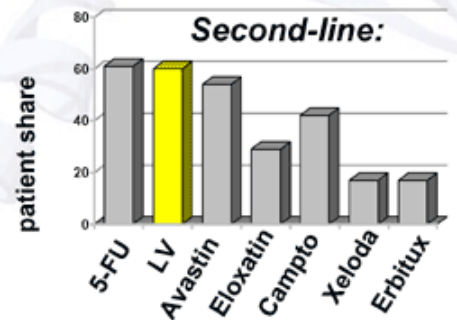
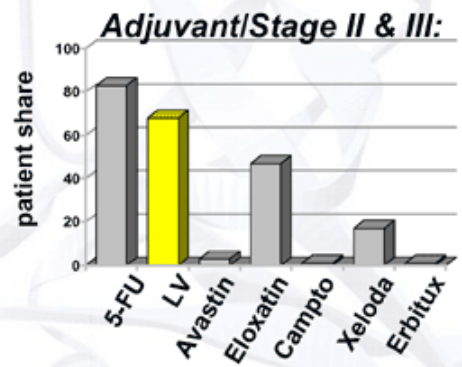
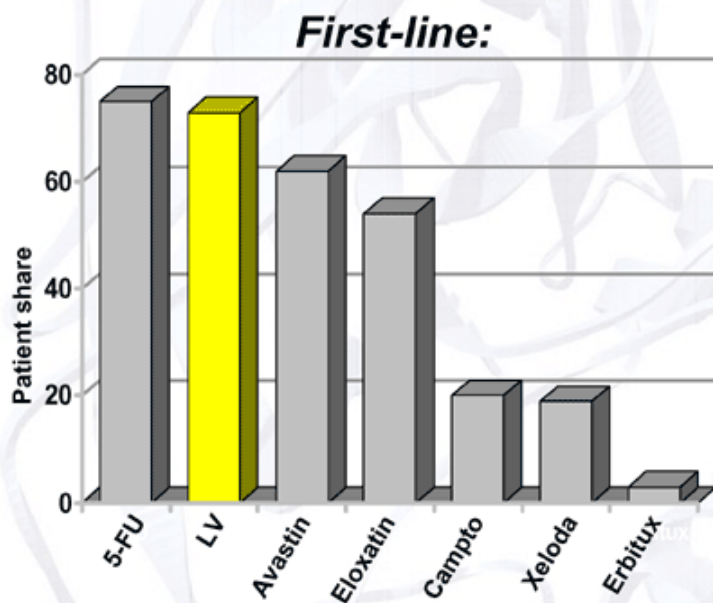
FOLFOX or CapeOX or Irinotecan or FOLFIRI

Improvement in functional status

No improvement in functional status

Source: NCCN Practice Guidelines in Oncology – v.1.2007. *Category 2B: There is nonuniform NCCN consensus based on lower-level evidence including clinical experience, that the recommendation is appropriate; ** Category 2B for the combination with bevacizumab.

LV's Large Share of CRC Market

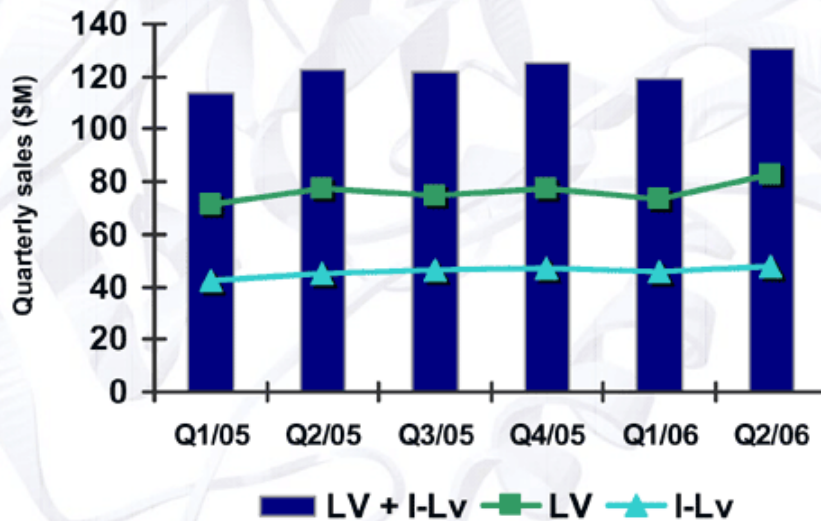


Source: March 06 data from Oncology, Inc.

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Leucovorin Market

Global Market of Approx. \$500M for Leucovorin & Calcium Levofolinate (I-Lv)*



* all intravenous and oral forms included

Source, IMS Health

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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
- Annual global market > \$200M



ANX-530 (vinorelbine emulsion)

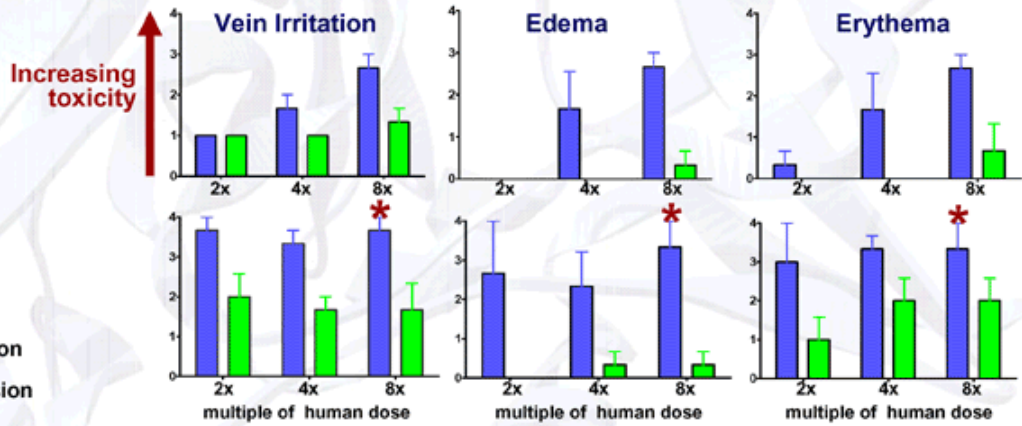
- FDA clearance of single 28-patient bioequivalency study of ANX-530 and Navelbine as a marketing-enabling clinical trial under 505(b)(2)
- Preclinical studies demonstrated reduced vein irritation, redness and swelling
- Pharmacokinetics and antitumor activity similar to Navelbine

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ANX-530 Preclinical Data

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

1st Injection:



2nd Injection:

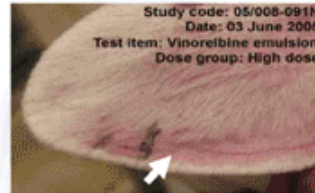
■ Vinorelbine solution
■ Vinorelbine emulsion

ANX-530: ALL dose levels & injections were given

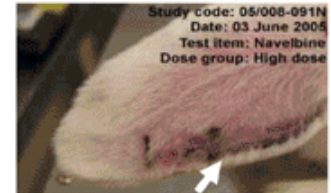
Vinorelbine solution: Due to the severity of toxicity, animals did not receive the full set of injections but were still analyzed for toxicity after each injection period.

*High dose group received 1st injection only.

Low and medium dose groups received 1st and 2nd injections only.



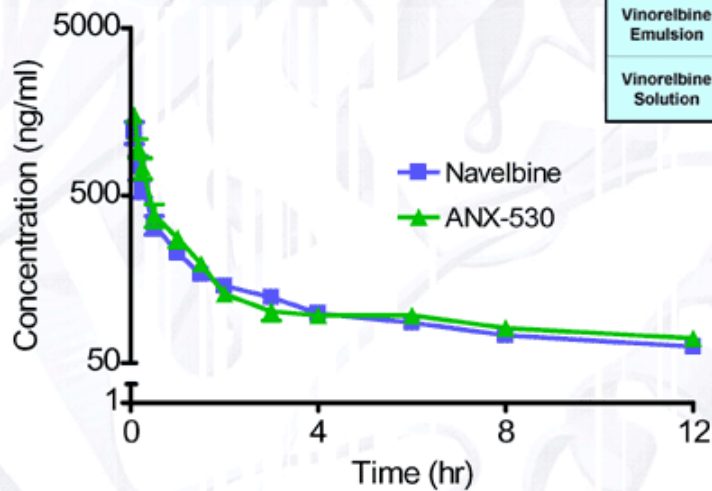
ANX-530 (vinorelbine emulsion)



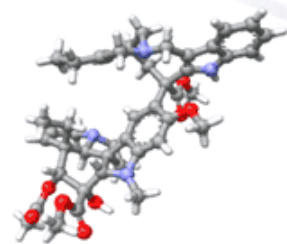
Navelbine® (vinorelbine)

ANX-530 Pharmacokinetics

Pharmacokinetics unchanged for ANX-530 (vinorelbine emulsion) in a rat pK model



Drug	$t_{1/2\alpha}$ (hr)	$t_{1/2\beta}$ (hr)	Vd (L/kg)	CL (L/hr/kg)	AUC ₀₋₂₄ (mg hr/L)	AUC _{0-∞} (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

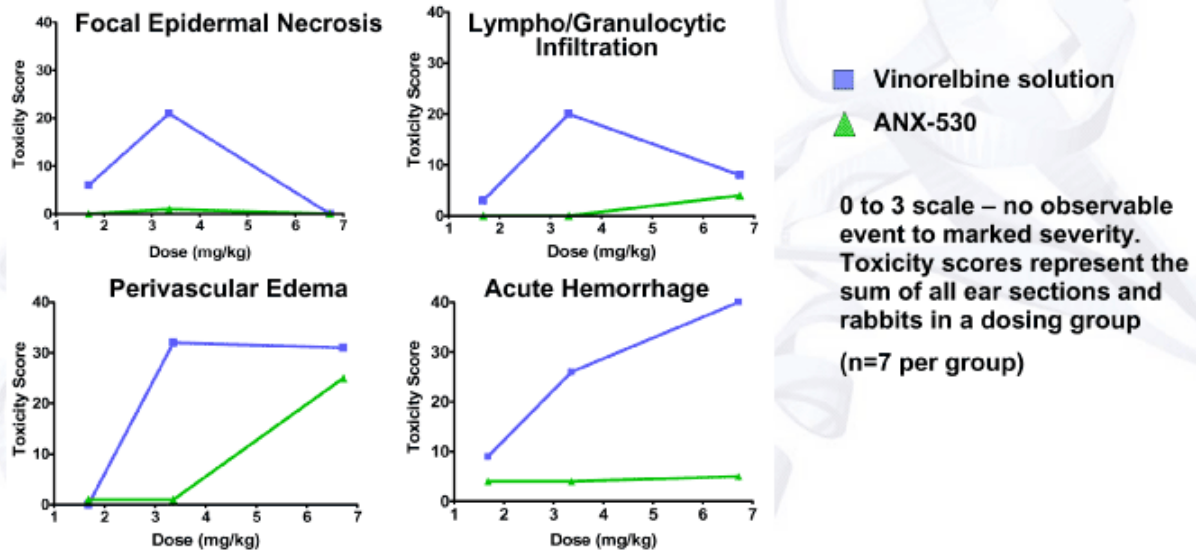


Source: Cantwell, MJ, Robbins, JM, Chen, AX; A novel emulsion formulation of vinorelbine attenuates venous toxicity while maintaining antitumor efficacy; AACR 2006

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ANX-530 Favorable Histopathology

Favorable histopathology for ANX-530 in preclinical studies



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

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ANX-530 Bioequivalency Trial Design

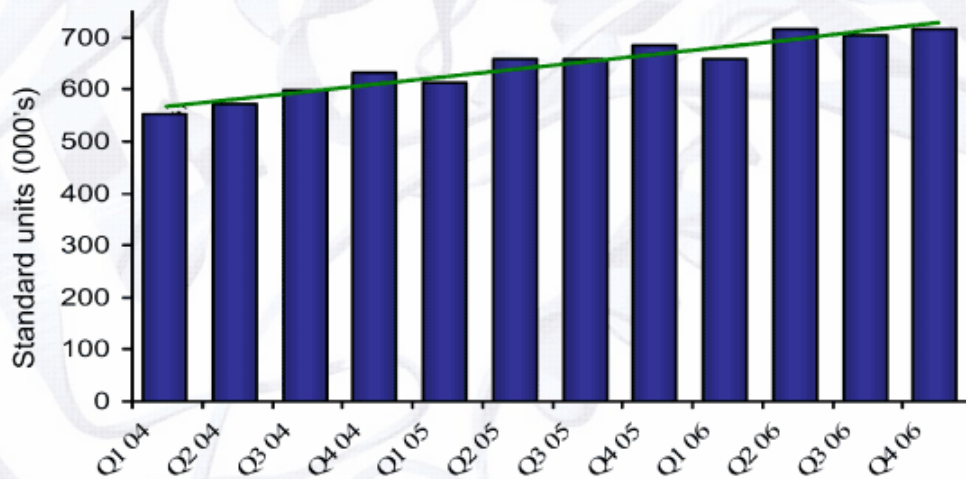
Clinical Design:	Multi-center, randomized, crossover comparison of ANX-530 with Navelbine
Study Population:	28 patients with advanced cancer potentially sensitive to vinorelbine
Dosing Regimen:	Single dose of 30mg/m ² , 10 minute infusion
Primary Endpoint:	Pharmacokinetic equivalence of ANX-530 and Navelbine
Secondary Endpoints:	Safety of a single dose of ANX-530
Clinical Sites:	6 (Latin America)
Data Analysis:	Pharmacokinetics, physical exam, vital signs and adverse events

Global Vinorelbine Market

Generic Vinorelbine Sales (2004-2006)

Global annual sales > \$200M

Unit sales CAGR of 9% (last 2 years, top 10 countries)



Source: IMS Health

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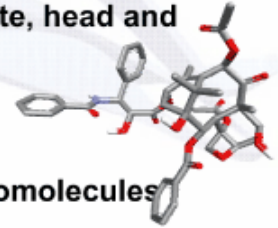
Improving Safety of Taxanes

ANX-514 (docetaxel emulsion)

- Novel emulsion free of polysorbate 80 or other detergents
- Designed to be non-allergenic and eliminate need for multiday immunosuppressant premedication
- No reactions in guinea pig hypersensitivity test with high or low dose
- Docetaxel approved to treat breast, non-small cell lung, prostate, head and neck & gastric cancers

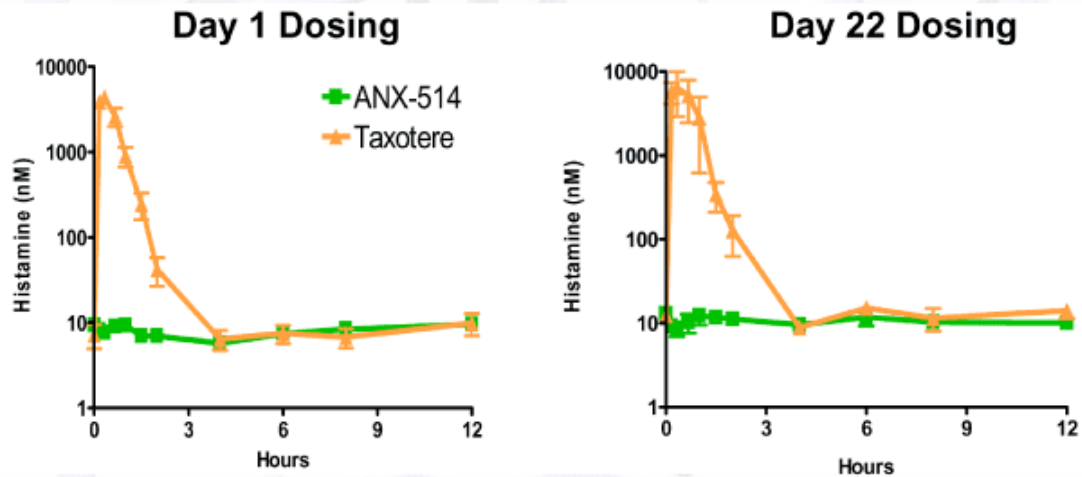
ANX-513 (paclitaxel emulsion)

- Novel emulsion free of Cremophor®, other detergents or macromolecules
- Designed to be non-allergenic and eliminate the need for immunosuppressant premedication
- No reactions in guinea pig hypersensitivity test with high or low dose
- Paclitaxel approved to treat breast, ovarian & non-small cell lung cancers



ANX-514: Plasma Histamine Levels

Lower hypersensitivity observed following ANX-514 (docetaxel emulsion) administration over Taxotere



**Dose Level = 1 mg/kg. Duration of Infusion = 5 minutes. Crossover Study Design.
n = 4 animals per group**

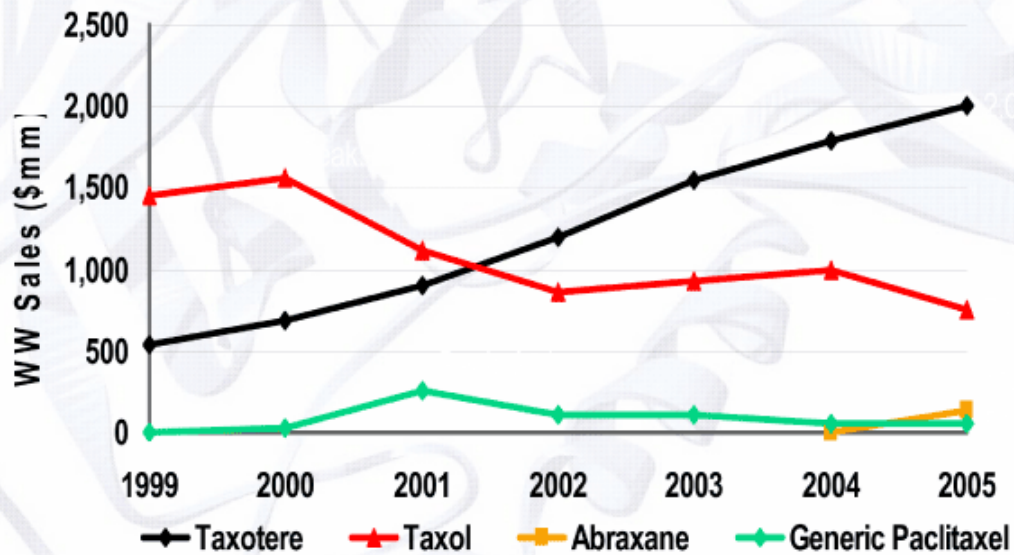
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Taxanes Market

Total Taxane pharmaceutical market nearly \$3 billion

Taxane Global Drug Sales 1999-2005



Source: EvaluatePharma

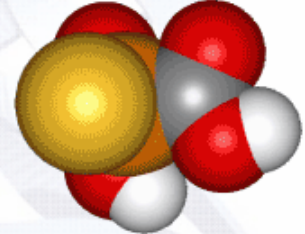
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ANX-201

Reverse transcriptase inhibitor with novel mechanism of action that re-enables NRTI use in NRTI-resistant HIV+ patients

ANX-201 (thiophosphonoformic acid, TPFA):

- Resensitizes NRTI-resistant virus
- Active against virus with common mutations
- Unique mechanism of action as a pyrophosphate analog reflected in unique resistance profile
- Synergistic activity with NRTIs including tenofovir, zidovudine (AZT), lamivudine and abacavir
- Broad antiviral activity: HIV, HPV, herpes and influenza A



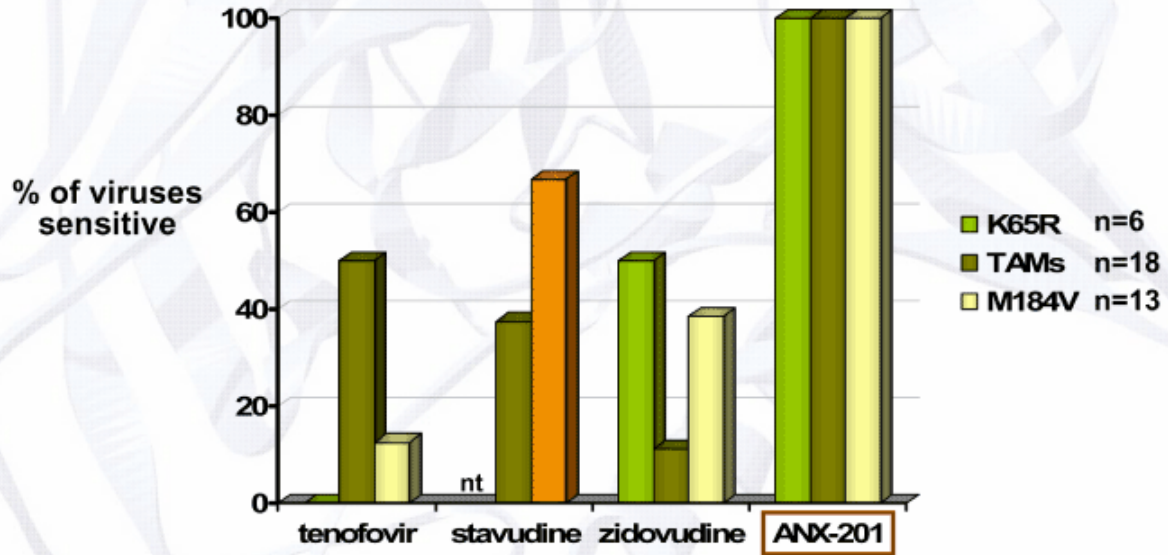
thiophosphonoformate, TPFA

Note: Tenofovir is a NRTI in Truvada® and Viread®, zidovudine is a NRTI in Combivir®, Trizivir®, Retrovir®, lamivudine is a NRTI in Eпивir®, Combivir®, Trizivir®, and abacavir is a NRTI in Ziagen®, Trizivir®, Epzicom®.

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Resistant Virus Susceptible to ANX-201

NRTI Activity Against HIV with Common Mutations:

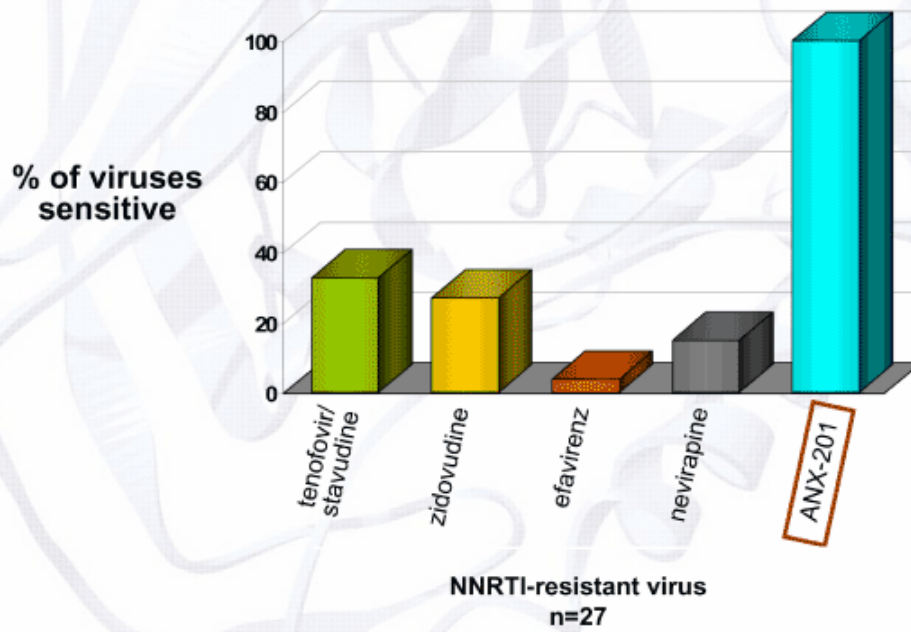


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Resistant Virus Susceptible to ANX-201

Drug Activity Against HIV with Resistance to NNRTIs:



ADVENTRX data on file.

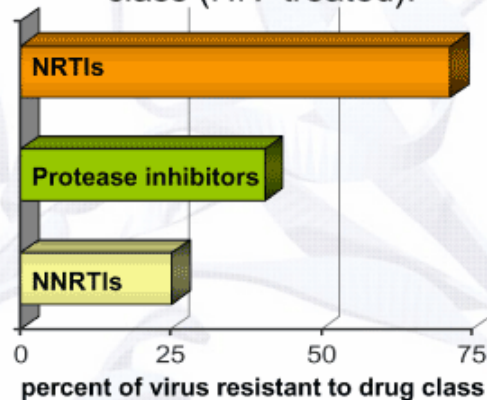
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Characteristics of HIV drug resistance

HIV treated population in the US:
Resistance to one or more drugs
is estimated at 76%.

Resistance to >1 class:	47%
Resistance to 3 classes:	13%

Estimated drug resistance by class (HIV-treated):



ANX-201 resensitizes NRTI-resistant virus. Novel mechanism of action is reflected in unique resistance profile.

Source: Richman, et al. The prevalence of antiretroviral drug resistance in the United States, *AIDS*, 2004. Datamonitor Stakeholder Insight: HIV, Oct 2005. BioStrategies, 2007.

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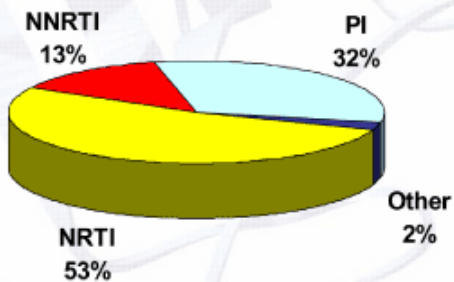
HIV/AIDS Market

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 40M

Portion of total sales by drug class in the 6 major markets (2005):



RTI SALES (US)

Drugs targeting HIV reverse transcriptase generated \$4.9B in sales (2005)

MARKET GROWTH

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

Treatment-experienced 3rd line+ patients, represent approximately one-third of all HIV+ patients in the U.S.

Sources: National Center for Health Statistics, UNAIDS/WHO, Datamonitor Pipeline Insight HIV 8/06

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ZANAFLU®

U.S. Market Launch Expected in 2007

Chitosan-based intranasal/topical broad spectrum antiviral intended to reduce duration and severity of cold and flu for OTC market

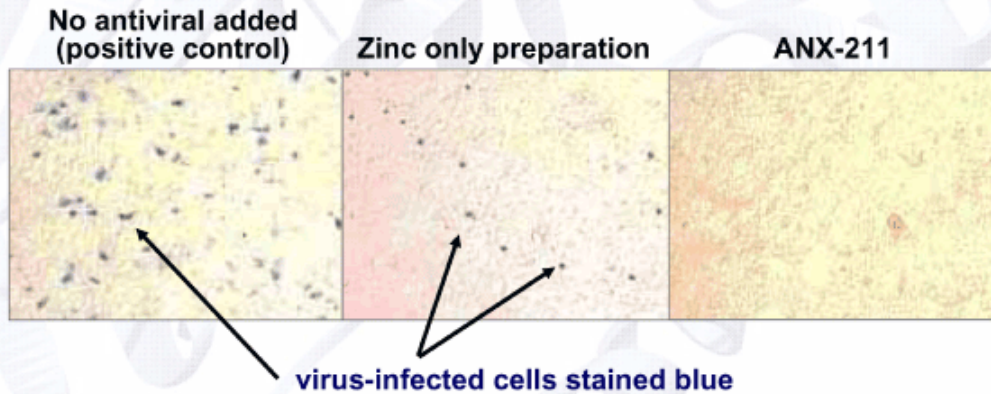
- U.S. rights licensed to TRx Pharma parent company (Oct. 06)
- \$1M license fee + milestones and 15-20% royalties on product sales
- Leading competitive US product, Zicam®, positioned for cold
- Zicam-branded cold remedy and multi-symptom cold/flu product line sold nearly \$75M in 2006
- Estimated 20-50M cases of flu and 500M cases of common cold each year in U.S.

Source: Incidence and prevalence database. Matrixx Initiatives, Inc. 2006 annual report.

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ZANAFLU Preclinical Efficacy

Zanaflu (ANX-211) has demonstrated efficacy against viruses responsible for the common cold, influenza and other respiratory tract infections in preclinical studies



HEK cells infected by adenovirus carrying β -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-015 (clarithromycin emulsion)

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-administered clarithromycin
- Clarithromycin is highly potent against a variety of aerobic and anaerobic Gram-positive and Gram-negative organisms

Clarithromycin for Injection Market:

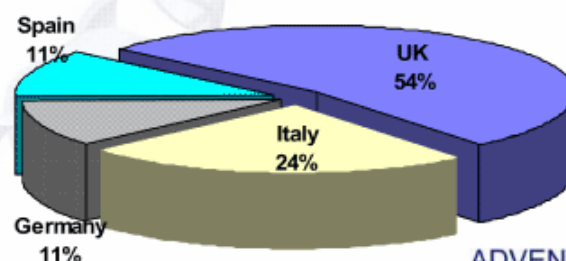
Klacid® (clarithromycin 500mg for injection, Abbott Laboratories)

Global sales: >1.9M units

Source: IMS Health, 2005

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

(% of total unit sales)



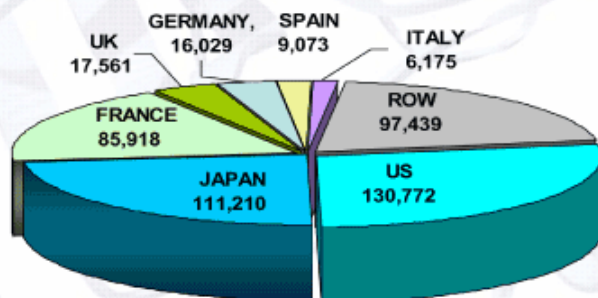
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ANX-016 (vancomycin emulsion)

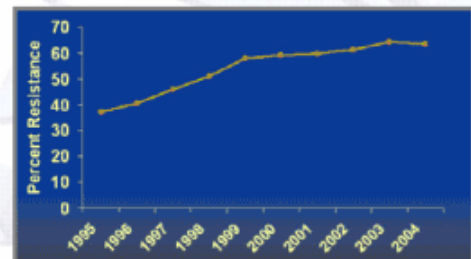
A novel emulsion IV formulation of the antibiotic, vancomycin, designed to reduce vein irritation

- Vancomycin IV Global Sales >\$450M
- ANX-016 is designed to reduce vein irritation from IV-administered vancomycin.
- 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: >\$450M Global Sales*



MRSA: an increasing threat



MRSA Among ICU Patients
1995-2004

*IMS Health, 2005 figures

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

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Leadership

Evan M. Levine, Chief Executive Officer & Director

Brown Simpson Asset Management; Dillon Read; Hambrecht & Quist

James A. Merritt, M.D., President & Chief Medical Officer

Imagine Pharmaceuticals; Introgen; Viagene; Idec Pharmaceuticals; Upjohn

Gregory P. Hanson, C.M.A., M.B.A., Chief Financial Officer, Senior Vice President

Avanir Pharmaceuticals; XXsys Technologies, L3 Communications, Caterpillar, Ford

Joan M. Robbins, Ph.D., Chief Scientific Officer, Senior Vice President

Immusol; Chiron; NCI/NIH Laboratory of Tumor Immunology & Biology

Brian M. Culley, M.S., M.B.A., Chief Business Officer, Senior Vice President

Immusol; UCSD Technology Transfer and Intellectual Property Dept.; Neurocrine Biosciences

Joachim P. H. Schupp, M.D., Vice President, Medical Affairs

ProSanos Corp.; Novartis AG

Patrick L. Keran, J.D., General Counsel, Vice President, Legal

Isis Pharmaceuticals; Heller Ehrman; Brobeck, Phleger & Harrison

Mark J. Cantwell, Ph.D., Vice President, Research & Development

Tragen Pharmaceuticals; UCSD

Michele L. Yelmene, Vice President, Regulatory Affairs

Perlan Therapeutics, Genzyme Corp., Mallinckrodt

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Jack Lief	President, CEO, Cofounder and Director, Arena Pharmaceuticals
Mark J. Pykett, V.M.D., Ph.D.	President and COO, Boston Life Sciences, Inc., Cofounder, Cytomatrix

Ambitious Clinical & Business Development Plan in 2007

- As many as 5 different product candidates in clinical development*
- U.S. launch of ZANAFLU® (ANX-211) for the 2007/2008 cold and influenza season
- Data from Phase 2b clinical trial of CoFactor in the treatment of metastatic colorectal cancer
- Anticipate filing first New Drug Application with the FDA for ANX-530 (vinorelbine emulsion)
- Continue to advance several of our product candidates through preclinical research

*Pending successful preclinical development and appropriate clearance of our Investigational New Drug Applications (IND's)

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Refining therapies for life

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