

Bio

Biotechnology
Innovation Organization

June 4–5, 2023

#BIO2023
#StandUpForScience



<http://bit.ly/BIOBUSMODELTALK2023>

Biotechnology Entrepreneurship Boot Camp

Presented by:

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BIO Recognizes Course Sponsor:



**McDonnell Boehnen
Hulbert & Berghoff LLP**
Intellectual Property Law

OVERARCHING QUESTIONS

How can biopharmas quickly assess biomedical startups of different maturity (development & commercial) levels?

How can startups and biopharmas engage at different maturity levels?

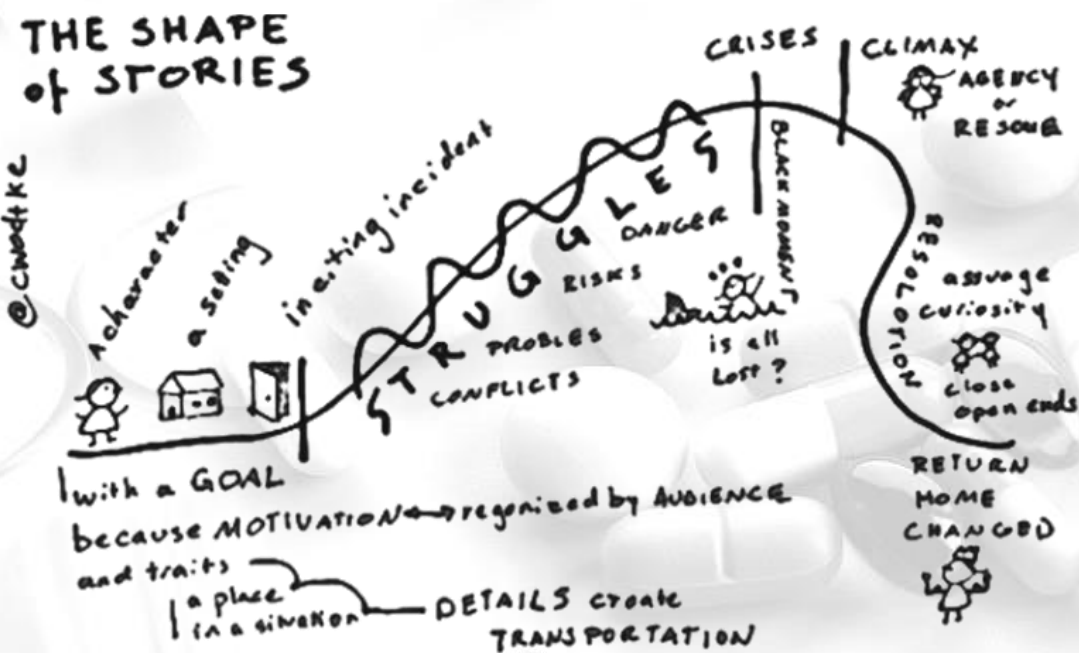


2 3 "Ps" and Examples

Story Arc

1

The Quick Screen



3

Key Learnings

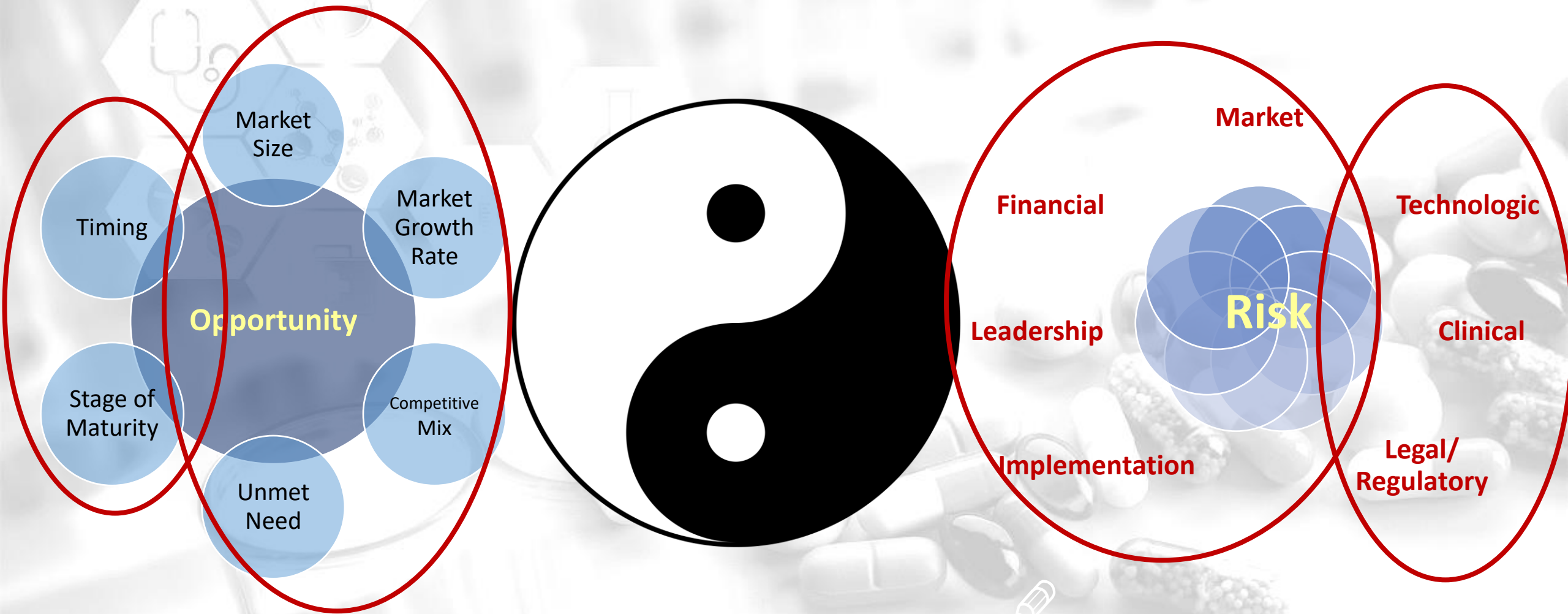


In the Beginning

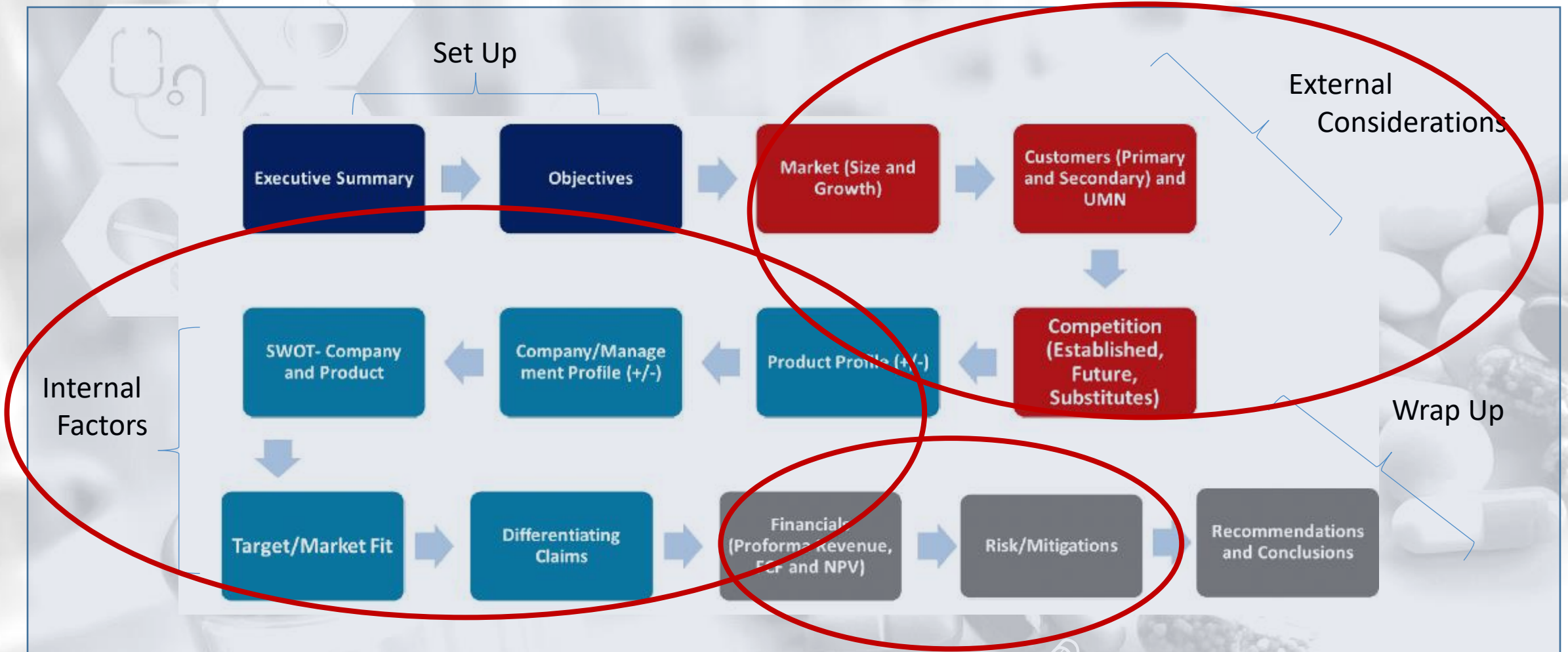
Setting the Basis for the Quick Screen



First, There Is Opportunity and Risk (Yin and Yang!)



BD Case Assessments Consider Such Factors



Erbes A BD Class Berkeley, 2014 Sheen and Gallo HBR Guide to Building Your Business Case *HBR*, 2015



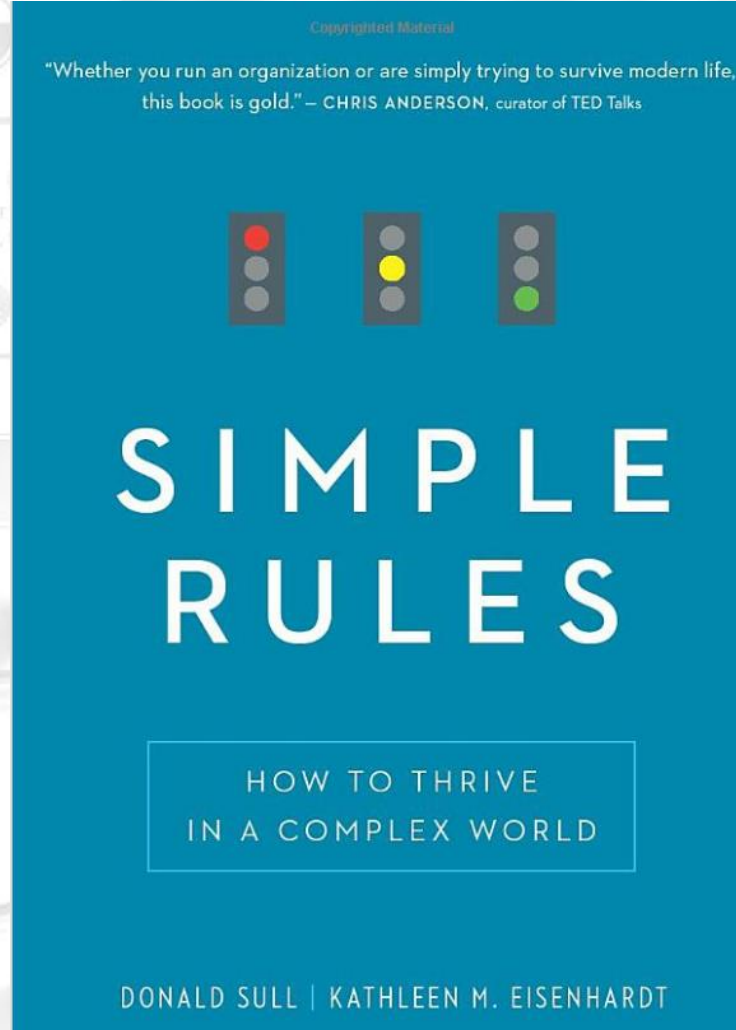
There's a Need for Some Simplicity



Don Sull, PhD
MIT



Kathleen M Eisenhardt, PhD
Stanford



Guidelines (3-5 points) tailored to the user and the task, balancing guidance with the freedom to exercise judgment.

Purpose: Help individuals thrive in complex situations.

Application- business to sports to personal life.

Types: How to, Boundary, Priority, Timing, and Exit.



Boni Introduced the **Quick Screen** as a Useful Set of Rules



Art Boni, PhD
Professor Emeritus, CMU
Editor Emeritus, JCB

Article

Evolution of the Screening Metaphor: Project, Product, or Platform?

Arthur A. Boni

John R. Thorne Distinguished Career Professor of Entrepreneurship, Emeritus, Tepper School of Business at Carnegie Mellon, Editor-in-Chief, Journal of Commercial Biotechnology

ABSTRACT

There are multiple options or paths to the market to be considered when developing the commercialization strategy for translating a technology or invention into an innovation. We present a very simple screening methodology that may be applied to facilitate a quick, but structured approach for the entrepreneur to identify which option or options may be most viable to create, deliver and capture value in potential markets. We construct the metaphors "project, product, or platform" to categorize three potential commercialization pathways to reach the market. Projects are best pursued with commercial partners via licensing arrangements. Products may be pursued using a research and development company business model. Platform is intended to signify creation and growth of a lasting, scalable organization intended to develop and bring multiple disruptive or transformative innovations to market. Which path to the marketplace is appropriate, or even possible will depend on a number of factors. These include: the magnitude of value being created for the market; the competitive set; and, the uniqueness of the solution and its sustainable, competitive advantage that can be created. It is also necessary to determine whether the value captured by the business model that may be constructed could generate sufficient profitability to balance the commercialization risks, while meeting the goals and objectives of the founders, investors and partners over an appropriate time line.

Journal of Commercial Biotechnology (2019) 24(4), 7-13. doi: 10.5912/jcb909

INTRODUCTION

This article focuses on articulating a simple, structured screening methodology for identifying and evaluating ideas as potential opportunities for commercialization. The methodology is structured around 5 pillars that are needed to build and grow profitable, sustainable businesses. A key component of the methodology is to identify appropriate business models that create, deliver, and capture value consistent with the strength and viability of the opportunity being pursued and the risks associated with commercialization.

This methodology was developed to kick off the first session of the annual Biotechnology Entrepreneurship Bootcamp held at the international BIO convention each year. An article was then published as part of our first special edition in J. Commercial Biotechnology, c. f. Boni (2012). Since that time, we have also published a much more comprehensive, and in-depth overview of the entire commercialization and innovation methodology that deals with the development and implementation of commercialization and innovation strategies, c. f. Special Edition of JCB, titled "The Business of

Commercialization and Innovation, Boni et al (2018)". This more recent, cross-industry perspective also includes case studies pertinent to biopharma, MedTech and Digital Medicine. Given this more recent work, our original article is now being updated herein, and includes some new perspectives.

The original article was titled, "Project, Product, or Company" since we focused on a development of categories of business model variations for potential opportunities in the broad biopharma and MedTech industries. With emphasis on simplicity, we took a *metaphorical approach* and suggested a framework that describes three potential pathways "from the laboratory to the market". All of these characterize and highlight the commercialization challenges, and identify an "appropriate" path to the market consistent with the risks, rewards, investment required, and with the extant or expected competitive landscape.

We first presented a very simple screening methodology that may be applied to facilitate a quick, but structured approach for the entrepreneur to understand which options may be most viable and lowest risk to create, deliver and capture value through the business model that is to be created and validated.

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Boni, JCB 2019

UC San Diego

INSTITUTE FOR THE
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JACOBS SCHOOL OF ENGINEERING
RADY SCHOOL OF MANAGEMENT

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Boni Introduced the **Quick Screen** as a Useful Set of Rules

The Quick Screen
Addresses
Three Questions
and Considers the
Five Anchors
of a Good Opportunity

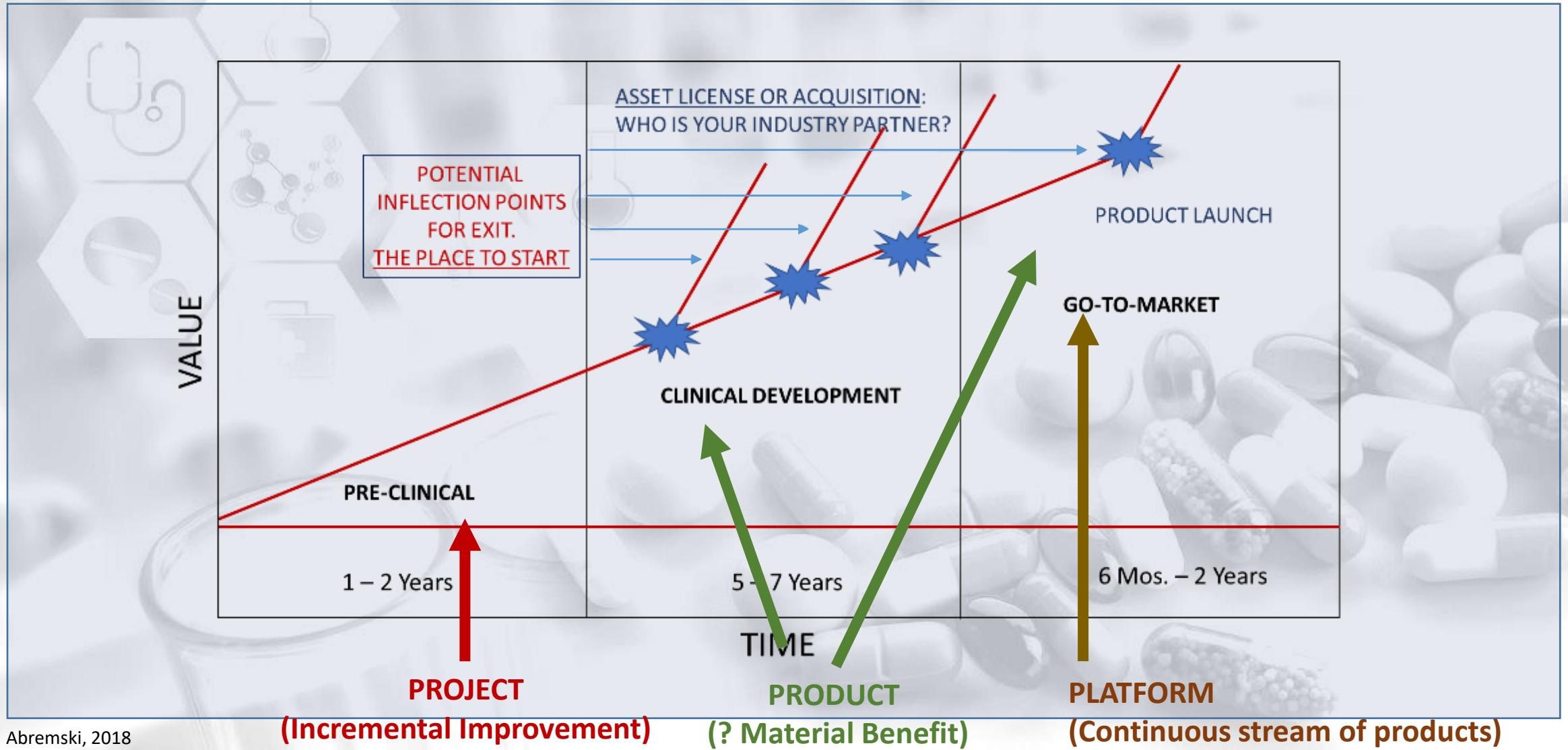


Pressing on to the 3 “Ps”

What Are They?

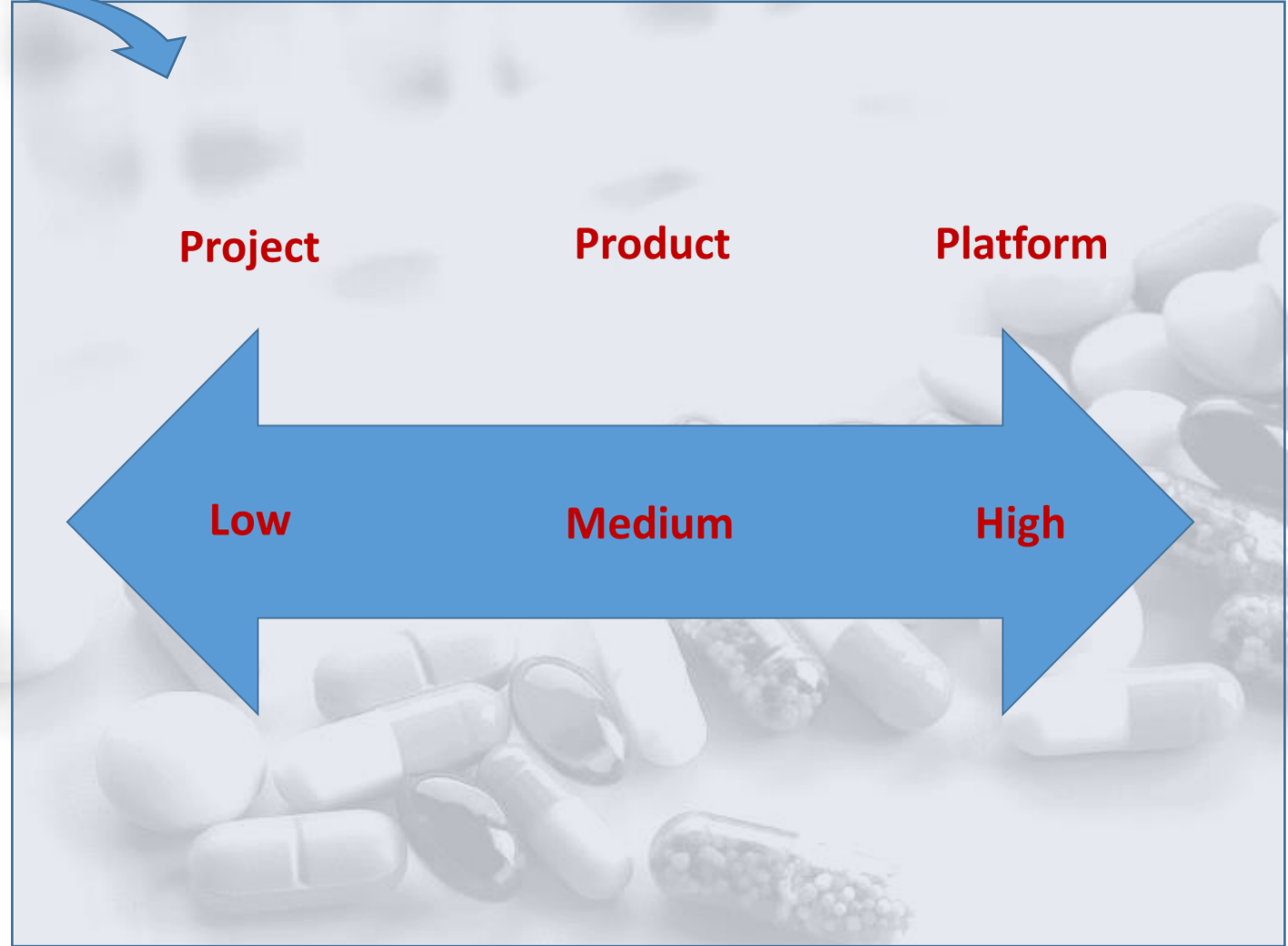
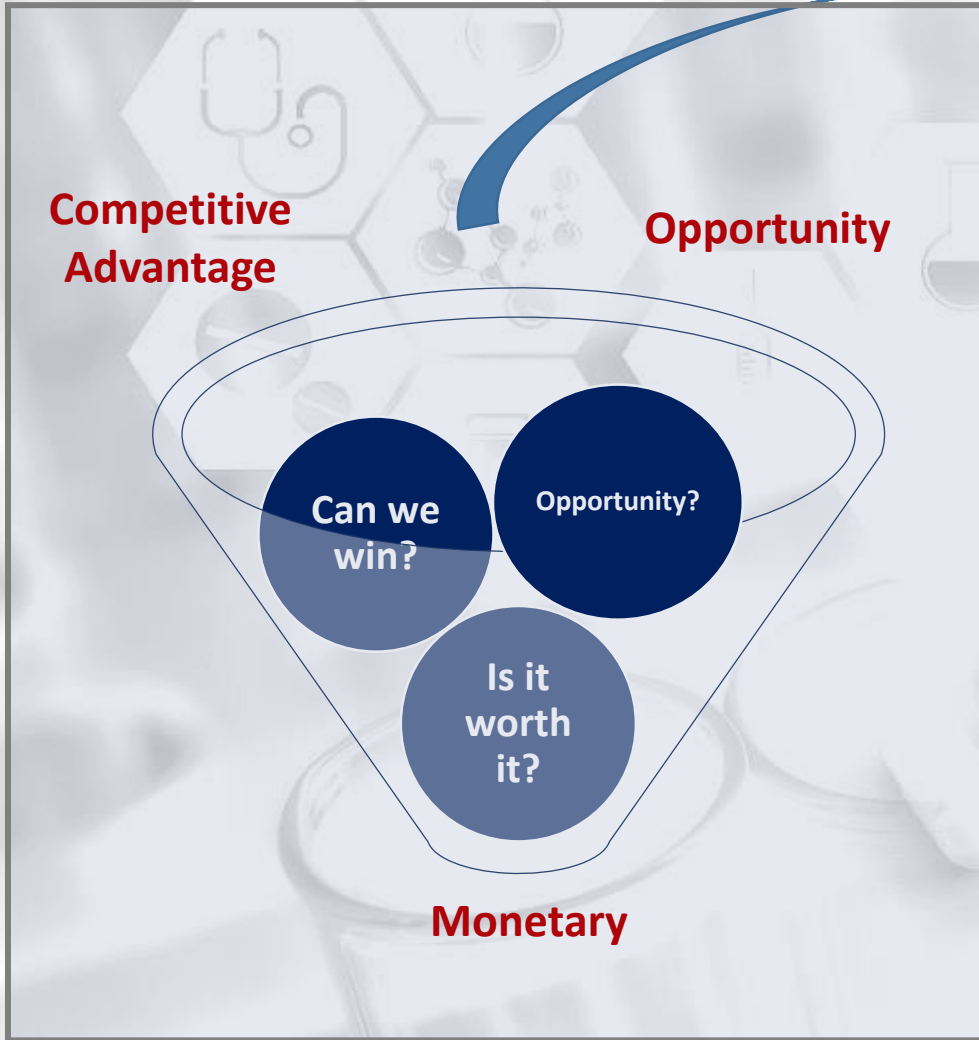


The Three “Ps” Reflect **Maturity Levels** and Value Inflection Points



York and Abremski, 2018

And the Quick Screen Can Sort Out How the 3 “Ps” Fit



Boni, JCB 2019



WHAT ABOUT PROJECT?

Defining Characteristics

Examples



Project- A Good Licensing, Grant, or Collaboration Option

Opportunity

- Early →
 - Product not fully defined
 - Value not yet compelling or significant

Monetary

- Low \$ value in market (early stage)
- Still, significant \$s to ↓ tech/clinical risk

Competitive Advantage

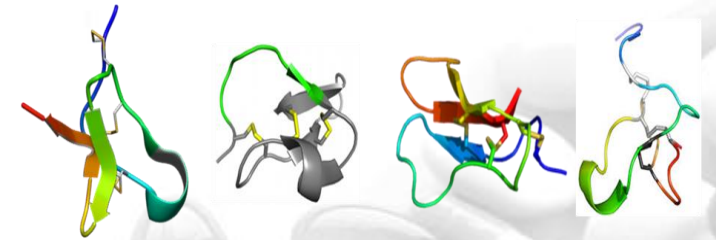
- Other competitors
- Limited IP and FTO
- POD → not fully defined (early)



Veneno Technologies: Three-year-old, Japanese Startup



VENENO
TECHNOLOGIES



Technology: Disulfide-Rich Peptide (DRP) Discovery Suite

- Accelerate DRP drug discovery → ↑ library screening ↓ timing

Management: Strong Science, Seasoned

- K Yoshinkawa (CEO), T Kimura, PhD (CSO), Y Matsukawa, PhD, MBA (BD), H Taira, PhD (BD) (>10 years biopharma R&D)

Stage: Early (pre, pre-clinical)

Interactions: Building collaborative biopharma relationships

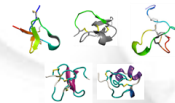


Institute for the
Global Entrepreneur

University of Tsukuba
Workshop (Japan)

1. DRP Space

Genetic library
construction



Library
construction

1 month

on-demand
design

2. PERISS

Affinity screening
(Identify hit DRP Sequence)

Sequence 1
Sequence 2
Sequence 3
Sequence 4
Sequence 5

Screening
(10⁹ library)

3 months

molecular
evolution

3. Anchor

DRP
Functional assay

- antagonists
- agonists
- binders

1st selection
(functional assay)

cell-based assay

4. Super Secrete

Low-cost
mass production



Production

DRP secretion into
culture medium

DRP
Characterization

- IC50/EC50
- selectivity
- stability

2nd selection
(functional &
stability assay)

cell-based assay
cell-free assay

Animal study

BD= Business Development;
CEO= Chief Executive Officer; CSO= Chief Scientific Officer
DRP= Disulfide Rich Peptide
R&D= Research and Development



Assessment: While Early, Can Benefit from R&D Collaborations

KEY POINTS FROM THE MAP

MAPPING KEY CONSIDERATIONS USING THE “QUICK SCREEN” → **ALL LOW**

	Positives	Negatives
Opportunity	<ul style="list-style-type: none"> Markets: Peptide → \$28.5B (2020, Global), 9.66% CAGR¹ Drug discovery → \$58.3B (2021, Global), 8.21% CAGR² UMNs → Rapid, productive screening, faster developed, expanded library, and ↑ stable, novel targets 	<ul style="list-style-type: none"> ↑ competition, especially in the drug discovery service space Suite → early → service vs. product → lower value (incomplete)
Monetary	<ul style="list-style-type: none"> Raised \$2M seed (2021) 	<ul style="list-style-type: none"> Significant capital to mature to a product and a significant inflection
Competitive Advantage	<ul style="list-style-type: none"> Throughput, productivity, and efficiency Multiple patents (Japan, US) Scientific expertise Projects, alliances, and licensing of technology or outputs will enhance 	<ul style="list-style-type: none"> Tool/service business may be questionable for a durable POD

1. Attractive markets
2. UMNs for screening/library production and sustainable oral peptides
3. Suite → Advantages, **but early**
4. \$ raised → **Need more**
5. Recent Astellas Pharma collaboration.
6. **Drug discovery competitive → ? the tool/service business durability**
7. **Projects or alliances \$s → lead peptide → Animal POC → Clinical testing**

CAGR= Compounded Annual Growth Rate; POD= Point of Differentiation; ?=Questionable



AgPlus: A UK Point-of-Care Diagnostic Venture to Deliver Personalized Healthcare Using Individual Biomarker Profiles

Technology: Novel electrochemistry + metallic nanoparticles
→signaling with diagnostic immunoassays

Management: Experience >100 years (R&D, project, Manufacturing)

Stage: Preclinical

Interactions: Contract Work (Primary) and Own Assays

- Contract → New diagnostics products and develop new assays
- Additional → Own assays for licensing and integration into partners' products



Assay development and manufacturing services provider – moving into point of care diagnostics (PoC) platform provision.



R&D= Research and Development; PoC= Point of Care

Assessment: Build Out Collaborative Alliances and Contract Development Projects

MAPPING KEY CONSIDERATIONS USING THE “QUICK SCREEN” → ALL LOW

KEY POINTS FROM THE MAP

1. PoC diagnostics attractive
2. Faster regulatory route
3. Early → Needs preclinical validation
4. Technology is not the industry standard
5. IP is trade secret
6. Service \$s from partners → Need more for a regulatory-approved product

	Positives	Negatives	Uncertain
Opportunity	<ul style="list-style-type: none"> PoC dx: \$32.9→\$73.3 B (2020-20), CAGR 8.3% 	<ul style="list-style-type: none"> Early stages of implementing multiple assays 	<ul style="list-style-type: none"> Offering assay development and manufacturing
Monetary	<ul style="list-style-type: none"> Service revenue offsets Grants and angel investments → BP 1.5M Planning to raise GBP 5M for customer validation 	<ul style="list-style-type: none"> Still have significant investment for development 	
Competitive Advantage	<ul style="list-style-type: none"> Ability to create a range of assays in a consistent cartridge form factor for use in their readers Service revenue from partners 	<ul style="list-style-type: none"> IP → Patents (UK, EU), knowhow and trade secrets 	<ul style="list-style-type: none"> Technology not the industry standard Early stage

BP= British Pounds; CAGR= Compounded Annual Growth Rate; EU= European Union; GBP= Great Britain Pounds; IP= Intellectual Property; UK= United Kingdom



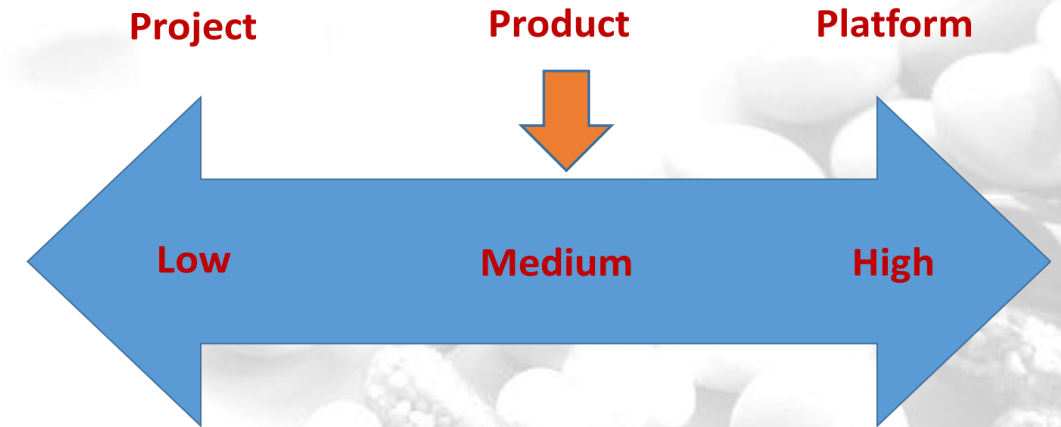
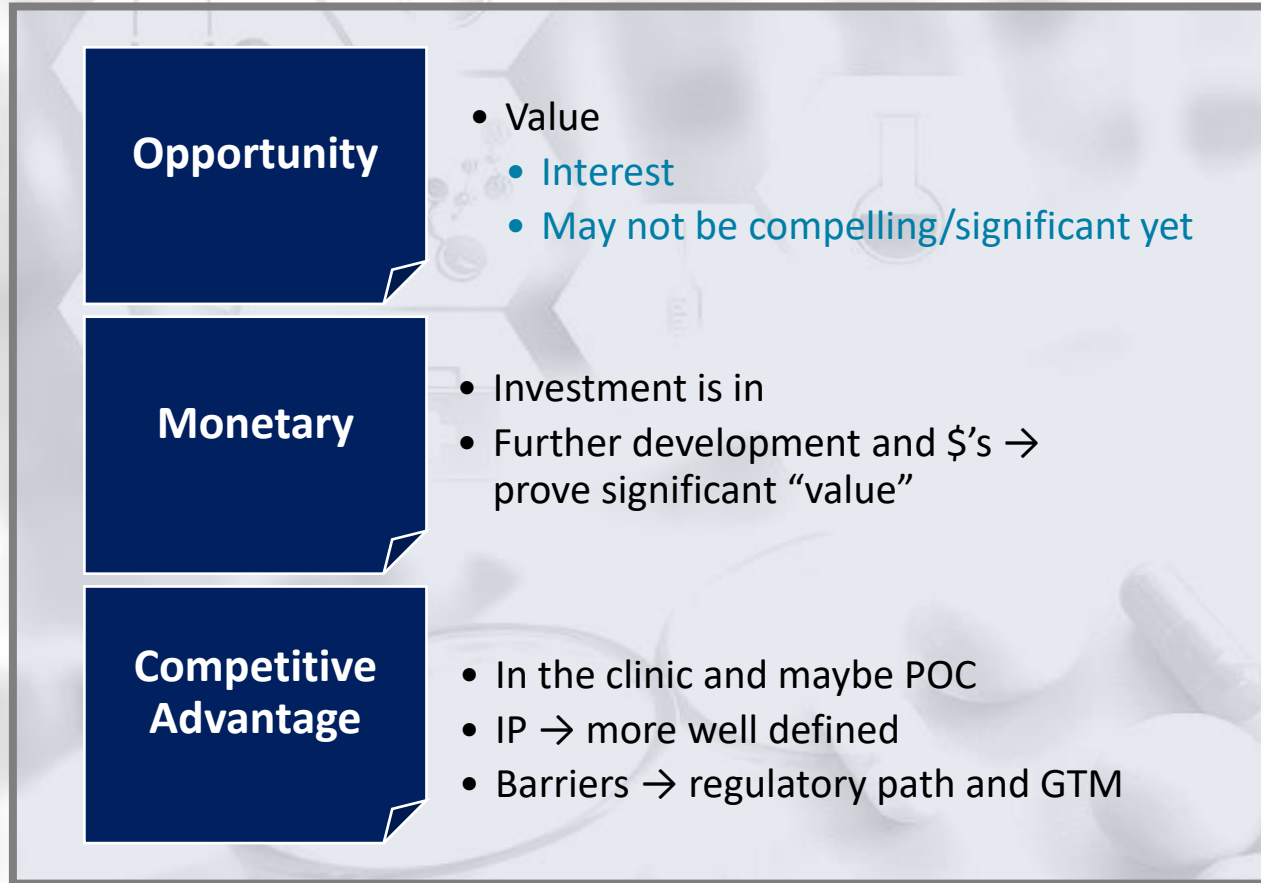
WHAT ABOUT PRODUCT?

Defining Characteristics

Examples



Product- A Development Stage Set to Commercialize



IGTM= Go to Market; P= Intellectual Property; POC= Proof of Concept

Boni, JCB 2019



JD Bioscience: An Emerging 6-year-Old, Clinical-Stage Firm from Korea

Institute for the
Global Entrepreneur

Global Entrepreneurship
Accelerator (Korea)

Technology: GM-60106 (a peripheral 5HT_{2A} inhibitor) is 1st in class

Management: Science-Oriented, with a Track Record and Expertise

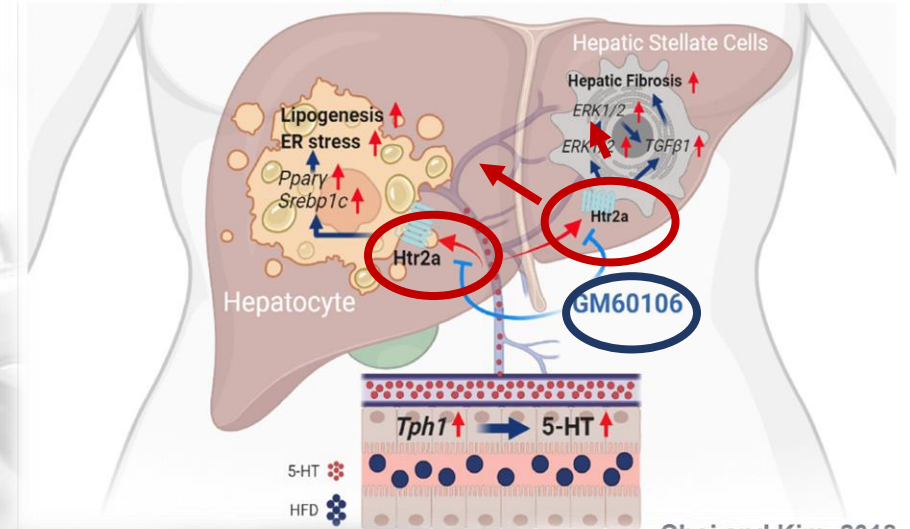
- J. Ahn, Ph.D. (CEO) → Med Chem Prof, > 5 L/O to pharma
- D. Kim, Ph.D. (Director) → Merck (20 years, Januvia®), Kainos (9 years, CTO)
- R. Loomba, MD (SAB) → Professor & Director, NAFLD Center, UCSD

Stage: Completing FIH Phase 1 2023 in Australia for SAD and MAD

Interactions: Engaging industry partners for alliance opportunities



MOA of GM-60106 during hepatic steatosis and liver fibrosis



Assessment: Early-Stage Clinical Can Benefit from Alliances

KEY POINTS FROM THE MAP

MAPPING KEY CONSIDERATIONS USING THE “QUICK SCREEN” → ALL MID

	Positives	Negatives
Opportunity	<ul style="list-style-type: none"> Moving into Ph 1 a/b Market: \$144.4M→\$27.2B (2019-29), 68.8% CAGR (Global)¹ UMN→ lipid, inflammation, and fibrosis management^{2,3} Trend→ Movement to combo therapy² (Pfizer fast track) 	<ul style="list-style-type: none"> Uncomfortable investors/BD regarding NASH
Monetary	<ul style="list-style-type: none"> Series A and B Funding (~\$20M, Lead, Mirae Asset Capital) 	<ul style="list-style-type: none"> Funding needed for Ph 2 and 3
Competitive Advantage	<ul style="list-style-type: none"> 1st-in-class peripheral 5HT2A antagonist Defined IP (Korea, US) ↓ fibrosis, inflammation, and lipids (4 animal models) No BBB crossing Alliance/licensing → enhance development position 	<ul style="list-style-type: none"> No real H/H with other assets through development

1. Large market → No approved treatments.
2. Madrigal Pharmaceuticals, Inc.
→ breakthrough designation and Phase 3.
3. Combo therapy (Gilead/Novo Nordisk)
4. Unique MOA (fibrosis, inflammation, and lipid reduction) with POC (4 animals).
5. JDB Completes FIH with no safety issues.
6. Complicated disease. Issues with clinical studies and approvals (Intercept).
7. Has funding; Needs more for Ph 2 and 3 → Alliance/licensing → Move asset along.

BBB= Blood Brain Barrier; BD= Business Development; CAGR= Compounded Annual Growth Rate; FIH= First in Human; H/H= Head to Head; NASH=Non-Alcoholic SteatoHepatitis; Ph= Phase; UMN= Unmet Need



Reviva Pharma: Late-stage Drug Development That's Gone Public

Technology: Chemical Genomics-driven and Proprietary Chemistry Approach

- Brilaroxazine → Multimodal D/5HT ag/antag (central & peripheral)
- POC- **Animal**- PAH, IPF, Schizophrenia **Human**- Schizophrenia

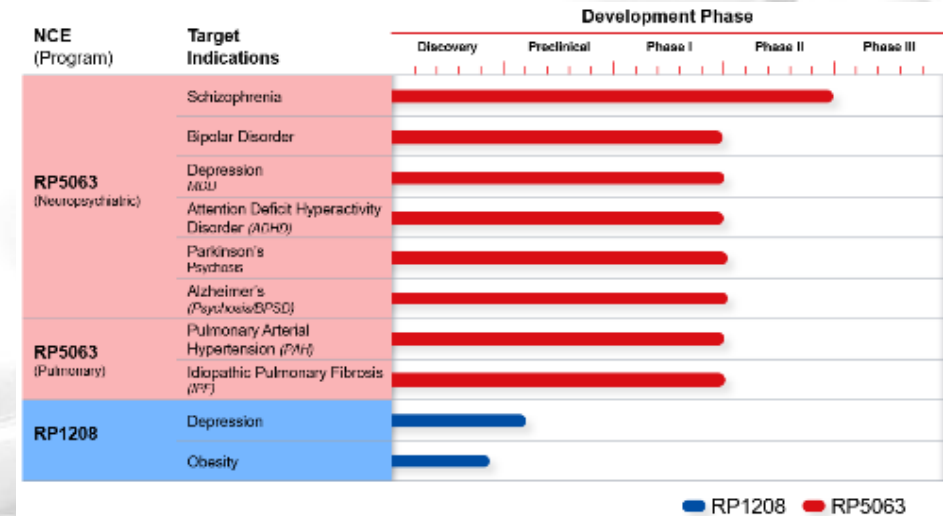
Management: Seasoned Industry Scientists

- L. Bhat, PhD- CEO, M. Cantillon, MD (CMO) (>16 yrs with co., > 20 yrs industry)

Stage: Phase 3 Schizophrenia, Phase 2 PAH, IPF (ODD)

Interactions: SPAC (Tenzing) 2020 (Public)

- Exploring industry options for development and commercialization



TENZING ACQUISITION CORP. (TZACU)

CEO= Chief Executive Officer; CMO= Chief Medical Officer; D= Dopamine; IPF=Idiopathic Pulmonary Fibrosis; ODD= Orphan Drug Designation; PAH= Pulmonary Artery Hypertension; Ph= Phase; POC= Proof of Concept; SPAC= Special Purposes Acquisition Company; 5HT= Serotonin; Yrs.=Years



Assessment: Strong, Late Stage with a Few Shots on Goal. Could Benefit from an Alliance

MAPPING KEY CONSIDERATIONS USING THE “QUICK SCREEN” → ALL MID-LATE

	Positives	Negatives
Opportunity	<ul style="list-style-type: none"> • Schizophrenia → \$7.8B → \$9.3B, 3.68% CAGR, (2020-26).¹ • UMN → Broad efficacy, ↑ safety and clean PK (B → Ph 3) • PAH → \$7B, 5.2% CAGR (2021)² IPF → \$3.1B → \$6.16B, 7% CAGR (2020-30) • UMN → Dz modification → ↓ M&M (B → Ph 2) 	
Monetary	<ul style="list-style-type: none"> • Reverse merger (SPAC) 2020 → Tenzing (Public) 	<ul style="list-style-type: none"> • Financing for Ph 3, but still needs for Ph 2s
Competitive Advantage	<ul style="list-style-type: none"> • Strong IP → multiple layers (US, EU) • Simple PK, attractive safety, and strong POC • Later stage, Public company • Lean management and business model • Would benefit from an alliance 	<ul style="list-style-type: none"> • Still needs Ph 2 and Ph 3 data and commercialization plans

RESOURCING & FINANCIAL →

KEY POINTS FROM THE MAP

1. Interesting markets with UMN.
2. Lead asset in Ph 3 and Ph 2 (ODD).
3. SPAC with Tenzing (public).
4. Multiple posters/papers in 2023.
5. New formulation with POC for psoriasis.
6. **Need \$ for Ph 2 ODDs & GTM for schizophrenia.**
7. Would benefit from alliance to commercialize lead indication.

B= Brilaroxazine; B= Billion; CAGR= Compounded Annual Growth Rate; EU= European Union; GTM= Go to Market; IPF= Idiopathic Pulmonary Fibrosis; M&M= Morbidity & Mortality; ODD= Orphan Drug Designation; PAH= Pulmonary Artery Hypertension; Ph= Phase; PK= Pharmacokinetics; POC= Proof of Concept; SPAC= Special Purposes Acquisition Company; US= United States



WHAT ABOUT PLATFORM?

Defining Characteristics

Examples



Platform- Built to Last with Multiple Products and Management Team to Carry Products Further

Opportunity

- Large market
- Significant need
- Compelling solution

Monetary

- Passed the clin/reg inflection points
- ↑ profits and margins possible
- ↑ ROI potential for investors

Competitive Advantage

- Unique, differentiable solution
- Strong IP (or can be established)
- ↑ with a partnership

Project

Product

Platform

Low

Medium

High



Moderna: An In-market, mRNA Firm, with COVID-19 Success and a Diverse Pipeline

Technology: mRNA Platform **DESIGN STUDIO** → speed, scale, & flexibility

- Immuno-oncology, cardiovascular, autoimmune, and rare diseases

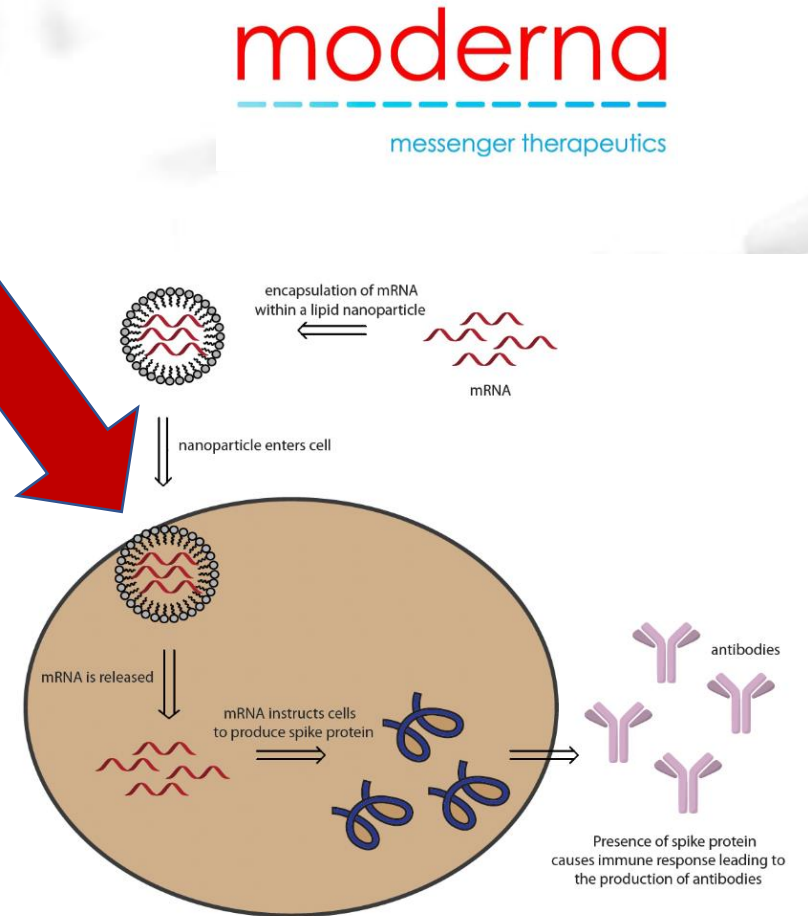
Management: Seasoned Business and Scientific Leadership

- S. Bancel- CEO (>27 years pharma, Indigo board), S. Hoge, MD- President (>12 yrs pharma, Axcella Health board), 3000+ experienced personnel

Stage: In-market and Active Clinical Program

- COVID-19 vaccine, 25 ongoing trials (Ph 2 [Zika] and Ph 3 [Adult RSV, CMV])

Interactions: Alliances and Projects with Different Partners. ? M&A



Public Citizen, 2020

CEO= Chief Executive Officer; CMV= Cytomegalovirus; COVID= Coronavirus; M&A= Merger & Acquisition; mRNA= Messenger RNA; RSV= Respiratory Syncytial Virus.



Assessment: Many Positives with Room for Growth in Alliances or May Engage in M&A

MAPPING KEY CONSIDERATIONS USING THE “QUICK SCREEN” → **ALL HIGH**

KEY POINTS FROM THE MAP

Positives

Opportunity

- **Market: Vaccines:** \$67B → 149B (2001-27), CAGR 10.2%¹
- **COVID-19:** \$65B → \$157B (2020 -25) CAGR 19.29%²
- **mRNA:** \$47B → \$101B (2021-26)³
- **UMN** → HIV, RSV, CMV, Zika and cancer in the pipeline

Monetary

- **Revenue** → \$803.4M → \$18.5B (2020-21)⁴
- **Market cap** → \$54.19 B (May 2022)⁵
- Room for growth

Competitive Advantage

- Unique platform, strong COVID-19 experience, Strong IP
- Ph 1 → HIV vaccine (mRNA-1644 & mRNA-1574) and Immuno-oncology (IL-12, MEDI 1191)
- Seasoned mgmt.; large talented organization
- Multiple alliances (e.g., AZ, Merck, Vertex).
- Maybe M&A

1. Defined, effective platform with commercial success
2. Pipeline ID and IO applications
3. Seasoned mgmt.; Talented organization
4. Attractive opportunities with UMNs
5. Strong revenue, but declining due to the control of COVID.
6. \$ left on the table?
7. Benefit from alliance. Maybe M&A (BioNTech-Pfizer → \$37B vs. Moderna → \$18.5 B in 2021)

AZ= AstraZeneca; B= Billion; CAGR= Compounded Annual Growth Rate; CMV= Cytomegalovirus; COVID= Coronavirus; HIV= Human Immunodeficiency Virus; IL= Interleukin; ID= Infectious Disease; IO= Immuno-Oncology; M&A= Mergers & Acquisitions; mRNA= Messenger RNA; RSV= Respiratory Syncytial Virus.



Kite: Cell Therapy Pioneer within an Established Pharma

Technology: Gene Editing and Cell Therapy →
Chimeric Antigen Receptor T-Cell Receptor (CAR-T)

Management: Experienced, Strategic and Research-Focused

- Gilead: D. O'Day (CEO); M. Parsey, MD, PhD (CMO); T. Yang, PhD (Exec. VP, Pharma Dev. and Manufacturing); Kite: C. Perette (EVP, 20 years), W Biddle (Commercial, 25 yers), C McDonald (Tech Ops, 25 years) ²

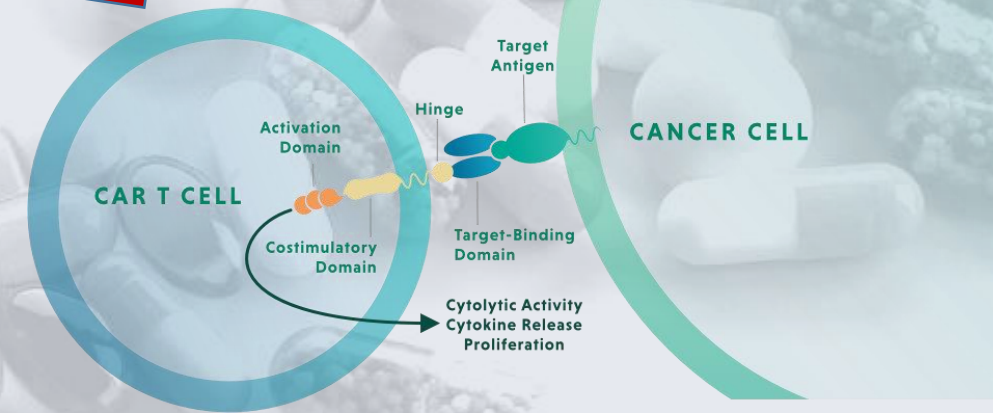
Stage: In-market and Pipeline (Products and Indications)

- In-market products, axi-cel (Yescarta®) and brexucel (Tecartus®)¹
- Pipeline → **HM** and **ST**

Interactions: Acquired by Gilead (2017). Functions as its own unit.
Alliances with HiFiBio Therapeutics and Appia Bio.¹



Arie Belldegrun, MD
(Founder)



CEO= Chief Executive Officer; CMO= Chief Medical Officer; HM= Hematologic Malignancy; Ops= Operations; ST= Solid Tumor; VP= Vice President



Assessment: Healthy Platform Led to Gilead Acquisition, Robust Growth, and Potential for Acquiring Other Assets

MAPPING KEY CONSIDERATIONS USING THE “QUICK SCREEN” → ALL HIGH

KEY POINTS FROM THE MAP

	Positives	Negatives
Opportunity	<ul style="list-style-type: none"> Market: CAR-T → 1.96B → \$20.56B(2021-29), 31.6% CAGR¹ UMN: ↓ chemo and treatment time, needs in solid tumors, and ↑ survival and cures 	<ul style="list-style-type: none"> Competition: G1 Tx, BioNTech, Amgen, Novartis, and Juno²
Monetary	<ul style="list-style-type: none"> Potential high revenue, profits, and margins Revenues (Gilead total): \$27.3 B (2021)³ CAR-T: \$871M (up 43% due to Tecartus® launch)⁶ Market Cap: \$80B⁴ Room to grow 	
Competitive Advantage	<ul style="list-style-type: none"> Pioneer, with well-established IP In-market products → strong efficacy and safety Gilead. Experienced leadership. ↑ manufacturing capabilities Broad HM and ST pipeline; platform for continued innovation, especially allogenic for ST 	

1. Defined, effective platform with commercial success, revenue, and growth
2. Seasoned mgmt.; Talented organization
3. Attractive opportunities with UMNs
4. Multiple HM & ST pipeline programs- Ph 3 (2), Ph 2 (4), and Ph 1 (2)
5. Evolving competitive space
6. Departure of C Shaw, the CEO in Q1 2023.
7. A great marriage. Could benefit from alliance to fully tap pipeline.

B= Billions; CAGR= Compounded Annual Growth Rate' CAR-T=Chimeric Antigen Receptor T-Cell Receptor; HM= Hematologic Malignancy; IP= Intellectual Property; M= Million; Mkt= Market; Ph= Phase



TAKE HOME CONSIDERATIONS

3 Key Learnings And a Proposed Tool



Key Learnings:

1

↓ Risk →
↑ Opportunity
Development

2

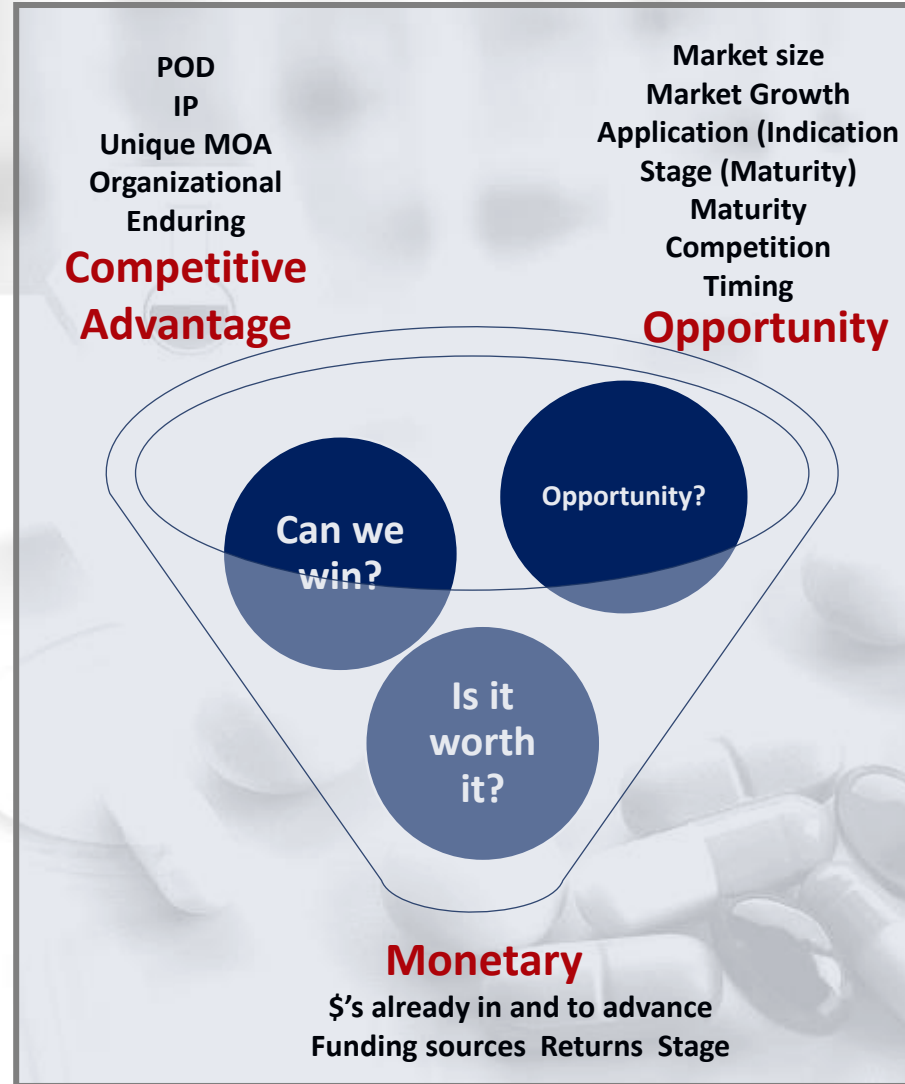
Different Engagement
Strategies Exist, which
evolve from nascent to
mature

3

Quick Screen → Useful
Lens for Sensemaking
that Can Be Developed
and Refined with Time
and Experience



And, There's More to the QS that Just Meets the Eye



Boni, JCB 2019 IP= Intellectual Property; MOA= Mechanism of Action; POD= Point of Differentiation

A Score Card Tool to Explore

Profiles vs. Benchmarks

Opportunity		Weight	Low	Med	High	Super High	Weighted Score	Benchmark
			1	2	3	4		
	Market Size	17%					0.67	0.67
	Market Growth	17%		2			0.33	0.67
	Application (Indication)	17%	1				0.17	0.67
	Stage (Maturity)	17%			3		0.5	0.67
	Competition	17%	1				0.17	0.67
	Timing	17%	1				0.17	0.67
Composite Score							2.01	

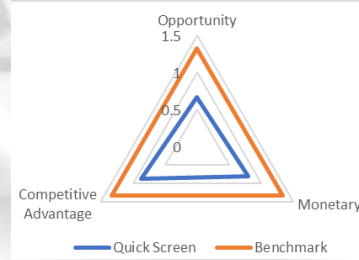
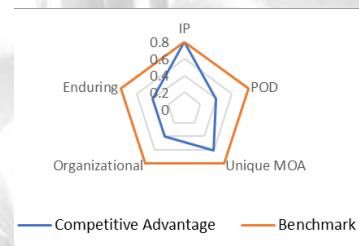
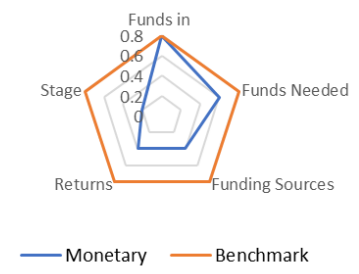
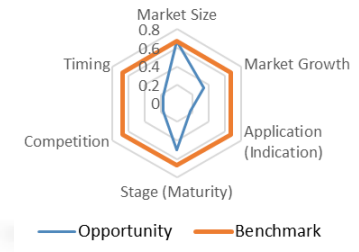
Monetary		Weight	Low	Med	High	Super High	Weighted Score	Benchmark
			1	2	3	4		
	Funds in	20%				4	0.8	0.8
	Funds Needed	20%			3		0.6	0.8
	Funding Sources	20%		2			0.4	0.8
	Returns	20%		2			0.4	0.8
	Stage	20%	1				0.2	0.8
Composite Score							2.4	

Competitive Advantage		Weight	Low	Med	High	Super High	Weighted Score	Benchmark
			1	2	3	4		
	IP	20%				4	0.8	0.8
	POD	20%		2			0.4	0.8
	Unique MOA	20%			3		0.6	0.8
	Organizational	20%		2			0.4	0.8
	Enduring	20%		2			0.4	0.8
Composite Score							2.6	

Quick Screen		Weight	Score	Weighted Score	Benchmark	Net
	Opportunity	33%	2.01	0.67	1.33	
	Monetary	33%	2.4	0.8	1.33	
	Competitive Advantage	33%	2.6	0.87	1.33	
Total QS Composite Score				2.34		Project

Score Range	
Project	0-4
Product	4.1-8
Platform	8.1-12

Input **Output**

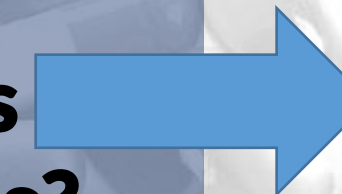


Quantitative Evaluation
 Weighted Evidenced
 Signatures Within Each Screen vs. Standard
 Areas to Work on

CONCLUSION: BACK TO OUR OVERARCHING QUESTIONS

How can biopharmas quickly assess biomedical startups of different maturity (development & commercial) levels?

How can startups and biopharmas engage at different maturity levels?



Quick Screen → Useful Lens for Sensemaking Early in the Process and Complement More Detailed Due Diligence Later On

Among the 3 P Stages → Multiple, Unique Engagement Strategies Exist and Evolve with Maturity



Closing Thought....



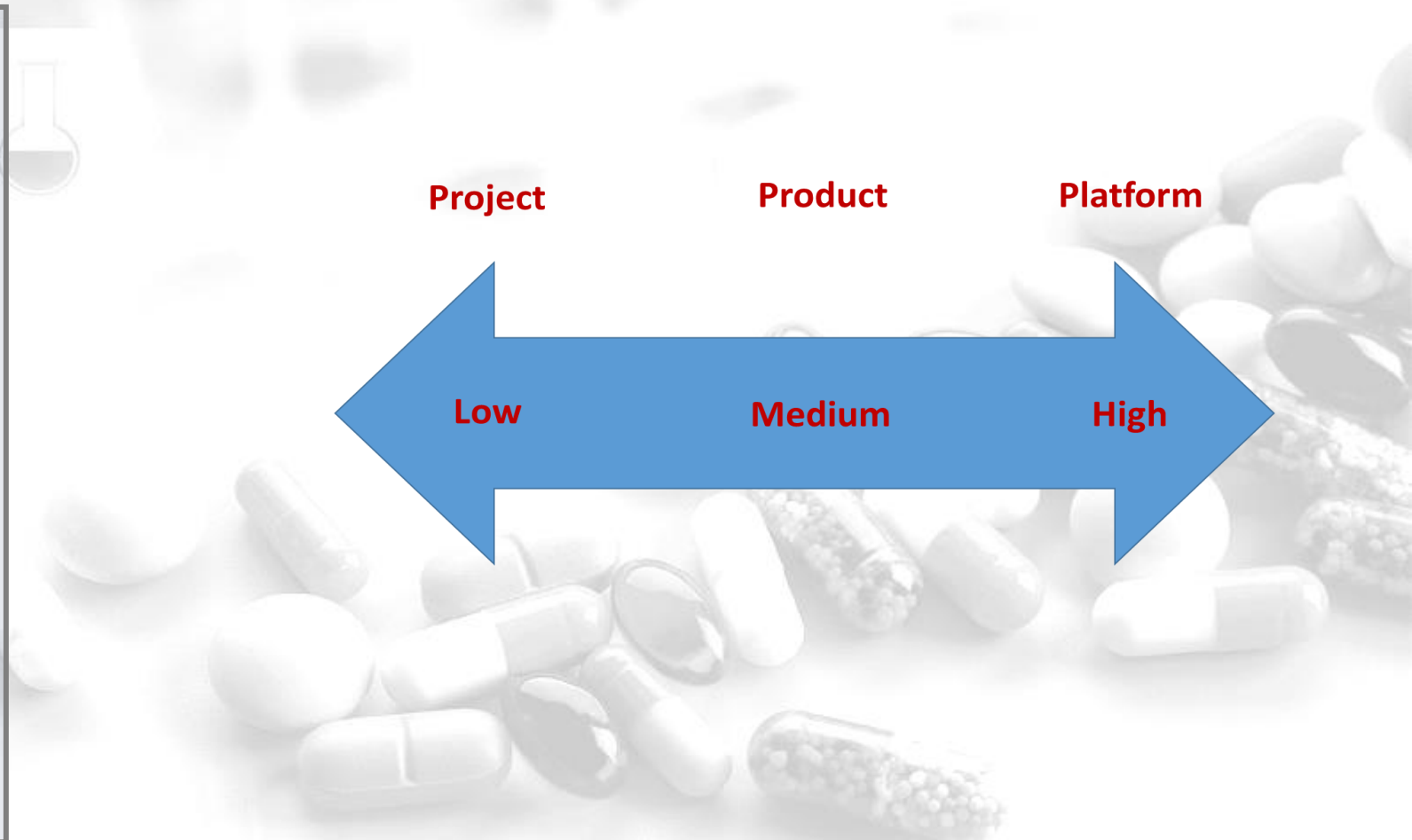
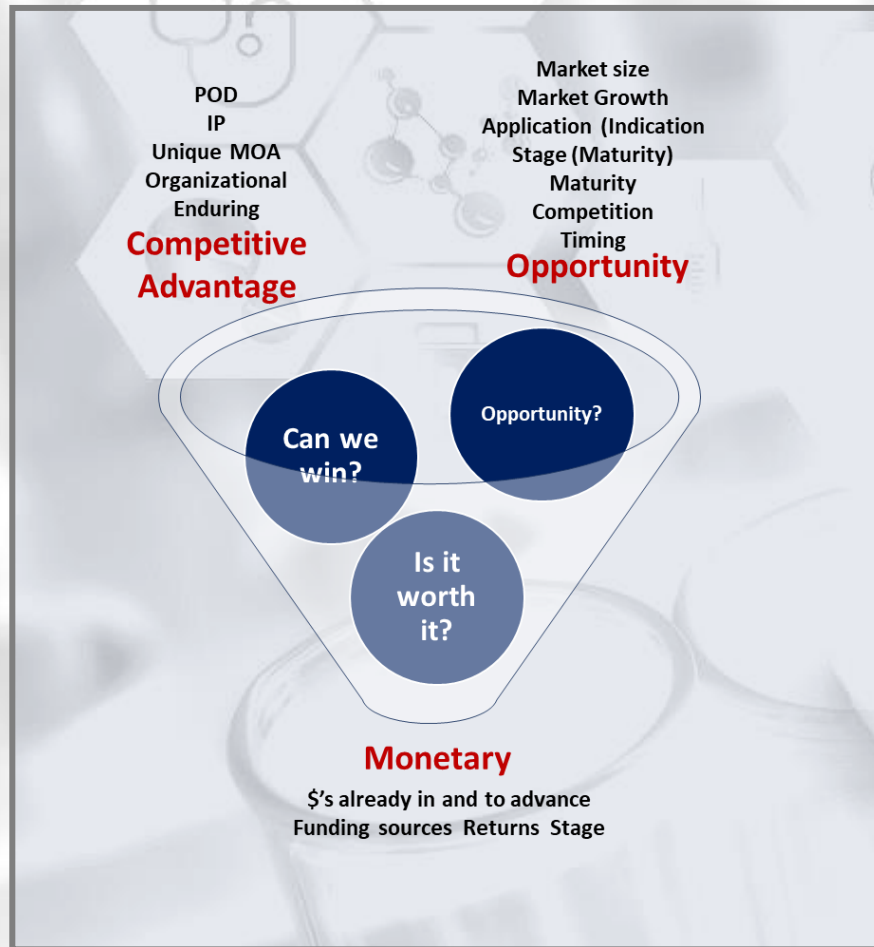
The beauty of simplicity is
the complexity it attracts.

Tom Robbins

quote fancy



Case Activity: Let's Take and Map Out a Company or Two From the Audience?



Boni, JCB 2019 IP= Intellectual Property; MOA= Mechanism of Action; POD= Point of Differentiation