DURECT Corporation

A Biopharmaceutical Company

April 24, 2017

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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 an innovative biopharmaceuticals 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."

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A Biopharmaceutical Company with a Rich Pipeline

- Epigenetic NCE's for orphan diseases (PSC), acute organ injury and chronic metabolic diseases (including NAFLD/NASH), and inflammatory conditions (including psoriasis)
  - Family of endogenous small molecules
  - DUR-928: lead molecule with compelling data from more than 10 animal models
  - More than 140 people dosed in Phase 1 studies
  - Phase 1b activity in NASH patients
- Pipeline of 505(b)2 programs
  - Including the late-stage post-op pain product: POSIMIR®
- Cash flow positive product lines
  - ALZET® and LACTEL®

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Epigenetic Regulator Program

- Family of ENDOGENOUS epigenetic regulators and analogues
  - Sulfated oxysterols: a new class of therapeutics
  - Regulation of lipid metabolism, inflammatory response, and cell survival
  - In-licensed in 2012; exclusive WW rights with patents issued and pending

- 3 programs, many potential orphan & broad-based indications
  - Chronic metabolic disorders . . . . . Oral administration
  - Acute organ injuries . . . . . Injection (SC, IM, IV)
  - Inflammatory skin disorders . . . . . Topical

- Lead molecule: DUR-928
  - Compelling data from more than 10 animal models
  - Phase 1b study (NASH) completed, signal of biological activity from single dose
  - Phase 1b study (CKD) on-going
  - Phase 1b study (Psoriasis) completed, advancing to topical formulation

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DUR-928
Biology

- Made in association with the mitochondria
  - Insulin is one of the mechanisms that regulate its production
  - Shown to stabilize mitochondrial membranes
- Modulates Lipid Metabolism
  - Decreases fatty acid, cholesterol and triglyceride synthesis (HMGCR, ACC, FAS, others)
  - Regulates lipid absorption and transportation
  - Improves insulin sensitivity and glucose tolerance
- Regulates inflammation responses (including modulation of IL-1, IL-6, IL-18, hsCRP, TNFα, and other mediators during the inflammation state)
- Improves cell survival (including reduction of full length and cleaved CK-18)

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Epigenetic Regulator Program
Endogenous molecules

- Endogenous = produced naturally by the body
- DUR-928 is highly conserved and found in similar plasma concentrations in healthy state in all mammals studied to date:
  - Humans, mice, rats, hamsters, monkeys, dogs
- Endogenous molecules have been approved in various therapeutic areas:

Insulin	Corticosteroids
Thyroid hormone	Erythropoietin (Epoetin alfa; Epogen®/Procrit®)
Growth hormone	G-CSF (Filgrastim; Neupogen®/Neulasta®)

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Compelling Animal Data

- Activity demonstrated in multiple metabolic disorders, inflammatory conditions and acute organ injury
  - Chronic model observations:
    - Suppresses inflammatory responses
    - Reduced fibrosis, hepatocyte ballooning, and lipid accumulation
    - Improved glucose tolerance, insulin sensitivity, and liver morphology
    - Improved cholestatic liver injury
  - Acute model observations:
    - Reduced mortality, inflammation, and cell death
    - Improved histology across multiple organs
- Treatment duration covering 1-2 injected doses (acute), to daily oral administration (chronic)

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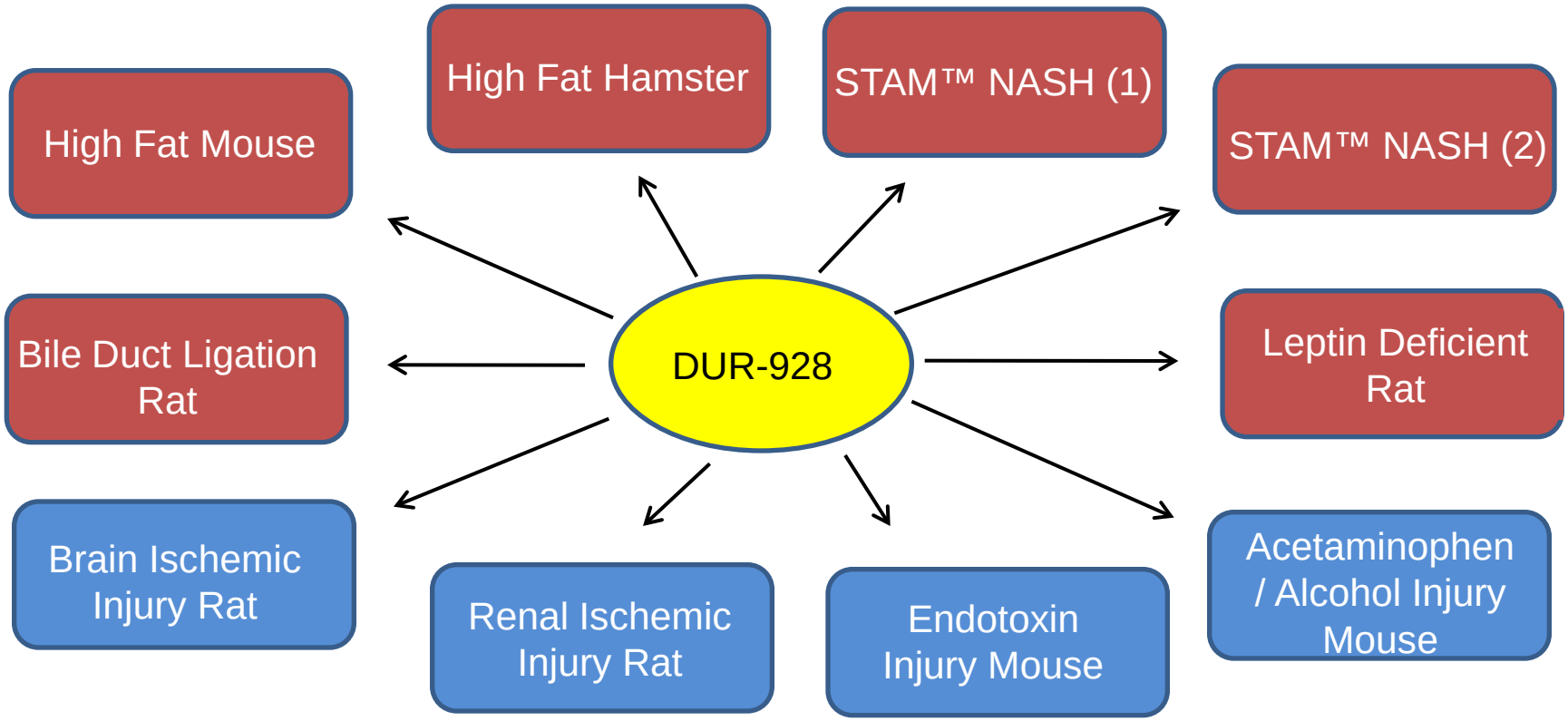
DUR-928
Compelling Animal Data



- Extensive, compelling pre-clinical data
- Positive data has been generated in each of the models shown
- Together, these have given us confidence in the activity of this drug candidate

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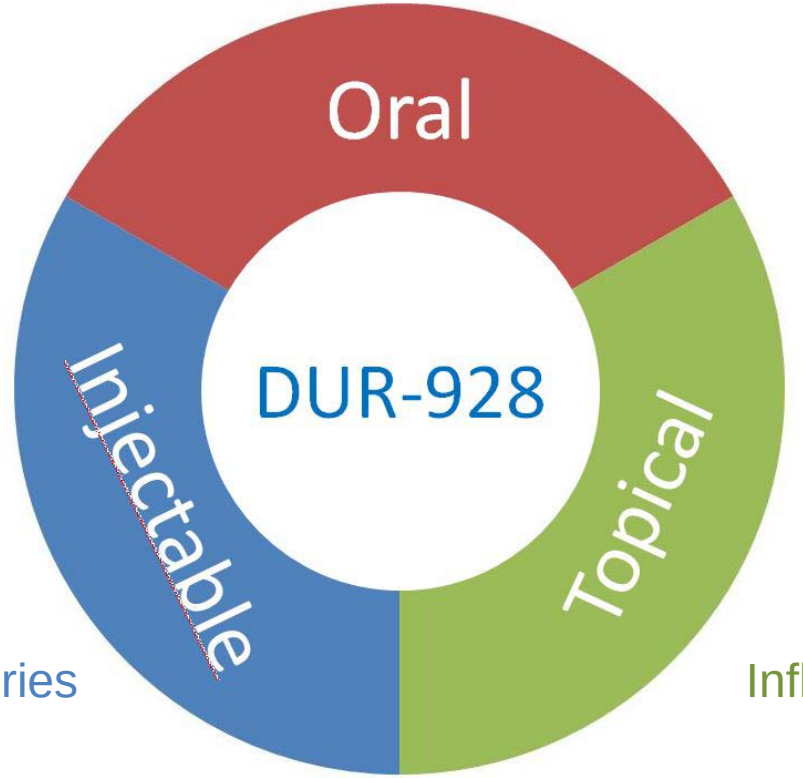
DUR-928 Development Programs
Orphan and broad based indications

NASH/ASH
Cholestatic liver diseases,
Other metabolic disorders



AKI
Acute organ injuries

Psoriasis
Inflammatory skin disorders

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Phase 1: Safety in healthy human subjects

Single-site, randomized, double-blind, placebo controlled studies

Oral Administration

- Single-ascending dose in 30 subjects
- Multiple-ascending dose in 20 subjects (5 consecutive days)
- Food effect in 8 subjects

Injectable Administration

- Single-ascending dose in 24 subjects
- Multiple-ascending dose in 10 subjects (5 consecutive days)
- IV infusion in 16 subjects

- Over 140 individuals treated (including Phase 1b studies)
- High doses resulted in plasma levels >1,000-fold higher than endogenous levels
- Minimal food effect observed
- Well tolerated at all doses
- No accumulation in plasma concentrations observed with repeated dosing, dose related increases in plasma concentrations observed

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Chronic Metabolic Disease Program

Phase 1b: Initial Patient Study (NASH)

- Conducted in Australia, oral formulation
- 2 successive cohorts evaluating single doses of DUR-928:
  - 20 NASH patients and 12 matched control subjects (by age, body mass index and gender, but with normal liver function)
  - Single-site, open label, dose ranging safety and PK study
- Safety and PK results:
  - Safe and well tolerated, with one possibly treatment related serious adverse event (shortness of breath)
  - PK parameters between NASH patients and matched controls comparable

➢ While not designed to assess efficacy, biologic activity was observed after a single dose in both cohorts

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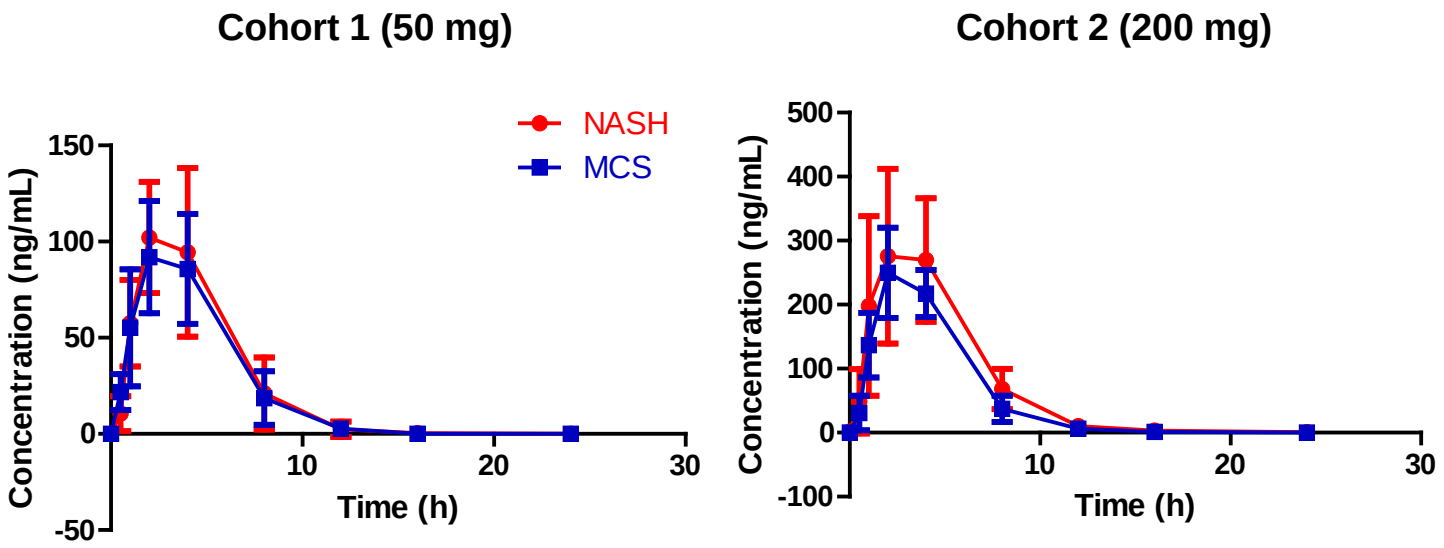
Phase 1b: NASH Patient Study

Plasma exposure not significantly increased in NASH patients compared to matched control subjects with normal liver function



N = 10 NASH patients, 6 Matched Control Subjects per cohort

Note: NASH group includes cirrhotic and non-cirrhotic patients

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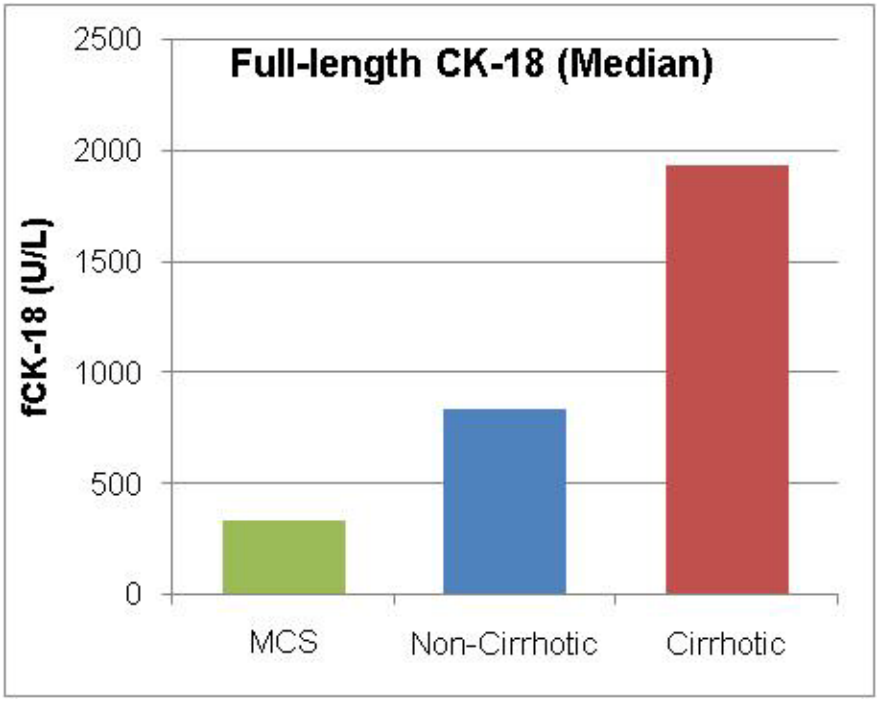
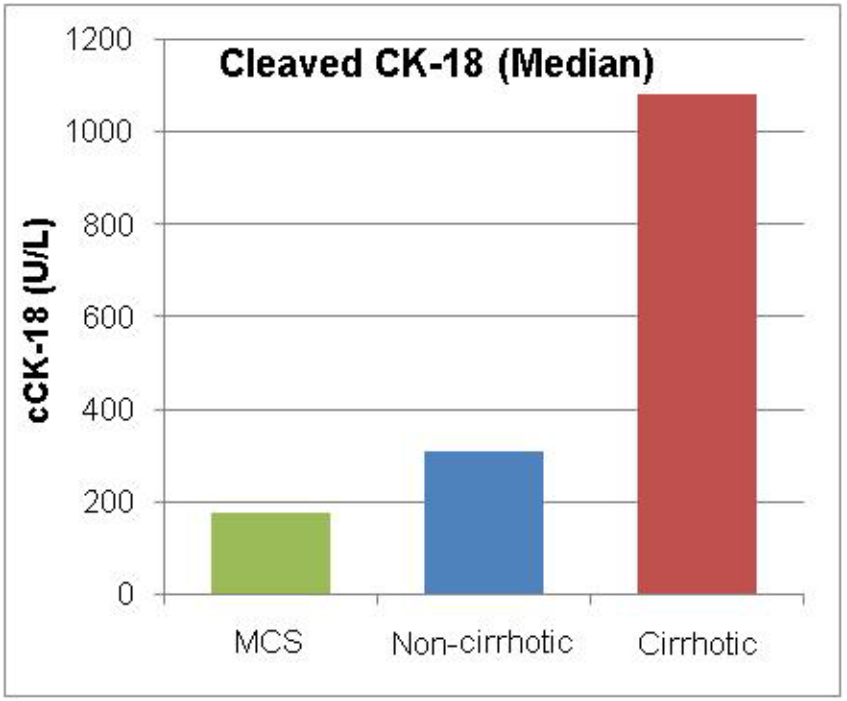
Phase 1b: NASH Patient Study

CK-18 – cell death marker

Baseline Value in Study Subjects





N = 10 NASH patients, 6 Matched Control Subjects – from low dose cohort

Note: NASH group includes cirrhotic and non-cirrhotic patients

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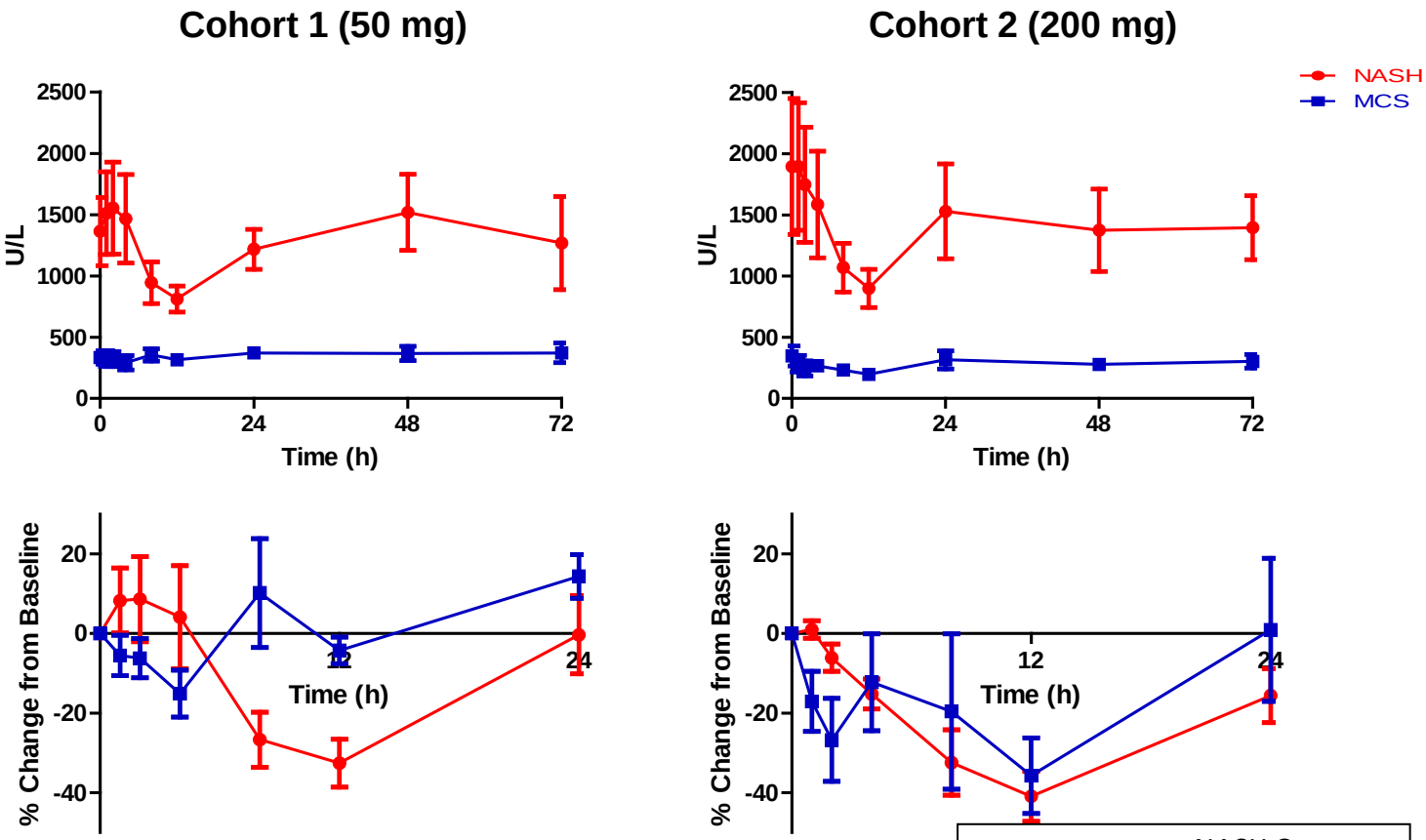
Phase 1b: NASH Patient Study

Full-length CK-18



	NASH Group 12 hour Decrease
Low Dose	33%
High Dose	41%

N = 10 NASH patients, 6 Matched Control Subjects per cohort

Note: NASH group includes cirrhotic and non-cirrhotic patients

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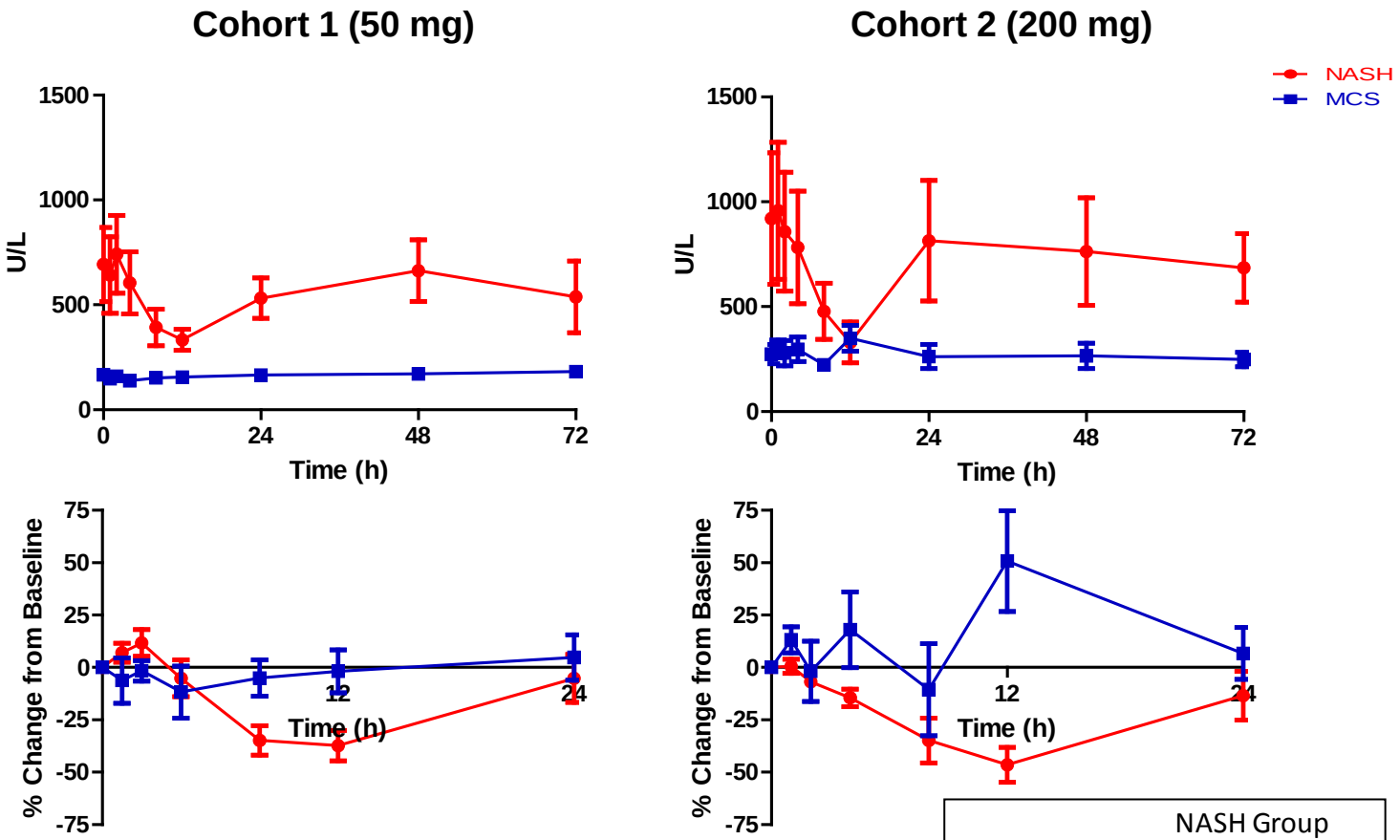
Phase 1b: NASH Patient Study

Cleaved CK-18



	NASH Group 12 hour Decrease
Low Dose	37%
High Dose	47%

N = 10 NASH patients, 6 Matched Control Subjects per cohort

Note: NASH group includes cirrhotic and non-cirrhotic patients

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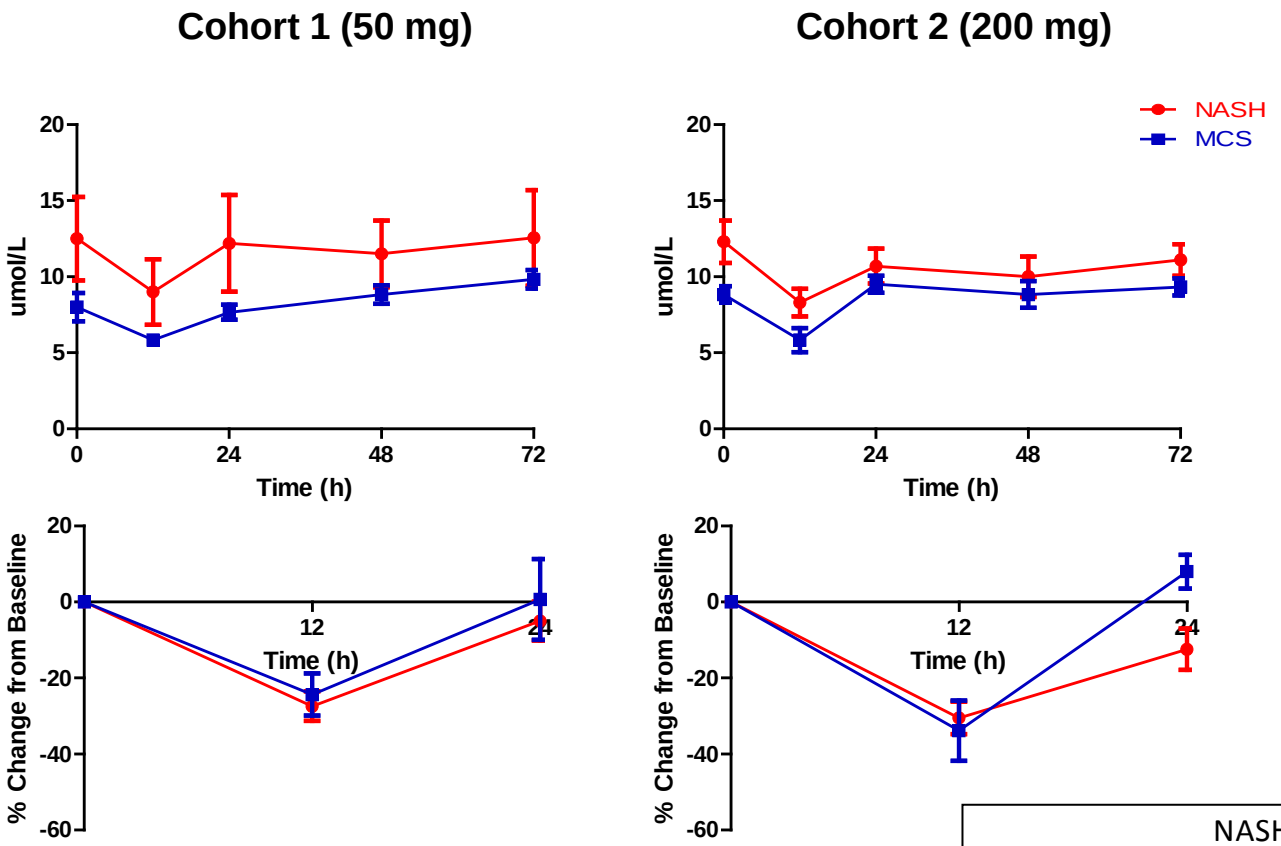
Phase 1b: NASH Patient Study

Total Bilirubin



	NASH Group 12 hour Decrease
Low Dose	27%
High Dose	31%

N = 10 NASH patients, 6 Matched Control Subjects per cohort

Note: NASH group includes cirrhotic and non-cirrhotic patients

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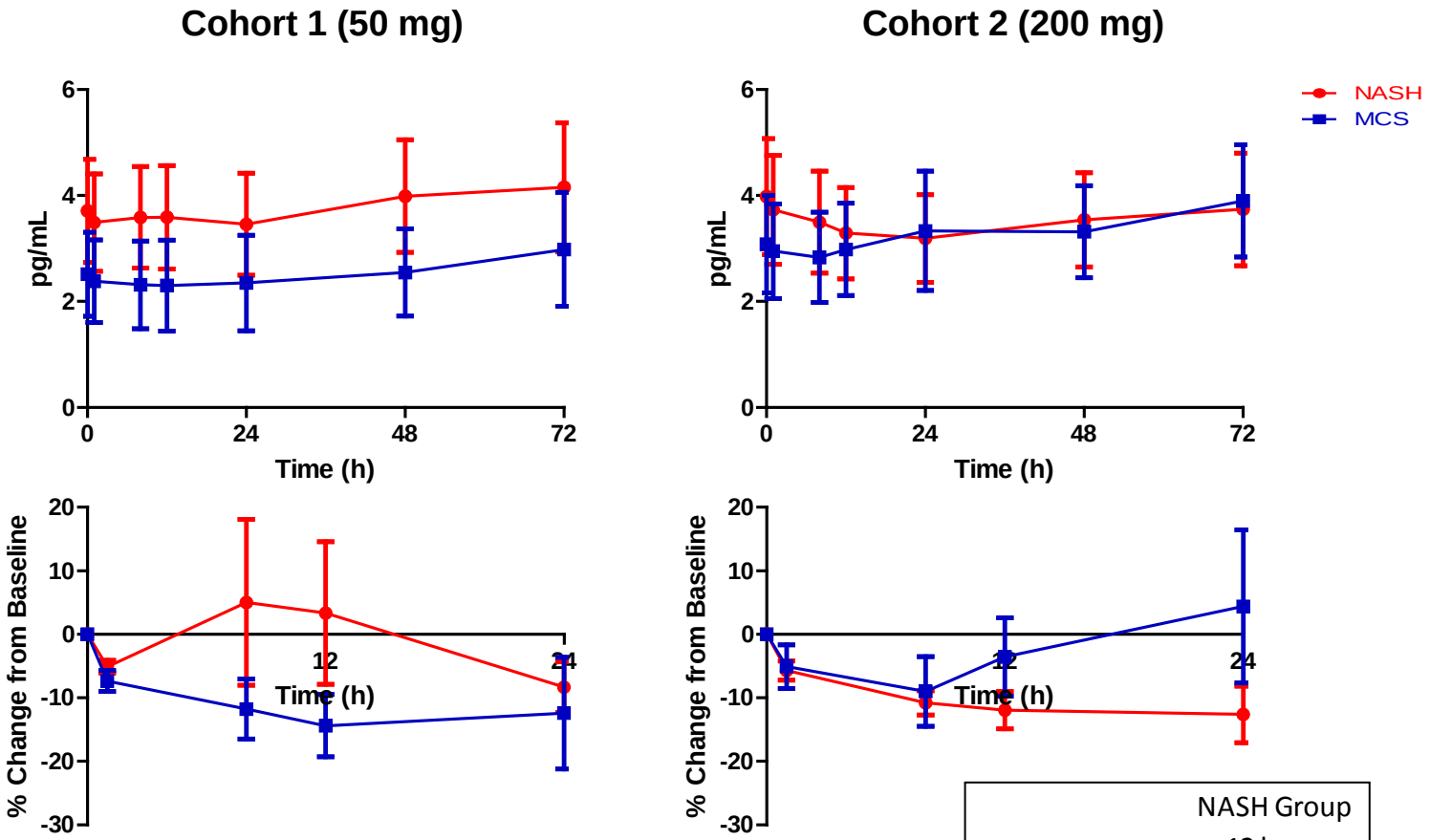
Phase 1b: NASH Patient Study

High-sensitivity C-reactive Protein (hsCRP)



	NASH Group 12 hour Decrease
Low Dose	-3%
High Dose	12%

N = 10 NASH patients, 6 Matched Control Subjects per cohort

Note: NASH group includes cirrhotic and non-cirrhotic patients

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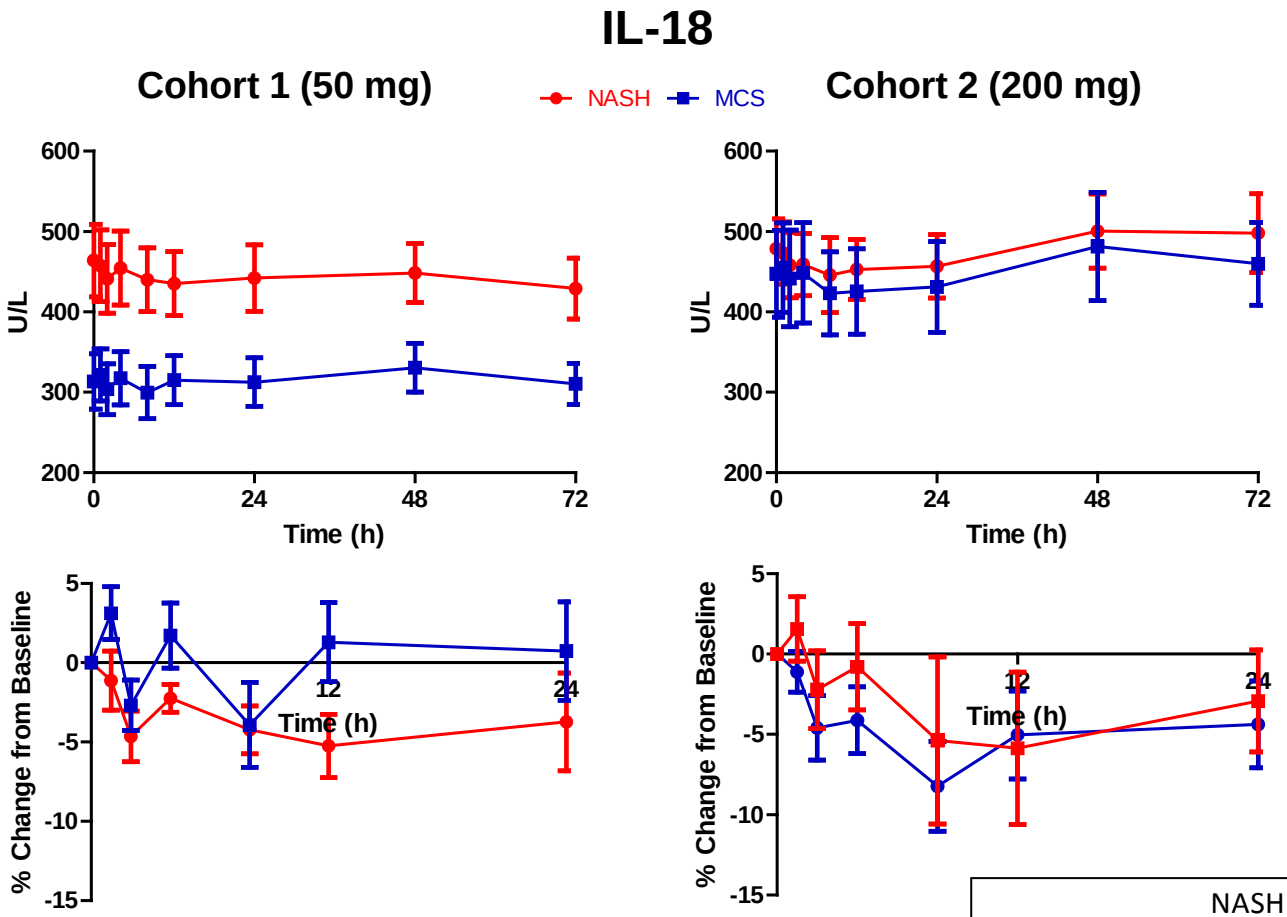
Phase 1b: NASH Patient Study



	NASH Group 12 hour Decrease
Low Dose	5%
High Dose	5%

N = 10 NASH patients, 6 Matched Control Subjects per cohort

Note: NASH group includes cirrhotic and non-cirrhotic patients

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Acute Organ Injury Program

Phase 1b: Initial Patient Study (renal impaired patients)

- Conducting in Australia, injectable (IM) formulation
- 2 successive cohorts evaluating single doses of DUR-928:
  - 6 renal function impaired patients (stage 3 and 4 chronic kidney disease) and 3 matched control subjects (by age, BMI, and gender) per cohort
  - Single-site, open label, dose ranging safety and PK study
  - Progressed to Cohort 2, with dose 4x that of Cohort 1
  - PK parameters between kidney function impaired patients and matched controls comparable in first cohort

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Inflammatory Skin Condition Program

Phase 1b: Initial Patient Study (Psoriasis)

- Conducted in Australia, intralesional injection
- Evaluating a single dose of DUR-928:
  - 9 psoriatic patients (moderate to severe)
  - Micro-plaque assay, self-control
  - 2 formulations, double-blinded, safety and efficacy study
  - Kenalog as positive control
  - Evaluated LPSI (local psoriasis severity index) scores

➢ Proceeding with development of a topical formulation of DUR-928 and a similar Phase 1b study

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DUR-928: An Endogenous Sulfated Oxysterol

An epigenetic regulator, highly conserved, and a new class of therapeutics

In vitro:

Regulation of genes in Lipid metabolism, inflammatory responses, and cell survival

Disease Models:

Demonstrated activity in more than 10 models, covering chronic and acute conditions

Normal Animals:

Demonstrated excellent safety in all toxicology studies, covering oral and injectable administrations

Patients:

Demonstrated biologic activities in NASH and psoriasis patients (single dose)

Healthy Subjects:

Well tolerated at all doses (single, multi, oral administration, injection, IV infusion)

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DUR-928 Development Programs: Next steps

- Oral Formulation
  - Presenting NASH data at EASL (April 22)
  - Commence Phase 2 in PSC
- Injectable Formulation
  - Complete Phase 1b study in chronic kidney patients
  - Commence Phase 2 in one or more acute indications
- Topical Formulation
  - Proof-of-concept Phase 1b in psoriasis

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POSIMIR®: Post-Operative Pain Control
SABER®-Bupivacaine

- Up to 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 and costs
  - Nausea, vomiting, ileus, constipation, respiratory depression
  - Potential for earlier hospital discharge

➢ DURECT holds WW rights to POSIMIR

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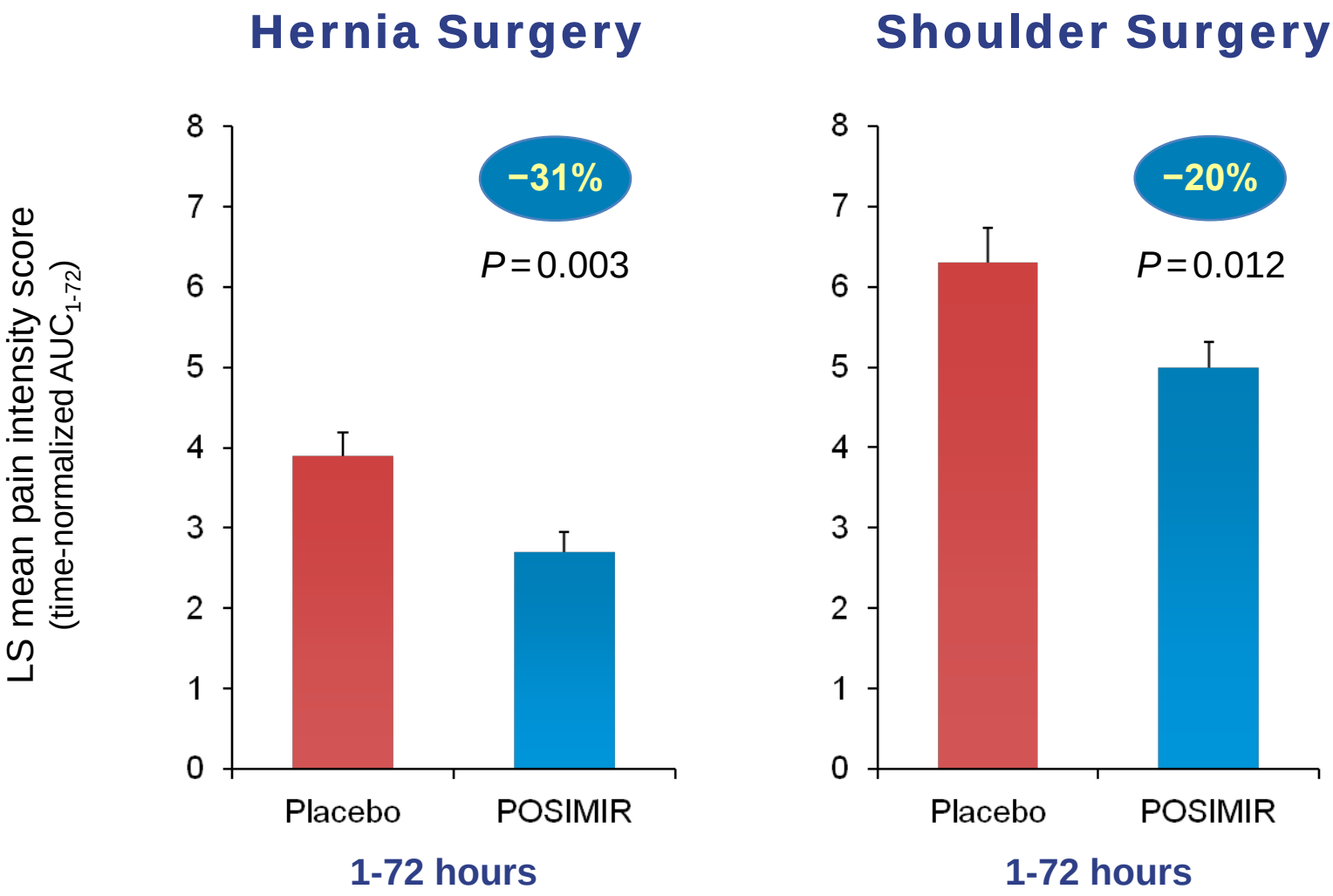
POSIMIR®
Reduction in Pain on Movement



P-values derived from ANOVA.

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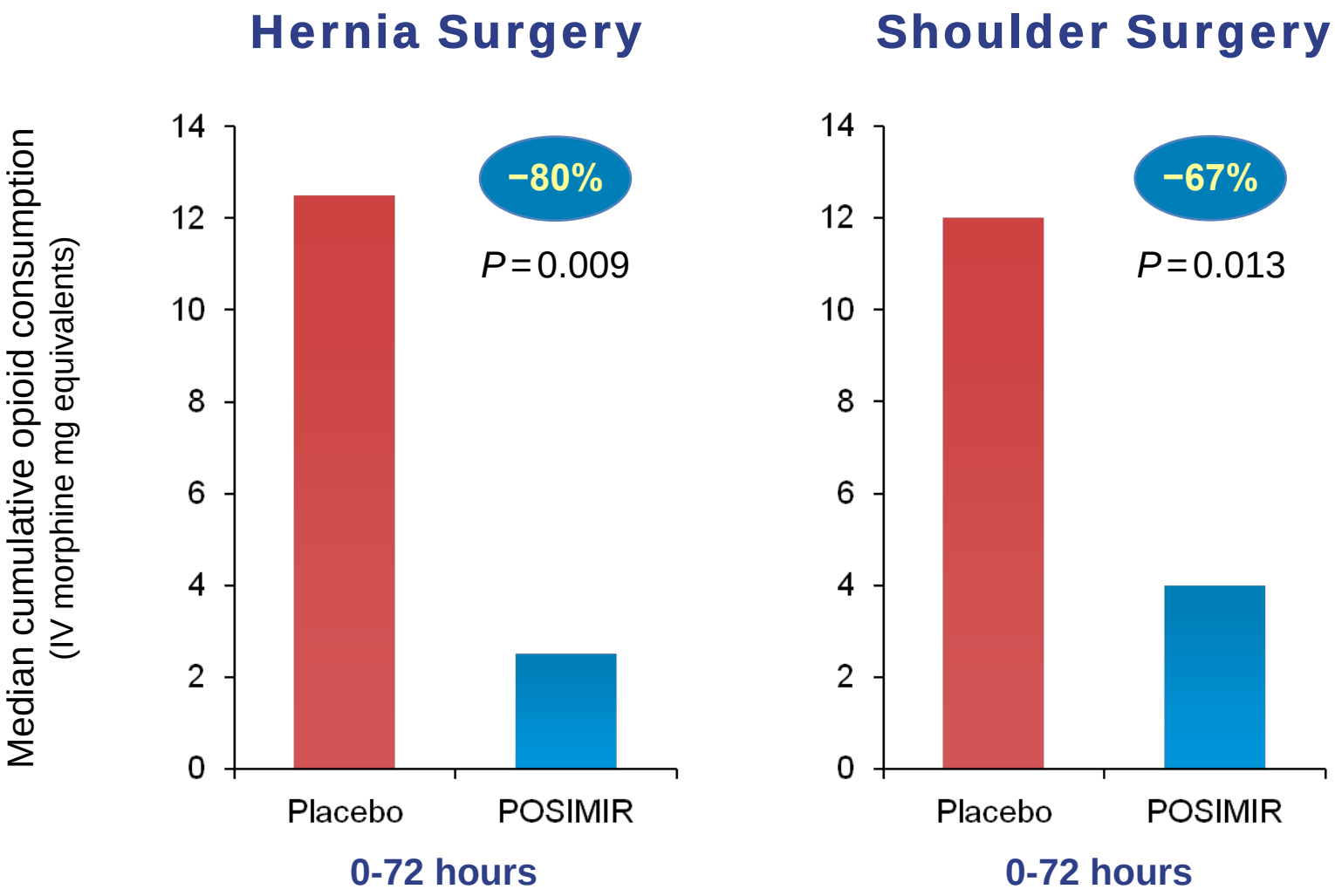
POSIMIR®
Reduction in Opioid Use



P-values derived from nonparametric Wilcoxon Rank Sum test.

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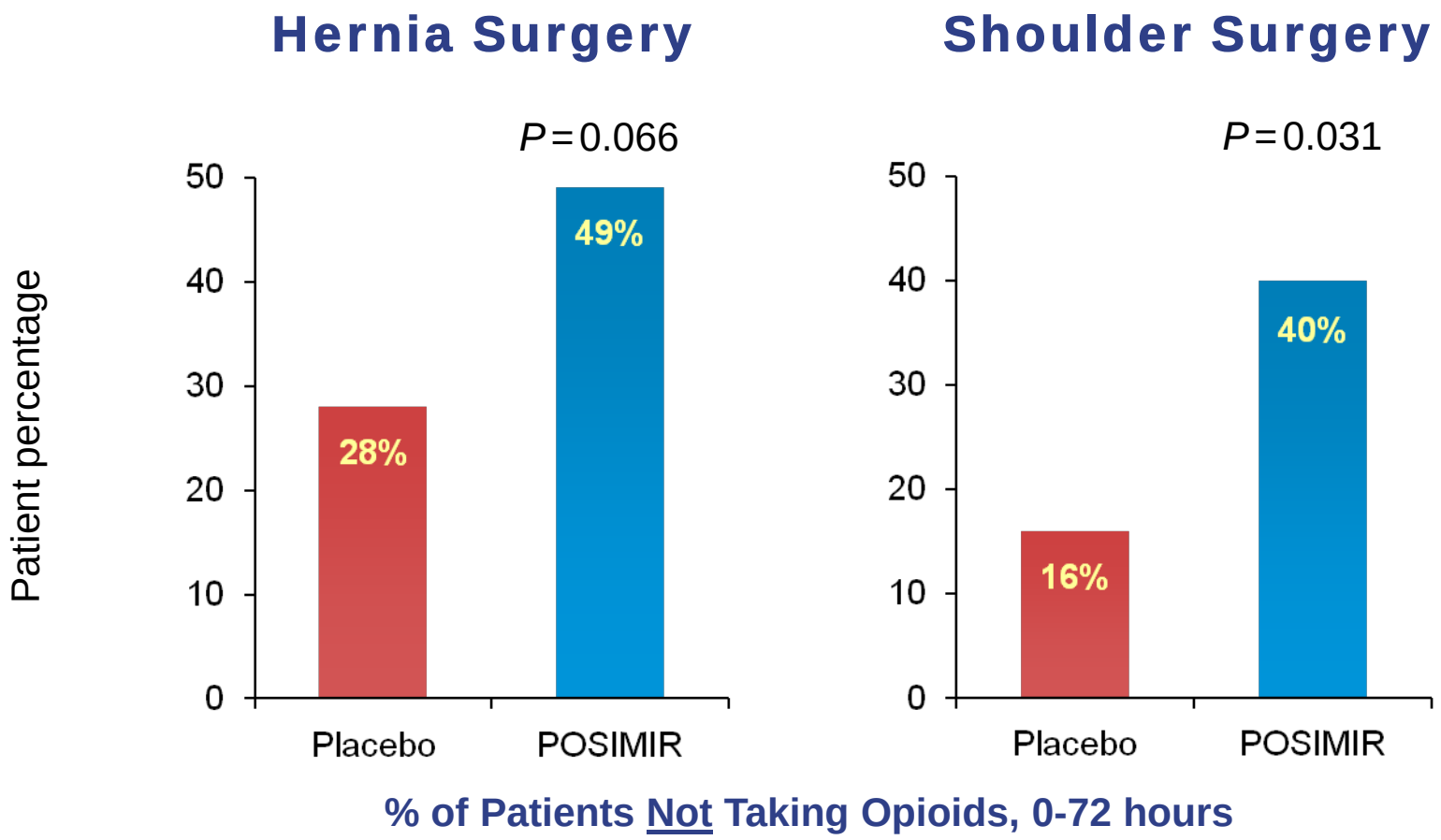
Proportion of Patients NOT Taking ANY Supplemental Opioid



>20% more patients did not require a single opioid

P-values derived from CMH Chi-Square test adjusted by study sites.

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POSIMIR®
Phase 3 Pivotal Trial

PERSIST

- Phase 3 clinical trial in laparoscopic cholecystectomy (gallbladder removal)
- Part 1: POSIMIR vs. Placebo, n = 92
- Part 2: POSIMIR vs. Bupivacaine HCl, n = ~264
  - Primary efficacy endpoint: pain intensity on movement during first 48 hours after surgery
  - Key secondary endpoint: pain intensity on movement during first 72 hours after surgery
  - Other secondary endpoints: cumulative use of opioids, etc

➢ Positive previous experience with this surgery

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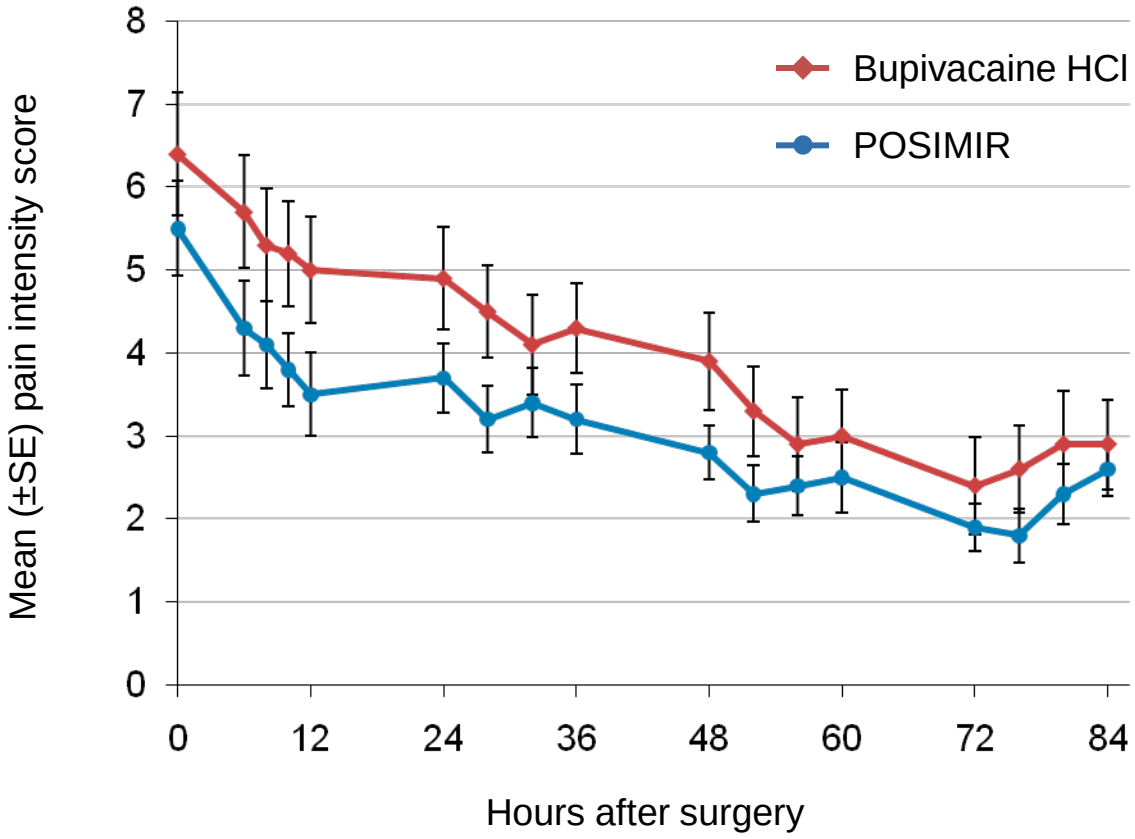
POSIMIR®
Using statistical method being used in the Phase 3

BESST Trial

Pain intensity on movement
Laparoscopic cholecystectomy (Cohort 2, N=50)



~25% Pain Reduction

P = 0.0198, 2 days

P = 0.0235, 3 days

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POSIMIR®
Differentiating Features

- NDA to include efficacy data from 3 common surgical models
  - Hernia, shoulder, gall bladder removal
  - Aiming to be first product to demonstrate efficacy in laparoscopic procedures
- Extended duration of action (3 days)
  - SABER® formulation allows dosing 660 mg — 2½ times more than any other bupivacaine product
- Simple and rapid administration into the wound under visual supervision
  - Puts more drug closer to affected nerves
  - Facilitates use in laparoscopic procedures with multiple ports

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POSIMIR®
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

➢ Compelling 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

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Company Financials

Shares Outstanding (March 9, 2017)		141.9	
Recent Share Price (March 31, 2017)	$	1.05	
Market Value	$	149.0	MM

December 31, 2016			
Cash and Investments	$	25.2	MM
Debt		19.9	MM

Federal NOL carryforward at 12/31/16	$	327	MM
State NOL carryforward at 12/31/16	$	216	MM

Insider selling	None	
Insider buying 2012-2016	>2.5 MM	shares
Insider ownership (excl. options)	~4.7%	
Options paid in lieu of cash bonuses [1]	>$5.7 MM	
Reduced salaries / BOD fees for options [2]	>$1.5 MM	

[1] 2012-2016
[2] 2011-2016

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Potential Key Drivers Next 12-24 Months

Next 12 months

- Patient data, start of Phase 2 (DUR-928), initial Phase 2 data
- Complete Phase 3 (POSIMIR®), top-line data, NDA resubmission
- 1 new meaningful collaboration
- Phase 3 data in Taiwan (ORADUR®-Methylphenidate)

Next 24 months

- Phase 2 data in one or more indications (DUR-928)
- POSIMIR® approval and launch
- At least 1 new collaboration
- Phase 3 in Europe/US (ORADUR®-Methylphenidate)

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