

Investor Update

Jazz and Codiak Collaboration

January 4, 2019

Jazz Forward-Looking Statements

"Safe Harbor" Statement Under the Private Securities Litigation Reform Act of 1995

This slide deck and the accompanying oral presentation contain forward-looking statements, including, but not limited to, statements related to the future development of exosome therapeutics to treat cancer; potential clinical, regulatory and sales milestones with respect to certain targets covered by Jazz Pharmaceuticals' strategic collaboration agreement with Codiak; potential future payments by Jazz Pharmaceuticals to Codiak; the potential ability to develop multiple new, innovative and differentiated therapies in order to add long-term value for patients and shareholders; the potential opportunity to improve patient outcomes in various cancers; the potential advantages of the collaboration to Jazz Pharmaceuticals, including the opportunity to build precision oncology expertise and potential access to innovative research; the expected income statement impact of the collaboration to Jazz Pharmaceuticals; and other statements that are not historical facts. These forward-looking statements are based on Jazz Pharmaceuticals' current plans, objectives, estimates, expectations and intentions and inherently involve significant risks and uncertainties. Actual results and the timing of events could differ materially from those anticipated in such forward-looking statements as a result of these risks and uncertainties, which include, without limitation, risks and uncertainties associated with: Jazz Pharmaceuticals' ability to achieve the expected benefits (commercial or otherwise) from the collaboration agreement; pharmaceutical product development and clinical success thereof; the regulatory approval process; and effectively commercializing any product candidates; and other risks and uncertainties affecting Jazz Pharmaceuticals, including those described from time to time under the caption "Risk Factors" and elsewhere in Jazz Pharmaceuticals plc's Securities and Exchange Commission filings and reports (Commission File No. 001-33500), including the company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2018 and future filings and reports by the company. Other risks and uncertainties of which Jazz Pharmaceuticals is not currently aware may also affect the company's forward-looking statements and may cause actual results and the timing of events to differ materially from those anticipated. The forward-looking statements made in this slide deck and the accompanying oral presentation are made only as of the date hereof or as of the dates indicated in the forward-looking statements, even if they are subsequently made available by Jazz Pharmaceuticals on its website or otherwise. Jazz Pharmaceuticals undertakes no obligation to update or supplement any forward-looking statements to reflect actual results, new information, future events, changes in its expectations or other circumstances that exist after the date as of which the forward-looking statements were made.

Agenda

Bruce Cozadd

Jazz, Chairman and Chief Executive Officer

Introduction & Overview

Doug Williams, PhD

Codiak, President and Chief Executive Officer

Harnessing the Potential of Exosomes

Bruce Cozadd

Jazz, Chairman and Chief Executive Officer

Doug Williams, PhD

Codiak, President and Chief Executive Officer

Dan Swisher

Jazz, President and Chief Operating Officer

Allen Yang, MD, PhD

Jazz, Head of Clinical Development and Acting Chief Medical Officer

Q&A

Jazz & Codiak Collaboration Focused on Transformational Targets in Precision Oncology

Differentiated Delivery Platform	<ul style="list-style-type: none"> Exosomes provide a unique and promising drug targeting methodology Potentially broad utility applications in a broad range of diseases
Innovative Technology	<ul style="list-style-type: none"> Exosomes naturally serve as messengers in the tumor microenvironment Codiak's engineered exosomes hijack this natural cellular communication systems to enable transfer of therapeutic cargo Utilize tumor directed pharmacology to enable higher potency and wider therapeutic index Codiak's proprietary exosomal platform has shown strong preclinical proof of concept to deliver payloads to tissue/cells of interest
Development Status	<ul style="list-style-type: none"> The exosome programs are preclinical and will cover five targets, including NRAS and STAT3
Unmet Medical Need	<ul style="list-style-type: none"> Widespread application of precision oncology has been limited because many well validated oncogenes are undruggable with current modalities Potential to yield innovative and differentiated new therapies to continue transformation of cancer treatments May provide better outcomes for targeted subgroup of patients
Intellectual Property	<ul style="list-style-type: none"> Codiak has developed exclusive and IP protected methods to manufacture, engineer, generate, purify and quantify uniform exosomes

Jazz & Codiak Collaboration

Scope and Financial Terms

Scope	<ul style="list-style-type: none">• Jazz has access to a potentially transformative platform that could be used against previously well validated but “undruggable” targets in precision oncology• Codiak granted Jazz an exclusive, worldwide, royalty-bearing license to develop, manufacture, and commercialize five targets from its exosome platform• Codiak is responsible for pre-clinical development, IND filing, and the conduct of Phase 1/2 studies for all five targets• Jazz will be responsible for future development post Phase 1/2 subject to Codiak’s co-commercialization option• Codiak has the option to participate in commercialization and cost/profit sharing on up to two products in U.S. and Canada
Financial Terms	<ul style="list-style-type: none">• Jazz to pay an upfront payment of \$56 million• Codiak to fund early research activities for all five targets<ul style="list-style-type: none">• Codiak to fund IND-enabling and Phase 1/2 studies for two targets• Jazz to fund IND-enabling and Phase 1/2 studies for three targets• Codiak eligible for up to \$20 million in pre-clinical development milestones• Additional potential milestone payments based on IND acceptance, clinical and regulatory milestones including approvals in the U.S., EU and Japan, and sales milestones<ul style="list-style-type: none">• Up to \$200 million in milestones per target, plus• Tiered royalties as a percentage of commercial sales by Jazz which, depending upon sales levels, range from mid-single digits in the lowest tier to high teens in the highest tier

Jazz & Codiak – Targets for Collaboration

Four targets identified & fifth target to be selected at a later date

	Target	Initial Areas of Interest
1	NRAS	Hematological malignancies
2	STAT3	Hematological malignancies
3	Undisclosed	Hematological malignancies
4	Undisclosed	Solid tumors
5	To be selected	

Advantages of Collaboration

Jazz

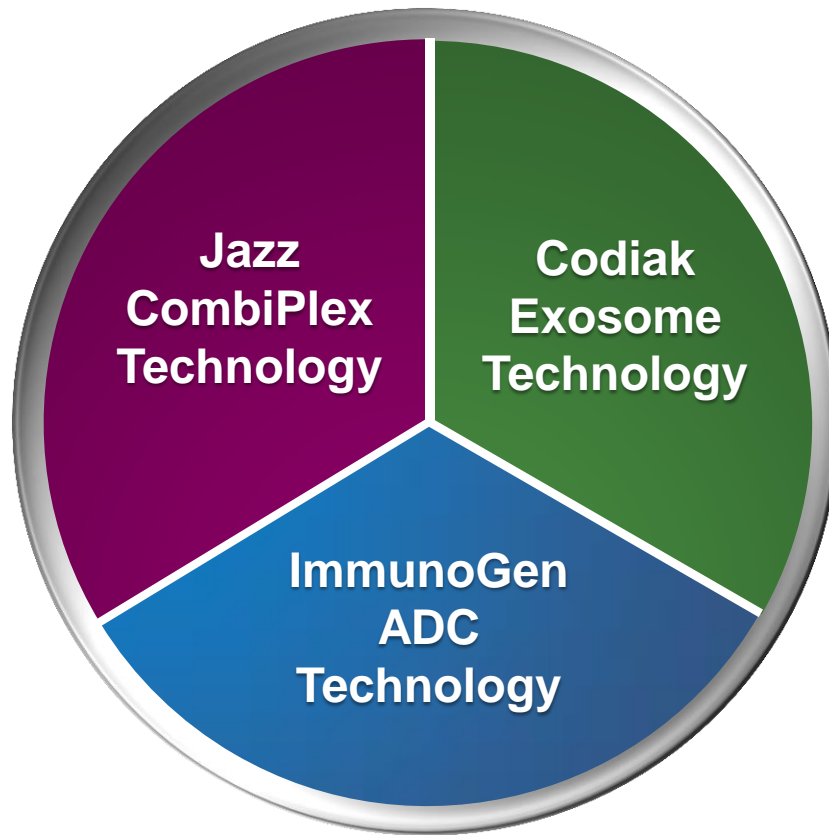
- The addition of the exosome platform technology is an important advancement in Jazz's ability to develop multiple new and innovative therapies with long-term value for patients and shareholders
- Worldwide license to develop exosome product candidates addressing five oncology targets
- Opportunity to build precision oncology expertise given multiple untargeted driver oncogenes with potential to expand into solid tumors
- Provides access to innovative research and supports Codiak through Phase 1/2 development while limiting resource use from Jazz's R&D infrastructure

Codiak

- Partnership with Jazz accelerates and expands development of early-stage hematology and oncology programs beyond Codiak's internal pipeline candidates with the benefit of a global partner
- Option for Codiak to participate in commercialization and cost/profit sharing on up to two programs in the U.S. and Canada
- Enables Codiak to build operational capabilities

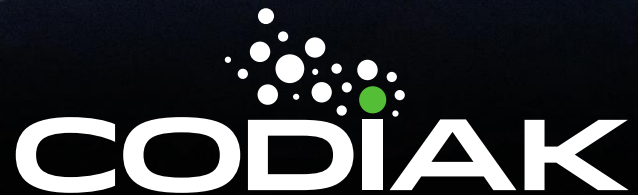
Jazz Precision Oncology Strategy

Leverage Multiple Technologies to Potentially Improve Therapeutic Index of Cancer Agents



Precision oncology therapeutics may result in better outcomes for targeted subgroups of patients over non-targeted approaches¹

THE PRECISION EXOSOME THERAPEUTICS COMPANY



January 4, 2019

Exosomes: Nature's Highly Evolved Messaging System

30-200 nm vesicles released and taken up by all cells

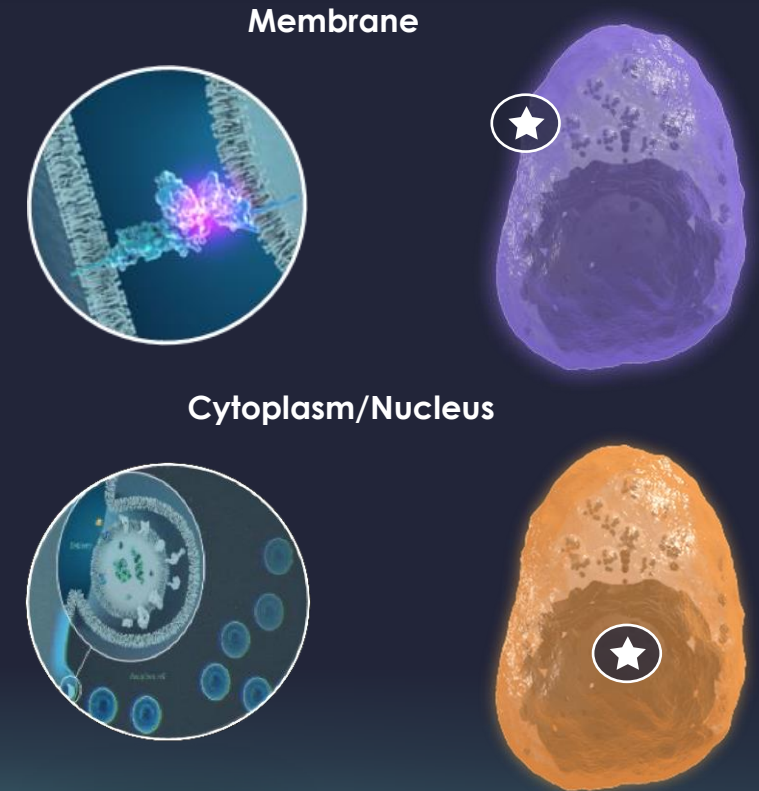
Crucial mechanism for intercellular communication

Convey and protect complex macromolecules which can alter the function of recipient cells

Intrinsically non-immunogenic

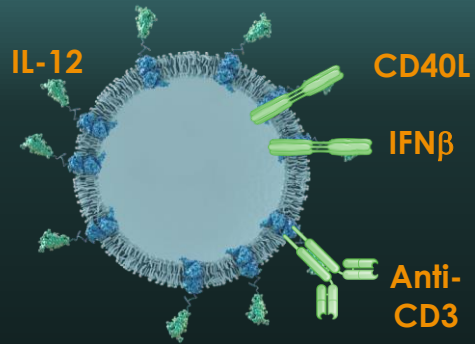
Natural or engineered tropism to specific cells and tissues

Exosome signaling



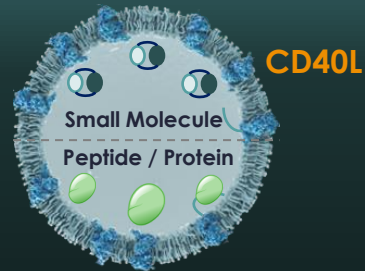
engEx™ Platform Enables Multiple Exosome Modalities

Surface Loading



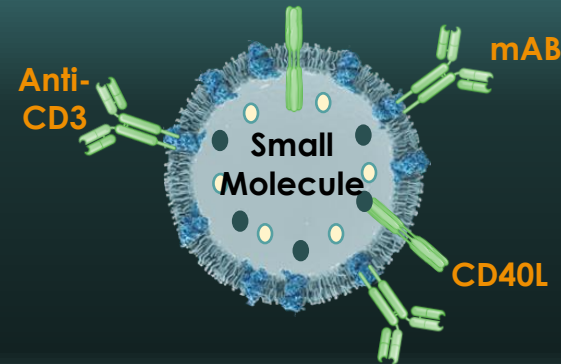
Surface Protein Presentation
Increased Avidity

Luminal Loading



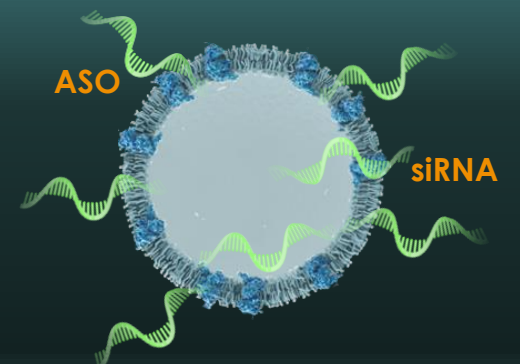
Enhanced Potency/Enhanced
Therapeutic Window

Tropism Enhancement



Directed Delivery
to Specific Cell Types

Nucleic Acid Delivery



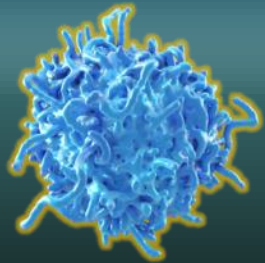
Enhanced Potency
Reduced Toxicity

Combinations of engEx™ Modalities Enable Precision Therapeutics

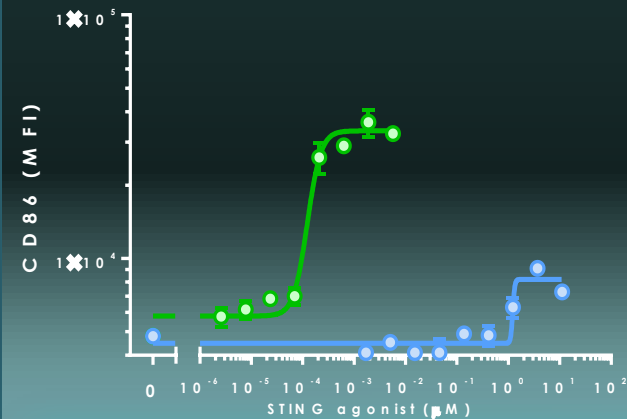
Amenable to Multiple Therapeutic Areas

Targeting Hematologic Cell Types

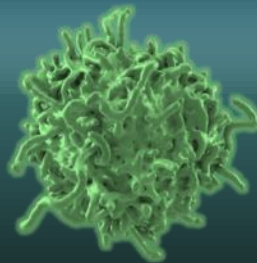
Dendritic Cells



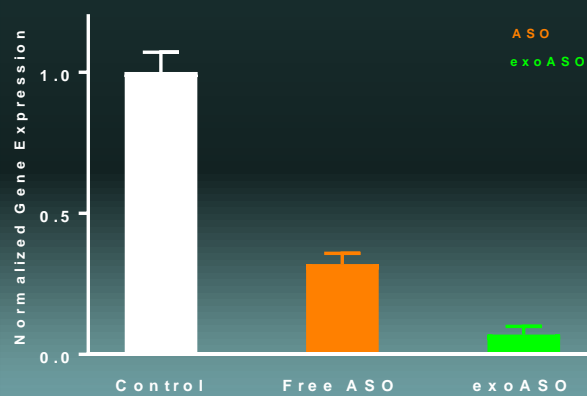
exoSTING



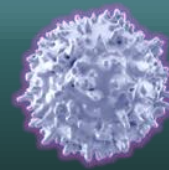
Monocytes
Macrophages



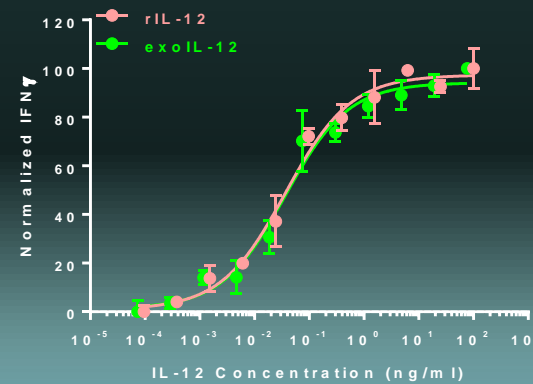
exoOligo



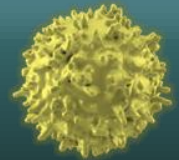
T Cells



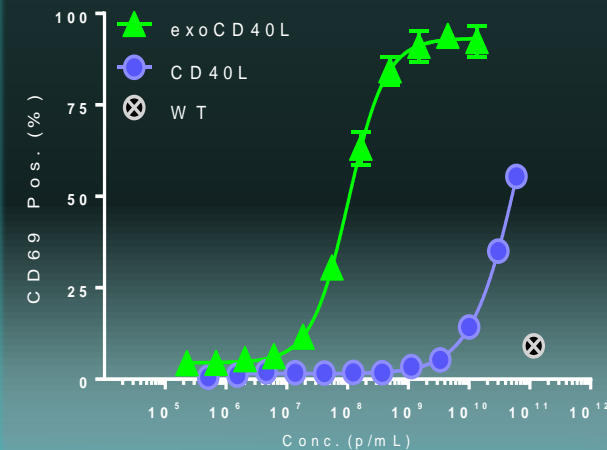
exoIL-12



B Cells



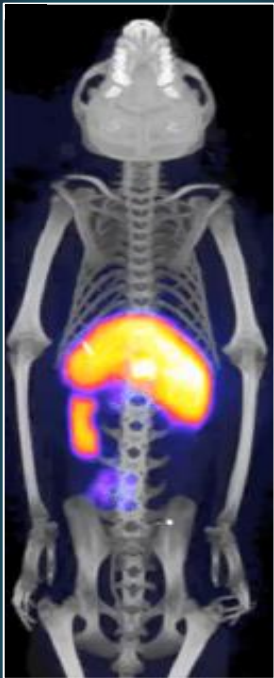
exoCD40L



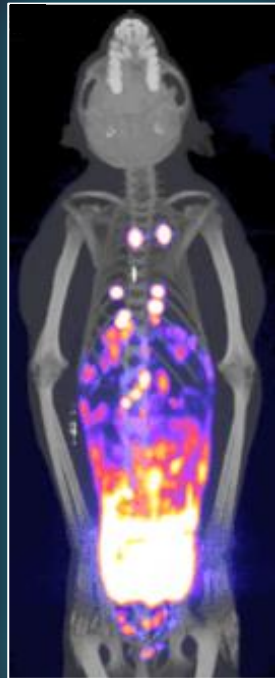
Cancer/IO, Infectious diseases, Vaccine platform, Tolerance induction, Fibrotic diseases

Tunable Delivery by Route and Surface Engineering

Broad hierarchical
tissue targeting
(IV, IP, IT, SQ, Oral, Inhaled)



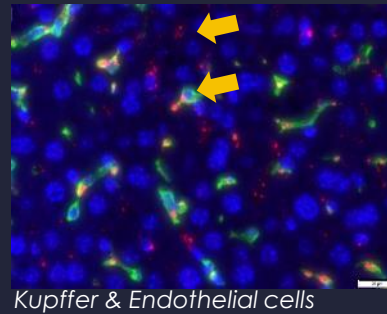
IV



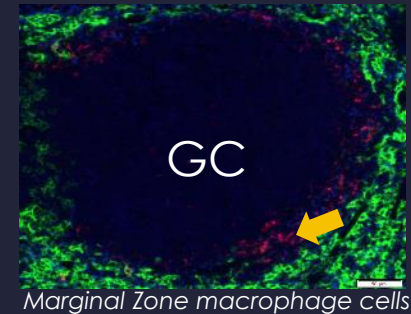
IP

Targeted Cellular
Uptake

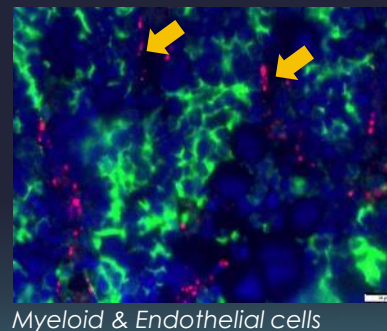
Liver



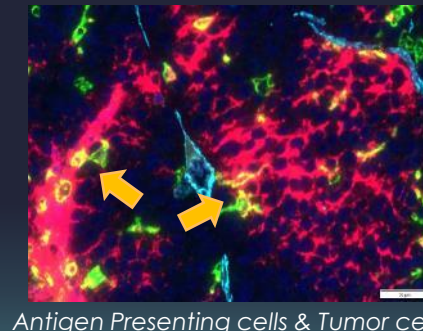
Spleen



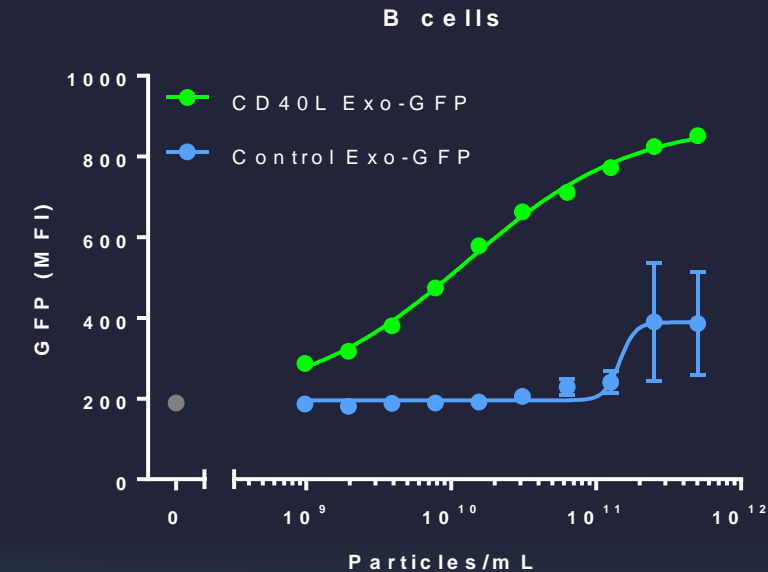
Bone Marrow



Tumor

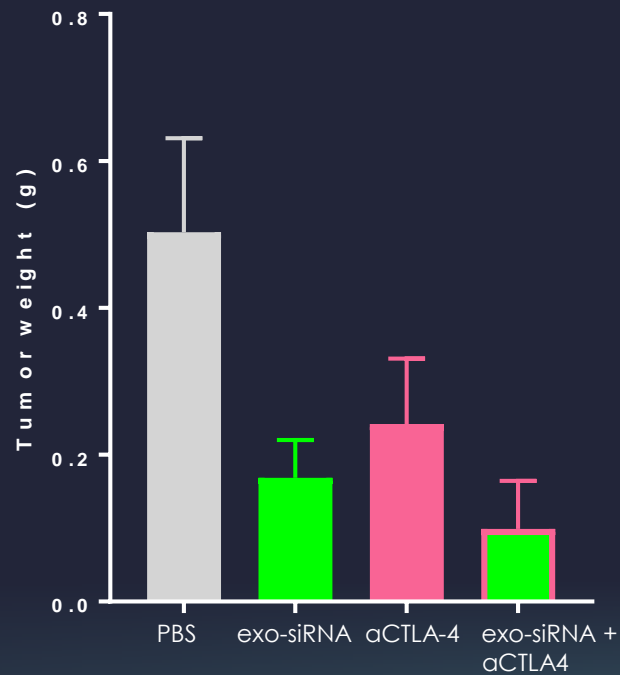


Engineered
Tropism

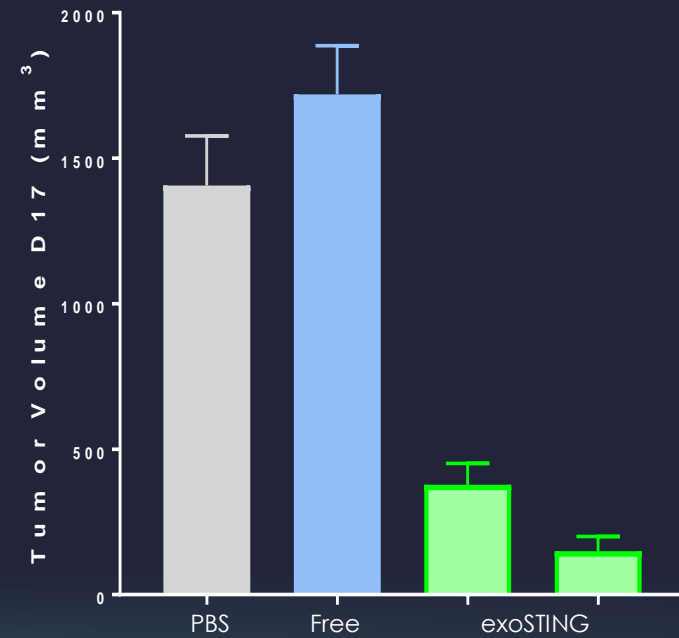


Significant In Vivo anti-Tumor Activity in Solid Tumor Models

KPC689

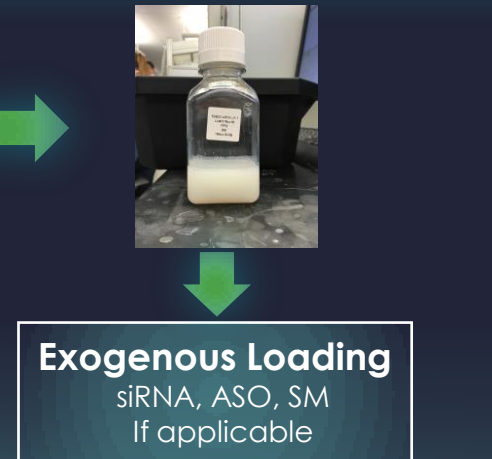
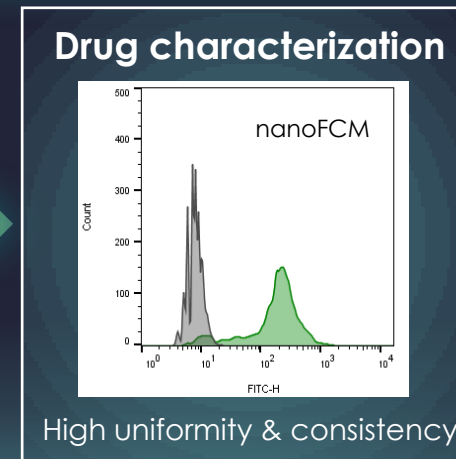
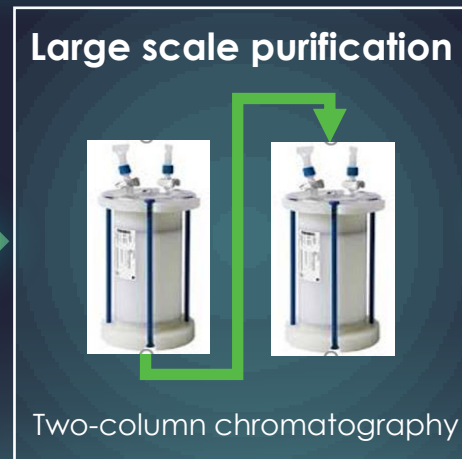
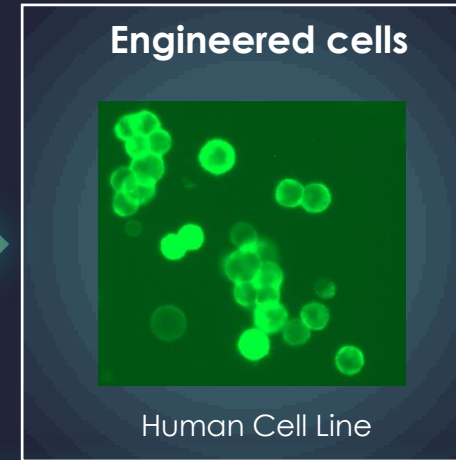
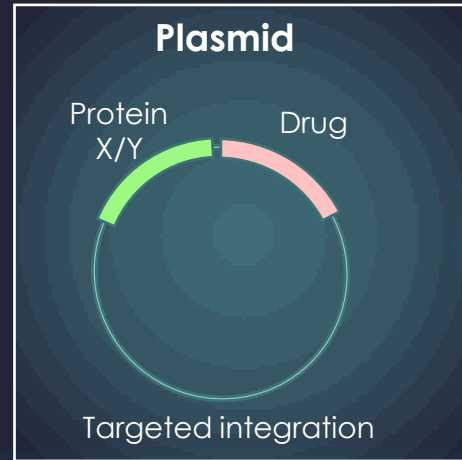


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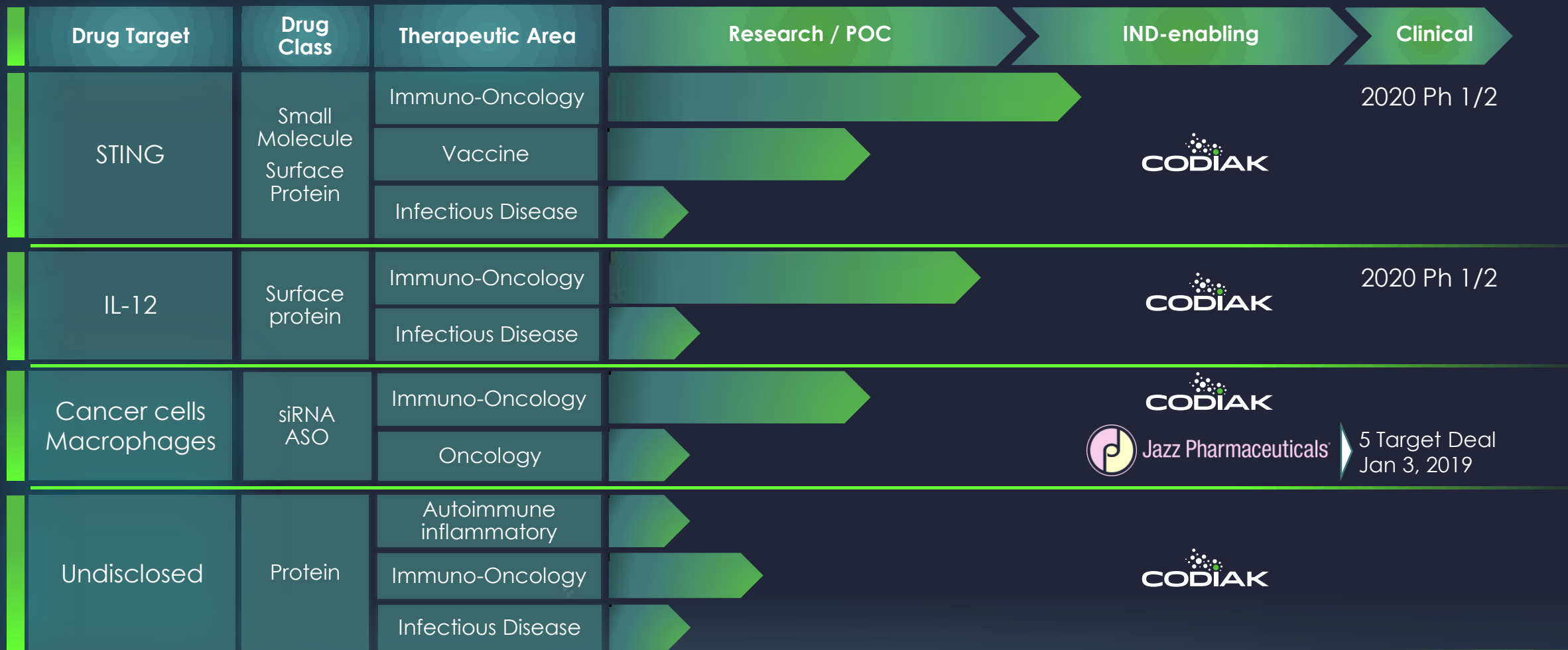


Platform Production Process Established: From Plasmid to High Potency Drug

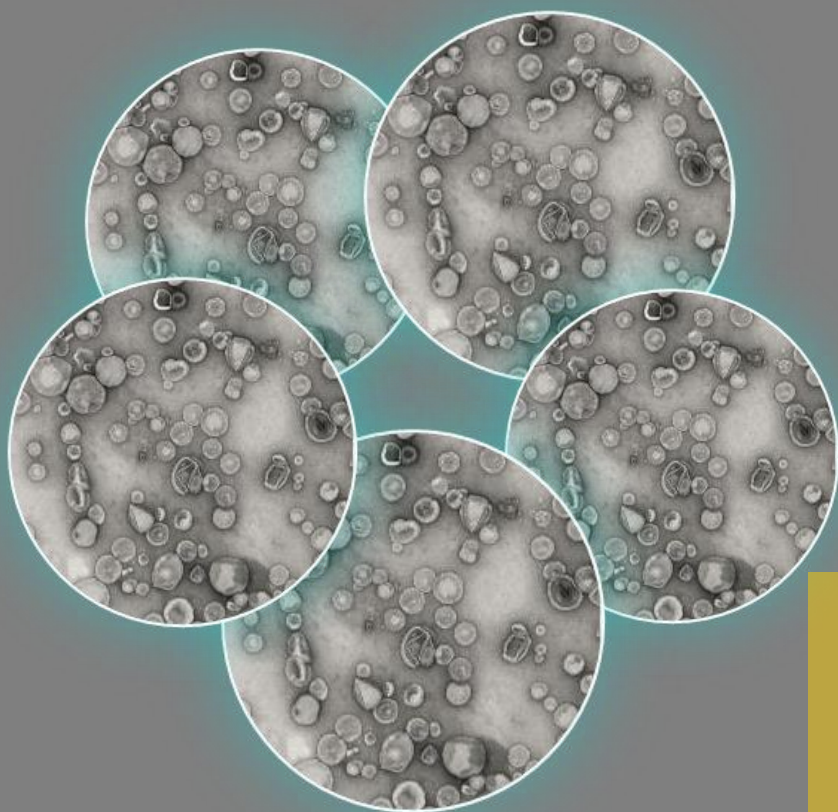
- Advanced technology throughout process
- Proprietary
- Readily scalable
- Supports various
exosome constructs
- “Biologics” COGS
- Highly reproducible
- Superior potency



Codiak engEx™ Pipeline



*In addition to the above pipeline, Codiak has option rights to an ongoing Ph 1/2 trial being conducted by MD Anderson Cancer Center



Appendix

Jazz Expected P&L Impact of Transaction

GAAP In-process R&D	\$56 million upfront payment
GAAP R&D	IND-enabling and Phase 1/2 studies for three targets
GAAP R&D	Pre-approval milestone payments
GAAP Amortization (capitalized assets)	Approval & post-approval milestone payments