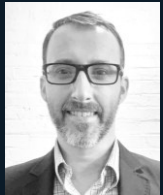




The New Chemo.

Rebuilding the Decades-Old
Foundation of Cancer Therapy



Sam Rothstein, PhD
CEO and Co-Founder
srothstein@DuoOncology.com



Duo is Upgrading Cancer Therapy's Toxic Foundations

For decades, chemotherapy has been and remains the backbone of cancer therapy



Pancreas

Gemcitabine

nAb-paclitaxel

Since: 2013



Bile Duct

Gemcitabine

Cisplatin

2012



Bladder

Gemcitabine

Cisplatin

2005



Stomach

Docetaxel

Cisplatin, 5-FU

2006



Lung

Paclitaxel

Cisplatin

2010



Breast

Paclitaxel

Gemcitabine

2015



Ovarian

Gemcitabine

Carboplatin

2012

- Many cancers share common first and second line backbone chemotherapy combinations.
- Cost of generic chemo remains high (\$30-70k) per month largely due to expense in managing side effects
- Duo's nanomedicines could offer patients safer, more potent anti-neoplastic therapy and become the new backbone of cancer therapy...

Duo's Chemistry Protects Patients and Penetrates Tumors

Pipeline of Best-in-Class Foundational Therapies

Clinical-stage lead, DUO-207 replaces paclitaxel & gemcitabine

- Issued chemistry patent 'til 2040
- Granted orphan designations
- Clean freedom to operate
- Clinically proven active moieties

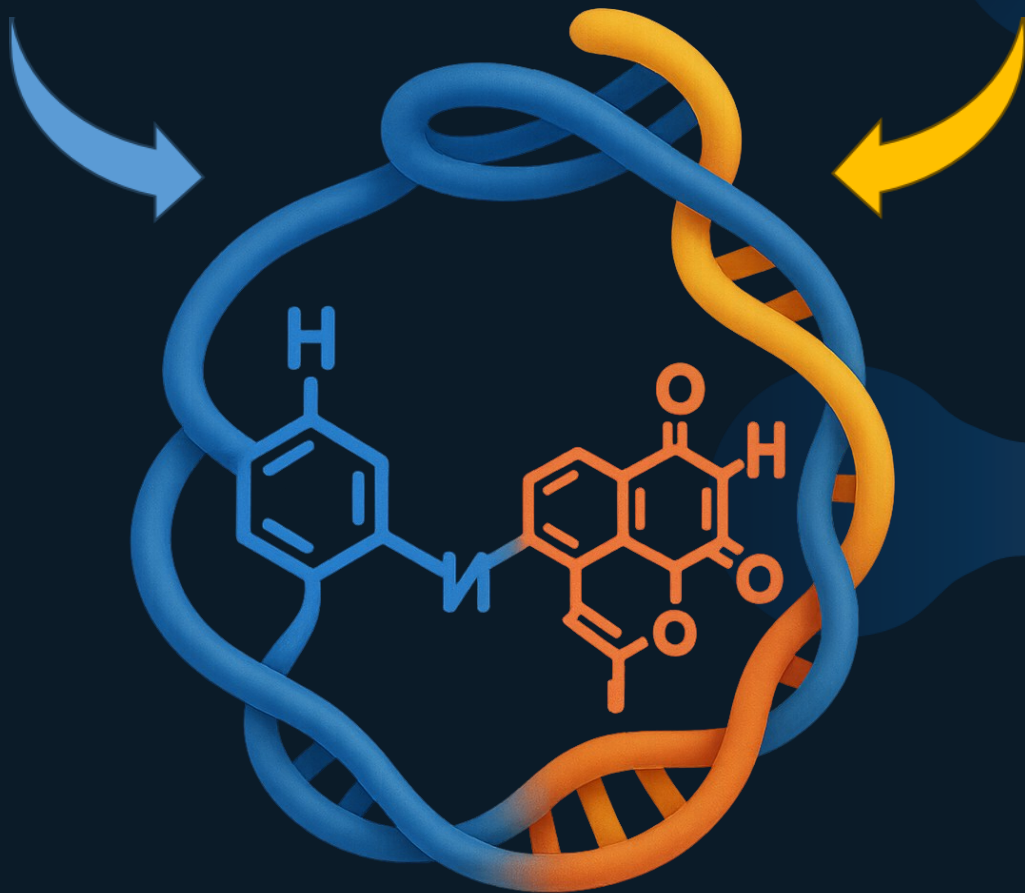
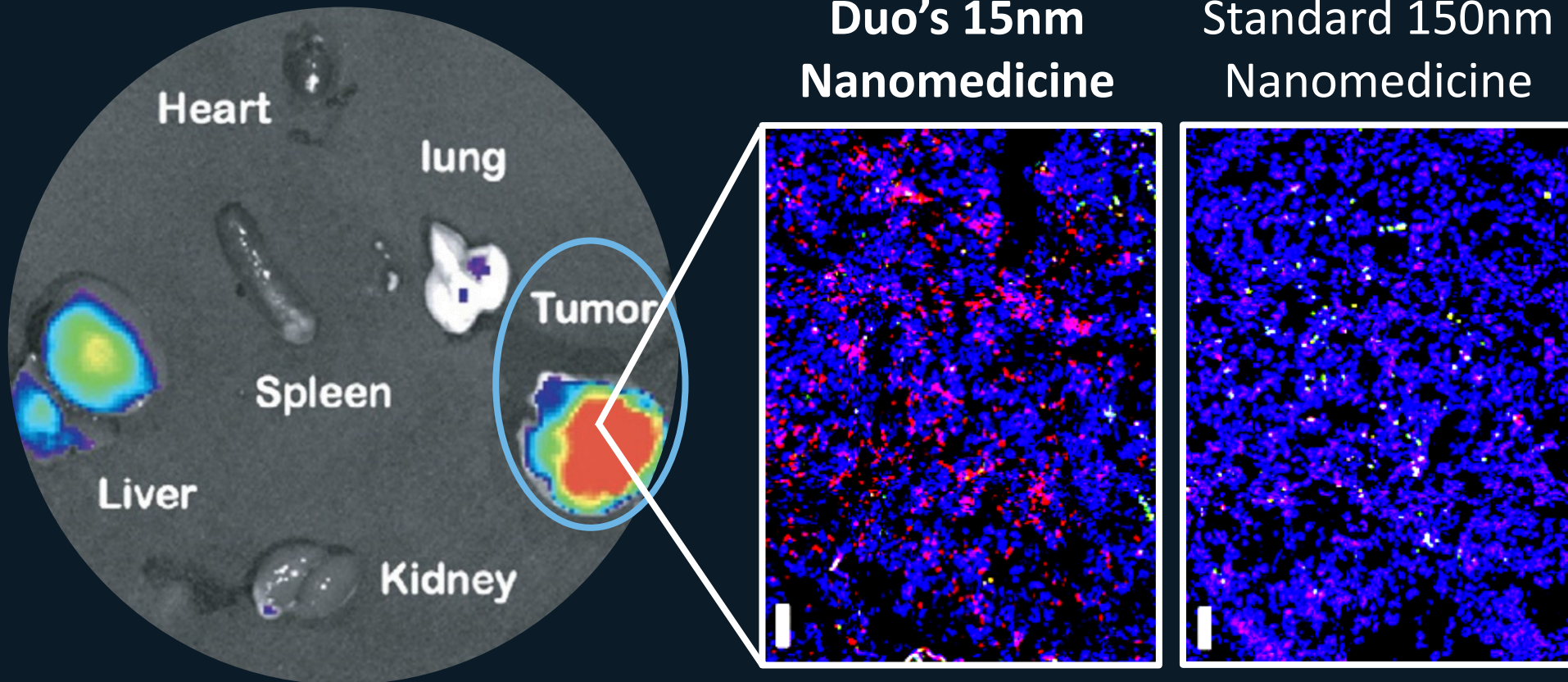


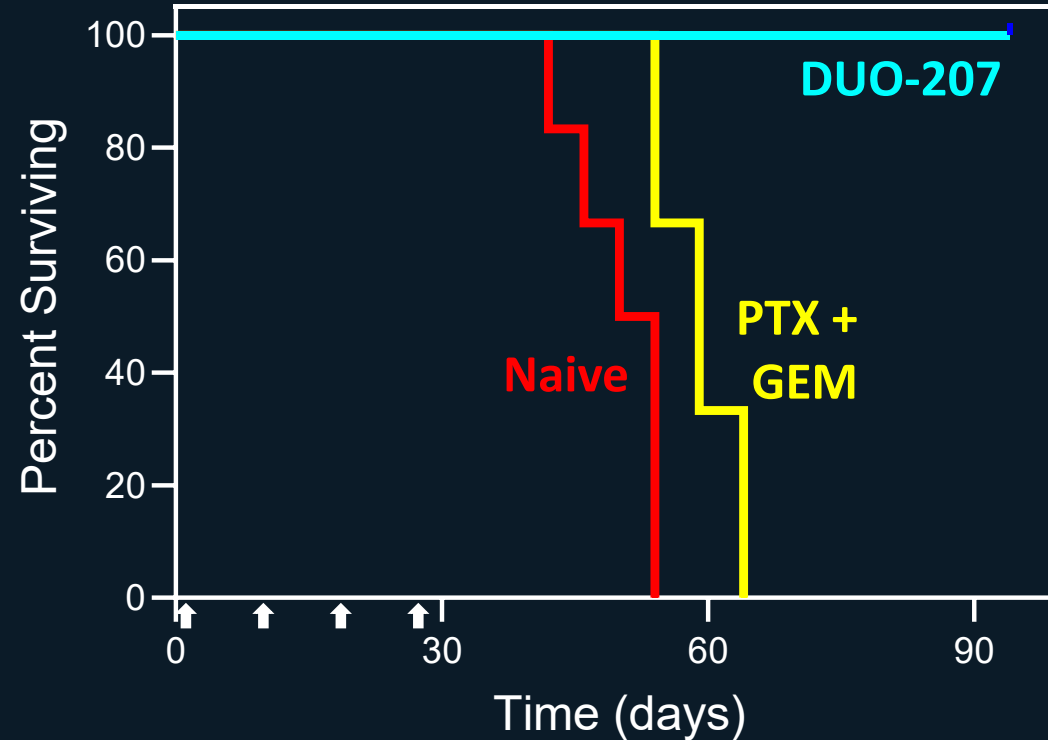
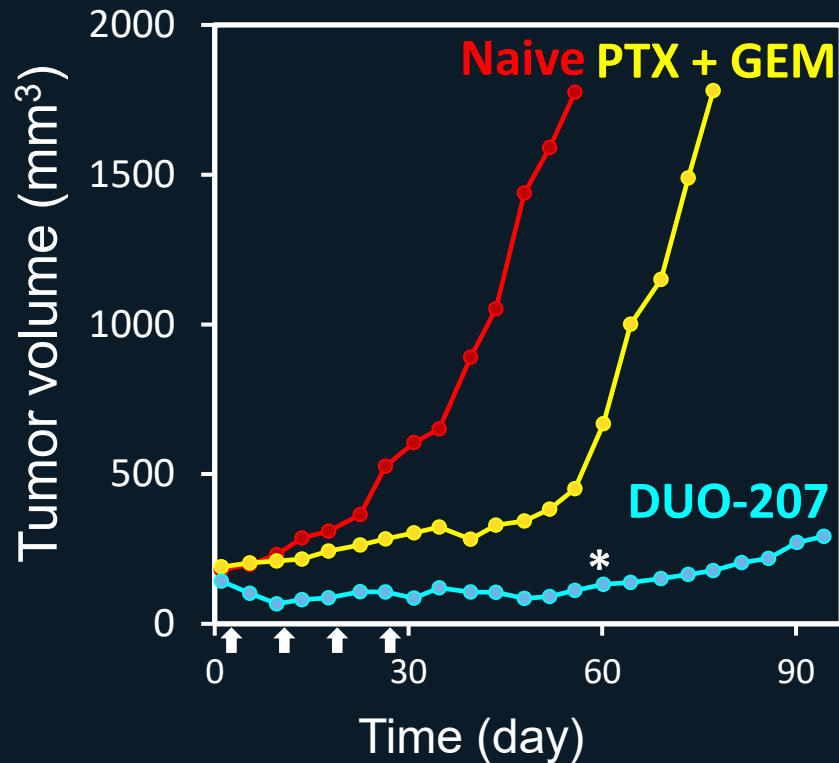
Illustration of DUO-207: Self-assembling prodrug nanomedicine with dual active payload.

Duo's Nanomedicine Chemistry Gets to the Right Place: Out of Healthy Organs and Deep into Tumor



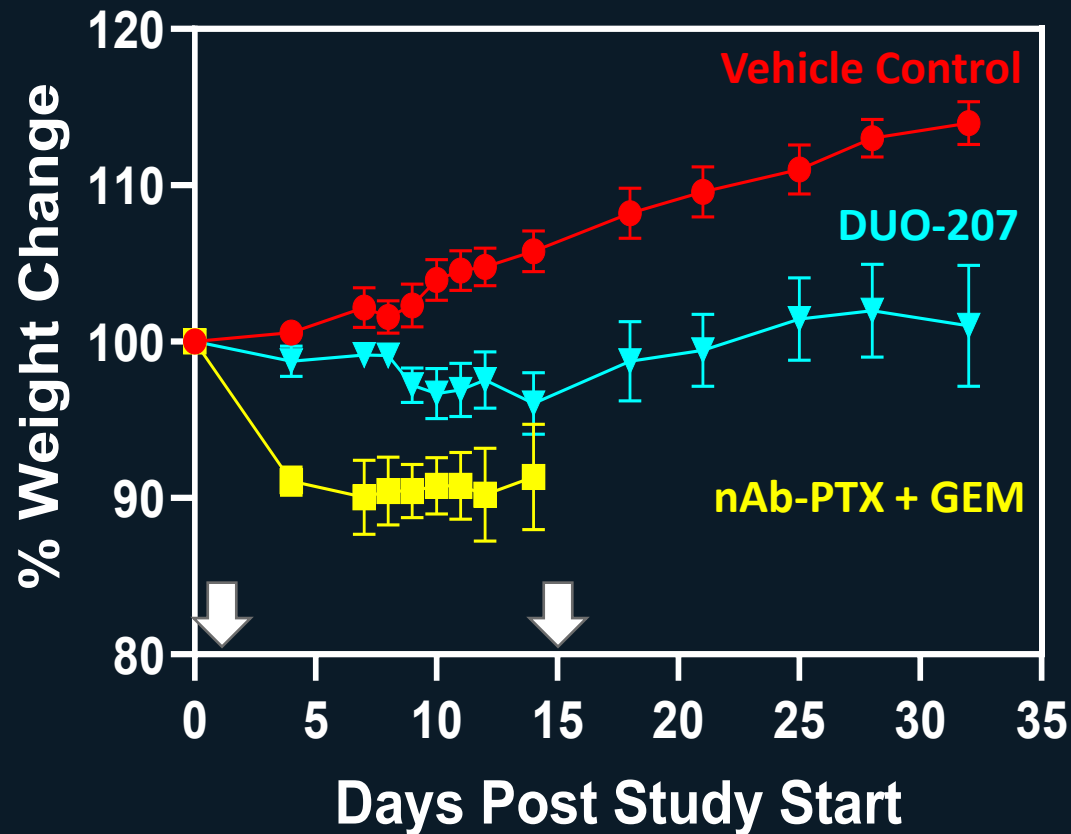
Small size = better biodistribution in mice with orthotopic KPC tumors and other clinically relevant cancers. Excised organs or tumors (left) show nanomedicine accumulation as low (blue / green) or high (yellow / red). Images (right) show nanomedicine (red) and blood vessels (green) in tumor tissue (blue) (50 μm scale bar). **Important: Duo's 15nm nanomedicines leaves blood vessels to penetrate tumor; 150nm particles do not.**

DUO-207 Nanomedicine: 100% Survival, Better than Matching Generic Therapy Against PDX Tumors



Sun et. al. Theranostics 2020: Equivalent i.v. doses of DUO-207 and PTX + GEM were given over four weeks (arrows). Stroma-rich CRC PDX mice (n = 6) 10:20 mg/kg DUO-207 superior to PTX + GEM 1 mo. after treatment (day 60) in both tumor volume (T Test, $p < 0.01$), and survival (Mantel-Cox $p < 0.0001$).

Favorable Results in DUO-207 Toxicology Studies: Starting Dose Finalized for Phase 1 Trial



DUO-207 better tolerated and safer than nAb-PTX + GEM (SoC) in rat and dog GLP tox. studies:

- Animal-equivalent doses of SoC cause severe weight loss.
- No evidence of liver or kidney toxicity in either DUO-207 or SoC.
- Dose limiting toxicity is to blood cells and is completely reversible.

Left: Weight gain in rats with Mia Paca 2 tumors treated at MTD determined in GLP tox studies. Full toxicology data package and summary report are available in the data room.

Full GLP Toxicology Studies Reveal Greater Than 3x Therapeutic Window for DUO-207.

	Murine mg/kg	Rat mg/kg	Canine mg/kg	HED mg/kg	HED mg/m ²
	7.5	4	1	0.6	21
First Efficacy	15	8	2	1.1	41
	30	16	4	2.2	82
			5.5	3.1	113
First Toxicity			7	3.9	144

- Superior to nAb-PTX + GEM (SoC)

- Recoverable Hemotoxicity
- No toxicity to liver or kidney

GLP-Tox data de-risks Bayesian Phase 1 trial:

- Starting Dose: 20mg/m² as per ICH S9 from non-toxic dose in dogs.
- Dose Escalation: 40mg/m² step up places 2nd cohort in efficacy range.
- De-escalation: 20mg/m² step down fine-tunes efficacy in

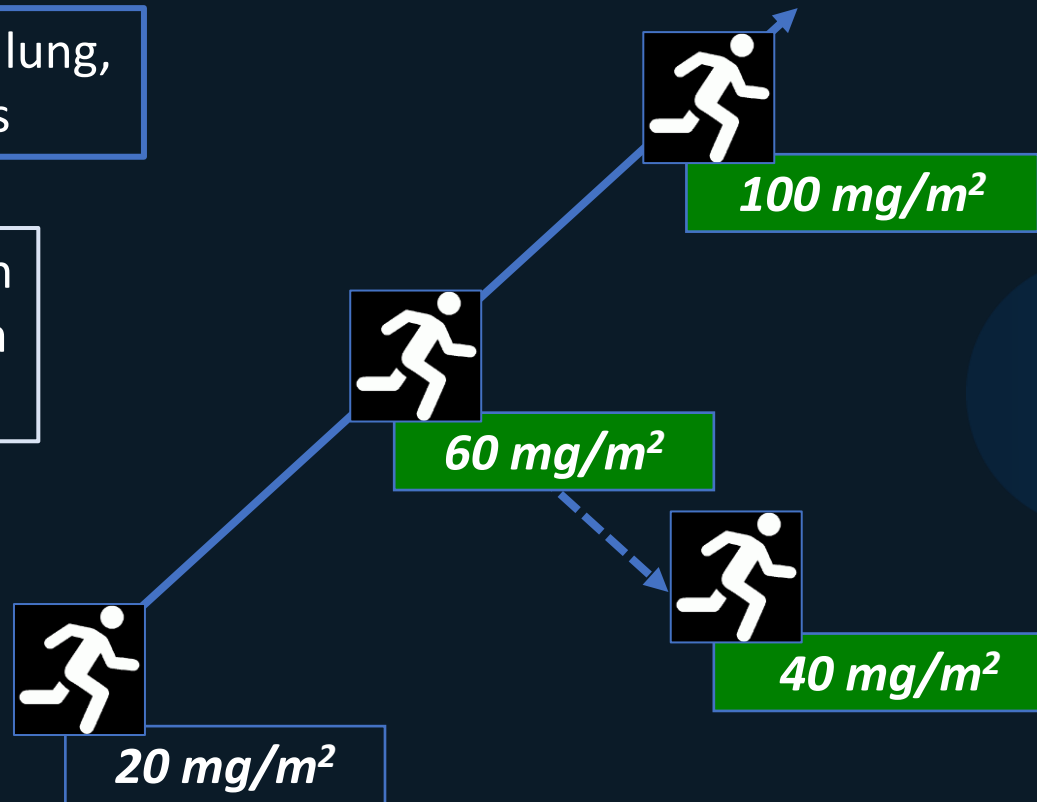
Continuous Reassessment Method Clinical Trial of DUO-207: Dose Escalation Reaches Human Efficacy by Patient #4

Q2W Dose Escalation: breast, lung, and pancreatic cancer patients

Enrollment: Cohorts start with 3 patients and adapt based on observed adverse events.

Escalation:

- 40mg/m² up
- 20mg/m² down



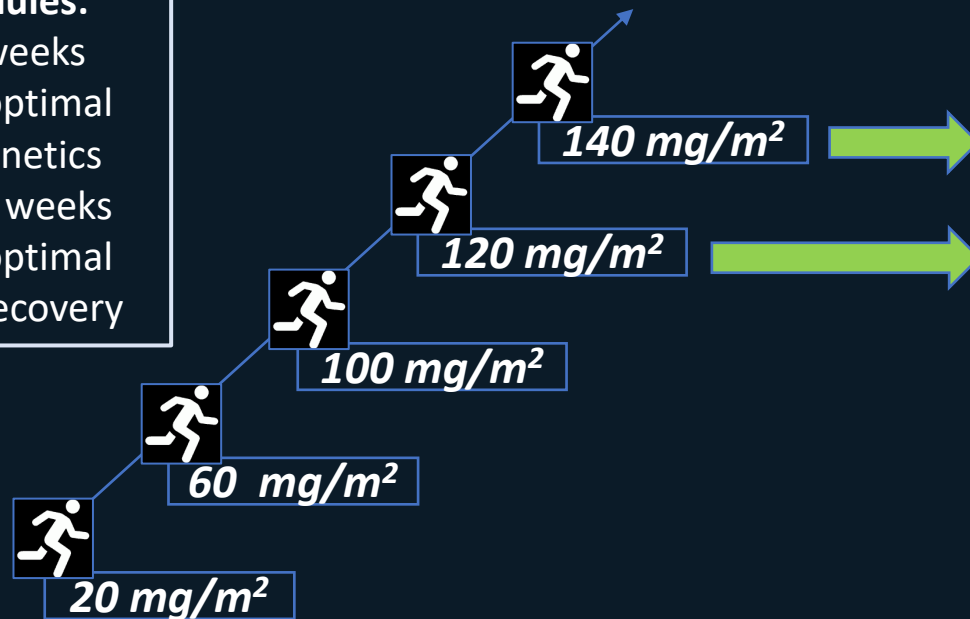
Starting dose selected based on ICH S9 guidance from GLP tox data. Selected cancers are known to respond to active moieties in DUO-207. Efficacious doses highlighted in green. The trial continues to efficacy using a Bayesian adaptive framework.

Continuous Reassessment Method Trial: Rapidly Optimizes DUO-207's Recommended Phase 2 Dose

PART 1: Dose Escalation to MTD (<40 patients)
(6-week cycle, escalation to Q2W then Q3W)

Dosing schedules:

- Every two weeks (Q2W) for optimal pharmacokinetics
- Every three weeks (Q3W) for optimal blood cell recovery



PART 2: Dose-Expansions for RP2D (<40 Patients)
(Safety and ORR evaluated by disease state)

DUO-207 Q3W

DUO-207 Q2W

One
DUO-207
RP2D

Cohorts for expansion selected for low AEs and high ORR from the following:

- Pancreatic: no more than one prior treatment
- Biliary: no more than one prior treatment
- Breast: no more than three prior treatments
- Lung: no more than one prior treatment

Full-Time Experts & Industry Veterans De-risk Growth



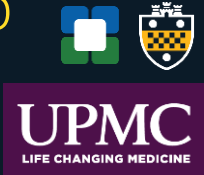
Sam Rothstein CEO

10yrs+ as life science CXO.
20yrs+ nanoparticle R & D.



Katherine Eichinger COO

Certified pharmacist & PhD
20yrs+ of translational exp.



Victoria Manax CMO

Expert on pancreatic cancer
and adaptive clinical trials.



Jose Iglesias Clinical Advisor

Leader in clinical development of
Gemzar & Abraxane



Karen Williams VP of Clinical Dev.

Oncology clinical trial
manager since 1987.



Mark Tracy VP of CMC

Led five particle drugs or
nanomedicines to NDAs.



Jen Haldeman Acting CCO

Chief marketing and
commercialization officer.



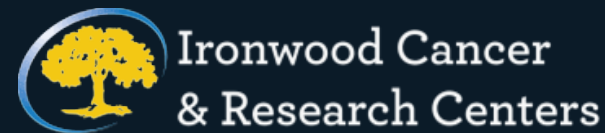
Reza Ilkhani Acting CFO

Corporate & capital-side
financials since 1988.

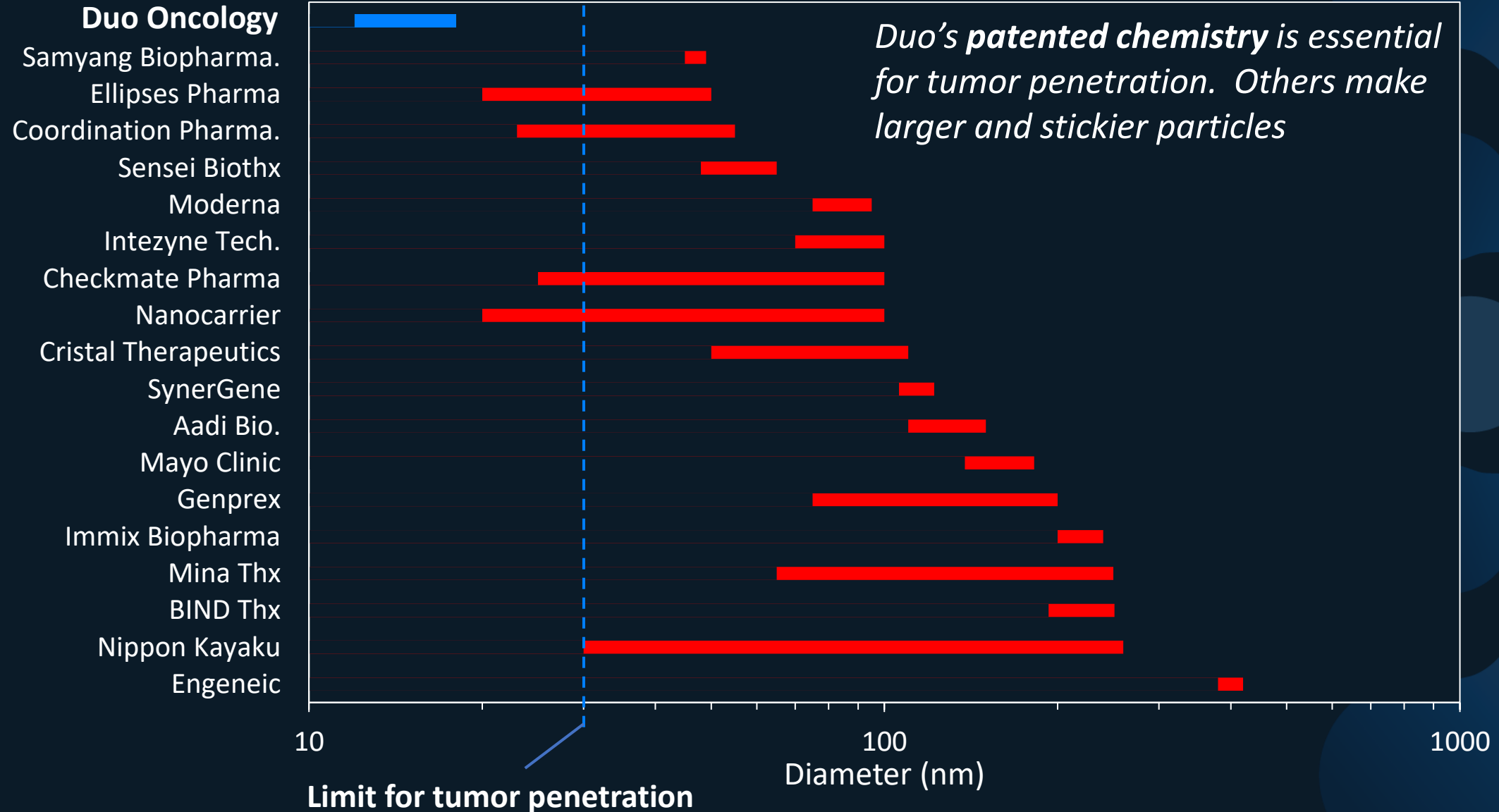


Leading Oncologists Advising on Clinical Program

- Dan Von Hoff, MD: **Leader on 10+ cancer drugs, CoH**
- John Zalcberg, MD PhD: **Dir. Oncology since 1986, Various**
- Funda Meric-Bernstam, MD: **Chair of Phase 1, MDACC**
- Toni Saab, MD: **Leader GI Cancer Mayo Clinic**
- Philip A. Philip, MD: **Acclaimed GI Oncologist, Henry Ford**
- Diane Simeone, MD: **Dir. Moores Cancer Center, UCSD**
- Manuel Hidalgo, MD PhD: **Chief of Oncology, WCM, NYPH**
- Stanley Marks, MD: **Chair Hillman Cancer Center, UPMC**
- David Goldstein, MD: **40k citations, GI Leader, UNSW**
- Ramesh Ramanathan, MD: **Dir. Clinical Research, ICRC**
- Michael Pishvain, MD: **Dir. Investigational GI oncology JHU**



Unique Ultrasmall Chemistry is Key to Tumor Penetration



Clean, Protected Landscape for Lead Product, DUO-207

- Freedom-to-Operate (FTO) search completed: **No blocking IP found.**
- Granted US patent on drug chemistry: **Expires in Oct. 2040.**
 - Claims cover 3 chemical moieties essential for Duo's nanomedicines.
 - Chemistry patent also pending in JP, CN, EPO, AUS, CAN, HK, and SK.
 - Methods patents to be filed >2025.
- Orphan designations from FDA and EMA for Pancreatic Cancer.
 - 7 and 10 years of post approval exclusivity protected sales.

- DUO-X07 nanomedicine chemistry: **Best-in-class antineoplastic prodrug.**

Moiety 1: Circulate

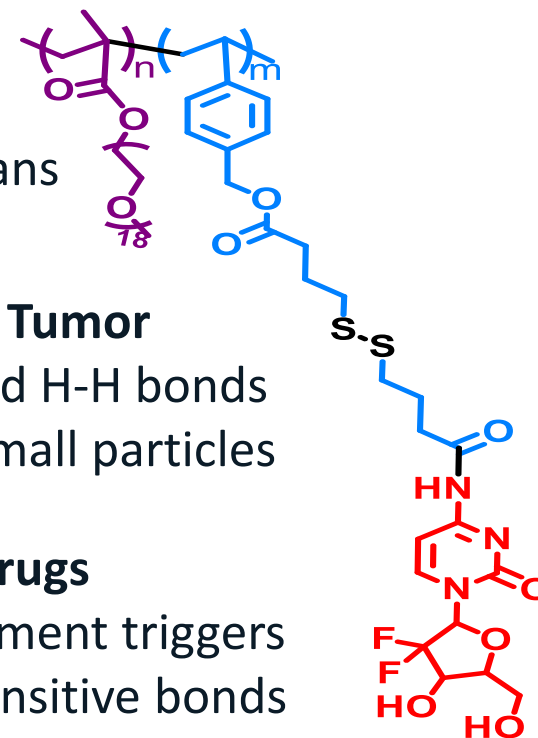
Oligo ethylene glycol protects healthy organs

Moiety 2: Penetrate Tumor

π - π stacking rings and H-H bonds self-assemble ultrasmall particles

Moiety 3: Release Drugs

Tumor microenvironment triggers drug release from sensitive bonds

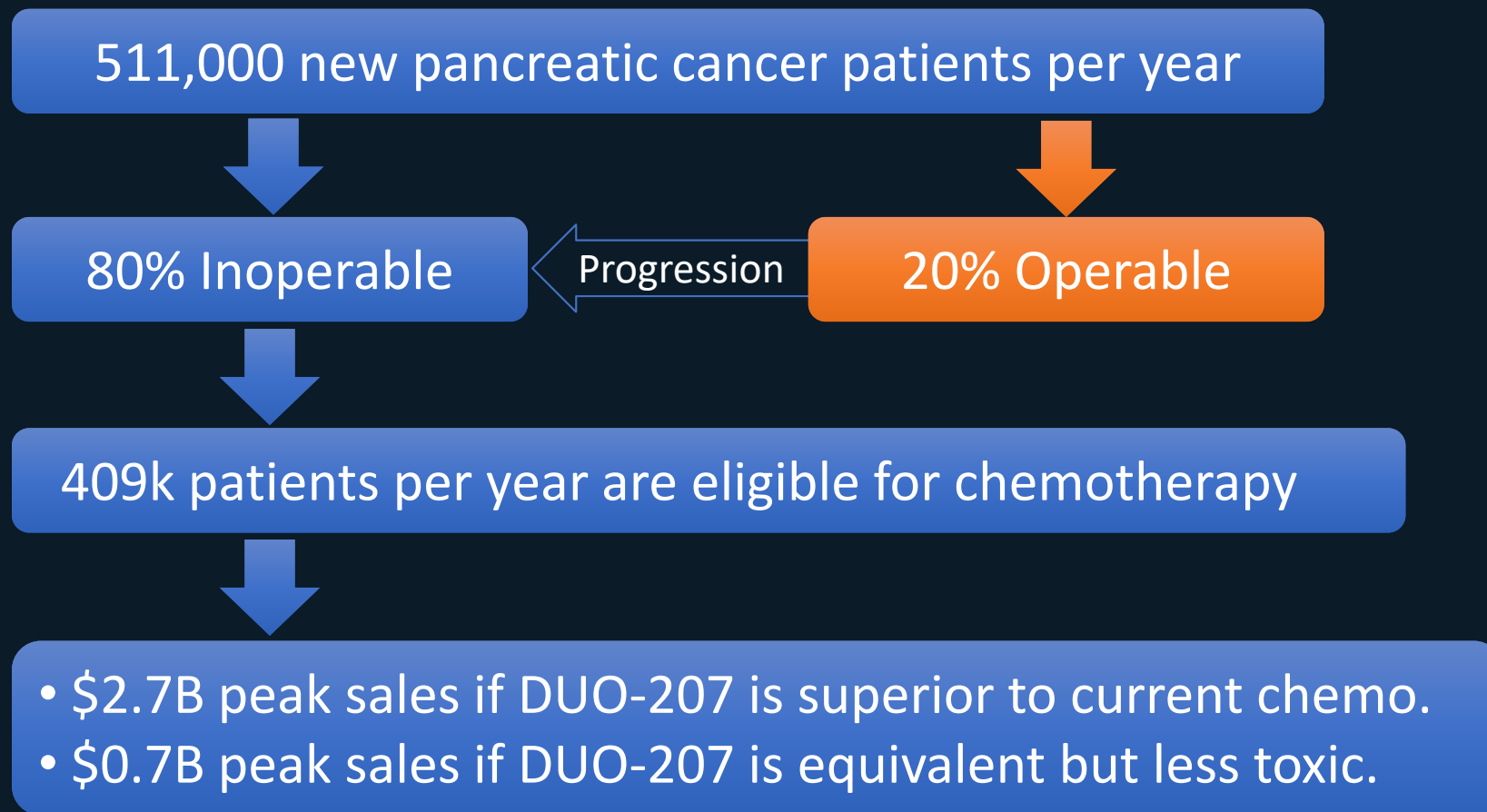


Duo's Pipeline of Ultra-small Nanomedicines Addresses Multiple Cancer Markets

Target Profiling	Drug Discovery	Lead Selection	IND Studies	Clinical Trials
DUO-207 (GEM + PTX) Pancreatic + 2 nd or 3 rd Lung and Breast		Favorable Pre-IND mtg.	Clean GLP Tox. Studies	
DUO-307 (GEM + CCR2i PF-6309) Bladder + Head & Neck + 1 st Lung		Funded by NIH SBIR		
DUO-209 (AZA + PARPi BMN673) Leukemia + Lymphoma + MDS				
Partnership Opportunities*				

**out-licensing of prodrug nanomedicine platform for proprietary agents of select partners.*

Enormous Global Potential in Pancreatic Cancer Market



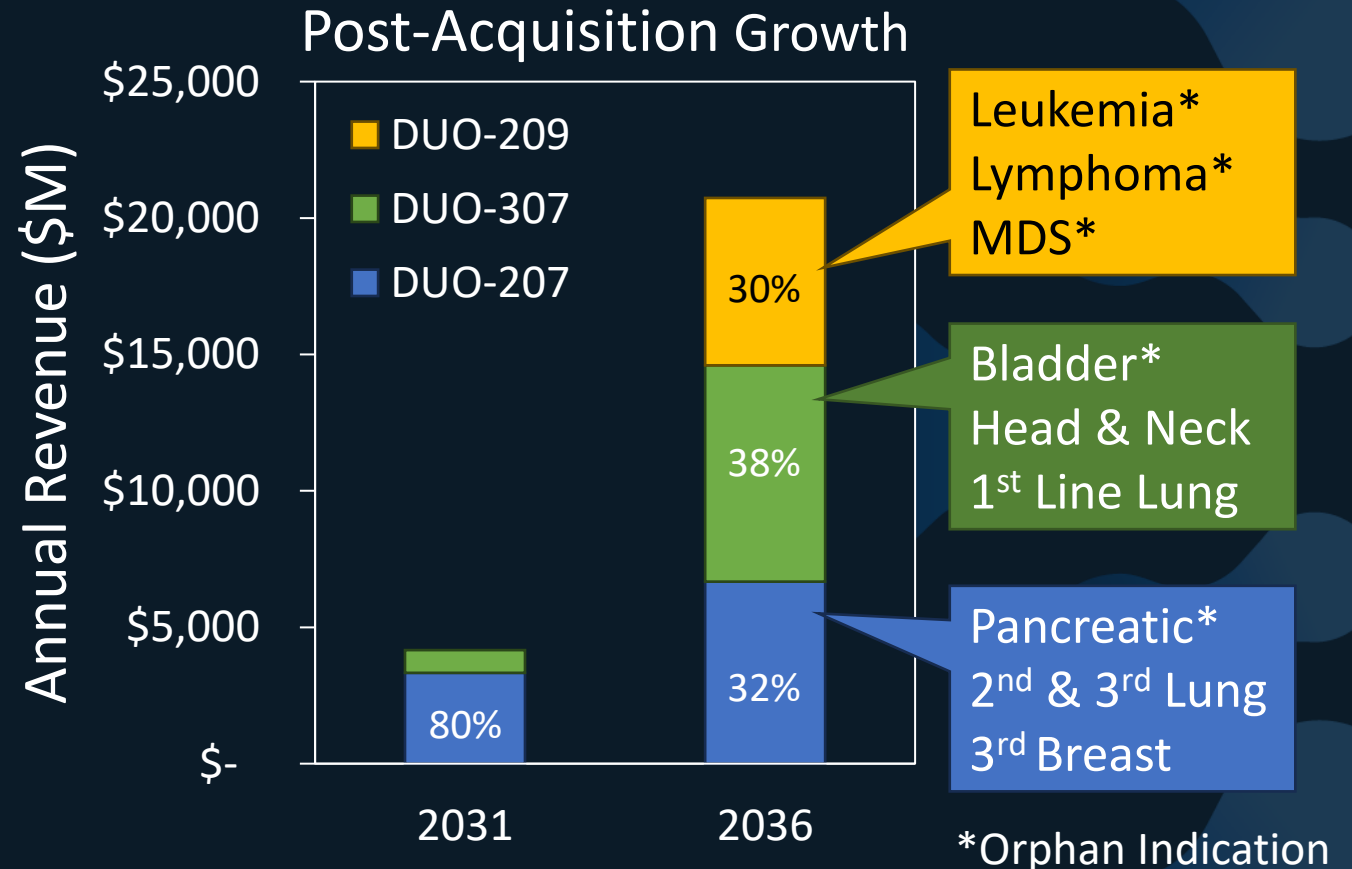
Product development Gantt charts and market analysis data available in data room.

Duo's Pipeline Addresses Cancer Markets Topping \$20B

Adaptive Bayesian trials prepare each product simultaneously for multiple indications.

- DUO-207: Foundational chemotherapy without toxicity.
- DUO-307: Chemoimmunotherapy for immune checkpoint inhibitors.
- DUO-207: Precision medicine for orphan blood cell cancers.

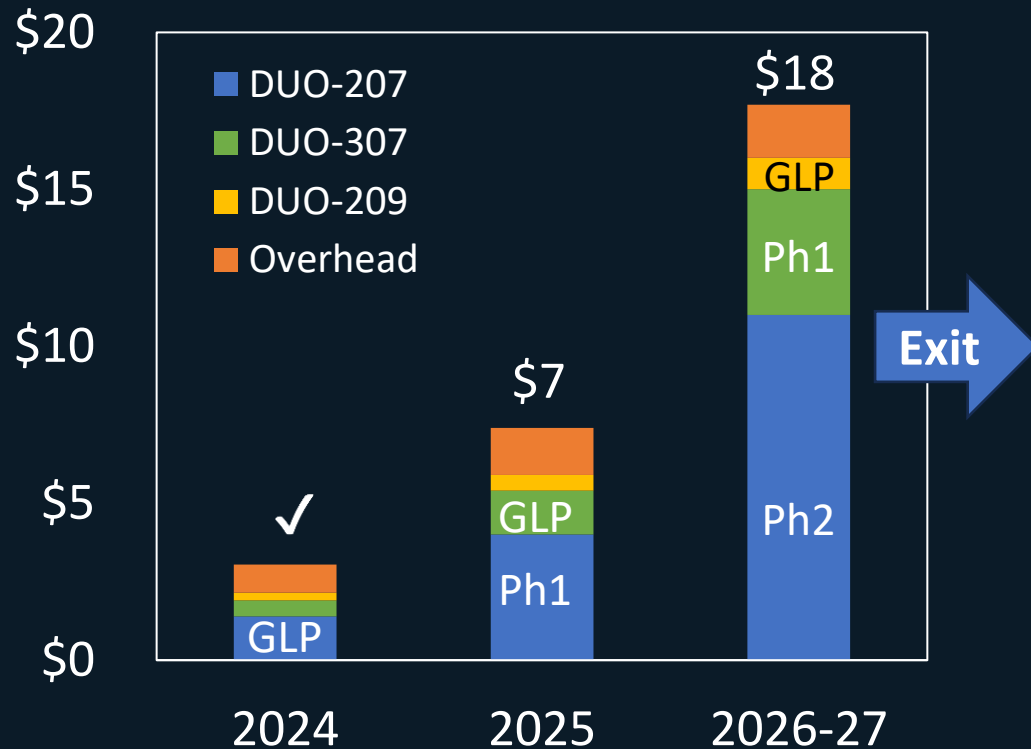
Rapid approvals and revenue growth for acquiring pharma.



Product development Gantt charts and market analysis data available in data room.

Streamlined Development Drives to Human Efficacy

Expenses to Phase 2 Data



Human efficacy in pancreatic cancer drives \$1B+ pipeline acquisition

- Aligns with development plans of large pharma companies – BeiGene, JNJ, Amgen
- Validated by more than 20 transactions reported in Pitchbook since 2021
- Confirmed by net present value calculations for beachhead sales of DUO-207 and DUO-307 in North America, Europe, and Asia

Product development Gantt charts and market analysis data available in data room.

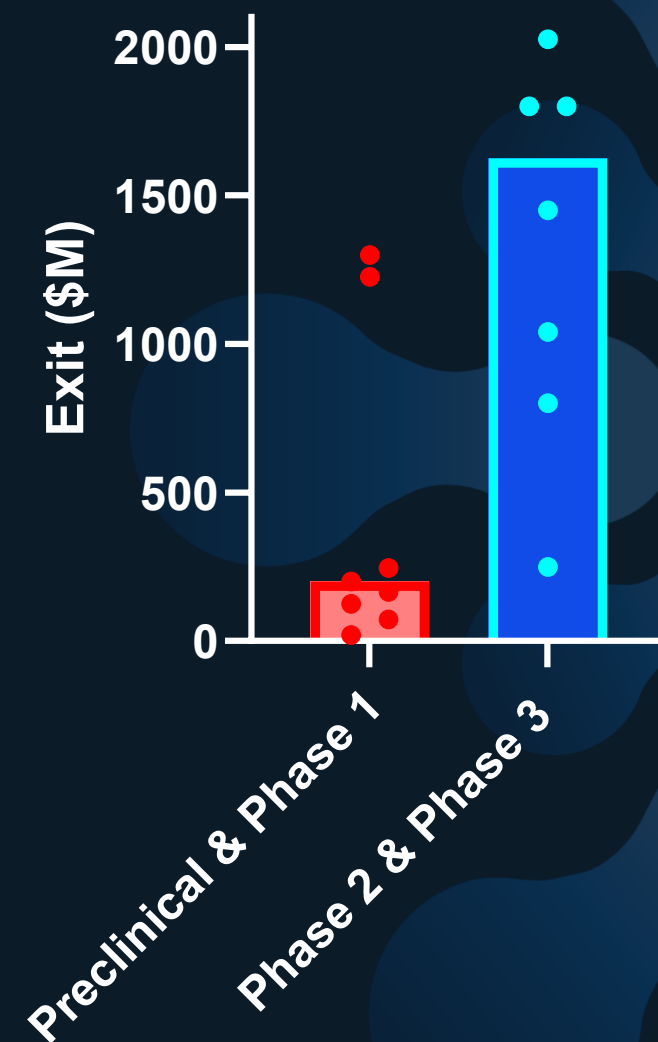
Recent Oncology Acquisitions Show Value of Phase 2 and 3 Clinical Data

Comp. Stage	Median Exit	90% Confidence	n
Preclinical & Phase 1	\$183M	\$73 - \$1,225M	8
Phase 2 & Phase 3	\$1625M	\$800 - \$2,025M	9

Duo Oncology Milestone	Total Raised	Return on Investment (ROI) Median	90% Range
Phase 1 in 2026 Q4	\$11M	16x	6x – 110x
Phase 2 in 2028 Q2	\$29M	55x	27x – 69x

- Phase 2 or 3 clinical trials establish efficacy in human patients
 - Determine cost for FDA/EMA approval & derisk sales estimates
- Exit findings are calculated from 17 Oncology therapeutics company M&As that have been completed since 2021

Oncology M&As Since 2021



2024 Phase 1 Acquisitions: Small Raises, Big Returns

\$1.3B Nerio Therapeutics Acquisition by Boehringer Ingelheim

- **Small molecule** inhibitor of protein tyrosine phosphatases.
- Funding: Two Rounds, \$6.5M
- Exit: Unknown upfront, like 10% of total exit (\$130M)
- Total ROI: 199x

\$123M QSAM Biosciences Acquisition by Telix

- **Small Molecule** radiopharmaceutical drug.
- Funding: Five Rounds, \$5.3M
- Exit: \$33M upfront and \$90M in milestone payments
- Total ROI: 22x

Takeway: Capital efficient development provides exceptional returns.



Institutional Investor
and Board Member

Global Pharmaceutical Company Brings Experience to Duo's Board:

- Cancer medicine portfolio covers 80% of indications by patient count.
- 27 assets in clinical testing. 16 developed internally, 11 in-licensed.
- Bringing 10 new molecules into the clinic each year starting in 2024.
- Over 130 active and completed clinical trials.
- Global reach with sales in 40 markets on five continents.
- \$3.8B in annual revenue with over \$2.5B cash on hand in 2022, 2023, & 2024.
- Engaged in 20+ active industry collaborations.

Duo Oncology Checks All the Boxes for De-risked, Efficient Cancer Therapeutics Development.

SCIENCE &
PRODUCT

- ✓ Strong scientific foundation: **Five peer reviewed publications.**
- ✓ Protected platform chemistry: **Patents pending on novel polymer drugs.**
- ✓ Clean lead toxicology profile: **Greater AUC and less tox than SoC.**

PEOPLE &
MARKET

- ✓ Streamlined regulatory pathway: **Favorable pre-IND meeting completed.**
- ✓ Experienced clinical team: **Leaders from largest nanomedicine exit.**

ROADMAP
TO EXIT

- ✓ Aligned operational investor: **\$8M committed from Prevail brings “A” team.**
- ✓ Early institutional investor: **BeiGene Pharma bought 40% of seed round**
- ✓ **Short timeline: Three years to Human Efficacy Data and Acquisition.**



Contact:

Sam Rothstein, PhD CEO & Co-Founder

SRothstein@DuoOncology.com

www.DuoOncology.com

References:

<https://pubmed.ncbi.nlm.nih.gov/31938056/>

<https://pubmed.ncbi.nlm.nih.gov/32004652/>

<https://pubmed.ncbi.nlm.nih.gov/35530140/>

<https://pubmed.ncbi.nlm.nih.gov/38239407/>

<https://pubmed.ncbi.nlm.nih.gov/38482976/>

Seed Round Investors:



-- Backup Slides Follow --

Duo Oncology Board: Inventor, Investor, and Industry Experts



Sam Rothstein PhD

CEO & Cofounder, Serial entrepreneur with 12yrs in life science startups. Expert in particles drug products.



Song Li MD PhD

Professor & Director of Center for Pharmacogenetics, Inventor of ultrasmall nanomedicine platform



Jing Zhou Hou MD PhD

Cofounder and practicing oncologist specializing in blood cell cancers



Lusong Luo PhD

SVP & Head of External Innovation at BeiGene. Institutional investor.



Stanley Marks MD

Director UPMC Hillman Cancer Center, Practicing oncologist and investor



Joe Gatto MS

Managing Director SeedFolio, lead VC investor in seed round



Victoria Manax MD

Partner at Eckuity Capital
Former CMO of PanCAN & Dir. at Celgene and Abraxis

\$25M Funds Key Milestones on Roadmap to Acquisition

DUO-207 Milestones	Date	Cost
DUO-207 MTDs	2026 Q2	\$4.8M
DUO-207 RP2D	2026 Q4	\$3.7M
DUO-207 Ph3 Power	2028 Q1	\$6.1M
	Subtotal:	\$14.6M
	Rebate:	\$1.9M
	Total:	\$12.7M

'307 & '209 Milestones	Date	Cost
DUO-307 Pre-IND	2026 Q2	\$1.1M
DUO-307 GLP Tox.	2027 Q1	\$2.7M
DUO-307 RP2D	2028 Q2	\$8.1M
DUO-209 Pre-IND	2027 Q2	\$1.1M
DUO-209 GLP Tox.	2027 Q4	\$2.2M
	Subtotal:	\$15.2M
	Rebate:	\$3.2M
	Total:	\$12.0M

- Anticipated completion dates assuming Series A closing by EoQ2 2025
- Non-cumulative costs inclusive of a \$63k monthly baseline burn rate.
- Rebates are from Australia R&D tax incentive for Phase 1 clinical studies
- Excludes \$6M in potential SBIRs from pending / future phase II proposals.

Why Pancreatic Cancer and Why DUO-207?

Unparalleled Product Market Fit

Pancreatic Cancer

The deadliest cancer indication, patients with greatest unmet need

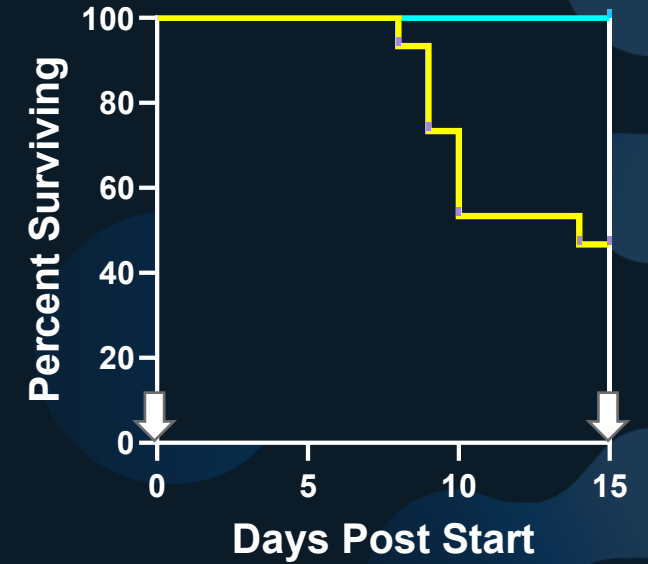
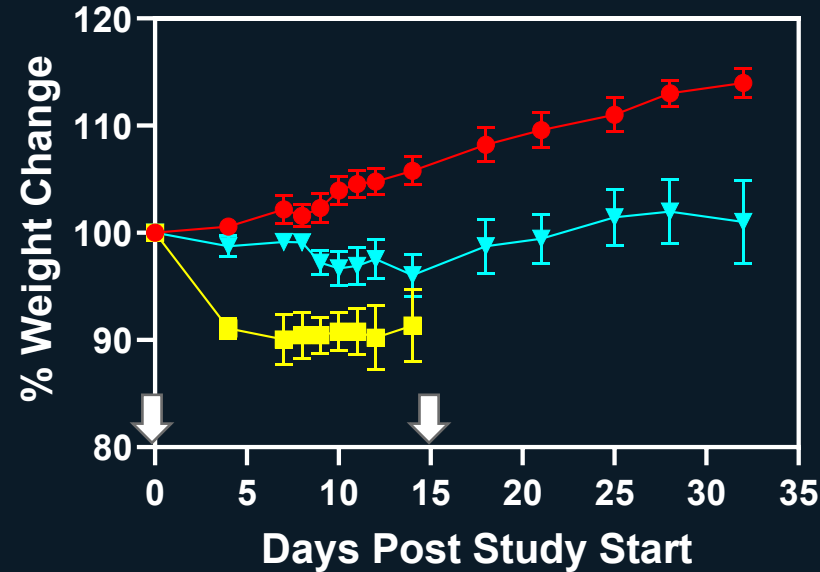
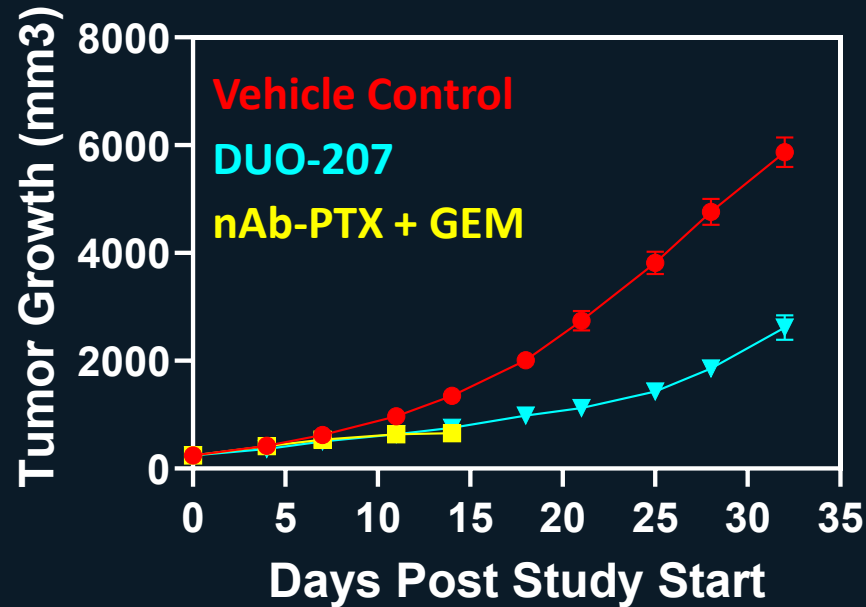
- **Short patient survival** speeds up clinical trials to human efficacy
- **Chemotherapy standard of care** derisks clinical trial and market
- **Orphan indication in US & EU** provides 7-10 yrs exclusive sales

DUO-207 (gemcitabine + paclitaxel)

Nanomedicine containing highly potent pancreatic cancer combo therapy

- **10x smaller particles** penetrate tumor tissue for improved efficacy
- **3x therapeutic window from GLP tox** increases margin for patient safety
- **2 or 3-week dosing schedule** improves quality of life and halves clinic visits
- **Single infusion** (vs. 2+) cuts visit time

DUO-207: Safer than Abraxane + GEM Standard of Care

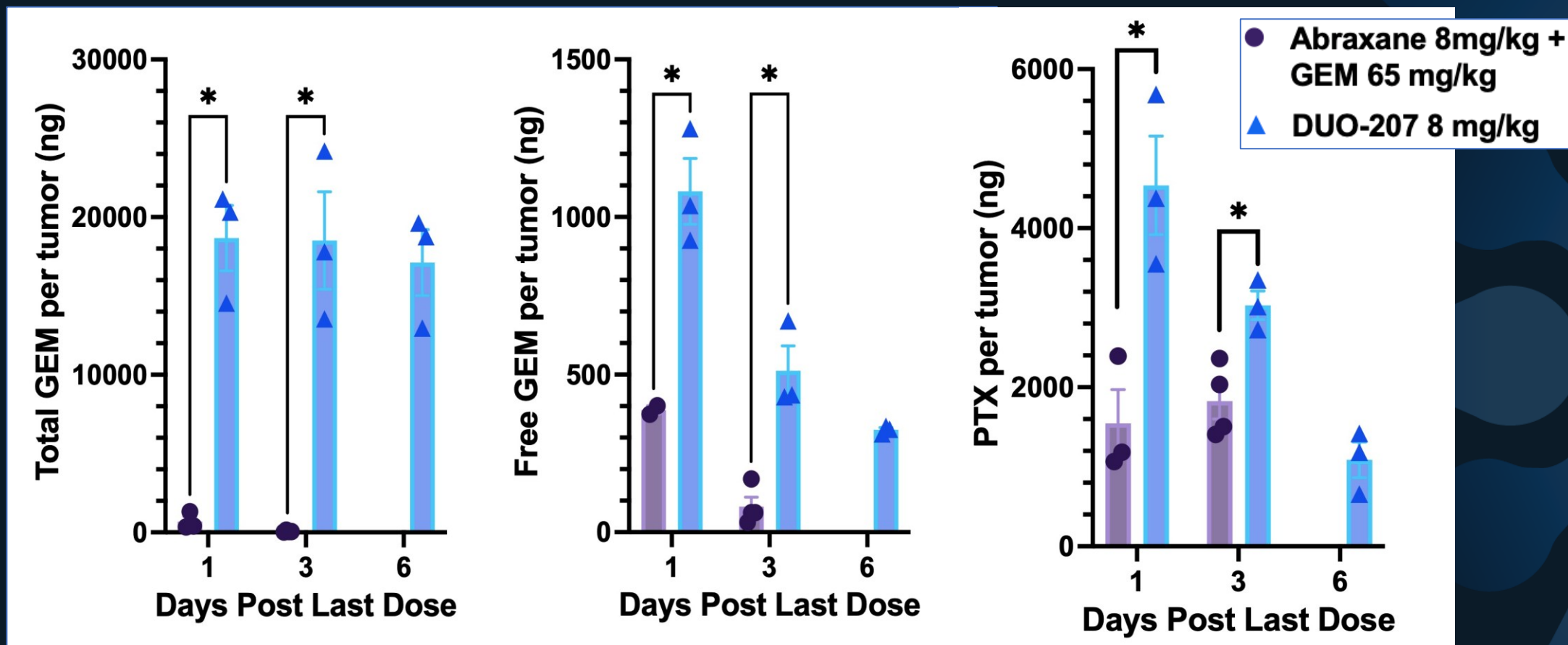


DUO-207 demonstrates superior tumor control, improved tolerability, and 100% survival in Mia PaCa-2 xenografts, despite delivering 8x less gemcitabine than the standard of care.

- The Mia PaCa-2 model is stroma-poor and gemcitabine-sensitive, which favors standard chemotherapy.
- DUO-207 controlled tumor growth without the lethal toxicity of MTD standard of care therapy.

See next slide for paired BioD data →

Greater Drug Exposure in Tumor for DUO-207 vs SoC



DUO-207 maintains a reservoir of GEM prodrug (PGEM) within the tumor that sustains significantly elevated levels of free GEM and PTX vs equiv SoC.

Summary of Toxicology Findings:

- No evidence of liver or kidney tox
- One dog death at 7mg/kg dose due to bacterial pneumonia, not treatment.
- DUO-207 induced significantly less body weight loss than equivalently dosed SoC in both rats and dogs
- Sub-Toxic DUO-207 doses control tumor growth where SoC produces tox.
- DUO-207 provided better intratumoral drug concentrations than SoC despite being administered with 1/8th the amount of GEM.
- Phase 1 trial of DUO-207 will start at 20mg/m² and progress to 140mg/m² with a minimum of 4 dosing levels and utilize a 20mg/m² step down to control adverse events.

Side Effects of Cancer Therapies are Expensive: New Foundation to Help Patients and Lower Costs

Toxicity of current therapies drive treatment cost and ruin patient quality of life

Per Patient:	Abrax.+ GEM	FOLFIRINOX
Cost of therapy	\$12,812	\$10,507
Supportive care	\$20,858	\$59,470
Total for 6 cycles	\$202,020	\$419,862
Tox. "Overhead"	163%	556%

"My husband's second Folfirinox treatment was Wednesday. A few hours later, he had a fever of 101.2 with intense pain throughout his body... His stomach is growling non-stop, unable to eat for a few day(s). Now can eat a little but has stomach pain and a lot of bloating. His quality of life has gone down tremendously." - Spouse of cancer patient on FOLFIRINOX