NEKTAR

Cowen and Company 32nd Annual Healthcare Conference

Robert Medve, MD

Chief Medical Officer

March 6, 2012

Forward-Looking Statements

- This presentation will include forward-looking statements regarding our technology platform, drug candidates, clinical plans and goals, and market projections. Actual results could differ materially and are subject to important risks detailed in Nektar's filings with the SEC, including our Form 10-K filed on February 29, 2012. We undertake no obligation to update forward-looking statements.

Nektar: Strong Foundation for Continued Growth

Potential for Four Phase 3 Pipeline Programs by Year-End

- Naloxegol for OIC - AstraZeneca on track for mid-2013 filings in US & EU
- NKTR-102 for metastatic breast cancer - Phase 3 study initiated Dec 2011
- NKTR-061 for pneumonia - Bayer target start 2H 2012
- BAX 855 for hemophilia A - Baxter initiated Phase 1 Jan 2012

Proven Technology Platform Driving New Clinical Programs

- NKTR-181 for chronic pain - Target start of Phase 2 mid-2012
- NKTR-192 for acute pain - Target start of Phase 1 end of Q1 2012
- New Nektar IND candidate in 2012

Core Assets for Future Growth

- Multiple preclinical programs - anti-infectives, neuropathic pain, oncology, metabolic diseases
- Strong and unique manufacturing base
- Two royalty-bearing collaborations with upcoming PDUFA dates

Naloxegol (NKTR-118)
Once-Daily Oral Tablet to Treat Chronic OIC

- **Comprehensive Phase 3 Program underway**
  - AZ on track for regulatory filings in mid-2013 in US and EU

AstraZeneca

NEKTAR

- **For naloxegol, Nektar eligible for up to:**
  - $95 million in milestones upon US/EU acceptance of filings
  - $140 million in launch milestones in those regions
  - $375 million in sales milestones at certain commercial levels
  - Significant, escalating double-digit royalties

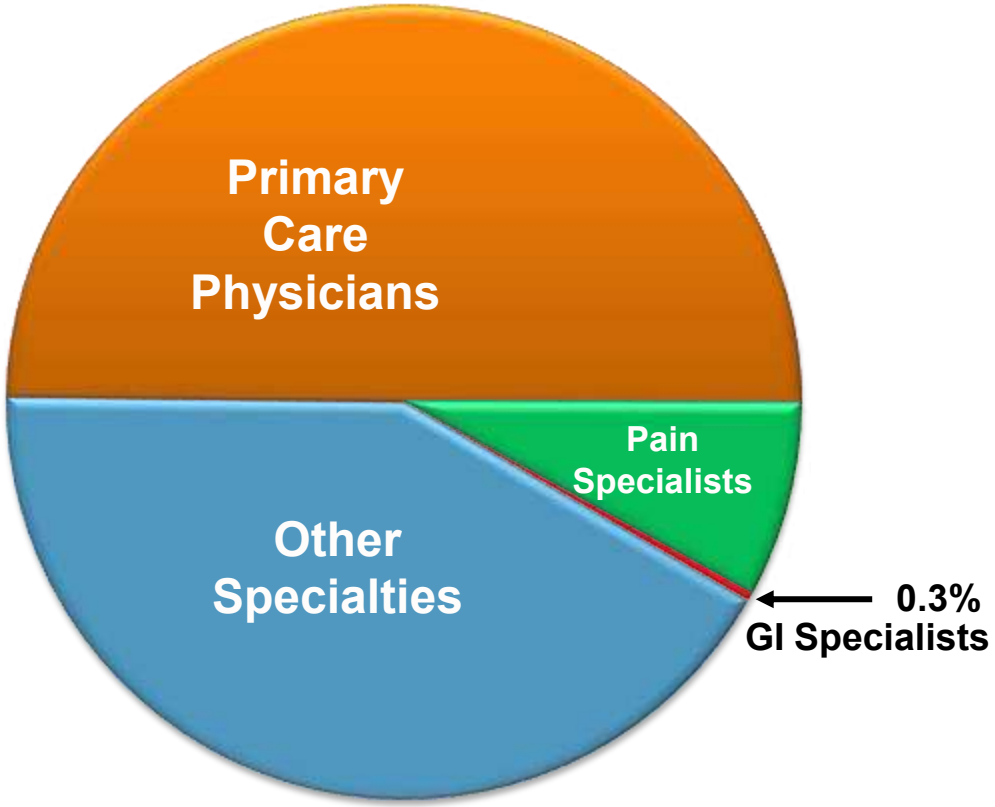
- **AZ responsible for all clinical, regulatory, CMC, commercialization for naloxegol**

1. IMS Health 2. Panchal et al. Int J Clin Pract. 2007;61(7): 1181-1187. 3. Bell T, et al. J Pain. 2007;8(4):s71. Abstract 882. 4. Bell T, et al. J Pain. 2007;8(4):S75. Abstract 897.; Photo source: Astrazeneca

AstraZeneca: Strong Position in Primary Care

- Constipation is common and debilitating side effect of opioid treatment
- ~50% of patients get OIC, significantly impacting quality of life and increasing healthcare utilization

250 Million Opioid Prescriptions Written Annually in the U.S.
By Type of Prescriber[1]



1. 2010 IMS Health and Thomas, J. Opioid-Induced Bowel Dysfunction. *Journal of Pain and Symptom Management*. 2008;35(1):103-113.

Global and Comprehensive Phase 3 KODIAC Program for Naloxegol for Chronic Use in OIC

Naloxegol (NKTR-118) Clinical Studies	Target Enrollment	Status
12-Week Efficacy and Safety in Patients With Non-cancer Pain and OIC	**630**	**Recruiting**
12-Week Efficacy and Safety in Patients With Non-cancer Pain and OIC	**630**	**Recruiting**
52-Week Long-Term Safety NKTR-118 in Patients With Non-cancer-related Pain and OIC	**1,135**	**Completed Recruitment**
12-week Extension of Phase III Efficacy and Safety Study of NKTR-118 in Patients With Non-cancer Pain and OIC	633	Recruiting
4-Week Efficacy and Safety in Relieving OIC in Patients With Cancer-related Pain	336	Recruiting
PK of NKTR-118 in Patients With Impaired Hepatic Function	24	Recruiting
Single and Multiple Ascending Dose Study for NKTR-118 and Cross-over Study to Investigate Food Effect in Japanese Healthy Subjects	50	Completed
Placebo-controlled Study to Assess Effect of Single Oral Dose of NKTR-118 on QTc Interval in Healthy Male Subjects	45	Completed
PK of NKTR-118 in Subjects With Renal Impairment Compared to Normal Renal Function	32	Completed
Relative Bioavailability of NKTR-118 in Three Formulations in Healthy Subjects	21	Completed
ADME Study With Single Oral Administration of NKTR-118	6	Completed

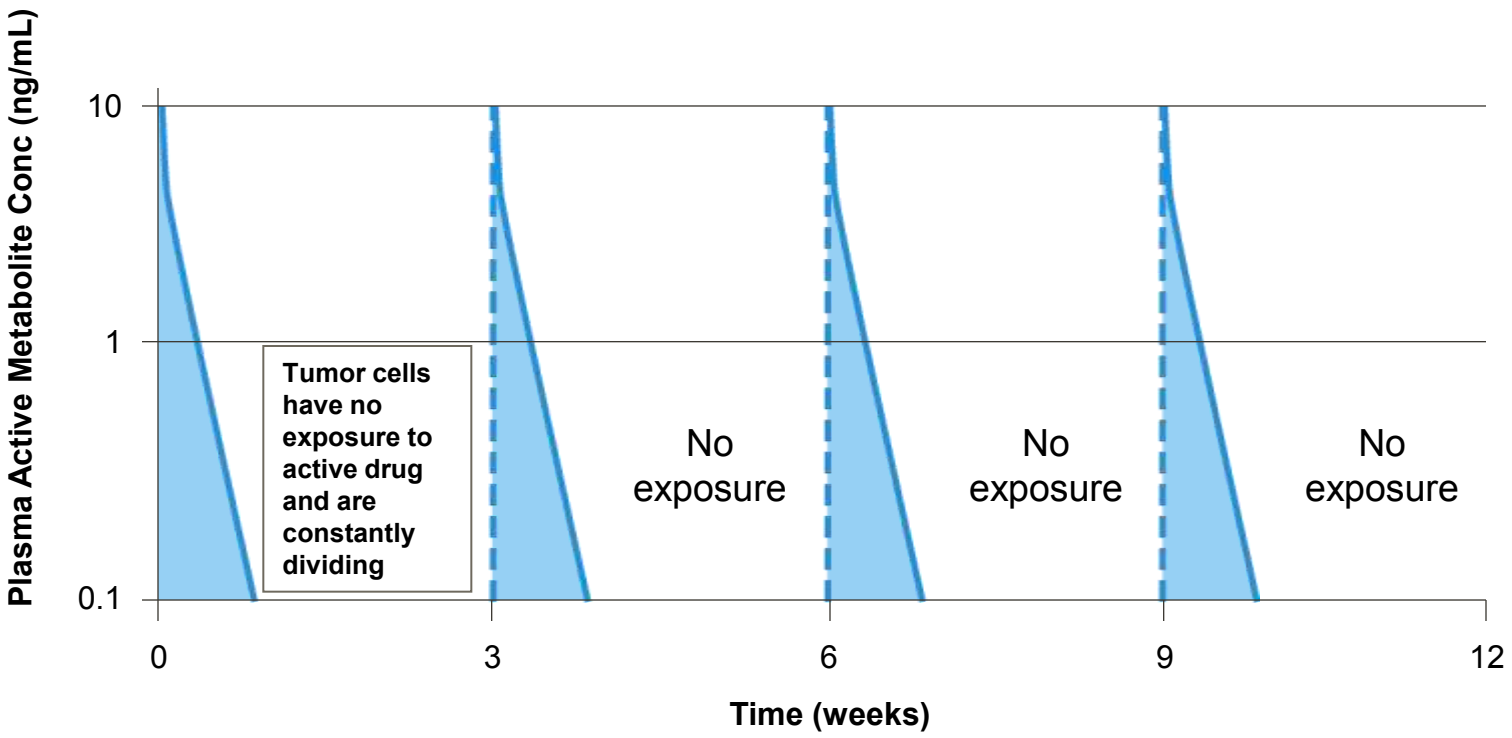
Source: clinicaltrials.gov as of November 2011

NKTR-102
A Next-Generation Topoisomerase I Inhibitor

- **Topo I inhibition is highly effective in solid tumors**
- **Optimized pharmacokinetic profile**
  - **Lower C-max and extended half-life**
- **Targets tumor tissue through EPR effect**
- **High response rates in advanced disease and poor prognosis tumors**
- **Development program in multiple tumors**
  - Phase 3 BEACON registration study ongoing in metastatic breast cancer
  - Phase 2 expansion data in platinum-resistant ovarian cancer in April 2012
  - Continuing development of 102 in combination with 5-FU in colorectal cancer (standard of care)
- **Commercial Opportunity: >$1 Billion**

Irinotecan and Most Chemotherapies Have Poor PK Profiles

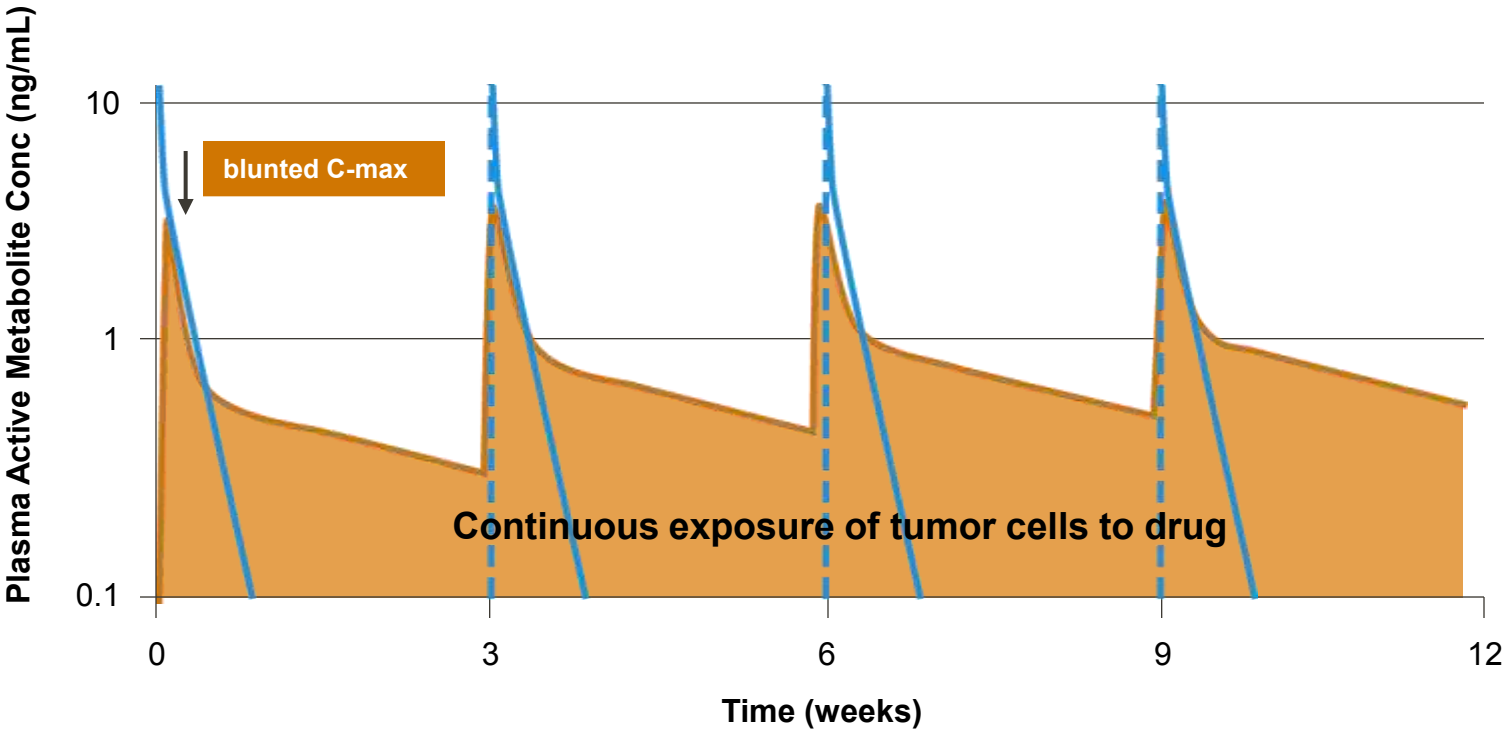
- Irinotecan active metabolite has half-life of ~47 hours
- Not detectable 5-6 days following dose



Source: ASCO 2011 Breast Cancer Annual Meeting, Garcia et. al.

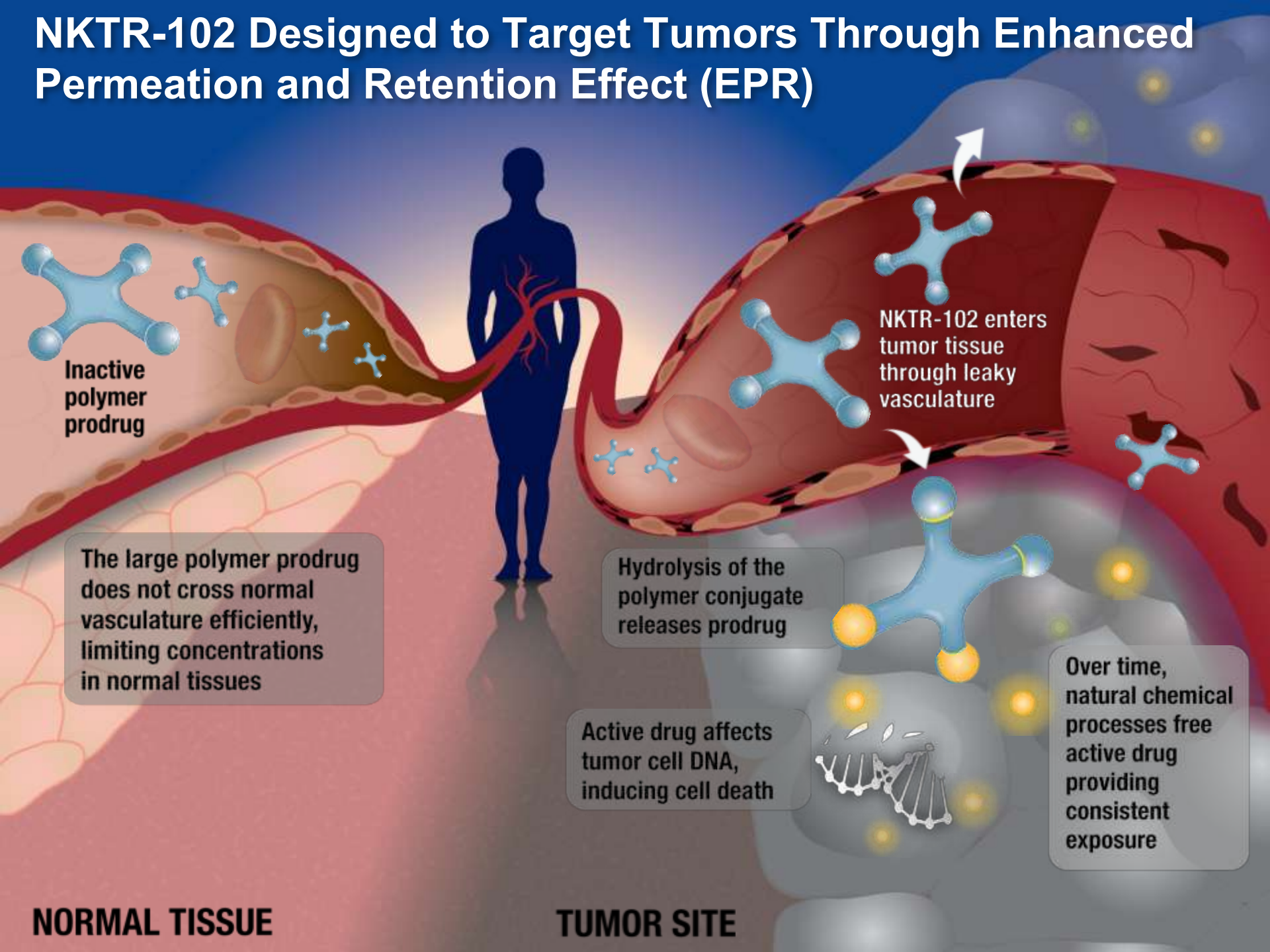
NKTR-102 Significantly Increases and Prolongs Metabolite Exposure in All Patients

- NKTR-102 has active metabolite with half-life of ~50 days
- Continuous long-term exposure with markedly reduced peak concentration



Source: ASCO 2011 Breast Cancer Annual Meeting, Garcia et. al.

NKTR-102 Designed to Target Tumors Through Enhanced Permeation and Retention Effect (EPR)



NKTR-102: Highly Active Single Agent with New Mechanism of Action in Metastatic Breast Cancer

The Challenge of Treating Metastatic Breast Cancer:

Emergence of Resistance with Existing Treatments

- Few options for metastatic breast cancer patients with late stage disease
- Microtubule inhibitors share a common mechanism leading to cross-tolerance and overlapping side effect profile
- In Phase 2, NKTR-102 had excellent activity as single agent in breast cancer patients with poor prognosis

Currently no topoisomerase-1 inhibitors in development or approved for the treatment of breast cancer

BEACON Phase 3 Registration Study of NKTR-102 in Women with Metastatic Breast Cancer

BEACON

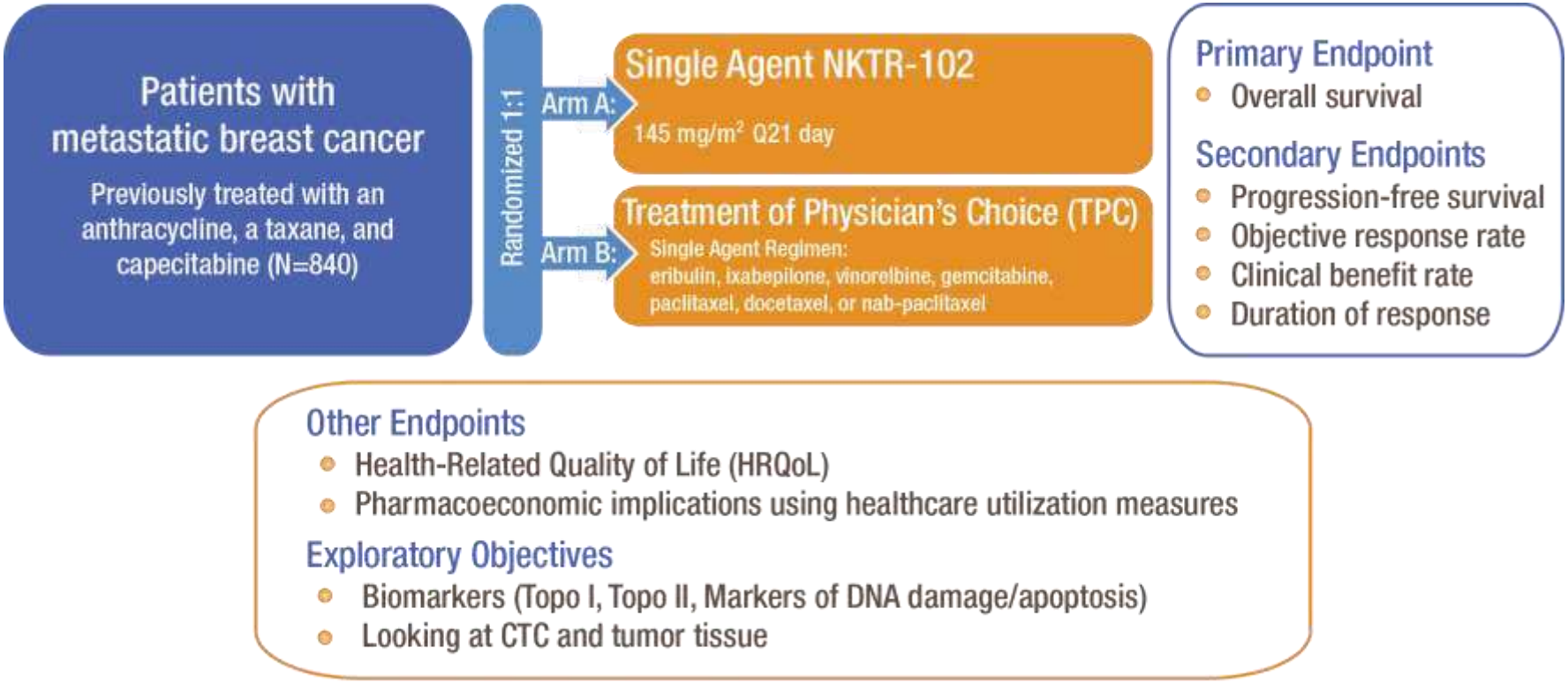
BREAST CANCER OUTCOMES WITH NKTR-102

- **NKTR-102 highly active across all poor prognosis subsets in Phase 2**
- **BEACON study patients include HER2+, HER2-, and Triple Negative**
- **First patient dosed in December 2011**
- **60 sites initiated to-date out of 150 total sites worldwide**
- **Agreement with FDA and EMA on study design**

BEACON Phase 3 Registration Study of NKTR-102 in Women with Metastatic Breast Cancer

BEACON

BREAST CANCER OUTCOMES WITH NKTR-102

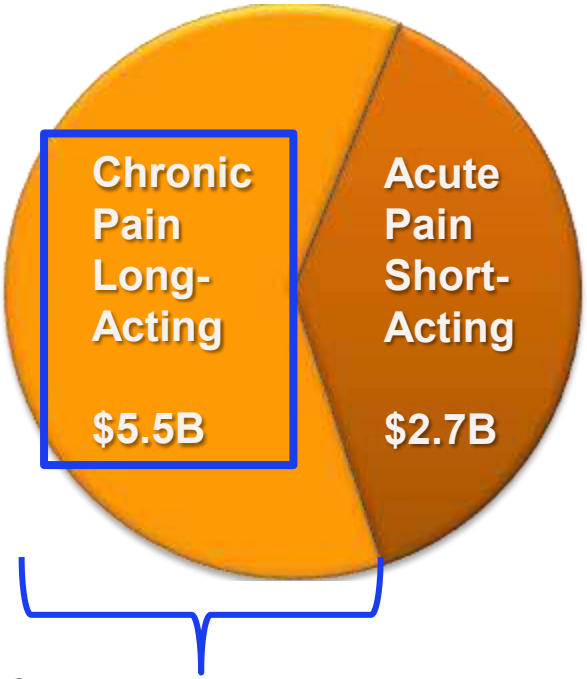


NKTR-102 in Platinum-Resistant Ovarian Cancer

- Ovarian cancer landscape dramatically changed as a result of Doxil shortage
- To date, a total of 170 women with platinum resistant ovarian cancer treated with NKTR-102
- Enrolled 94 of 110 planned patients in the expansion Phase 2 study in women with platinum-resistant/refractory ovarian cancer with prior Doxil
- Results from expansion study will guide development strategy and final regulatory strategy in ovarian cancer
- Topline response rate results from expanded study at Nektar R&D Day on April 16th

NKTR-181
New Opioid Molecule for Chronic Pain

US 2010 Opioid Sales Revenue > $8 Billion*



Chronic pain market includes:
- Neuropathic pain
- Fibromyalgia
- Osteoarthritis
- Chronic back pain

NKTR-181 designed to target <u>chronic pain</u> market with novel opioid:

- Slow rate of entry into CNS designed to:
  - Reduce abuse liability
  - Reduce drowsiness
  - Reduce respiratory depression
- Long-acting profile
- Properties inherent to molecule

Source: IMS Health 2010, Does not include IV or liquid; IMS NDTI USC5 codes and top DIAG 4 drug codes applied to NSP

Prescription Opioid Abuse Presents a Major Health Problem

Current Formulation Approaches to Abuse Deterrence

Time Release Deterrent Coatings

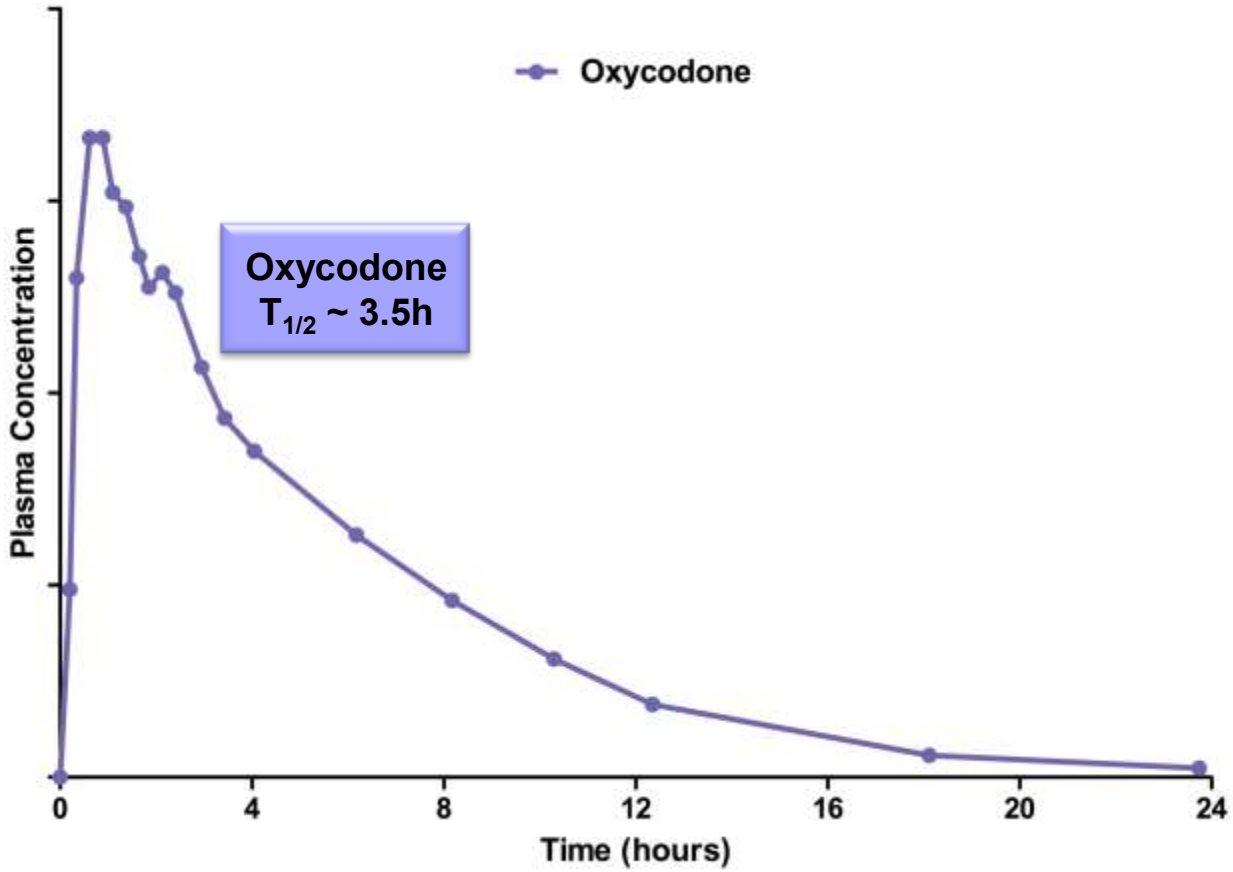
Gummy Pills to Inhibit Crushing

Tamper-Proof Formulations with Antagonist Cores

NKTR-181

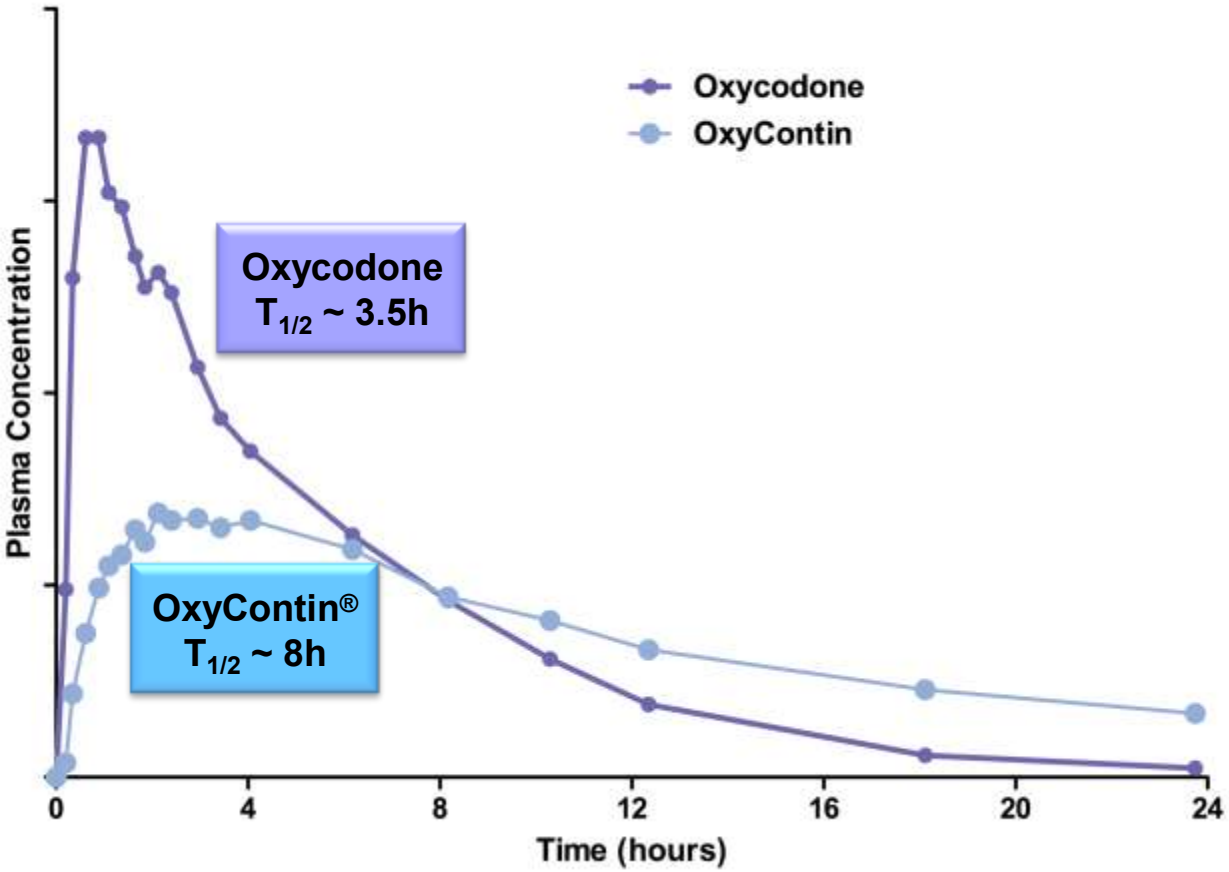
- **NKTR-181 is a new molecular entity. It can't be converted to a rapid-acting, more abusable form of opioid**
  - **Not a re-formulation, coating, gel or physical co-formulation**
  - **Lab and kitchen chemistries can't generate active free opioids from NKTR-181**
- **NKTR-181 is designed to have a slow rate of entry into the CNS to reduce euphoria and limit abuse**

Oxycodone Has Rapid Rise in Plasma Concentration and Rapid Entry into Brain Causing Euphoria



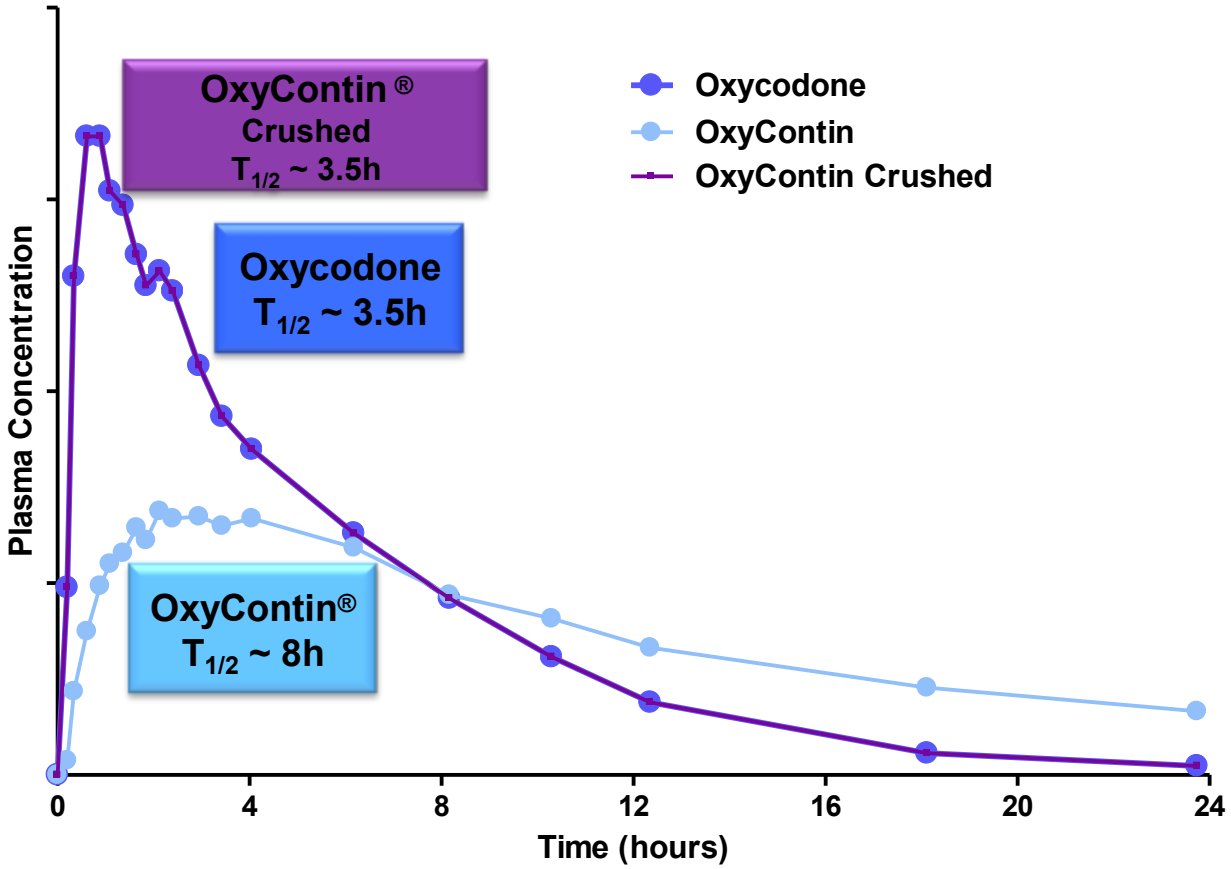
Sources: Nektar Therapeutics, NKTR-181 Phase 1 Single Ascending Dose Study; Mandema et al., 1996; Kharash et. al, Clinical Pharmacology and Therapeutics, 2006

Oxycontin® Has Extended Long-Acting Profile and Half-Life of 8 Hours

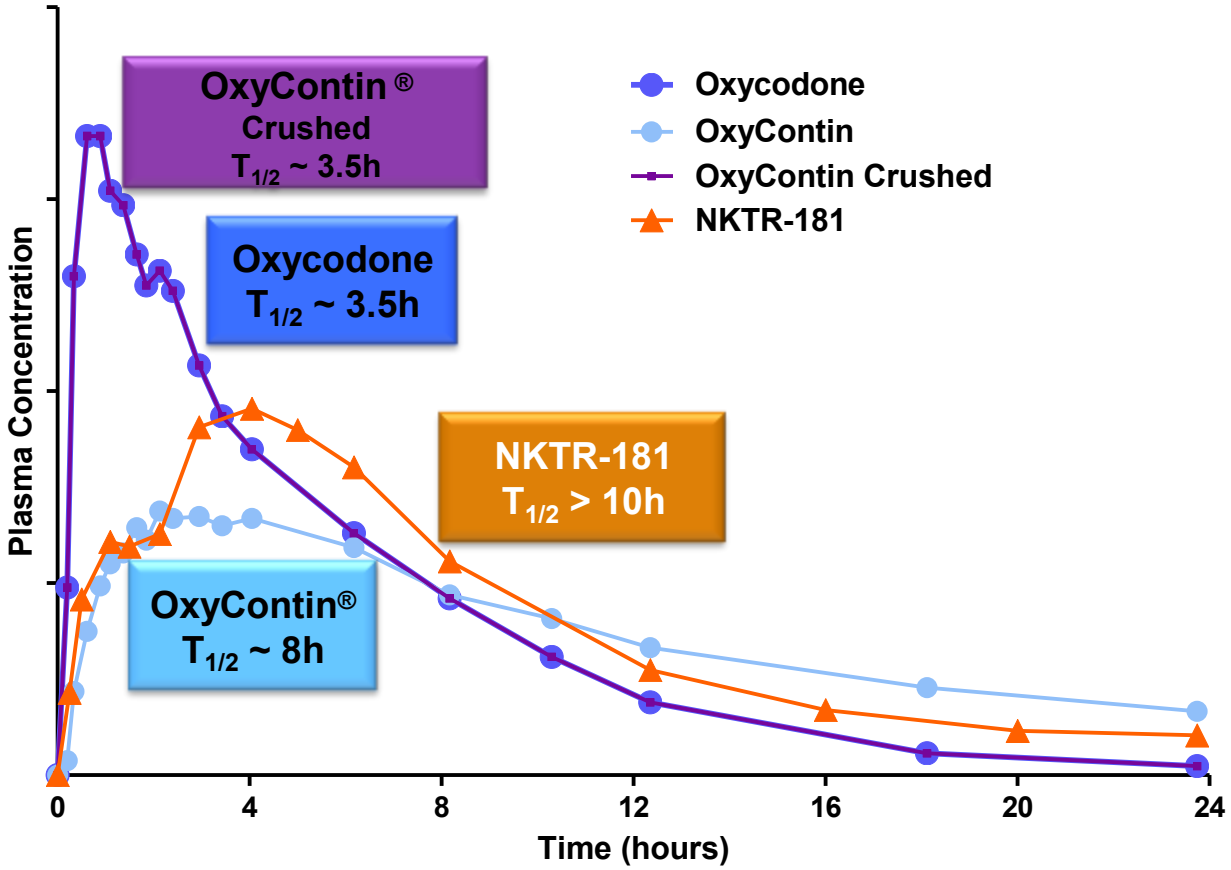


Sources: Nektar Therapeutics, NKTR-181 Phase 1 Single Ascending Dose Study; Mandema et al., 1996; Kharash et. al, Clinical Pharmacology and Therapeutics, 2006

Oxycontin® Crushed is Identical to Oxycodone

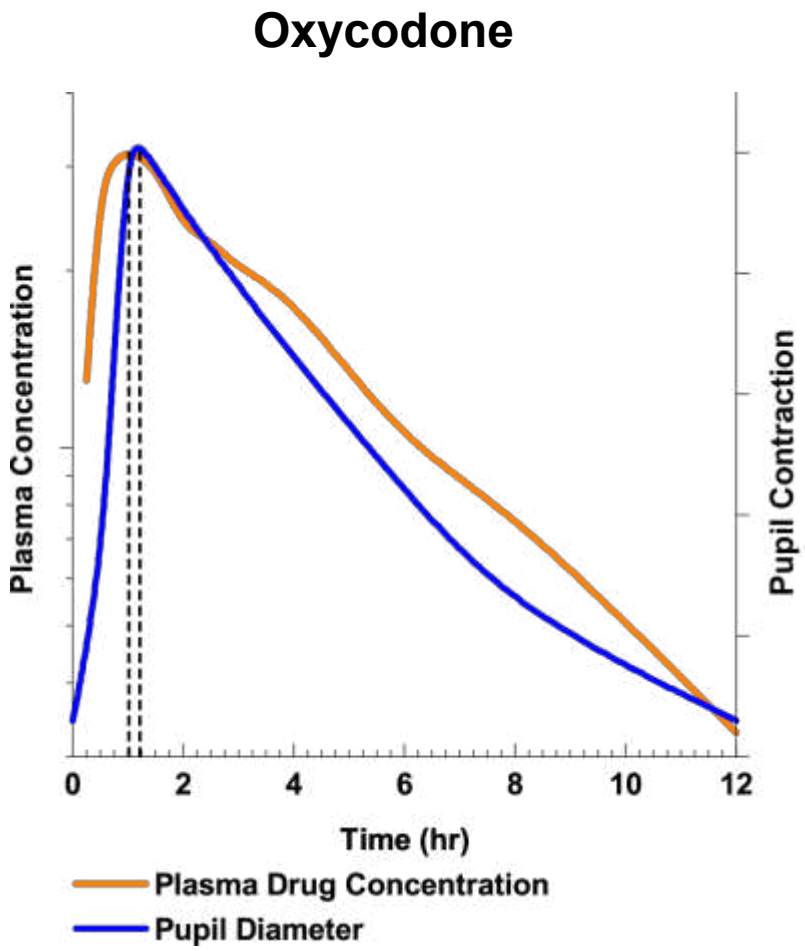


NKTR-181 Molecule Achieves Long-Acting Plasma PK Profile in Phase 1



Sources: Nektar Therapeutics, NKTR-181 Phase 1 Single Ascending Dose Study; Mandema et al., 1996; Kharash et. al, Clinical Pharmacology and Therapeutics, 2006

Oxycodone: Human Pupillometry Data Demonstrate Rapid Uptake into CNS

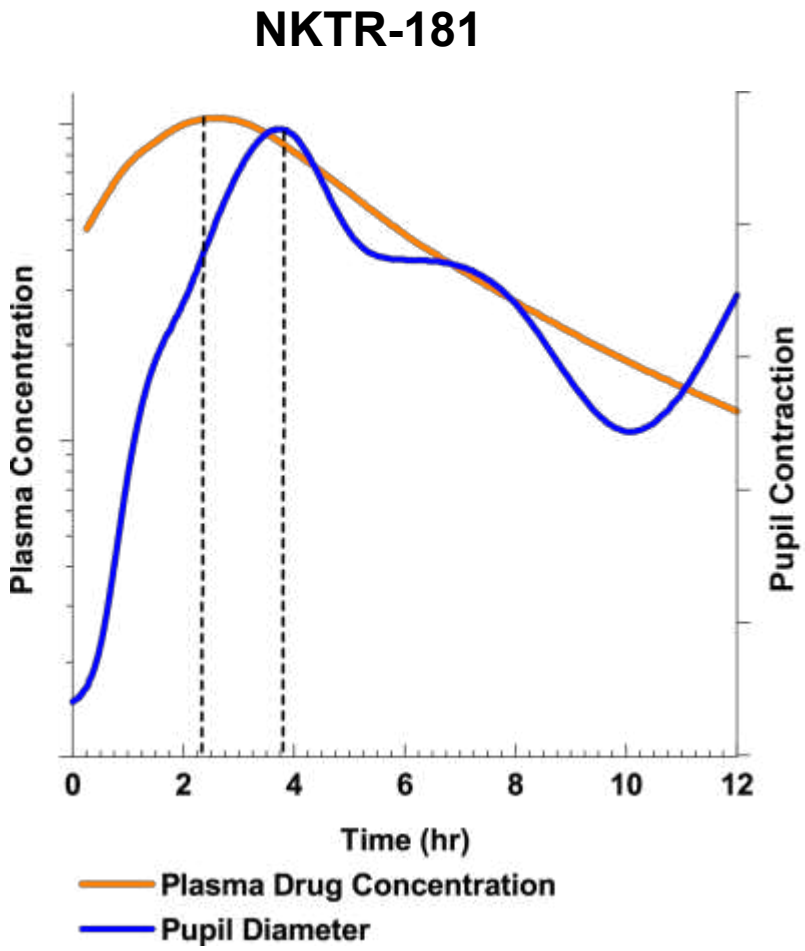


- Oxycodone enters the brain rapidly and extensively from the plasma
- Rapid rate of entry leads to euphoria and other CNS side effects

**Oxycodone Plasma to CNS Equilibration*
11 Minutes**

Source:Kharash et. al, Clinical Pharmacology and Therapeutics, 2006 (Table IV - $t_{1/2}$ eO, effect site equilibration half-life)

NKTR-181: Human Pupillometry Data Confirm Slow Rate of Entry into CNS



- NKTR-181 enters the brain slowly from plasma
- Slow rate of entry into brain designed to reduce euphoria and other CNS side effects

**NKTR-181 Plasma to CNS Equilibration*
1.7 Hours**

Source: Nektar Therapeutics, Data from Phase 1 Multiple Ascending Dose Study of NKTR-181 ($t_{1/2}$ eO, effect site equilibration half-life)

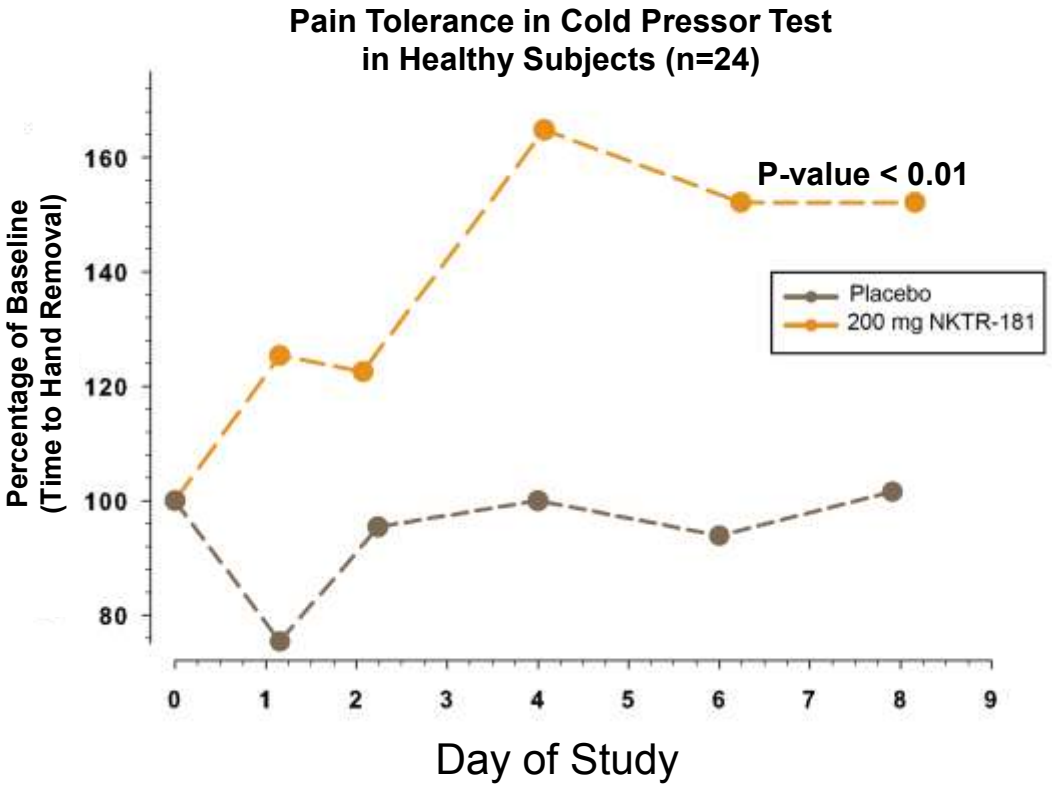
NKTR-181 Well-Tolerated in Phase 1 Throughout 8-Day Dosing Period (n=48)

- No serious or severe adverse events or dose-limiting toxicities observed in healthy volunteers throughout 8-day dosing period
  - Up to 400 mg twice-daily
- No observed respiratory depression
- Only one report of mild elevated mood
- Most reported adverse events were mild, and included:
  - Constipation
  - Headache
  - Nausea

Source: Webster et. al., 2012 American Academy of Pain Medicine Meeting

NKTR-181: Statistically Significant Analgesia in Phase 1 Multiple Ascending Dose Study in Multiple Pain Models

NKTR-181 produces significant peripheral and central analgesic responses



- NKTR-181 demonstrates a central analgesic response sustained over the 8-day dosing period in the cold-pressor test
- Response in the UVB model indicates that NKTR-181 provides relief of pain and hyperalgesia through both central and peripheral mechanisms

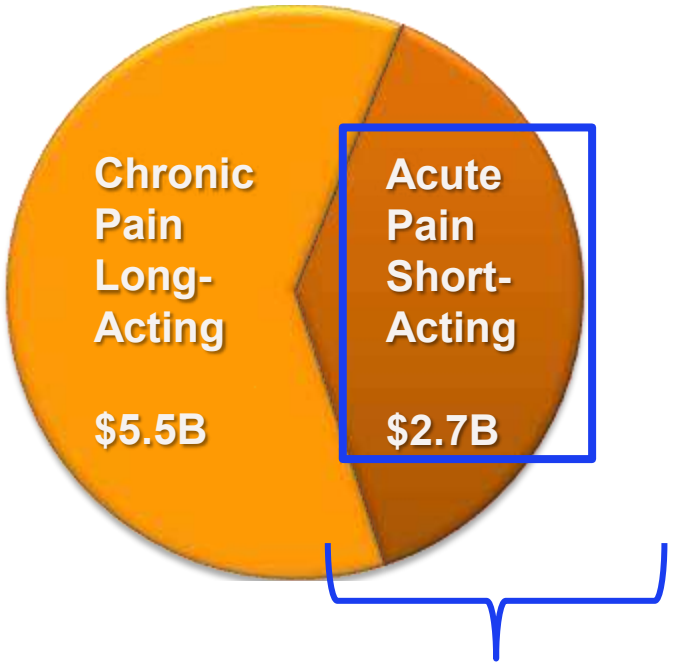
NEKTAR *Source: Webster et. al., 2012 American Academy of Pain Medicine Meeting*

NKTR-181 Phase 2 Program Planned to Start Mid-2012

- Randomized, placebo-controlled study with ~4-week treatment period
- Program to include up to ~ 300 chronic pain patients
  - Osteoarthritis
- Evaluate analgesia and side effect profile of NKTR-181 twice-daily doses
- Assess human abuse liability of NKTR-181 using a likeability cross-over design in recreational opioid users
- Phase 2 efficacy study design finalized by end of Q1 2012
  - Expect to complete Phase 2 - Q3 2013

NKTR-192
New Opioid Molecule for Acute Pain

US 2010 Opioid Sales Revenue
> $8 Billion



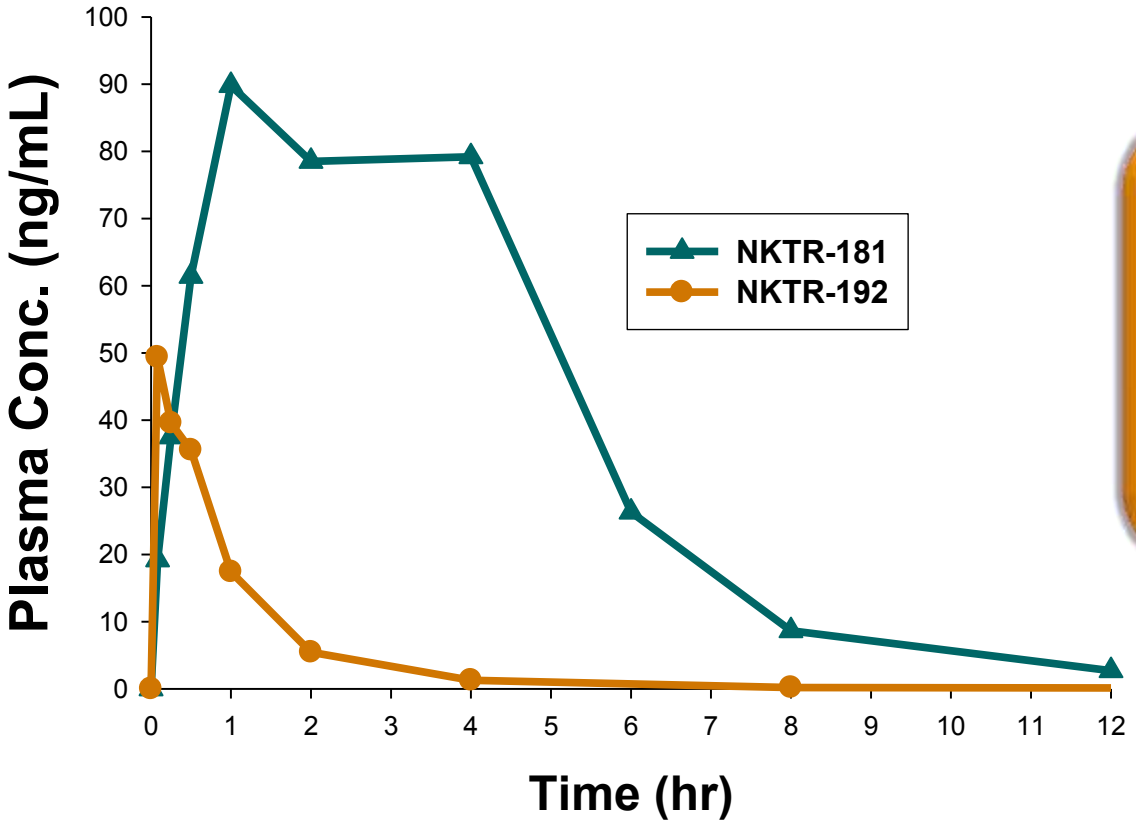
Acute pain market includes:
- Post operative pain
- Muscle and bone injuries
- Renal calculi
- OA flare

NKTR-192 targets <u>acute pain</u> market with highly differentiated opioid:

- Slow rate of entry into CNS designed to:
  - Reduce abuse liability
  - Reduce drowsiness
  - Reduce respiratory depression
- Short-acting profile inherent to molecule with rapid onset of action, short duration
- Targeting markets of Vicodin, Percocet, COX-2 inhibitors

Source: IMS Health 2010, Does not include IV or liquid; IMS NDTI USC5 codes and top DIAG 4 drug codes applied to NSP

NKTR-192 Exhibits Short-Acting PK Profile in Animal Studies



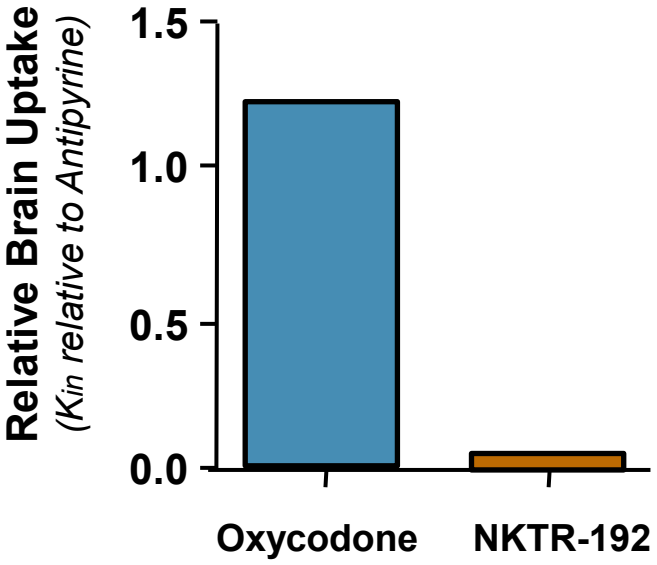
Oral administration in rats; 5 mg/kg PO

In addition to achieving the target PK profile, NKTR-192 also exhibits controlled rate of entry into the CNS

Sources: Nektar Therapeutics, based on NKTR-181 preclinical and Phase 1 data, and based on NKTR-192 preclinical studies

NKTR-192: Slower Entry into CNS Reduces Abuse Potential in Animals

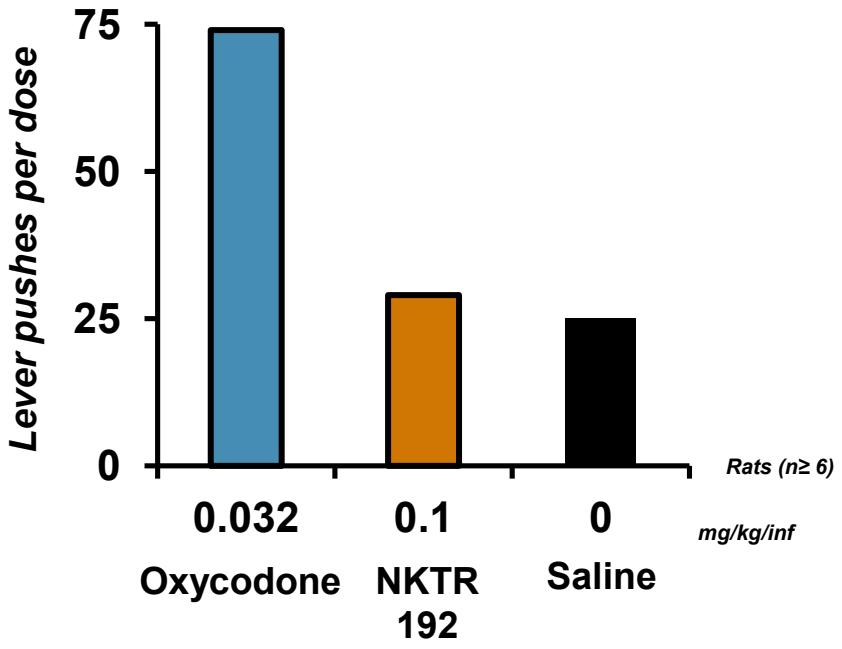
Brain Uptake Rate



Significantly reduced rate of entry into the brain compared to Oxycodone

Abuse Potential

Self-Administration/Drug Liking
At Equianalgesic Dosing



In addition, analgesic dose of NKTR-192 is not recognized as an opioid in drug discrimination tests

Source: Harrison et. al., Society for Neuroscience Annual Meeting, November 2011

Amikacin Inhale

Treating Gram-Negative Pneumonia Partnered with Bayer

- **65% of ICU pneumonias are gram-negative and have a high mortality rate[1]**
  - IV therapies can't reach effective lung concentration at tolerable doses
- **Unique delivery of amikacin directly to lungs to treat ventilator pneumonia**
  - Amikacin inhale achieves greater lung exposure of antibiotic and lower systemic exposure[2]
- **SPA in place for Phase 3 Program**
  - Primary endpoint: clinical response at test of cure visit (10-day treatment period)
  - Two multi-national 650-patient, randomized, placebo-controlled studies planned at 300 study sites
- **Bayer and Nektar targeting start of Phase 3 in second half of 2012**
- **Nektar royalties on net sales**
  - 30% U.S. flat royalty
  - 22% average ex-U.S. royalty

BAY41-5661 (NKTR-061)
Amikacin Inhale

1 Peleg et al - n engl j med 362;19 May 2010; 2 Niederman et al., "*BAY41-6551 achieves bactericidal tracheal aspirate amikacin concentrations in mechanically ventilated patients with Gram-negative pneumonia*", Intensive Care Med, Nov 2011,

BAX 855

Baxter/Nektar Collaboration for Long-Acting Factor VIII Molecule

- BAX 855: longer-acting (PEGylated) form of a full-length recombinant Factor VIII protein for hemophilia A
- Based on ADVATE, world's leading Factor VIII therapy with annual sales >$2 billion
- First patients dosed in Phase 1 study
- Baxter expects to complete Phase 1 in 2012 and planning Phase 3 by year-end
- Baxter and Nektar Factor VIII collaboration:
  - Up to $84 million in development and sales milestones
  - Significant royalties on net sales

Baxter

ADVATE
[Antihemophilic Factor (Recombinant), Plasma/Albumin-Free Method]
There's more to life.

Nektar: Key Upcoming Milestones

- **Q1 2012**
  - NKTR-192 - Phase 1 start
  - MAP Levadex - PDUFA on March 26, 2012
  - Affymax peginesatide - PDUFA on March 27, 2012
- **Q2 2012**
  - NKTR-102 - Phase 2 expansion top-line data in ovarian cancer (April)
  - NKTR-181 - Phase 2 start
- **Q3 2012**
  - NKTR-061 - Phase 3 program with Bayer targeted (Q3/Q4 2012)
- **Q4 2012**
  - BAX 855 - Phase 1 completed; Baxter plans Phase 3 by year-end
  - New Nektar clinical candidate announced
- **2013**
  - Naloxegol - AZ on track for mid-2013 regulatory filings in US and EU

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Cowen and Company 32nd Annual Healthcare Conference

Robert Medve, MD

Chief Medical Officer

March 6, 2012