



## Deutsche Bank 34<sup>th</sup> Annual Health Care Conference

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Senior Vice President and Chief Operating Officer

May 18, 2009



# Forward-Looking Statements



This presentation will contain forward-looking statements regarding our current views and expectations for Nektar's business. Actual results may differ materially from these statements which are subject to important risks and uncertainties detailed in Nektar's filings with the SEC, including our most recent Annual Report on Form 10-K and Quarterly Report on Form 10-Q. The company undertakes no obligation to update forward-looking statements.

# Nektar Therapeutics

NEKTAR®



- Biopharmaceutical company leveraging Advanced PEG/ Polymer Conjugate technology platform to develop novel therapeutics
- Headquartered in San Carlos, CA, USA with additional operations in Alabama and India
- Publicly-traded (NASDAQ: NKTR) since 1994
- 350 employees
- Strong heritage of partnership with top biopharma companies

# Nektar: Proven Platform, Growing Pipeline and Strong Financial Position



## Powerful and Proven Platform Technology Large and Small Molecules

- Vastly improves PK/PD properties of drugs
- Broad applicability to large and small molecules
- Enabled top-selling commercial drugs with \$6 billion of current annual sales

## Robust and Diverse R&D Pipeline

- 9 clinical product candidates
- 6 preclinical programs
- 9 partnered products on market

## Dominant IP Portfolio







- Advanced polymer conjugation technology – 60 US patents issued; 500 applications pending

## Strong Business Model and Financial Position

- Proprietary drug development with steady stream of new high-value product candidates
- Potential revenue of ~ \$400 million by 2013 from partnered programs
- Strong cash position; no plans for financing

# Significant Potential Revenue from Partnered Pipeline

By 2013, Potential ~ \$400 Million Annual Revenue Base Generated By Partnered Programs

Product		Product Potential	2008	2009	2010	2011	2012	2013
Mircera		\$500M – 750M	EU Anemia \$0.5M	~\$0.5M			\$15-25M	\$25-30M
Cimzia		\$500M -1B	US Crohn's \$13.5M	US / EU RA Launch ~\$12M			\$35-45M	\$45-55M
Hematide		\$1B - 2B	\$3M	~\$4.5M	Launch		\$30-40M	\$50-75M
NKTR-061		\$500M - 1B				Launch	\$75-125M	\$150-200M
Inhaled Cipro		\$250M - 300M				Launch	\$15-20M	\$25-40M
Factor VIII & IX		\$1.5B - 2B			→			
Other product and collaboration revenue, excluding divested assets	Existing		\$48M	~\$58M			\$45M	\$50M
<b>TOTAL</b>			<b>\$65M</b>	<b>~\$75M</b>			<b>\$215-300M</b>	<b>\$345-450M</b>

Revenue potential represents total revenue opportunity and is not a financial projection discounted for market, regulatory or other risks.

# Nektar Advanced Polymer Conjugate Technology

## Early Pegylation Technology

- Sub-optimal bioavailability
- Product altered by PEG remaining attached to parent drug
- Sub-optimal bioactivity
- Limited ability to modulate properties of drug
- Does not allow for oral administration
- Not applicable to small molecules, antibody fragments, and peptides

## Early PEGylation Technology

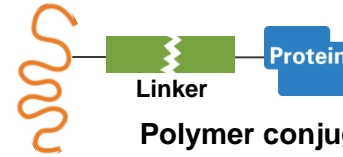
## Nektar Advanced Polymer Conjugate Technology



**Novel PEG architecture replaces Fc portion of antibody**

- Improves toxicity profile
- Extends half-life

**Antibody Fragments**



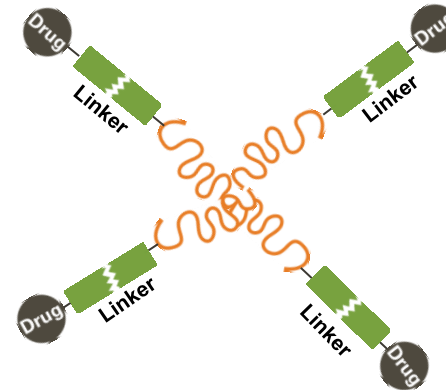
Linker

Protein

**Polymer conjugated to large molecule**

- Optimizes bioactivity by complete release of parent drug
- Programmed drug release

**Biologics, Peptides**



**Multi-arm polymer architecture with releasable linkers**

- Vastly improves PK/PD
- Optimizes bioavailability & bioactivity

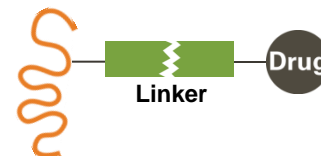
**NKTR-102, NKTR-105**



**Polymer conjugated in stable linkage to small molecule drug**

- Modulates metabolism & membrane transport
- Improves oral bioavailability
- Improves potency

**NKTR-118, NKTR-140, NKTR-171**



Linker

Drug

**Polymer conjugated to small molecule with releasable linker**

- Enables oral administration of parenteral small molecule drugs

**Oral oncolytics**

# Nektar's Advanced Polymer Conjugate Technology: Generating Novel Therapeutics Through Rational Drug Design



## ■ Improve

- PK/PD
- Half-life
- Potency
- Therapeutic Index
- Bioavailability

## ■ Modulate

- Physicochemical properties
- Metabolism
- Distribution

## ■ Reduce

- Toxicity
- Side effects
- Immunogenicity



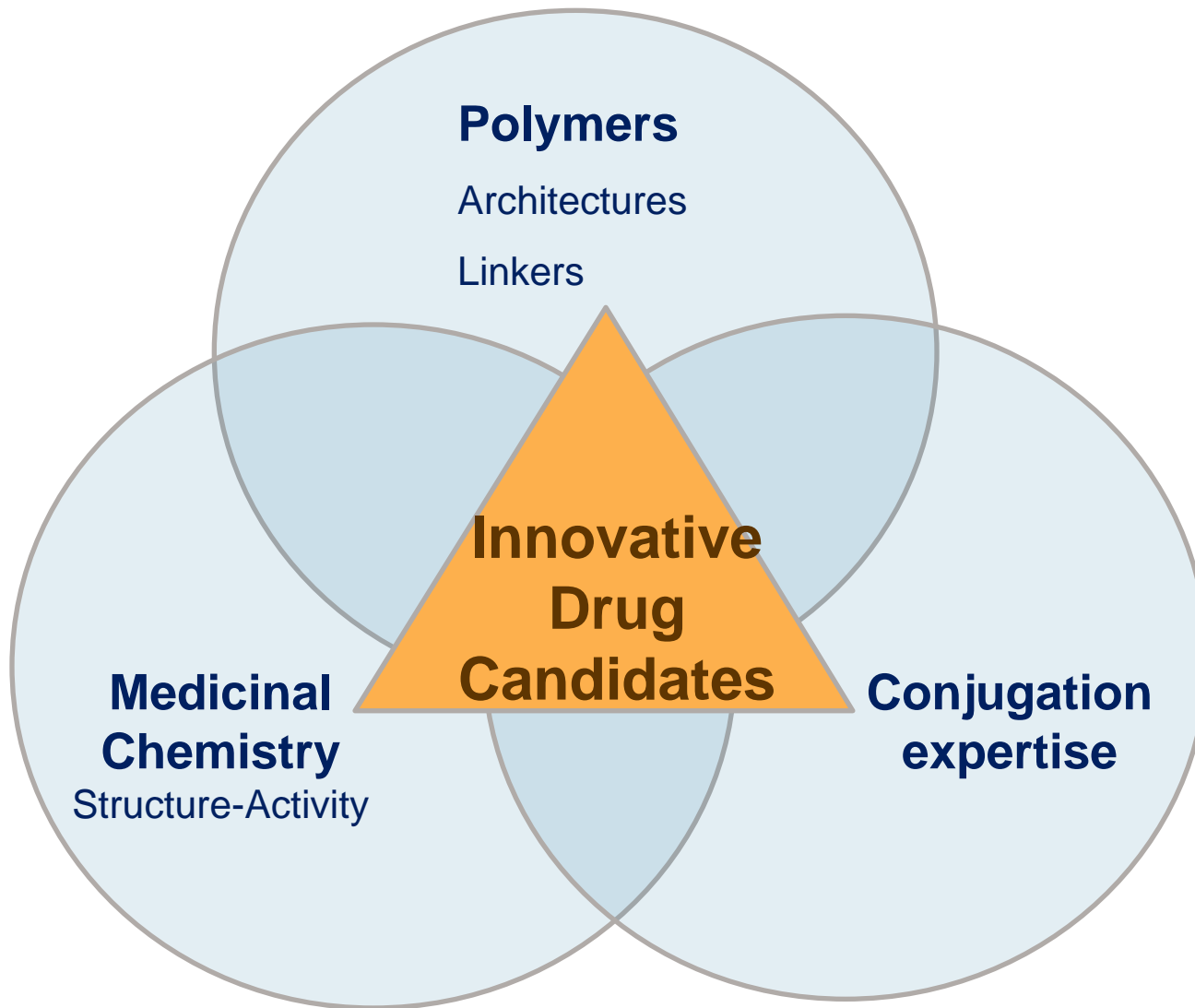
➤ **Create new drugs with optimized properties**

➤ **Rescue non-viable drug candidates**

➤ **Reposition approved products for new indications**

➤ **Applicable to small and large molecules across multiple therapeutic areas**

# Nektar's Technical Skills and Advanced Polymer Platform Combine to Enable a Diversity of Innovative Drugs



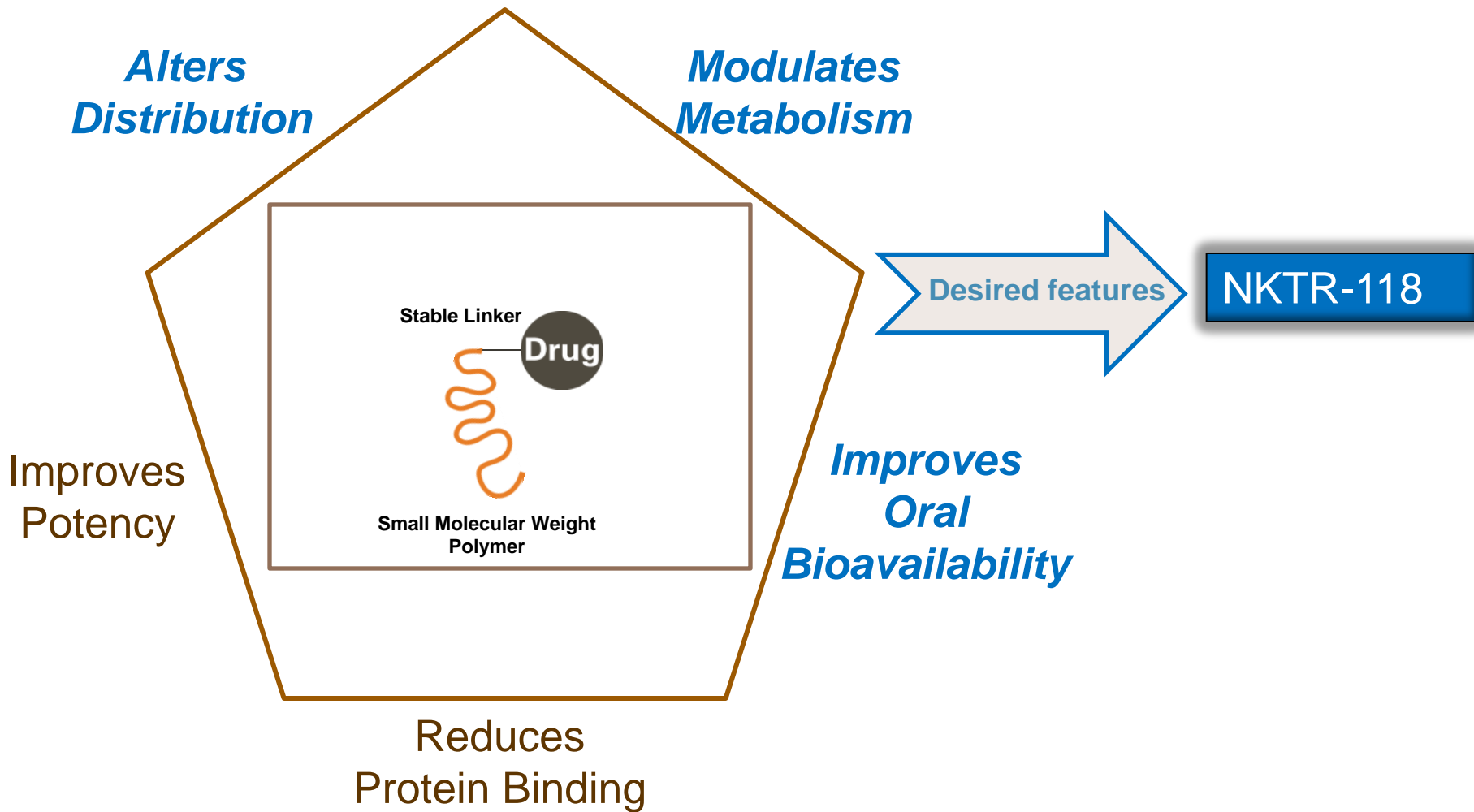
# Deep and Diverse R&D Pipeline



Annual Global Potential Revenue	Product / Indication	Phase of Clinical Development			
		Research/Preclinical	Phase 1	Phase 2	Phase 3
\$500M – 1B	NKTR-061 (Amikacin Inhale) – Partnered with Bayer / Gram-negative Pneumonias				
\$750M - 1B	Oral NKTR-118 / Opioid-Induced Bowel Dysfunction		Positive Phase 2 Data Announced		
\$1B - 2B	NKTR-102 / Metastatic Breast Cancer				Preliminary Data end of 2009
	NKTR-102 / Platinum Resistant Ovarian Cancer				Preliminary Data end of 2009
	NKTR-102 / Metastatic Colorectal Cancer Patients with KRAS mutation				
	NKTR-102 / Metastatic Cervical Cancer				
\$500 - 600M	NKTR-063 (Inhaled Vancomycin) / Gram-positive Bacteria (MRSA)				
\$1B - 2B	NKTR-105 / Solid Tumors		Data end of 2009		
\$1B - 2B	Oral NKTR-119 (Opioid Combo Product) / Analgesic				
\$750M - 1B	NKTR-140 (Protease Inhibitor) / HIV				
\$1B - 2B	NKTR-171 / Neuropathic Pain				
\$1B - 2B	NKTR-125 (Antihistamine) / Allergic Rhinitis				
	RNAi Polymer Conjugates / Multiple Indications				

Current status of development
  Status at end of 2009

# Application of Nektar's Small Molecule Advanced Polymer Conjugation Technology to Create Clinical Product Candidate



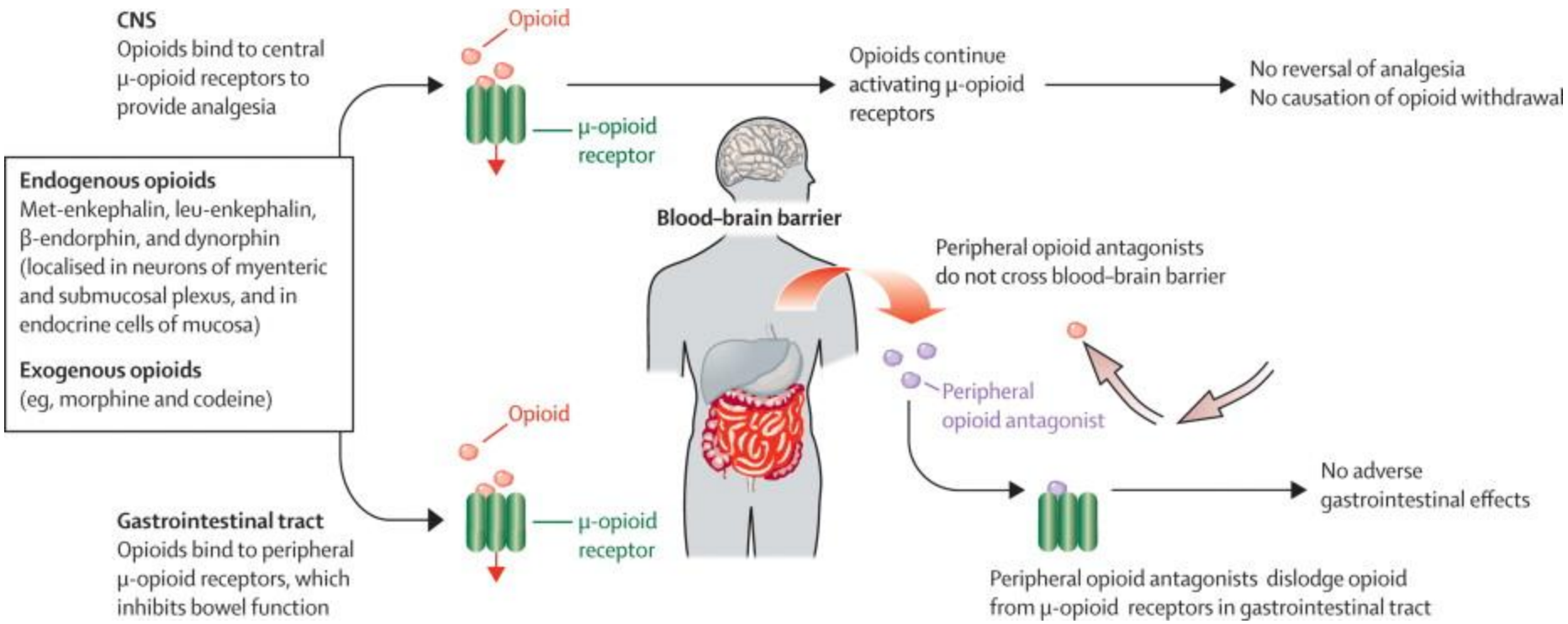
# NKTR-118 (Oral PEG-Naloxol) to Treat Opioid-Induced Bowel Dysfunction (OBD)

- Oral drug with high relative bioavailability
- Peripheral opioid receptor antagonist targets underlying cause of OBD, including opioid-induced constipation
- Preserves analgesic effect of opioid by reducing blood-barrier penetration
- Commercial opportunity for prevention and treatment >\$1 billion





# Action of Opioids and NKTR-118 in the CNS and Gastrointestinal tract



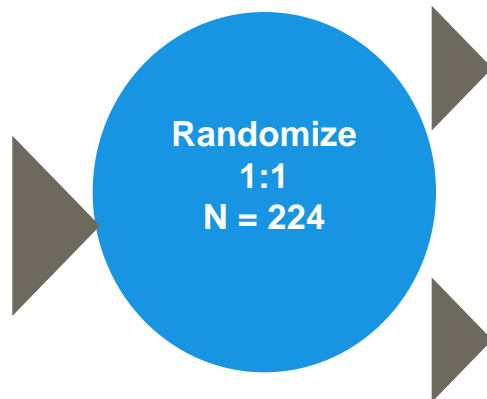
Adapted from Becker G and Blum HE, The Lancet, April 4, 2009

# Highly Statistically Significant Results Achieved in Phase 2 Study of NKTR-118

- Randomized, placebo-controlled, dose escalation study
  - ~ 50 centers in North America and Europe
- Met primary endpoint in two dose cohorts ( $p < 0.01$ )
- No reversal of analgesia or opiate withdrawal

## Study Population

- Patients on stable opioid therapy for at least two weeks
- Patients exhibiting opioid-induced constipation (OIC)
- Non-cancer and cancer patients with moderate to severe pain



Opioid Analgesic Regimen  
+ NKTR-118  
(4 Dose Cohorts)

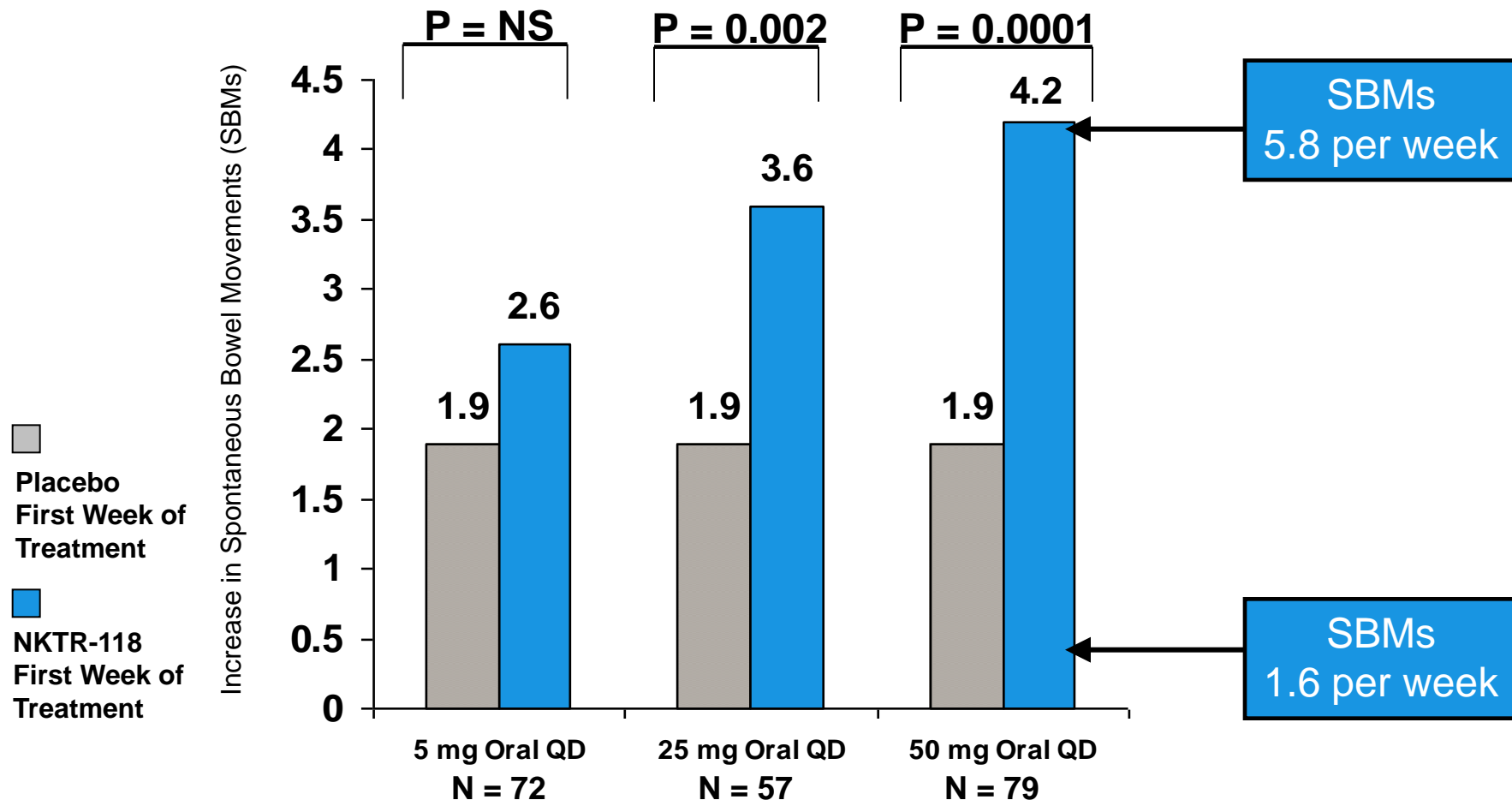
Opioid Analgesic Regimen  
+ Placebo  
(4 Dose Cohorts)

## Study endpoints:

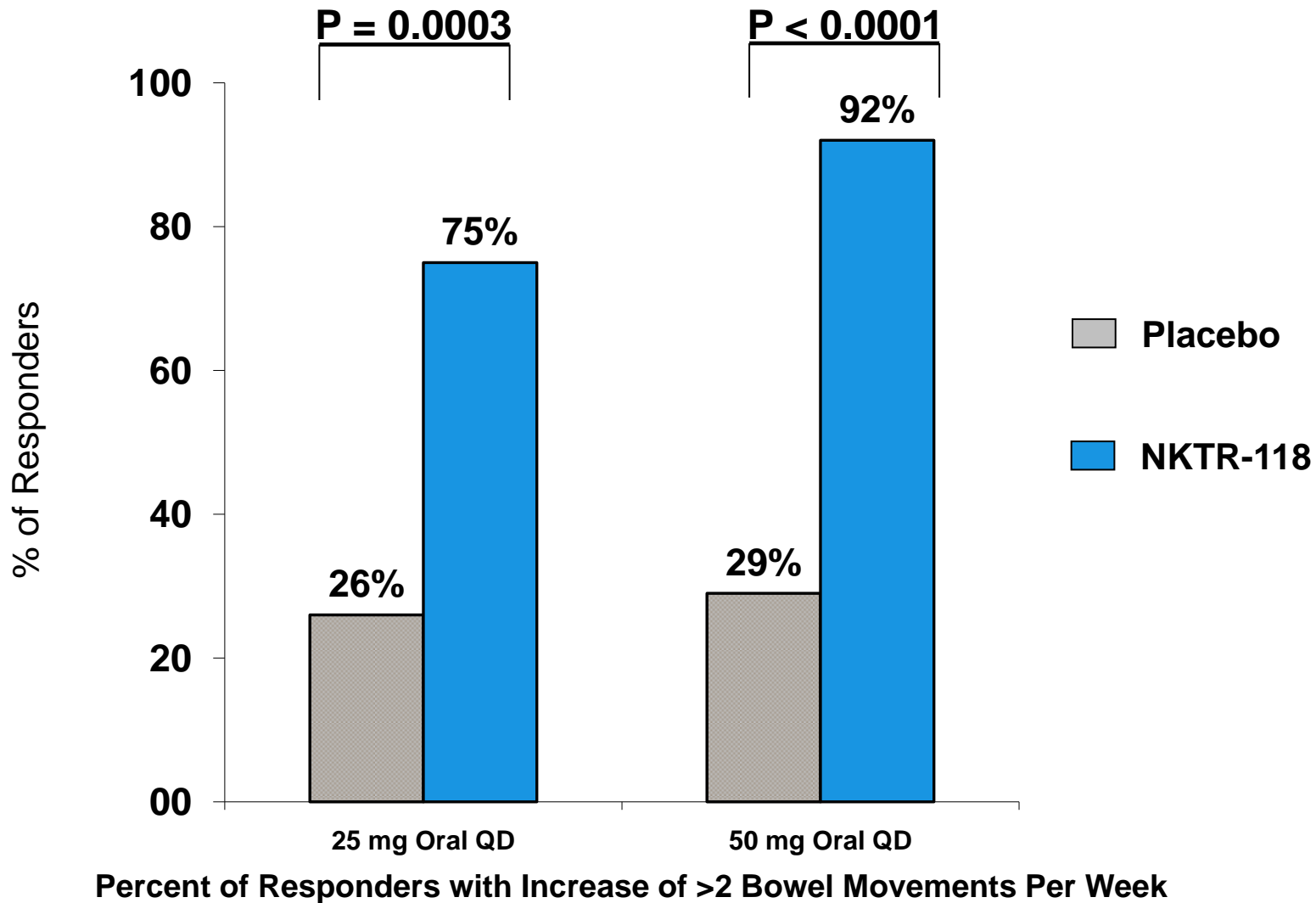
- Spontaneous Bowel Movements (SBMs) per week
- Maintaining analgesia
- Opiate withdrawal
- Safety
- Tolerability
- PK
- Quality-of-life

# Oral NKTR-118 Met Primary Endpoint at Two Dose Levels

*Treatment effect sustained over 28-day treatment period  
( $p=0.002$  for 25 mg dose and  $p<0.0001$  for 50 mg dose)*



# NKTR-118 Proportion of Responders Over 28-Day Treatment Period



# Oral NKTR-118 Met Key Secondary Endpoints



- No reversal of analgesia at 5 mg, 25 mg and 50 mg doses
  - Measured by a change in pain Numerical Rating Scale (NRS)
  - No increase in opiate use
- No opiate withdrawal at any dose
  - No change in the Clinical Opiate Withdrawal Scale (COWS)
- Most frequent side effects
  - Diarrhea, nausea and abdominal cramping
  - Most frequent in 50 mg dose cohort

# Validation of Nektar Advanced Polymer Conjugate Platform

- NKTR-118 Represents >\$1 Billion Potential Market Opportunity
- Successful PEGylation of a Small Molecule
- Significant oral bioavailability with a PEGylated drug



# Oral NKTR-119, Novel Analgesic without Opioid-Induced GI Side Effects

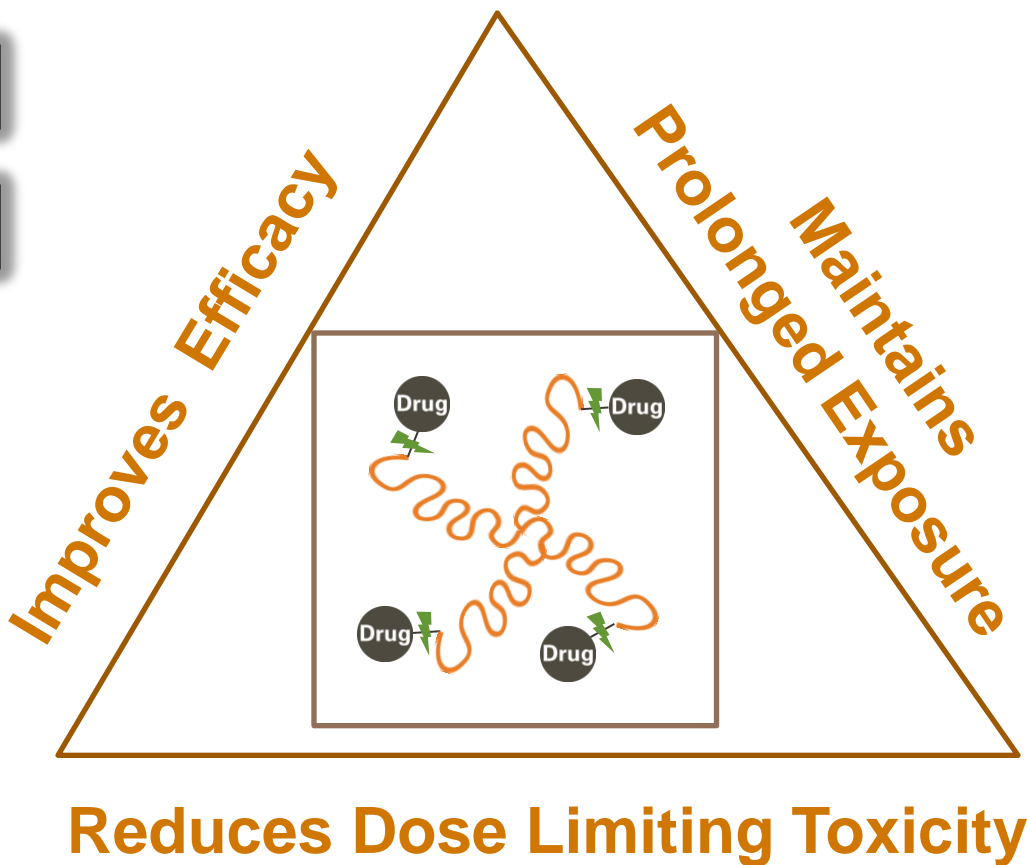


- NKTR-118 Effective With Wide Range of Opioid Doses
  - 30 – 1,000 Morphine Equivalent Units (MEUs)
- NKTR-119 Co-formulation of Various Doses of Long-acting Opioids and NKTR-118
  - Fixed dose of NKTR-118, ratio independent combination
  - Effective pain relief while maintaining normal bowel function
- Meets Significant Unmet Need
  - Over 230 million opioid prescriptions filled in US annually
  - Opioid market to grow to \$10 billion in U.S.
- Clinical program to demonstrate proof-of-principle in humans will be initiated in 2009

# Benefits of Nektar's Small Molecule Advanced Polymer Releasable Conjugation Platform

NKTR-102

NKTR-105



# NKTR-102: A Novel Oncolytic with Optimized Pharmacokinetics Profile



- Enables increased and sustained exposure of tumor to active metabolite versus irinotecan
- Significant tumor regression in Phase 1
  - 76 patients: To date, 10 patients with significant tumor regression (tumor size reduction from 30-60%)
  - Responses observed in first or second course of therapy
- Potential for superior efficacy and improvement in survival
- Commercial Opportunity > \$1 Billion

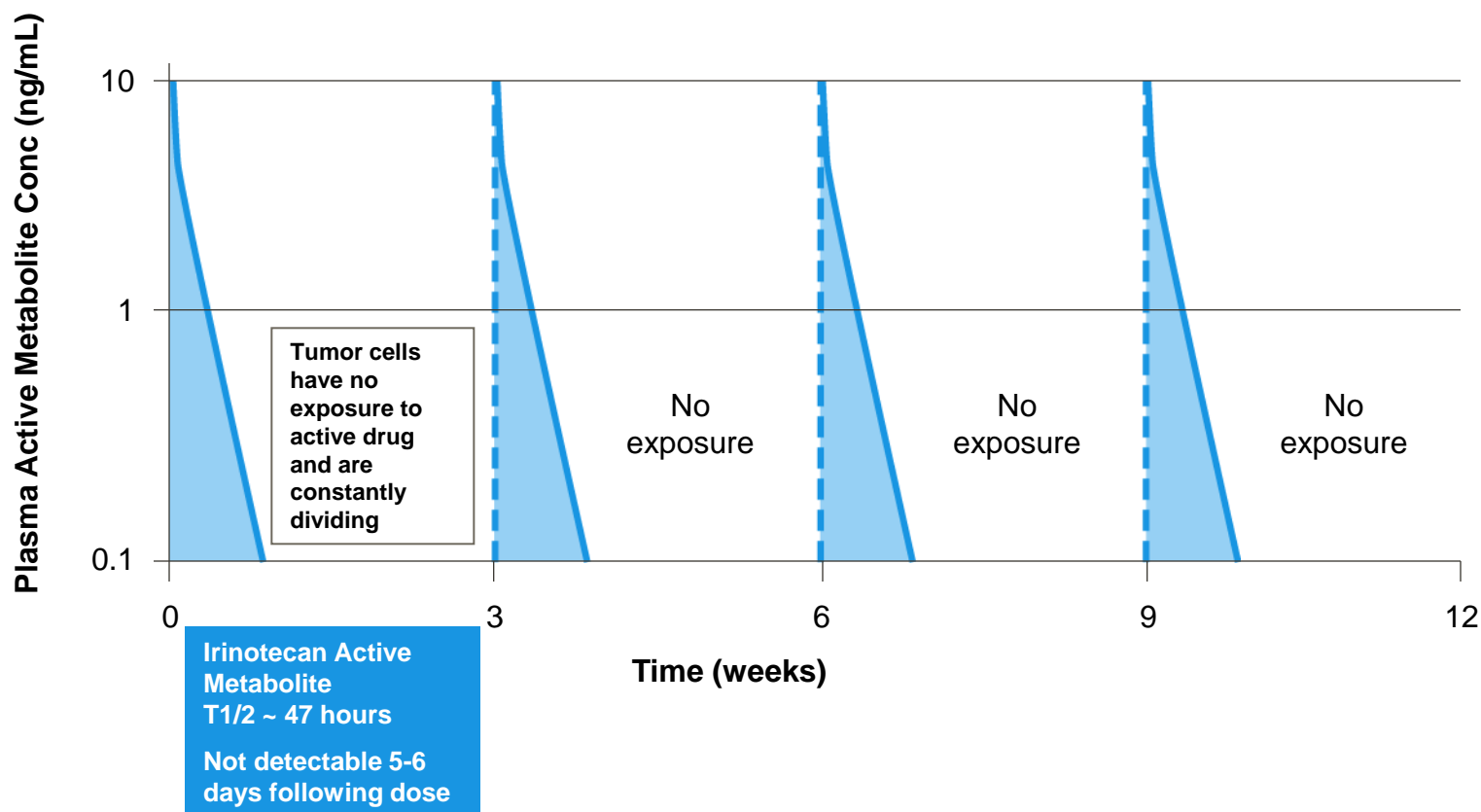


Photo of an investigational product candidate currently in clinical trials

# NKTR-102: A Superior Pharmacokinetic Profile Compared to Irinotecan



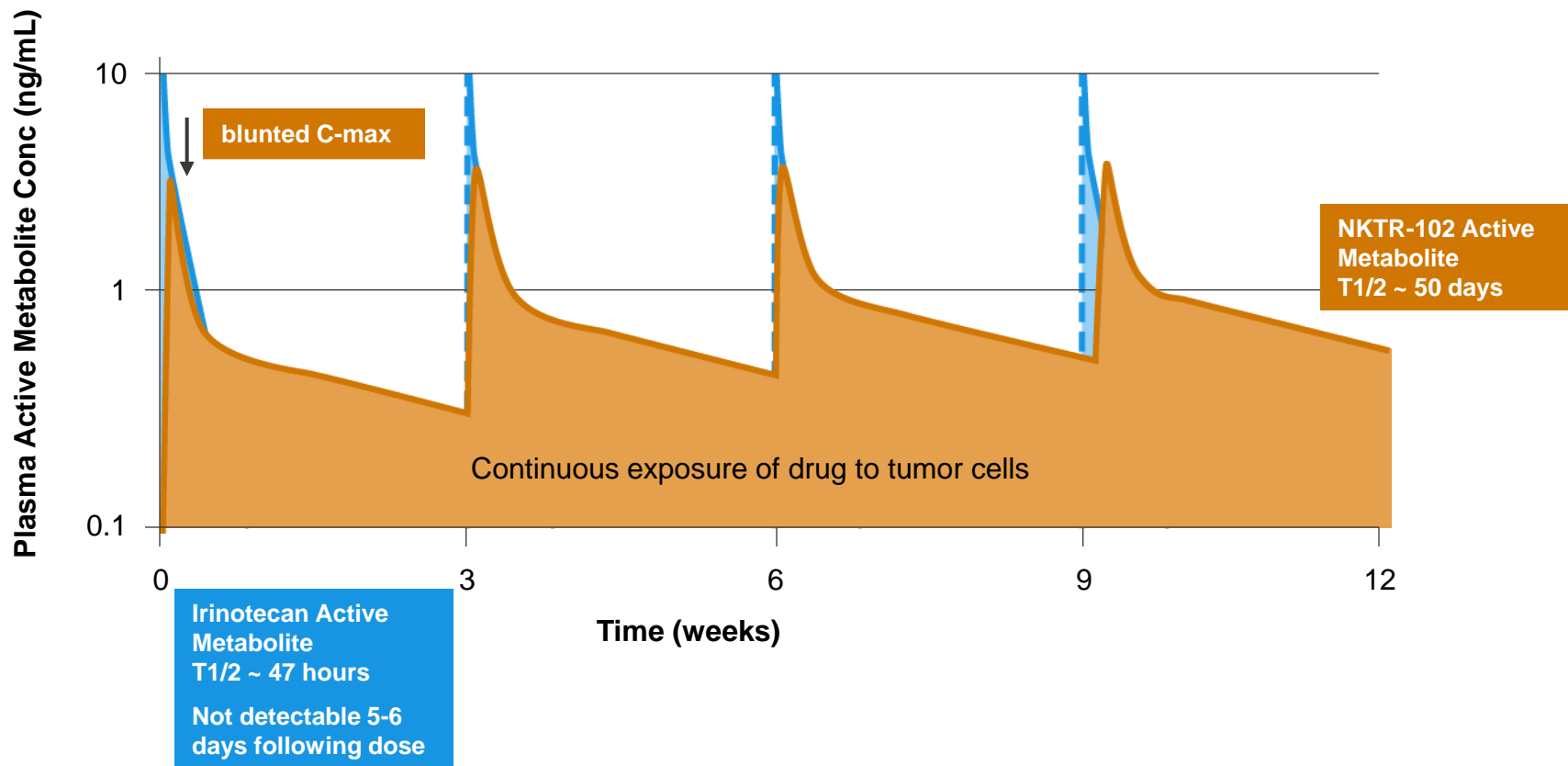
- Sustained and longer exposure to active metabolite (SN38) with lower maximum concentrations
- Blunted C-max for NKTR-102 results in marked reduction in early diarrhea



# NKTR-102: A Superior Pharmacokinetic Profile Compared to Irinotecan



- Sustained and longer exposure to active metabolite (SN38) with lower maximum concentrations
- Blunted C-max for NKTR-102 results in marked reduction in early diarrhea



# NKTR-102: Dramatic Multiple Partial Responses Observed in Phase 1 Study (N=76)

## To Date, 10 Patients with Measurable Tumor Reduction

Tumor	RECIST Response and/or Tumor Reduction	# Courses to Response	Prior Agents
Breast (triple negative)	PR: Tumor reduction of 41%	2	Bevacizumab, Doxil, docetaxel, carboplatin, tamoxifen, paclitaxel, cisplatin
Ovarian	<i>u</i> PR: Tumor reduction of 48% CA-125 Marker reduction	2	Investigational agent, docetaxel, carboplatin, tamoxifen, paclitaxel, cisplatin
Bladder	PR: Tumor reduction of 53%	2	Cisplatin, gemcitabine, paclitaxel
Maxillary sinus (neuroendocrine)	PR: Tumor reduction of 45%	2	None
Colon	PR: Tumor reduction of 51%	2	5-FU/leucovorin, oxaliplatin, bevacizumab, irinotecan, cetuximab, capecitabine
Pancreatic (neuroendocrine)	PR: Tumor reduction of 36%	8	Gemcitabine, pemetrexed, Doxil, etoposide, carboplatin, paclitaxel, capecitabine, investigational agent
Small cell lung	PR: Tumor reduction of 56%	2	Investigational agent, gemcitabine, topotecan, carboplatin, etoposide, cisplatin
Rectal	<i>u</i> PR: Tumor reduction of 34%	2	5-FU/leucovorin, oxaliplatin, bevacizumab, panitumumab, bevacizumab
Non small cell lung	<i>u</i> PR: Tumor reduction of 52%	1	Pemetrexed, docetaxel, carboplatin
Cervical	PR: Tumor reduction of 53%	2	Cisplatin, gemcitabine, investigational agent

# Positive Preliminary Results from Ongoing Phase 2a Study of NKTR-102 plus Cetuximab



Tumor	RECIST Response/ Tumor Reduction/Biomarker Activity	Prior Agents
Rectal	PR: 100% disappearance of target lesions; 1 residual non-target lesion (7 mm)	FOLFOX + bevacizumab capecitabine
Gastric	uPR: 35% reduction in target lesions	docetaxel, oxaliplatin
Colon	uPR: 55% reduction in target lesions	capecitabine + irinotecan + cetuximab, FOLFOX + bevacizumab
Pancreatic	Symptomatic improvement >90% Reduction in CA-19-9 Marker	gemcitabine

**4 Responses out of 12 Patients at NKTR-102 100 mg/m<sup>2</sup>**

# NKTR-102 Phase 2 Clinical Studies Underway



Indication	Study	Number of patients	Status
Second-line colorectal cancer in patients with the KRAS mutation	NKTR-102 vs. irinotecan Randomized, head-to-head superiority trial	174 (target accrual)	Dosed patients 2/2009
Metastatic platinum-resistant ovarian cancer	NKTR-102 Single agent	55 – 70	Dosed patients 12/2008
Metastatic breast cancer (prior taxane treatment)	NKTR-102 Single agent	55 - 70	Dosed patients 1/2009
Metastatic cervical cancer	NKTR-102 Single agent	55 - 70	IRB approval 12/2008

# NKTR-105: Next Promising Oncolytic in Phase 1 Clinical Study in Cancer Patients

- Leverages Nektar pro-drug approach to develop differentiated PEG-docetaxel
  - Enables increased and sustained exposure of tumor to docetaxel
  - Demonstrated superior efficacy in multiple tumor models
- Neutropenia in animal models not observed
  - Dose-limiting toxicity of docetaxel is myelosuppression
- Commercial Opportunity
  - \$1-2 billion

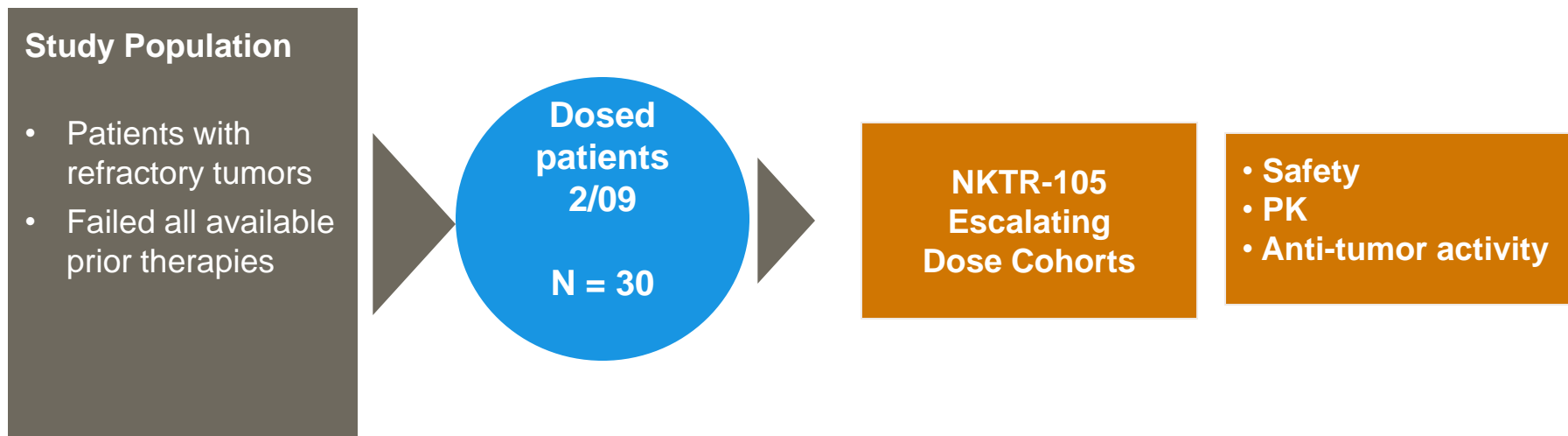


Photo of an investigational product candidate currently in clinical trials

# NKTR-105: Phase 1 Clinical Study in Cancer Patients Initiated Early 2009 (N=30)



- First cohort enrolled in Phase 1 clinical trial
  - Required no pre-treatment with corticosteroids
  - No evidence of neutropenia in patients to-date
  - No serious adverse events to-date



# Dominant Patent Estate in Early and Advanced Polymer Conjugate Technology and Therapeutics



**60 Issued U.S. patents and 500 applications pending**

Technology IP	Chemistry & Delivery IP	Manufacturing IP	Therapeutic Modalities and Molecules
Membrane exclusion	Linker Chemistry	Manufacturing	Small Molecules
Increasing potency through e.g., PEGylation		Process development	Proteins/Peptides/ Antibody Fragments
Metabolism and bioavailability control	Branched/ Multi-arm architecture	Scale-up	Nucleic Acids
Pro-drug/releasable conjugation	Attachment chemistries	Commercially validated manufacturing	
Next Generation PEG and other polymer conjugates		Reagents	
Reducing immunogenicity	Synthetic approaches	Conjugates	

# Dominant Patent Estate in Early and Advanced Polymer Conjugate Technology and Therapeutics



**60 Issued U.S. patents and 500 applications pending**

## Small Molecules

Dominant IP position in polymer conjugation of small molecules

Hundreds of small molecules covered includes:

- Oncolytics
- Pain management and analgesics
- Anti-depressants
- Protease inhibitors
- Anti-histamines
- Anti-hypertensives

## Proteins/Peptides/ Antibody Fragments

Dominant IP position for polymer conjugation of large molecules

Hundreds of proteins, peptides, and other large molecules covered:

- Cerezyme
- Biphalin
- Lysostaphin
- GLP-1
- GLP-2
- GM-CSF

## Nucleic Acids

Polymer conjugate-based delivery of nucleic acids

Coverage includes:

- siRNAs
- dsRNA
- microRNAs
- shRNAs

# Strong Financial Position

- Ended Q1 2009 with \$325.3 million in cash
- 2009 Non-GAAP cash used in operations ~ \$80 Million
  - Includes Significant Clinical Investment of more than \$65 Million
- Year-end 2009 cash forecast ~ \$275 Million
  - Does not include cash from any new partnerships



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