



DURECT Corporation

A Specialty Pharmaceuticals Company

March 2, 2015

Forward-Looking Statements

The statements in this presentation regarding DURECT's and its collaborative partners' products in development, anticipated product benefits, anticipated product markets, clinical trial results and plans, DURECT's future business plans and projected financial results and DURECT's emergence as a specialty pharmaceutical company are forward-looking statements involving risks and uncertainties that can cause actual results to differ materially from those in such forward-looking statements. Potential risks and uncertainties include, but are not limited to, DURECT's (and that of its third-party collaborators', where applicable) abilities to successfully enroll and complete clinical trials, complete the design, development, and manufacturing process development of the product candidates, obtain product and manufacturing approvals from regulatory agencies and manufacture and commercialize the product candidates and marketplace acceptance of the product candidates, as well as DURECT's ability to fund its growth and operations. Further information regarding these and other risks is included in DURECT's most recent Annual or Quarterly Report on Form 10-K or 10-Q filed with the SEC under the heading "Risk Factors."
















DURECT Corporation

Building a Leading Specialty Pharmaceutical Company

- 2 late (NDA) stage assets leveraging drug delivery: REMOXY[®] and POSIDUR[™]
 - Addressing large market opportunities (\$1+ billion)
 - Unique products for chronic pain and post-surgical pain
 - Distinct approaches to proper use of opioids
 - Other programs pursuing 505(b)2 path to approval
- Epigenomic Regulator Program yielding endogenous new chemical entities (NCE's)
 - DUR-928: endogenous small molecule with novel mechanism, compelling data from multiple animal models, and successful initial Phase 1 study
 - Potential orphan and broad indications for acute organ injury and chronic metabolic disorders
- Balanced business model
 - Some programs partnered, others with rights retained

Pipeline from Drug Delivery Programs

Multiple Products and Partnerships to Drive Value

PROJECT	Pre Clinical	Phase 1	Phase 2	Phase 3	NDA	Potential Market ¹	Commercialization Company	
 <p>REMOXY® (ORADUR®-Oxycodone)</p>	[Progress bar: Pre Clinical, Phase 1, Phase 2, Phase 3]						\$1+ Billion	 Pain Therapeutics, Inc.
 <p>POSIDUR™ (SABER®-Bupivacaine)</p>	[Progress bar: Pre Clinical, Phase 1, Phase 2, Phase 3]						\$1+ Billion	 DURECT
 <p>ELADUR® (TRANSDUR®- Bupivacaine Patch)</p>	[Progress bar: Pre Clinical, Phase 1, Phase 2]						Orphan - PHN	 IMPAX™ LABORATORIES, INC.
 <p>Relday™ (Risperidone)</p>	[Progress bar: Pre Clinical, Phase 1]						\$1+ Billion	 Zogenix
 <p>ORADUR®-ADHD (Methylphenidate)</p>	[Progress bar: Pre Clinical, Phase 1]						\$1+ Billion	  DURECT
 <p>ORADUR®- Hydromorphone</p>	[Progress bar: Pre Clinical, Phase 1]						\$1+ Billion	 Pain Therapeutics, Inc.
 <p>Ophthalmic Product (API not disclosed)</p>	[Progress bar: Pre Clinical]						Not disclosed	 Santen A Clear Vision For Life®

DUR-928: Potential clinical indications

Currently in Phase 1

Chronic indications

Oral

NAFLD/NASH
AFLD/ASH


Others

Acute indications

Injectable

Acute kidney injury

Others

 Orphan indications

Opioids Remain Major Focus of FDA

- Abuse of opioids remains top of mind for the FDA and the pain division – a hot, important and highly visible topic
- Our two lead programs both address this issue, but in different ways
- We think we should ultimately benefit from the FDA's actions and concerns

- REMOXY[®] - tamper-resistant formulation of oxycodone
- POSIDUR[™] - benefits of reducing opioid use after surgery

ORADUR[®]-Opioids REMOXY[®]

REMOXY[®]



Crushed



Long Acting
Oxycodone
Tablets



Intact

Crushed



Tamper Resistant

- Snorting 
- Smoking 
- Injecting 
- Chewing 
- Dissolving in drinks **Minimal Impact**

ORADUR[®]-Opioids

REMOXY[®] Likeability Study – Met All Pre-specified Primary Endpoints



Pain Medicine 2011; 12: 618–631

The Abuse Potential of Remoxy[®], an Extended-Release Formulation of Oxycodone, Compared with Immediate- and Extended-Release Oxycodone

Beatrice Setnik, PhD,* Carl L. Roland, PharmD,* Jody M. Cleveland, MS,* and Lynn Webster, MD†

- **Drug Liking was significantly lower ($p < 0.05$) for REMOXY**
 - REMOXY (whole) vs. oxycodone ER (whole) or oxycodone IR
 - REMOXY (chewed) vs. oxycodone ER (crushed) or oxycodone IR
- **Time to Peak Drug Liking was significantly delayed ($p < 0.05$) for REMOXY (chewed) vs. oxycodone ER (crushed) or oxycodone IR**
- **No patient could chew REMOXY for more than 1.5 minutes (mean = 45 seconds) due to taste/texture**

ORADUR[®] - Opioids

REMOXY[®]: NDA Status post-CRL on June 23, 2011

- The issues in the Complete Response Letter relate primarily to manufacturing
-

• Pfizer met with FDA re: resubmission

• Various studies posted to ClinicalTrials.gov, now completed



- Meeting provided a path forward, following the outline Pfizer requested
 - No need to re-do Phase III studies
 - A pivotal bioequivalence (BE) study with the modified formulation can be used to bridge back to data with the original formulation
 - Similar to, but larger than, the BA studies already done by Pfizer
 - Also need to conduct additional abuse potential studies with the modified formulation
 - Such data may now potentially be used in the product label

ORADUR[®] - Opioids

REMOXY[®]: Studies on Clinicaltrials.gov as of Sept 24, 2014

Study Purpose	Study Number	Number Subjects	Start Date	Estimated Completion Date	Status
Effect of food on PK of chewed versus non-chewed capsule - Formulation K	NCT02117583 Phase 1	N=34 healthy volunteers	April 2014	August 2014	Completed ✓
Dose proportionality of 5, 20 and 40 mg capsules - Formulation K	NCT02089295 Phase 1	N=18 healthy volunteers	April 2014	June 2014	Completed ✓
Bioavailability of Formulation K to Original Formulation	NCT02059915 Phase 1	N=134 healthy volunteers	April 2014	July 2014	Completed ✓
Abuse potential, after taking intact and chewed capsule	NCT01986283 Phase 1	N=67 recreational opioid users	Nov 2013	August 2014	Completed ✓
Effects of Ethanol on Oxycodone Pharmacokinetics in Healthy Volunteers	NCT02165930 Phase 1	N=17 healthy volunteers	July 2014	August 2014	Completed ✓

- All required studies are completed
- Program and data to be transferred back to Pain Therapeutics
- Pain Therapeutics will focus on resubmission and re-partnering

Patent Protection for ORADUR® technology

- 7 issued U.S. patents covering ORADUR® technology platform
 - 6 composition of matter (opioid or oxycodone formulations) patents and 1 covering methods of making opioid-containing formulations
- U.S. patent coverage (oxycodone only) to at least 2031, U.S. patent coverage (opioid or oxycodone formulations) to at least 2025
- European patent coverage to at least 2023
- Other pending applications would go to 2034, plus any eligible patent term adjustments and extensions

REMOXY[®]: Potential Financial Impact to DURECT

(dollars in millions)

- OxyContin[®] sales in 2013: ~\$3.0 billion
- Blended royalties on net sales: 6% to 11.5%

Illustrative Royalty Calculations: (in millions)

% of 2013 OxyContin Sales	10%	20%	30%
REMOXY Annual Sales	\$ 314	\$ 628	\$ 941
Royalties to DURECT *	<u>\$ 21</u>	<u>\$ 47</u>	<u>\$ 76</u>

* Does not include revenue / profits associated with manufacturing mark-up of key excipients.

POSIDUR™: Post-Operative Pain Control

SABER®-Bupivacaine



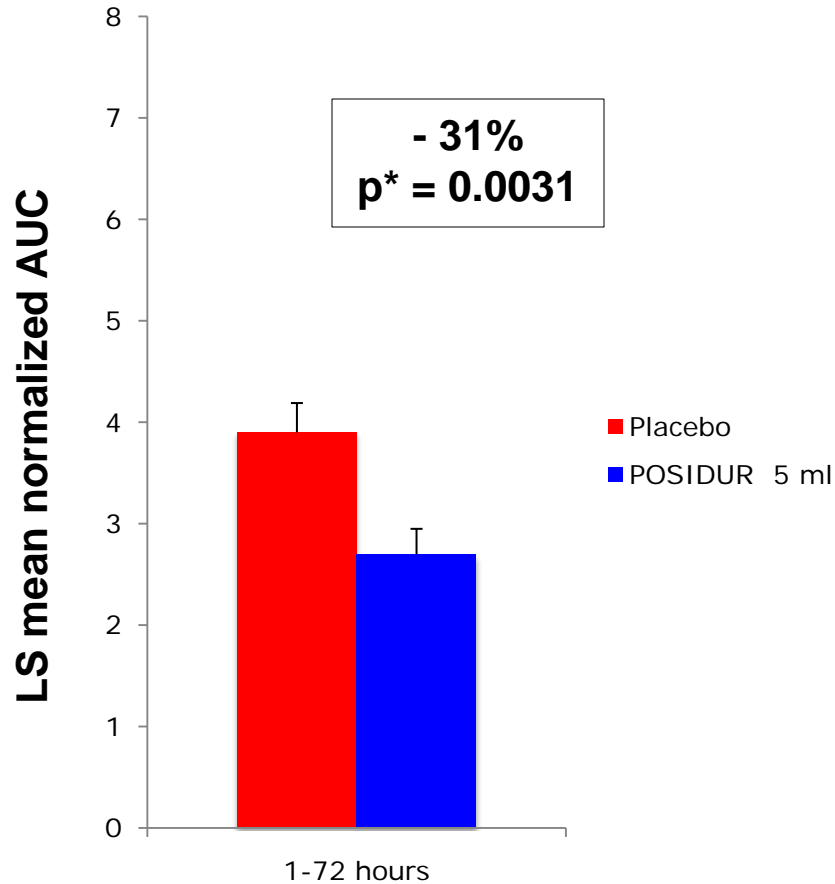
True 3 Days of Post-Op Pain Control

- Unmet need: non-narcotic analgesia, 24-72 hours after surgery
- Designed for local control of post-surgical pain
- Plus reduced narcotic use and associated side-effects / costs
 - Nausea, vomiting, ileus, constipation, respiratory suppression
 - Potential for earlier hospital discharge

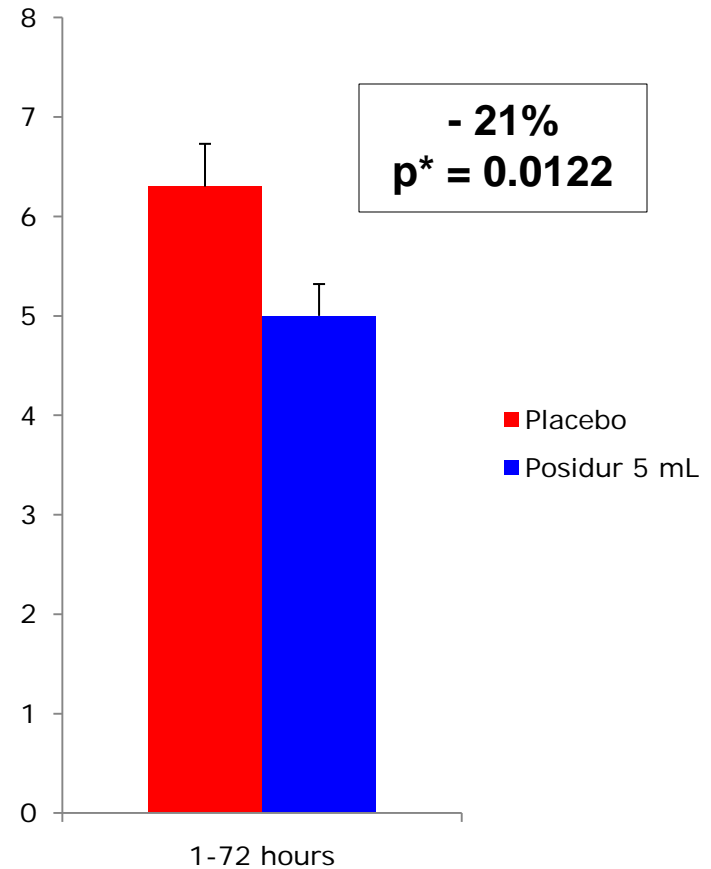
POSIDUR™:

Reduction in Pain on Movement

Hernia Surgery



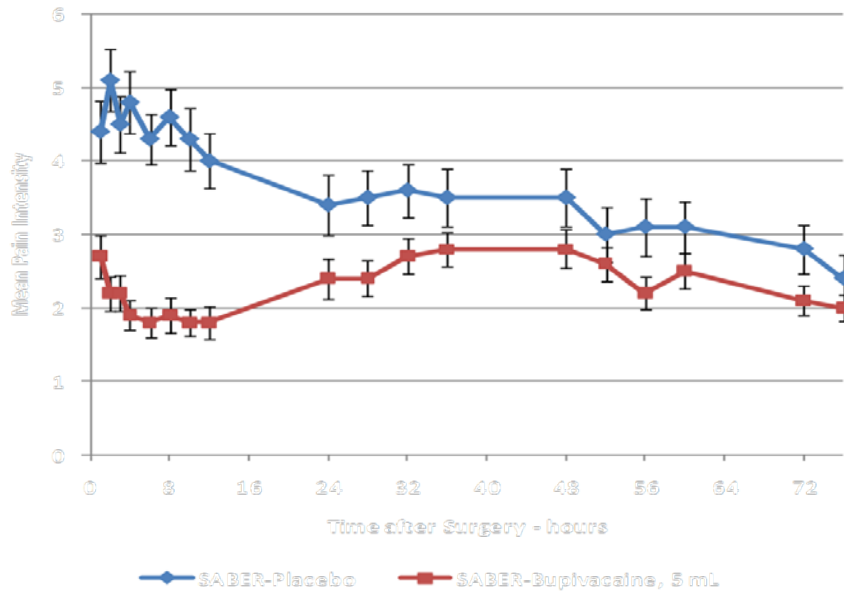
Shoulder Surgery



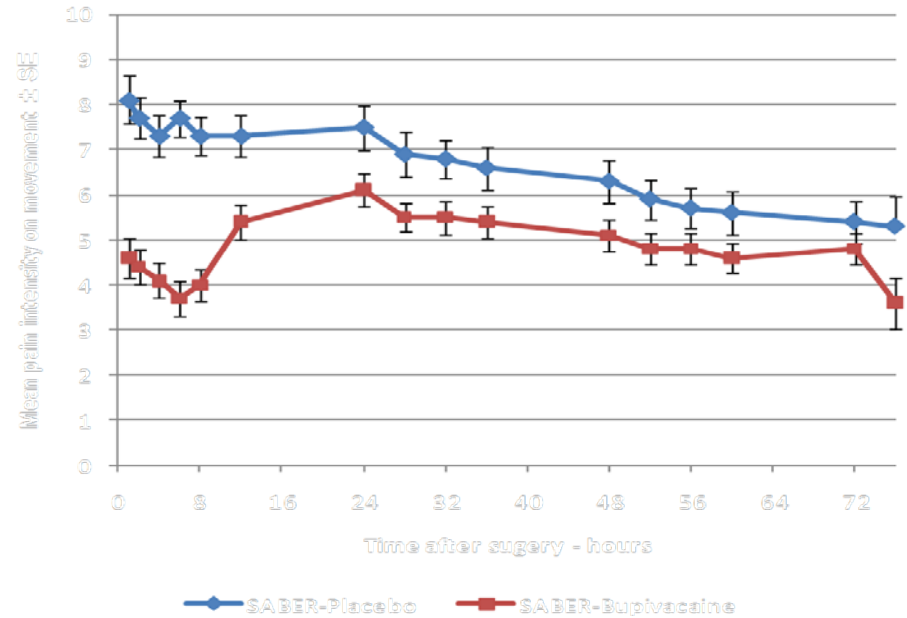
* P-values are derived from ANOVA.

POSIDUR™: Repeated Measures Analysis

Hernia Surgery

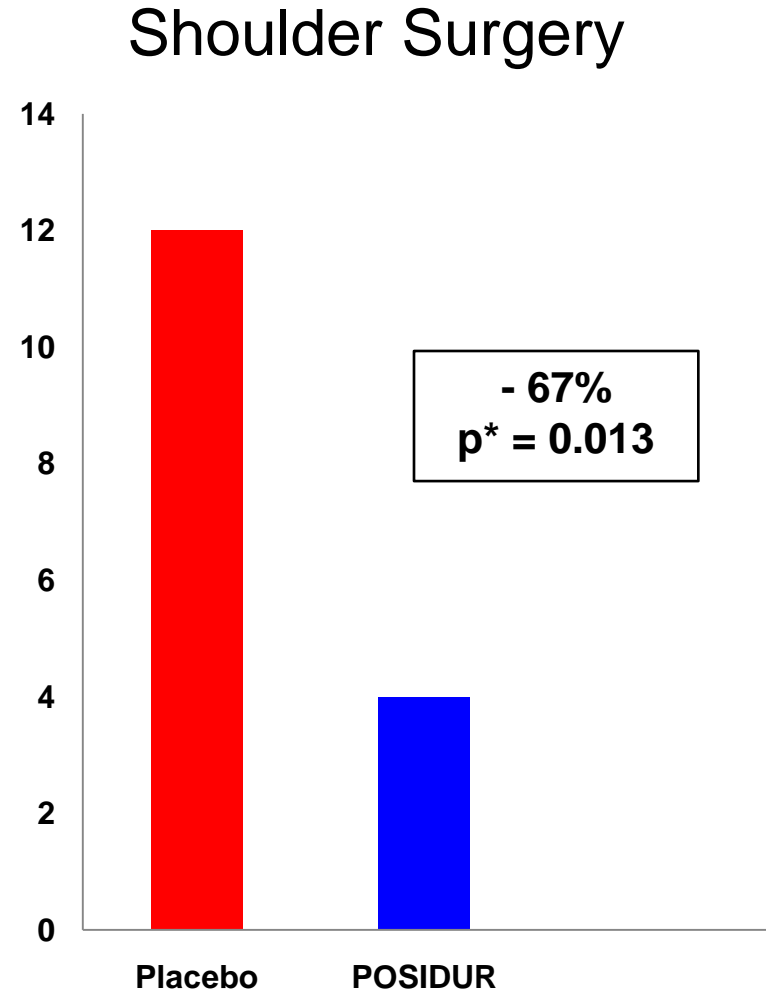
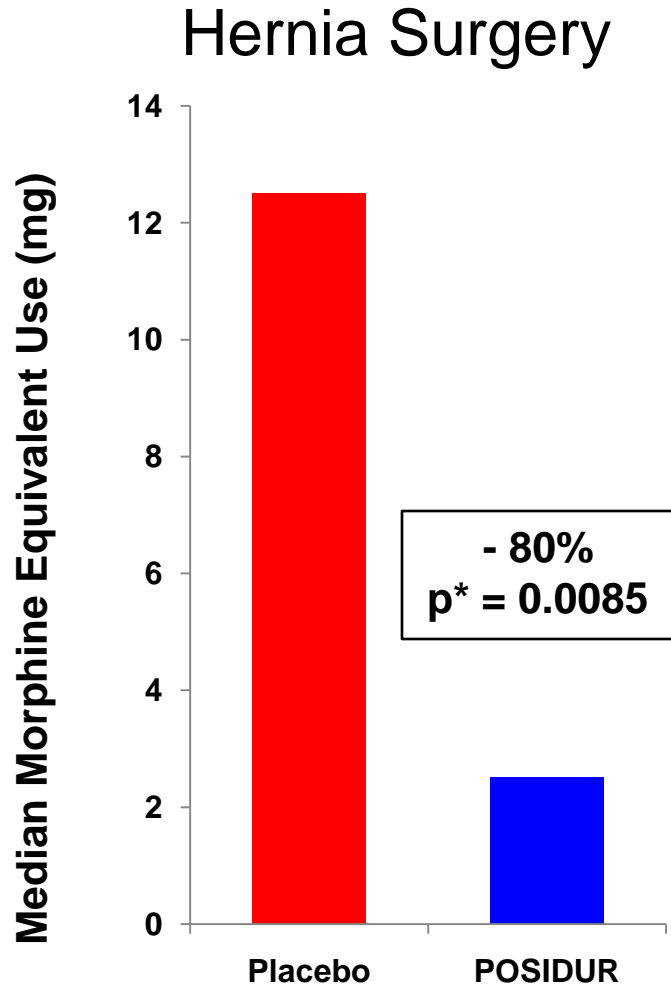


Shoulder Surgery



POSIDUR™:

Reduction in Opioid Use

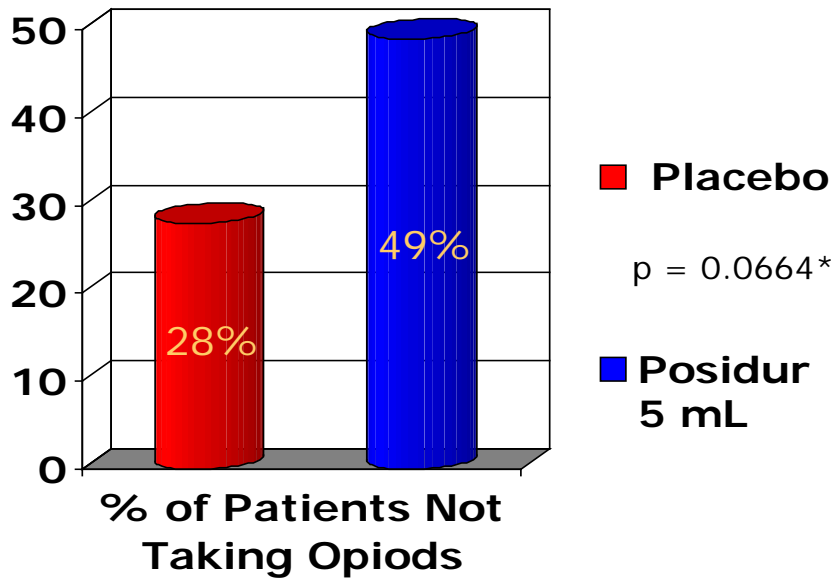


*P-value is derived from non-parametric Wilcoxon Rank Sum test

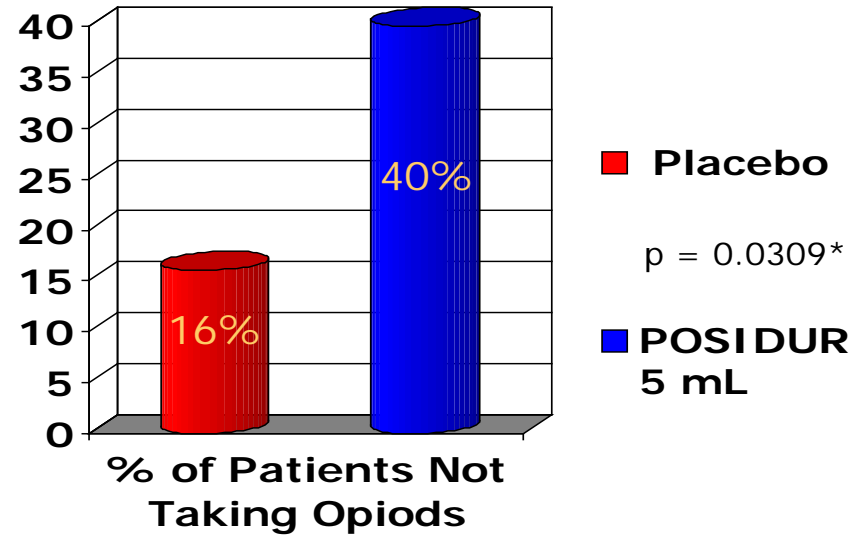
POSIDUR™:

Proportion of Patients NOT Taking ANY Supplemental Opioid 0-72 Hrs

Hernia Surgery



Shoulder Surgery



> 20% more patients didn't require a single opioid

* Using CMH Chi-Square test adjusted by study sites

POSIDUR™: Clinical Program

- Extensive clinical program
 - 13 studies completed (+ 1 safety extension C803-017e)
 - 683 POSIDUR exposures
 - 951 SABER-Vehicle exposures
 - Multiple surgical models
 - No significant systemic safety concerns observed, some increase in temporary local discoloration

Surgical Model	Protocol No.	Phase	Patients Dosed	Received POSIDUR
Normal Subjects	CLIN005-0008	Phase 1	5	5
Hernia	CLIN004-0001	Phase 2	81	61
Hernia	CLIN004-0009	Phase 2	43	32
Hernia	CLIN005-0010	Phase 2	89	54
Hernia	CLIN005-0007	Phase 2	12	12
Appendectomy	CLIN005-0002	Phase 2	21	14
Shoulder	CLIN005-0006	Phase 2	106	62
Shoulder	C803-017	Phase 2	60	40
Hysterectomy	BU-001-IM	Phase 2	114	60
Abdominal	C803-027	Phase 2	10	10
Abdominal	C803-025	Phase 3	305	189
Hernia	CLIN 803-006-0006	Pivotal	123	91
Shoulder	BU-002-IM	Pivotal	107	53
Total Patients			1,075	683

Patent Protection for POSIDUR™

- 2 granted patent families in the U.S. - coverage to at least 2025
 - Pharmaceutical composition
 - Method for providing sustained local anesthesia
- 1 granted patent in Europe - coverage to at least 2025
- 1 granted patent in Japan - coverage to at least 2025

POSIDUR™: Commercial Opportunity



- >70 million surgeries per year in the U.S.
- 10-20 million procedures as a potential available market
- Targeting ~\$300 / procedure based on strong pharmacoeconomics
 - Driven by reduction in opioid use and side-effects
- Easy product concept for surgeons, anesthesiologists and payers to get behind
 - Better for patients
 - Potentially large healthcare cost savings
 - Benefits to administration technique
 - Underlying desire for non-opioid, extended post-surgical pain relief

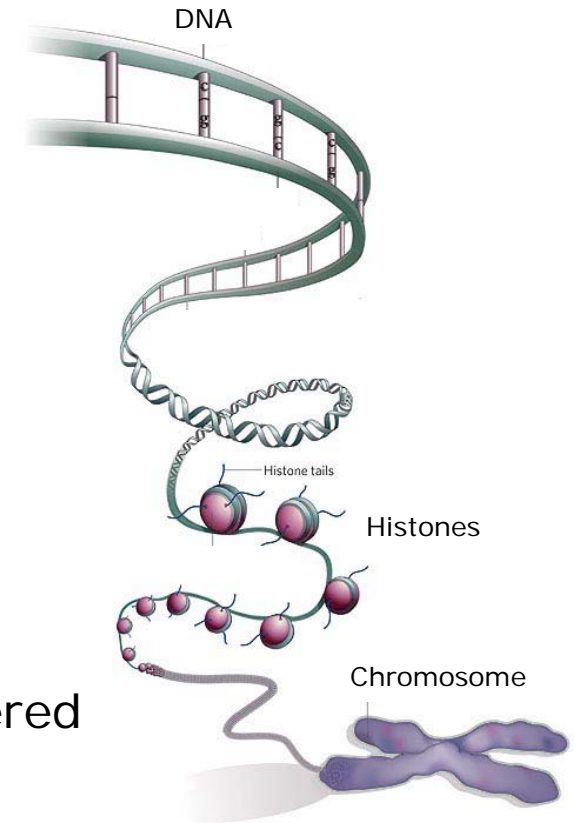
POSIDUR™ Complete Response Letter

February 12, 2014

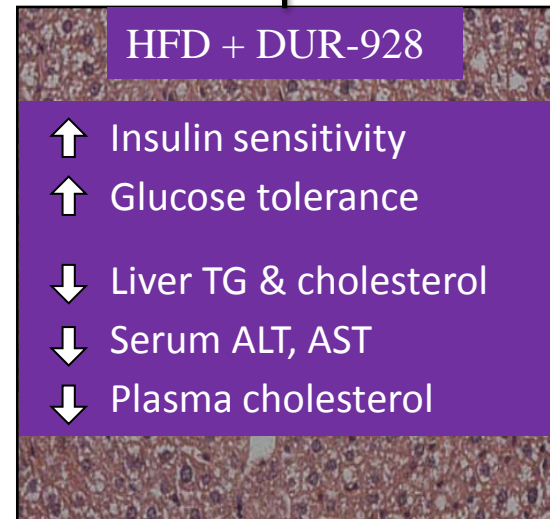
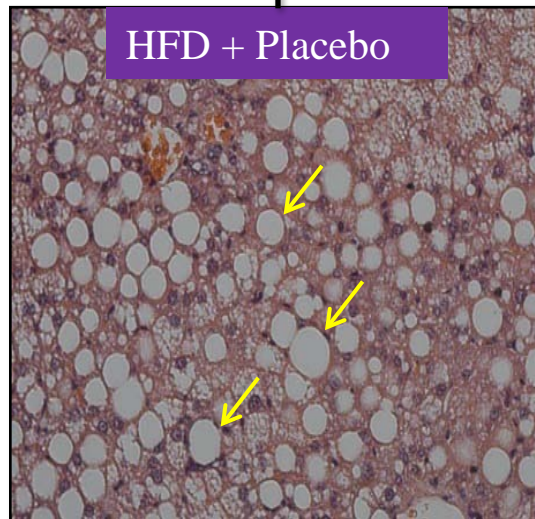
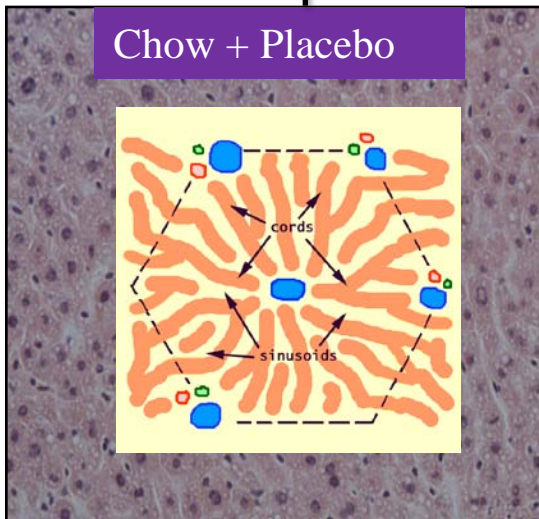
- Complete Response Letter: FDA has determined that they cannot approve the NDA in its present form, stating the NDA does not contain sufficient information to demonstrate that POSIDUR is safe when used in the manner described in the proposed label, and the FDA indicated that additional clinical safety studies need to be conducted
- We met with the FDA on September 23, 2014 to discuss path forward and have had subsequent interactions
 - FDA is reviewing our protocol synopsis for a soft tissue Phase 3 trial to generate the efficacy and safety data required for approval

Epigenomic Regulator Program

- Lead molecule: DUR-928
 - Endogenous small molecule
- Epigenomic modulator
 - Lipid homeostasis
 - Inflammation
 - Cell survival
- Family of compounds
 - Additional endogenous molecules discovered
 - Ongoing analogue program



Improvement in Hepatic Morphology after 6 Weeks

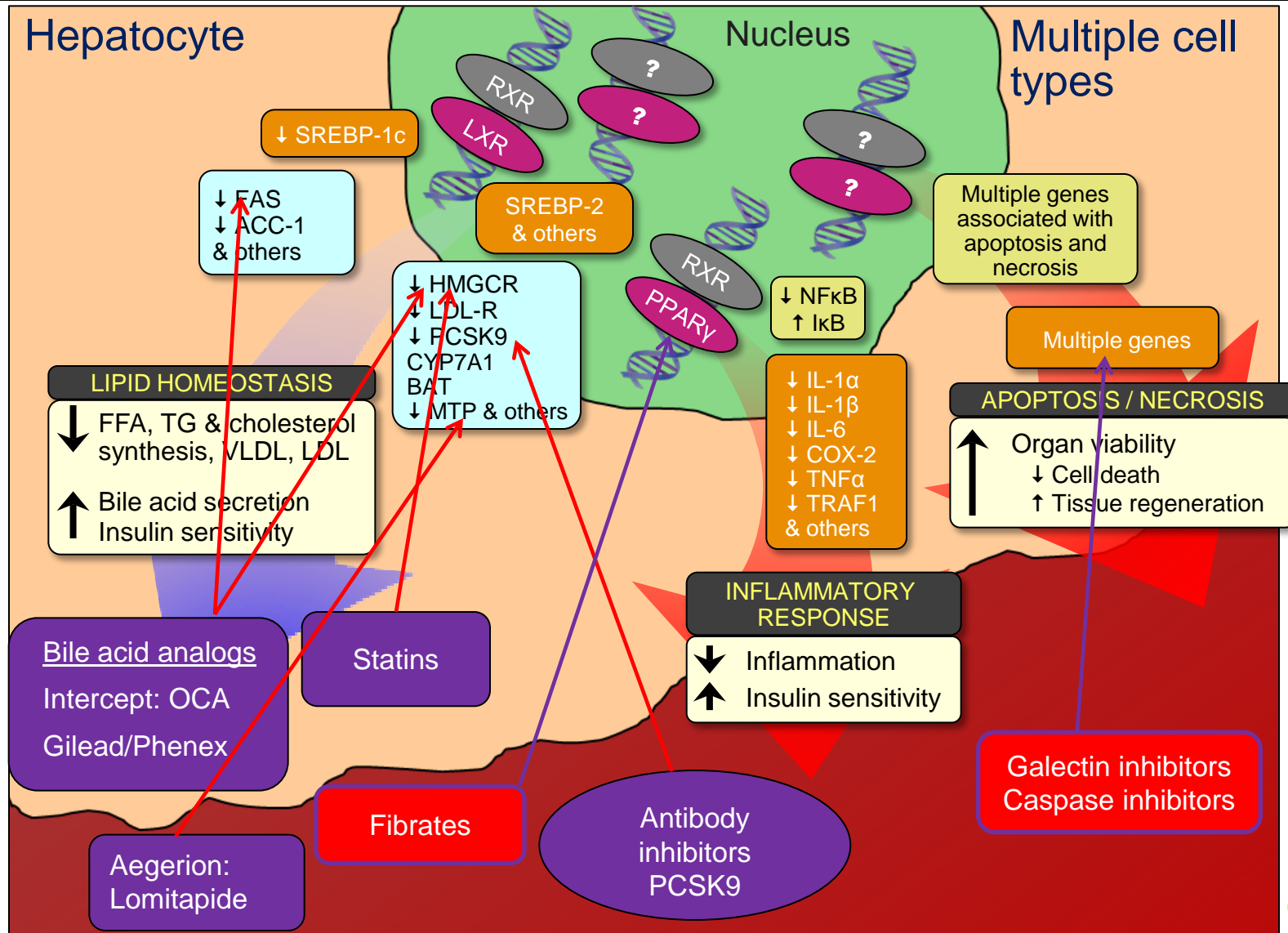


Epigenomic Regulator Program Highlights

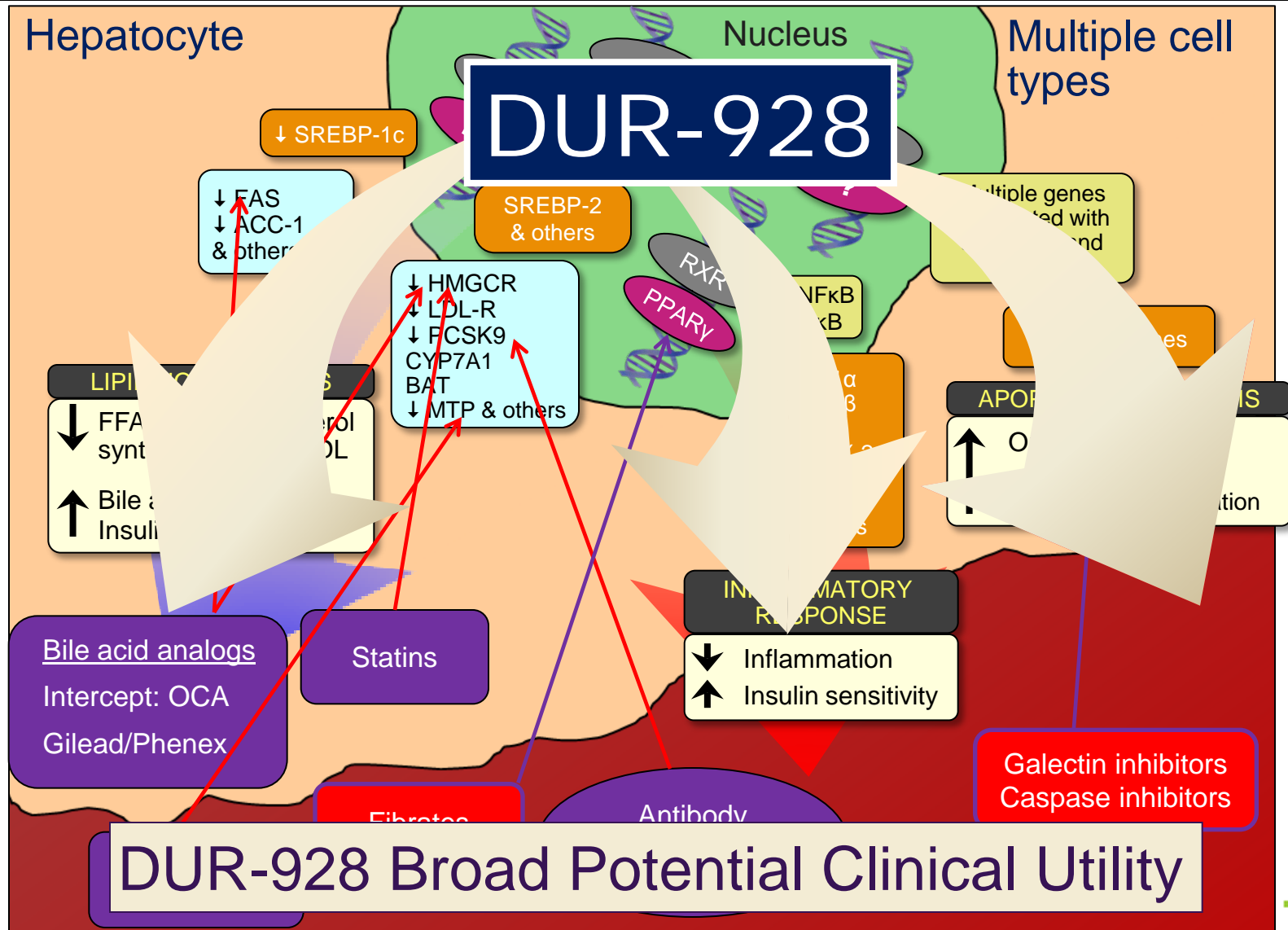
- Family of endogenous regulators and analogues
- Novel mechanisms, with compelling data from multiple animal models
- Potential orphan and broad-based indications
 - Acute organ injury: injectable formulation
 - Chronic metabolic and lipid disorders: oral formulation
- Program in-licensed in 2012; exclusive worldwide rights with issued and pending patents
- Successful initial Phase I study, with further clinical studies planned for 2015



Observed Biochemical Activity



Observed Biochemical Activity



Compelling Animal Data

Acute Organ Injury models

- Liver toxicity
- Endotoxin-induced septic shock
- Renal ischemia / reperfusion injury

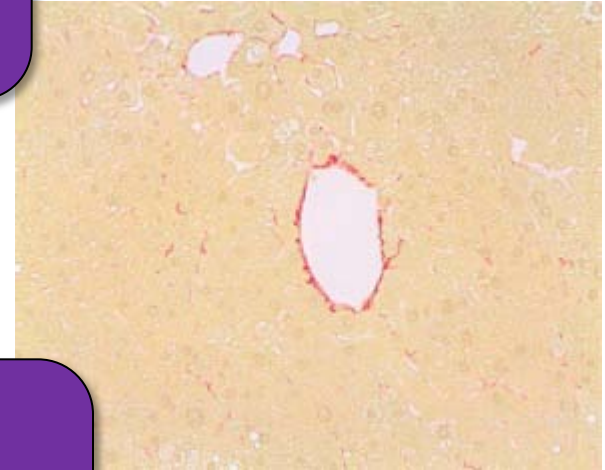
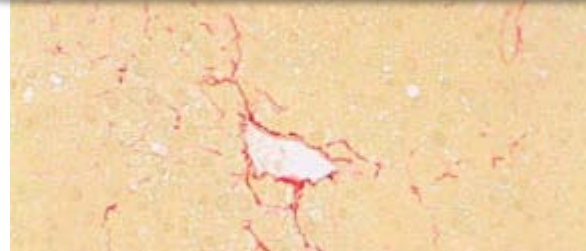
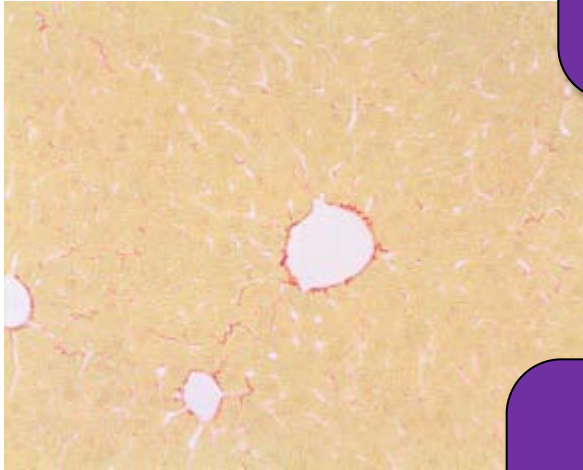
Chronic Disease Models

- High fat diet mouse
- High fat diet hamster
- NAFLD / NASH mouse
 - Nonalcoholic fatty liver disease (NAFLD)
 - Nonalcoholic steatohepatitis (NASH)

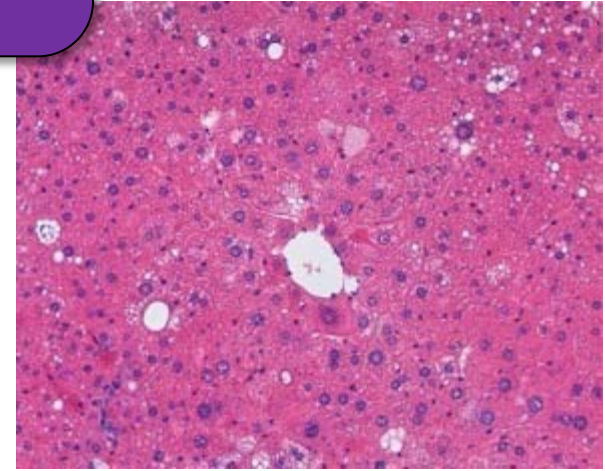
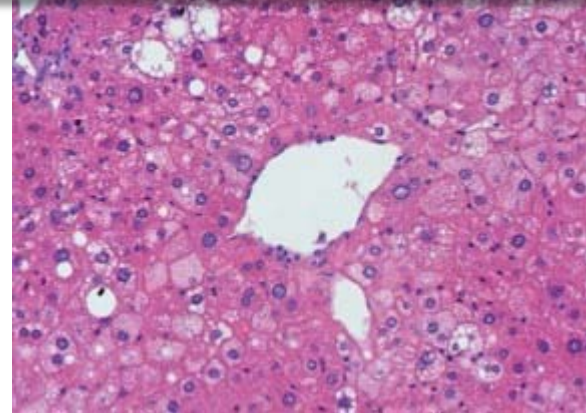


Broad Potential Clinical Utility Suggested by Multiple Animal Models

NASH



Reduction of
NASH score & fibrosis
in 3 weeks



Normal

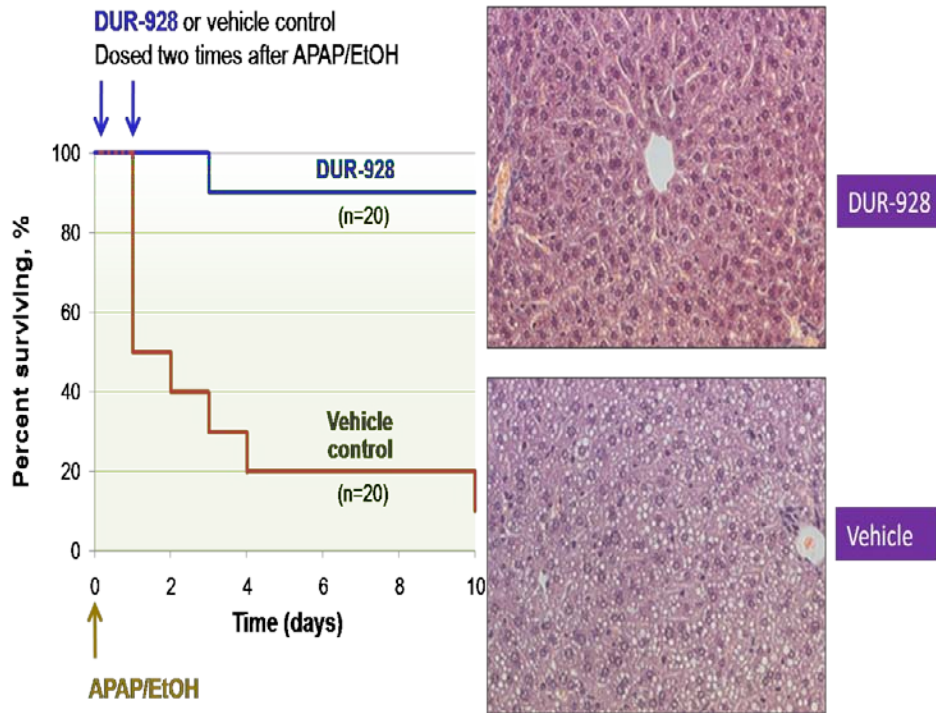
NASH + Vehicle

NASH + DUR-928

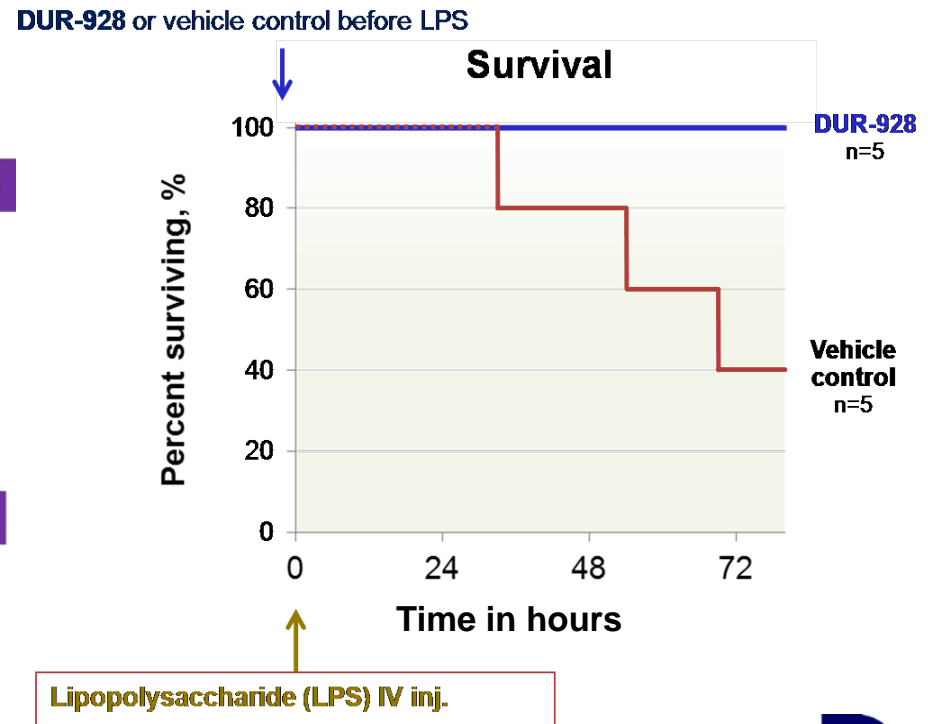


Broad Potential Clinical Utility Suggested by Multiple Animal Models

Chemical Injury
90% lived on DUR-928
90% died on vehicle

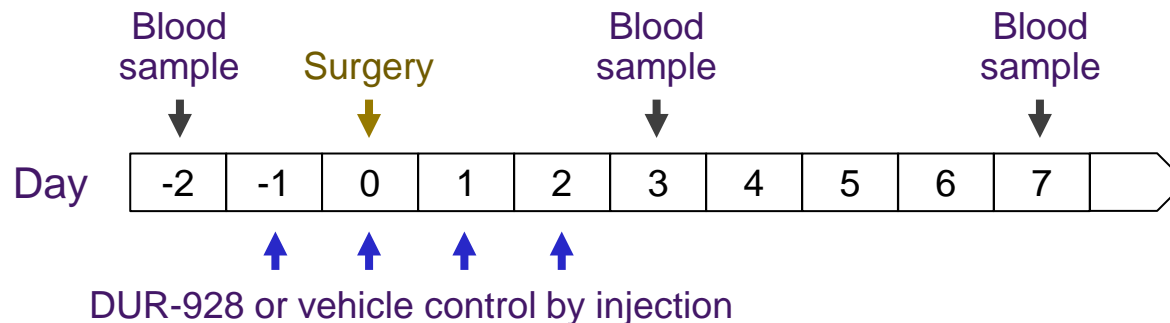
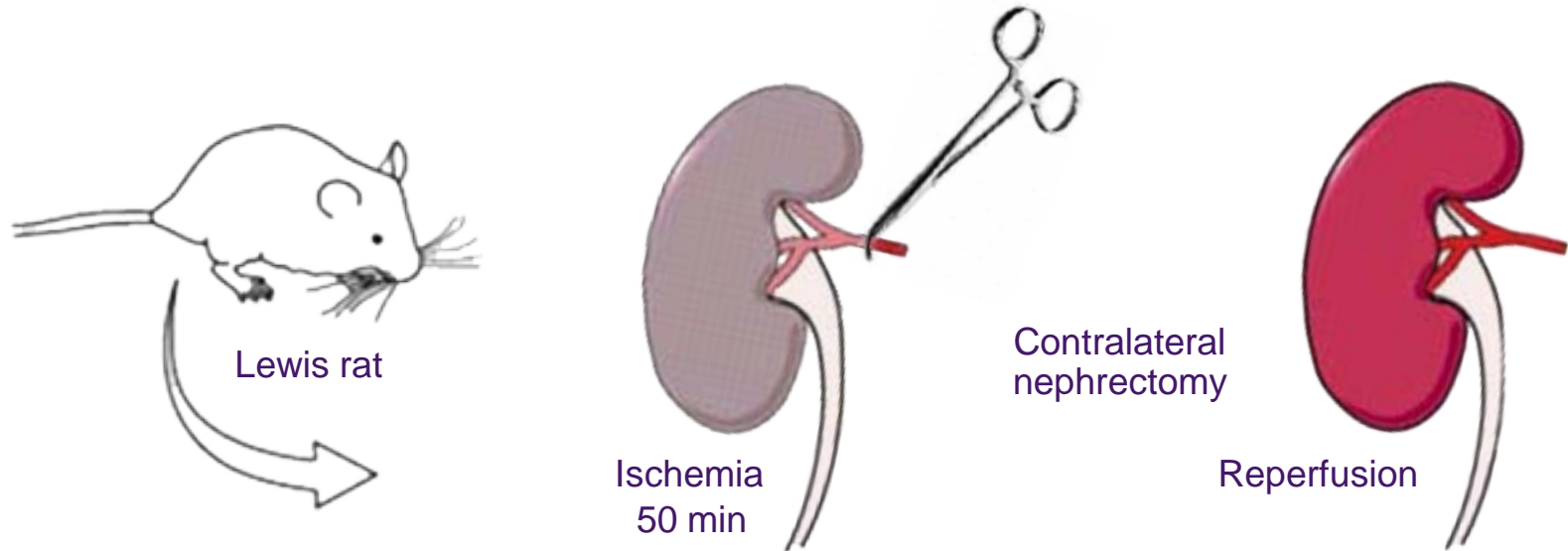


Endotoxin
100% lived on DUR-928
60% died on vehicle



Broad Potential Clinical Utility Suggested by Multiple Animal Models

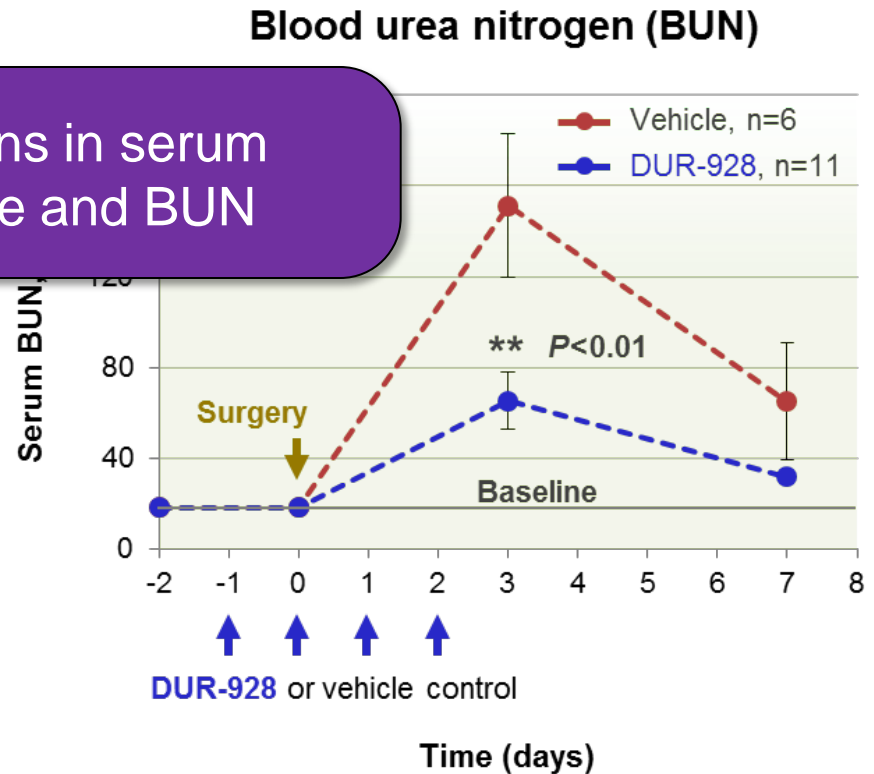
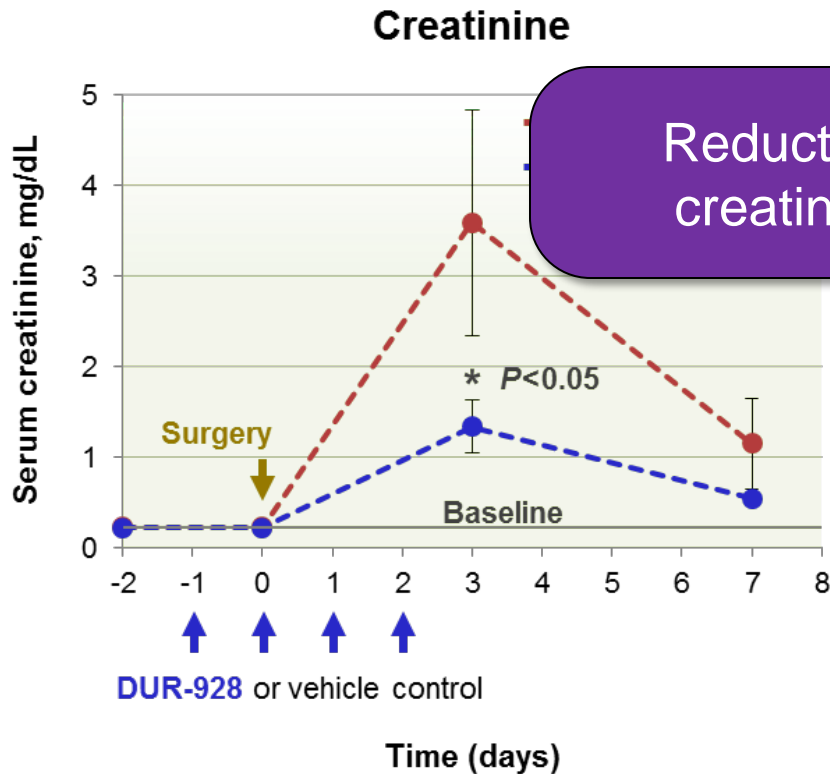
Ischemic Injury



Broad Potential Clinical Utility Suggested by Multiple Animal Models

Ischemic Injury

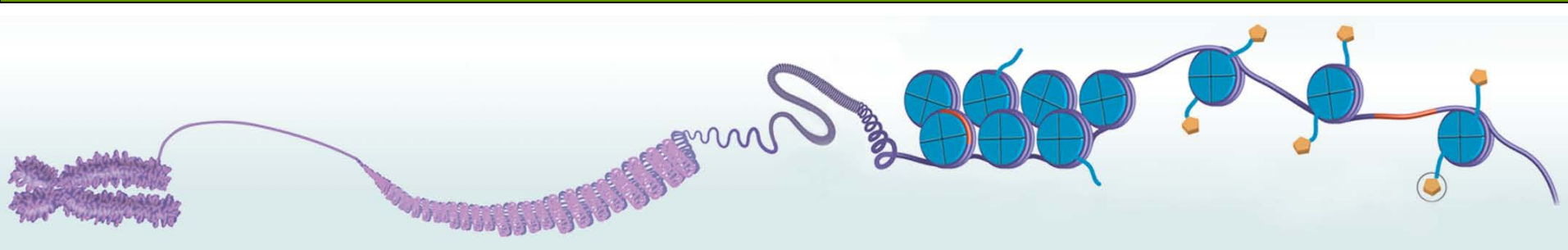
Reductions in serum creatinine and BUN



Values are means \pm SD

Phase I: Safety in healthy human subjects

- Single-site, randomized, double-blind, placebo-controlled, single ascending oral dose in 30 subjects
- 5 doses, highest of which resulted in plasma levels >100-fold higher than endogenous levels
- No treatment-related side effects noted at any dose
- Half-life appears suitable for once-daily or less-frequent dosing
- Precursor to Phase I multiple-ascending-dose trial in mid-2015

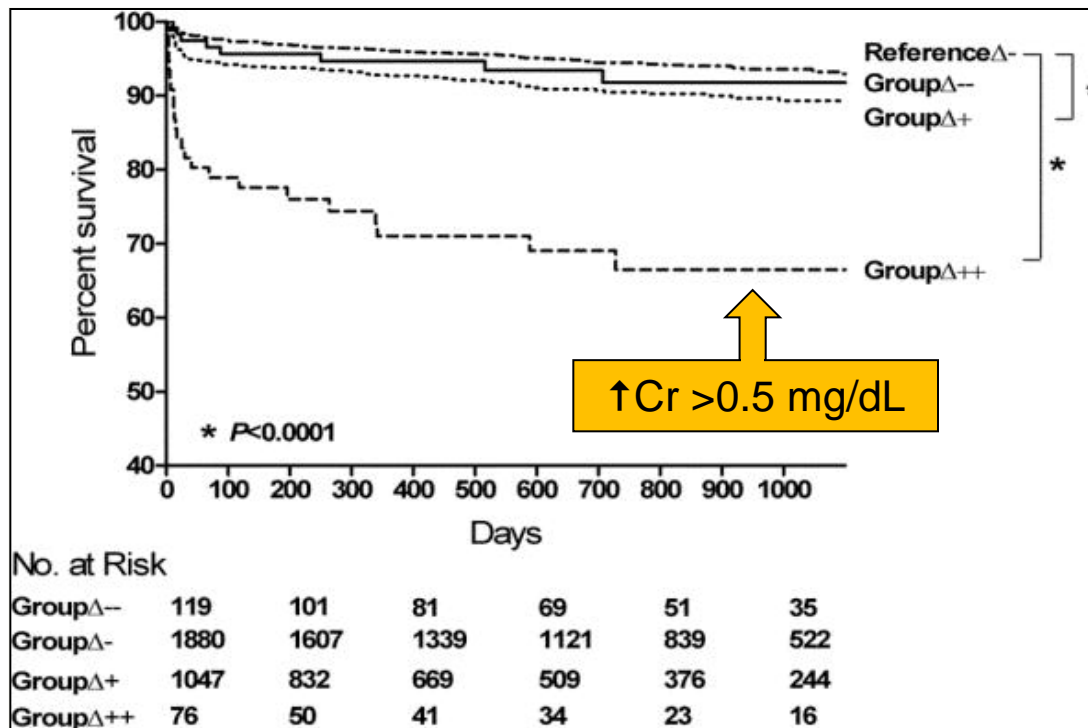


DUR-928

Therapeutic Opportunities

Postoperative acute kidney injury (AKI) associated with cardiac surgery

- Increasing incidence of postoperative AKI
 - 5% to 25% of patients undergoing major surgery
- AKI portends a poor outcome
 - Even small elevations in creatinine are significant



- 3,123-patient cardiac surgery cohort study
- Primary endpoint: 30-day adjusted mortality rate

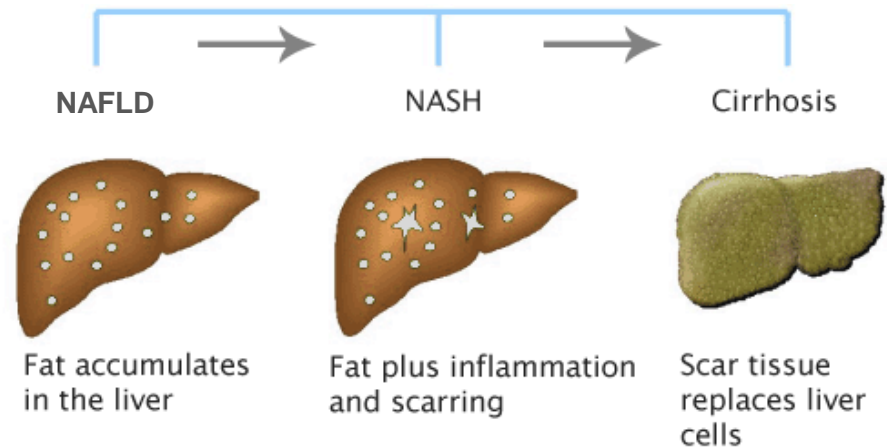
Lassnigg A, et al. *Crit Care Med.* 2008;36(4):1129-1137.

NAFLD and NASH: A growing epidemic

Metabolic Syndrome

Central obesity
High blood pressure
High triglycerides
Low HDL-c
Insulin resistance

Fatty Liver Disease



- NAFLD/NASH are hepatic manifestations of the metabolic syndrome
 - NAFLD prevalence doubled in the last 20 years to ~ 33% of the US population
 - 3%-5% of Americans (9-15 million people) have NASH, and ~20% of those will develop cirrhosis
 - By comparison, the 1999-2002 prevalence of hepatitis C virus (HCV) infection was 1.6%

Features of DUR-928

- Injectable formulation for acute dosing
- A novel, endogenous, small-molecule, epigenomic regulator of lipid homeostasis, inflammation, and cell survival
 - Regulates key enzymes & cell signaling mediators
 - Lipids: LXR, HMGCR, CYP7A1, PCSK9, FAS, ACC, BAT & others
 - Inflammation: PPAR γ , NF κ B/I κ B, TNF α , IL-1 α , IL-6, COX-2 & others
 - Cell survival: 24 genes associated with apoptosis/cell survival
- Compelling data from multiple animal models
 - Acute organ injury
 - Improved post-ischemia organ function
 - Improved survival
 - Chronic metabolic disease
 - Improved liver morphology and reduced liver TG & cholesterol
 - Reduced inflammation, fibrosis, and NASH score
 - Improved glucose tolerance and insulin sensitivity

Features of DUR-928

- Injectable formulation for acute dosing
- Oral formulation for chronic dosing
- Once-daily or less-frequent dosing
- No toxicity observed in preclinical studies to date
- No adverse events observed in initial Phase I trial

DUR-928: Next steps

- Multiple-ascending-dose oral Phase I to begin mid-2015
- Single-dose injectable Phase I to begin H2 2015
- Multiple-ascending-dose injectable Phase I to begin Q4 2015
- Phase II to begin 2016 in one or more patient populations
 - Acute organ injury with parenteral formulation (orphan)
 - Chronic indication with oral formulation (non-orphan, e.g., NAFLD/NASH)

ELADUR[®] (TRANSDUR[™]-Bupivacaine) Pain Patch

- Targeting post-herpetic neuralgia (PHN)
- Features:
 - 3 days vs. 12 hours for lidocaine patches
 - 66% of patients experience pain during the 12-hour “rest period” *
 - Patient-friendly design
 - Ability to shower and exercise, won't fall off as easily
 - Orphan Drug Designation
- 1 US patent issued (2031), 1 European patent (2027+)
- Positive Phase II data in PHN
- Licensed to Impax Pharmaceuticals
 - \$61 million potential milestones, royalties



* Gammaitoni, AR et al., Journal of Clinical Pharmacology, 2003; 43:111-117

SABER®/CLOUD™ Technology for LT Injectables

Feasibility Projects leading to Development Programs

Relday™

- Opportunity = >\$1 billion
- Features:
 - First once-a-month risperidone
 - Subcutaneous vs. IM injection
 - Simplified dosing regimen
- Positive single dose Phase I
 - Dose range expected for clinical practice
- Partnered with Zogenix
 - \$103 mm milestones, royalties
 - Plans to initiate multi-dose clinical trial Q1 2015, data Q3 2015



Santen Ophthalmic Program

- Opportunity = LT injectable
- Features:
 - Long term delivery
 - Small gauge needle
 - High drug loading, low injection vol
- Positive feasibility project
- Partnered with Santen
 - \$76 mm milestones, royalties
 - Development program January 2015



ALZET[®] and LACTEL[®]

(dollars in millions)



- Strong financial performance and positive cash flow contribution

	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014 *</u>
Revenue	\$ 10.5	\$ 10.6	\$ 10.5	\$ 11.4	\$ 11.0
Gross Profit	6.6	6.2	5.9	6.8	7.0
Gross Margin	63%	58%	56%	60%	63%

*Gross profit and margin in 2014 excludes \$1.6 million charge for excipients used in other product lines.

DURECT Corporation

Company Financials

December 31, 2014

Cash and Investments	\$	34.9	MM
Debt		19.8	MM

Shares Outstanding (Feb 18, 2015)	113.7
Recent Share Price	\$ 1.00
Market Value	\$ 113.7 MM

Potential Milestone Payments

REMOXY and ORADUR-Hydromorphone	\$	3.4	MM
Relday		103.0	MM
ELADUR		61.0	MM
Santen ophthalmic product		76.0	
Total	\$	243.4	MM

Federal NOL carryforward at 12/31/14	\$ 277	MM
State NOL carryforward at 12/31/14	\$ 204	MM

Insider buying 2012-2014	>1.4	MM	shares
Insider ownership (excl. options)	4.5%		
Options paid in lieu of cash bonuses 2011-2013	~\$3.7	MM	
Reduced salaries / BOD fees for options 2012-2014	>\$1	MM	
2013 cash bonus declined by Section 16 Officers	~\$158,000		

Potential Key Drivers Next 12-24 months

- REMOXY®
 - Tech transfer back to Pain Therapeutics (PTI), NDA resubmission by PTI
 - PTI seeking new commercialization partner
- POSIDUR™
 - Finalize design and initiate soft tissue safety/efficacy trial
 - Potential commercialization partner
- DUR-928
 - Additional Phase 1 studies in 2015, precursor to Phase 2 in 2016
 - Potential development and commercialization partner(s)
- Other Programs in Pipeline
 - ELADUR®: Initiation of Phase 3 by Impax
 - Relday™ (risperidone): Initiation of multi-dose clinical trial by Zogenix in Q1 2015 with data in Q3 2015, precursor to Phase 3 in 2016
 - Santen Ophthalmic Program: In development, details to be disclosed by Santen