



PlantForm Corporation®

Making life-saving
medicine
more **affordable**



plantformcorp.com



PlantForm Opportunity

Game-changing technology platform

- Disrupts current cell-based drug manufacturing methods
- Tobacco-plant system cuts biologic drug manufacturing cost by up to 90%
- Significantly reduced facility costs
- Common for all products

Virtually untapped market for biosimilar drugs

- Biosimilar sales estimated to be by \$35 billion by 2020

Pipeline of innovative drugs for medical countermeasures and infectious disease

- Billion dollar opportunity





Low Cost Production Platform

High yield expression, mammalian glycosylation

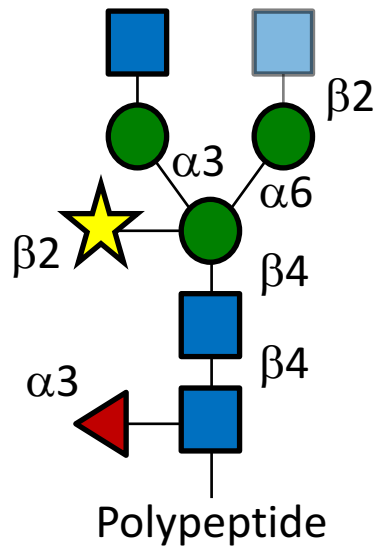




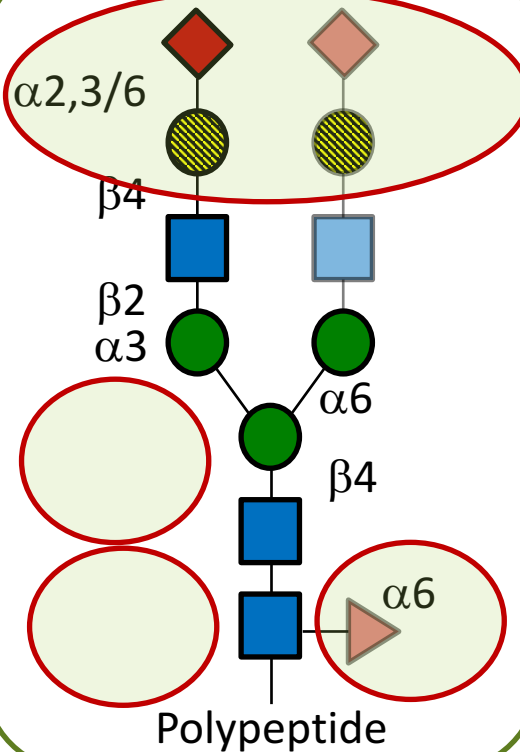
Key Technology Differentiation

Humanized Glycosylation

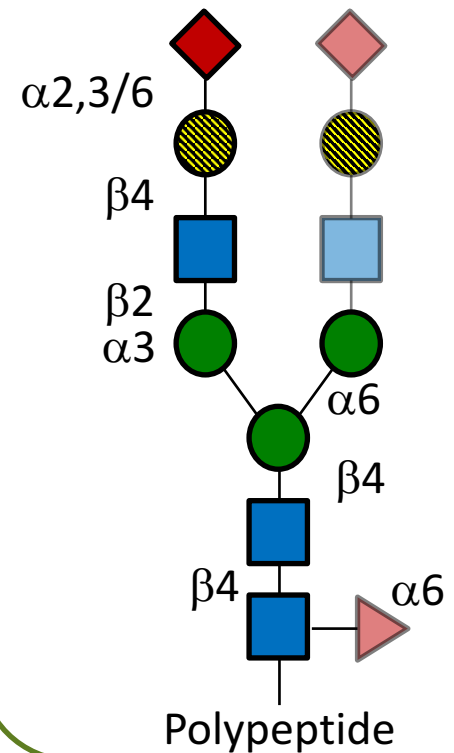
Wild Type Plants



Mammalian Production System



PlantForm[®]
vivoXPRESS[®] System



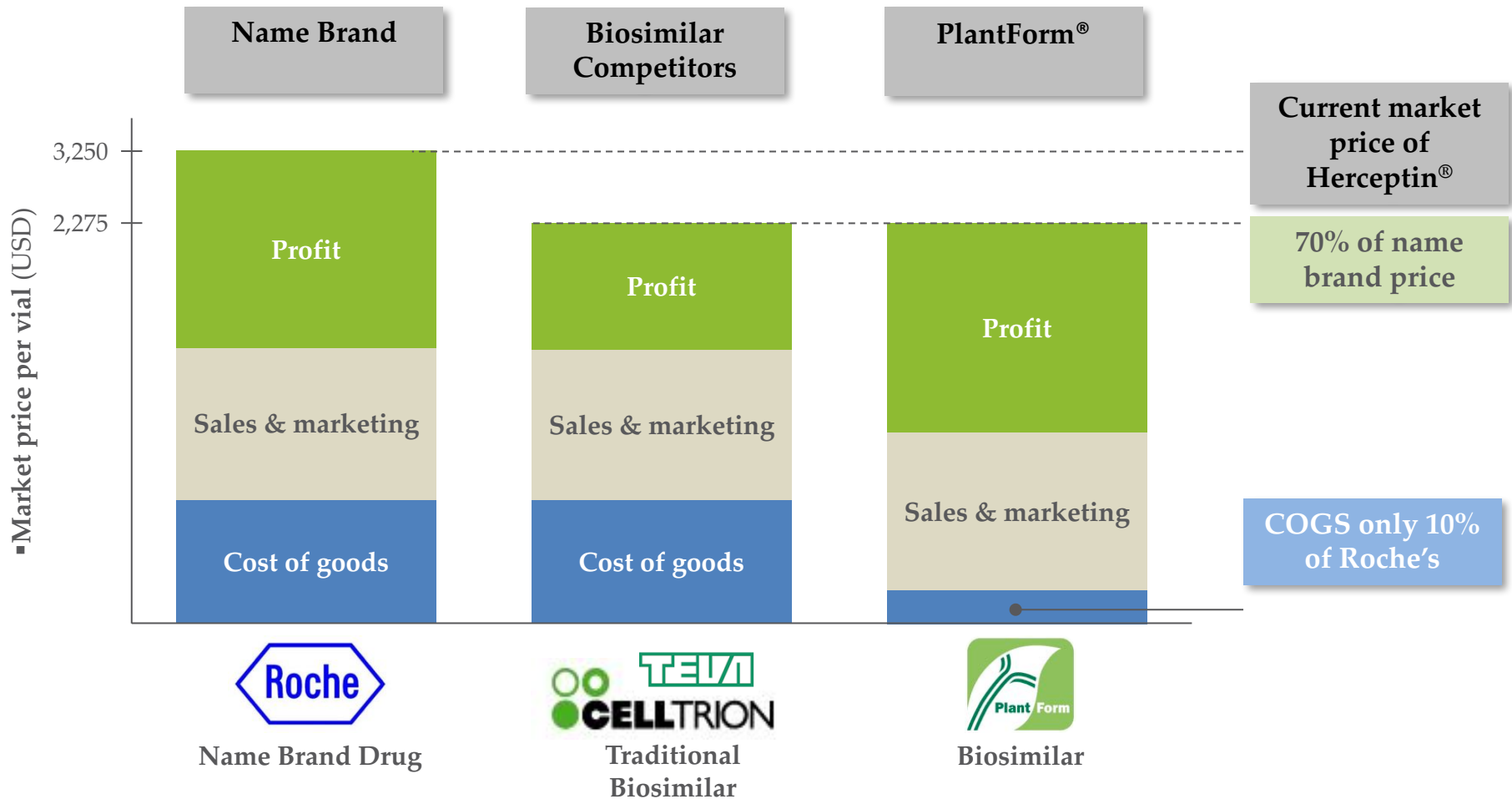


Intellectual Property

Patent	Expiry	Status
		15 issued or in review 3 new families in preparation
Platform technology		
Plug and play cloning	2028	1 patent issued, others in review
Very high yield production system	2031	Patents in review
Improved host plant	2036	Patents in review
Products		
Snake bite antidote	2029	2 patents issued, 1 in review
Biosimilar Herceptin [®] manufacturing process	2031	Patents in review
Anti-Ricin manufacturing process	2036	Patents in review



Low Cost Production



Greater profit margin enables flexible market entry strategy



Low Cost Facilities

Plant Production
Kentucky Bioprocessing, USA
Cost ~\$45 million



Mammalian Fermentation
Lonza, USA
Cost ~\$200 million



4-5x Plant Facility Cost

Manufacturing facility to produce \$1 billion antibody drug per year



Plant Produced Drugs

Organization	Indication	Class	Crop	Status Lead Drug Candidate
Pfizer/Protalix	Gaucher's disease	Therapeutic protein	Plant cell culture	Licensed FDA
Medicago	HSN1 Avian Influenza	Vaccine	Tobacco	Phase III
MAPP	Ebola	Antibody	Tobacco	Special access use approved
Planet biotechnology	Dental caries	Antibody	Tobacco	Phase II
Ventria Bioscience	Antibiotic associated diarrhea	Protein	Rice	Phase II
Icon Genetics	Non-Hodgkin's lymphoma	Idiotypic vaccine	Tobacco	Phase I
iBio	Influenza vaccine	Vaccine	Tobacco	Phase I
PlantForm	Breast Cancer	Antibody	Tobacco	Preclinical
Plantigen	Diabetes	Therapeutic drug	Various	Preclinical



Strong, Diverse Biosimilar Pipeline

World Markets

Pipeline Drugs

Brand Drug Market Size (us\$)

Market Entry

Biosimilar
Herceptin®

>\$7.5 bn

2021

Biosimilar
Avastin®

>\$6.0 bn

2022-2024

Orphan biosimilar
drugs

~\$0.5 bn each

Latin American Markets

Biosimilar
Humira®

>\$0.5 bn
(Latin American markets)

2021

Other undisclosed
Biosimilars

>\$0.5 bn each
(Latin American markets)

2021-26



Innovative Projects

Medical countermeasures

Pipeline Drugs

Funding support

Status

Anti-ricin mAbs



2nd round efficacy testing

BuChe
(nerve gas antidote)



Drug refinement

Infectious disease

Pipeline Drugs

Funding support

Status

HIV/AIDS entry inhibitor mAbs



Efficacy testing

Zika virus mAbs



Applications



Contract Projects

5 innovative drug candidates

Not disclosed, Major Biotech, North America

Proof of Concept

1 Drug & 1 bulk protein

Not disclosed, Pharmaceutical Conglomerate, Asia

Process development

8 Ebola drug candidates

Not disclosed, Leading University, North American

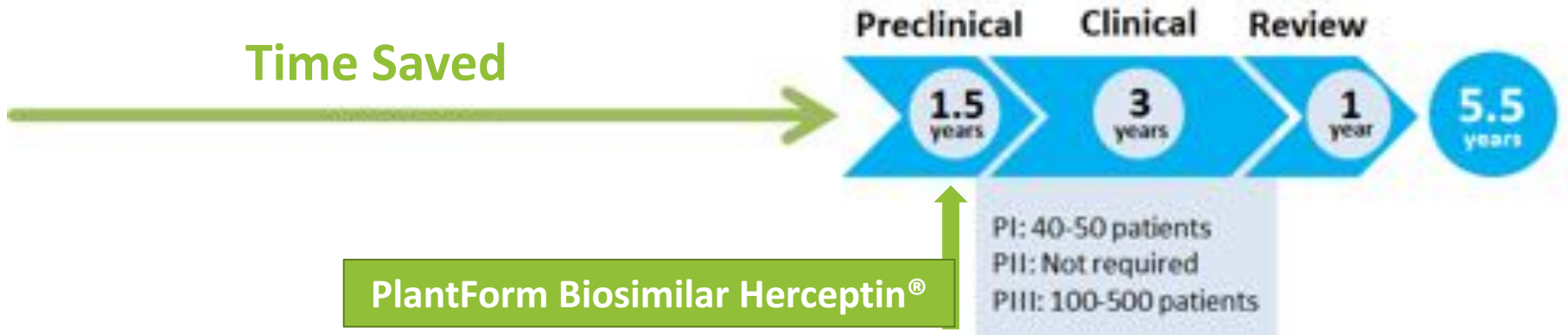
Production for preclinical evaluation



Biosimilar Drug Development

Biosimilar Drug

Time Saved



Innovator Drug





Approved Biosimilars Europe

Total: 23 (September 2016)

Product	Number of biosimilar versions licensed in Europe	Year(s) of approval
Somatropin	2	2006
Epoetin alfa	3	2007
Epoetin zeta	2	2007
Etanercept	1	2016
Filgrastim	9	2008–2014
Infliximab	3	2013–2016
Follitropin alfa	2	2013–2014
Insulin glargine	1	2014



Approved Biosimilars USA

Total: 4 (September 2016)

Product	Number of biosimilar versions licensed in USA	Year of approval
Filgrastim	1	2016
Infliximab	1	2016
Etanercept	1	2016
Adalimumab	1	2016



Biosimilar Herceptin[®] Program

Breast cancer

- In 2017, an estimated 255,180 new cases of invasive breast cancer are expected to be diagnosed in women in the US
- One in five (20%) US women are HER2 positive for breast cancer so treatable
- Herceptin[®] gives a 50% lower risk of breast cancer returning

Large and growing market

- Trastuzumab (Herceptin[®]) is the leading antibody drug for HER2-positive breast cancer patients
- Herceptin[®] sales \$USD7.5 billion (2015)

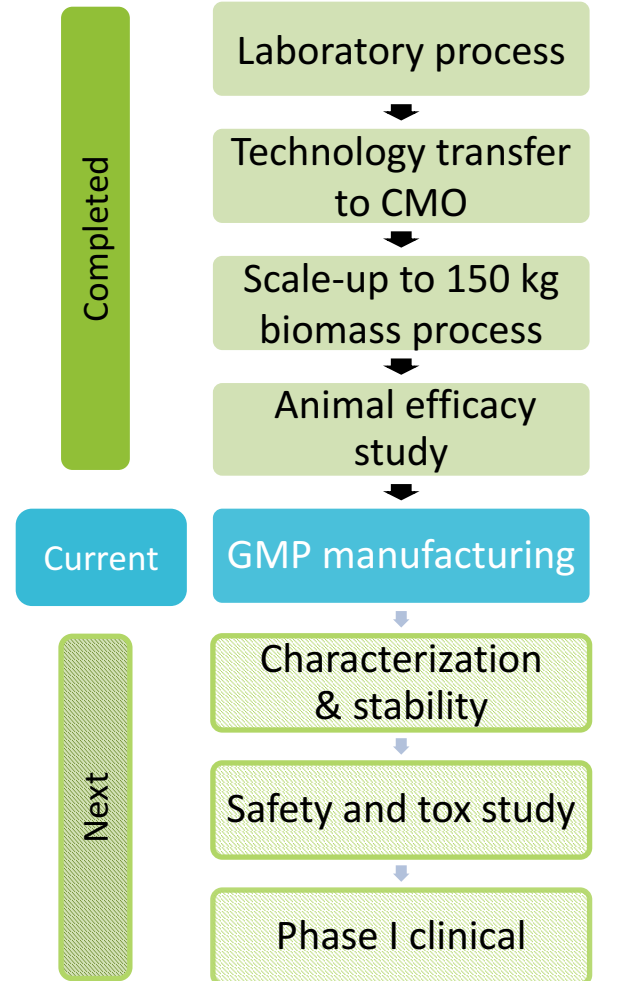
Market for Biosimilar trastuzumabs

- Estimated at > \$USD2.5 billion (~30%)

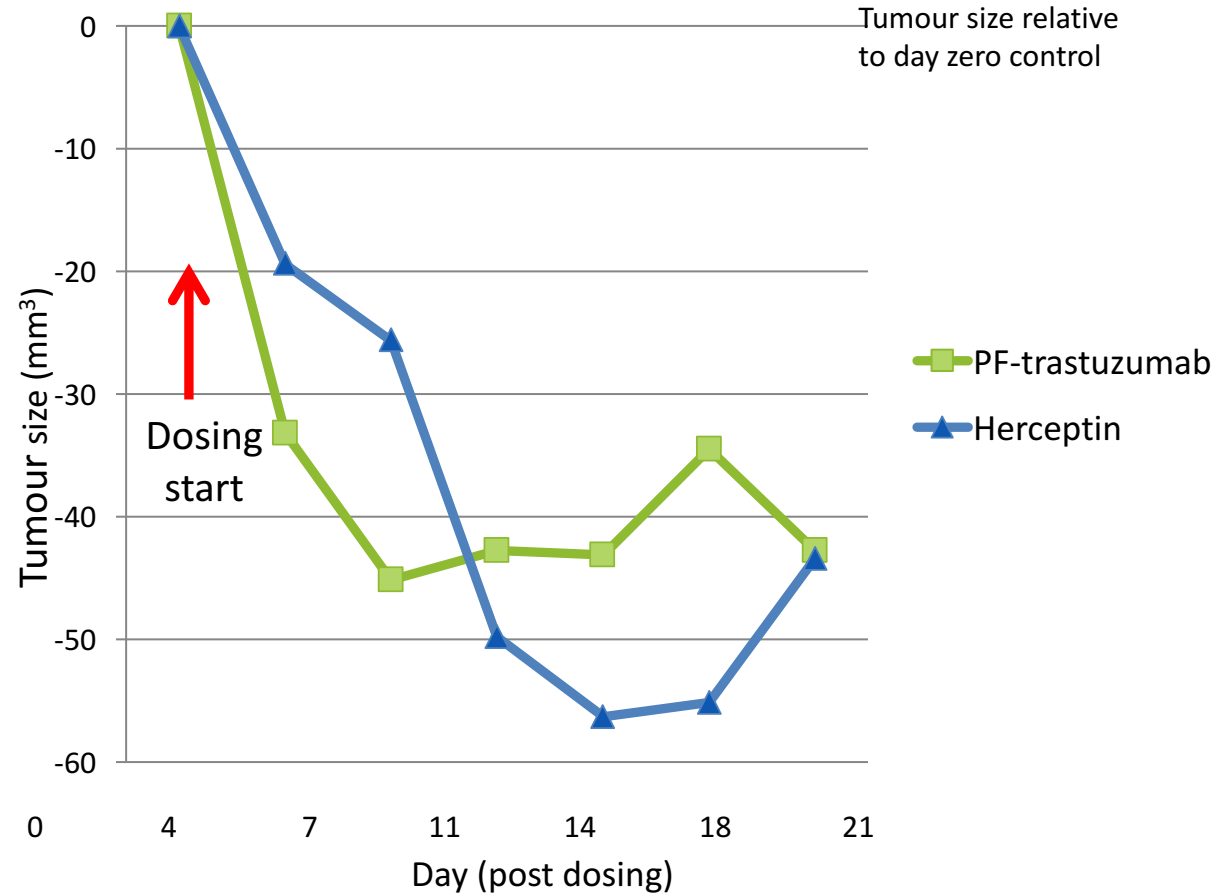


Biosimilar Herceptin[®] Program

Milestones



Testing on human breast cancer

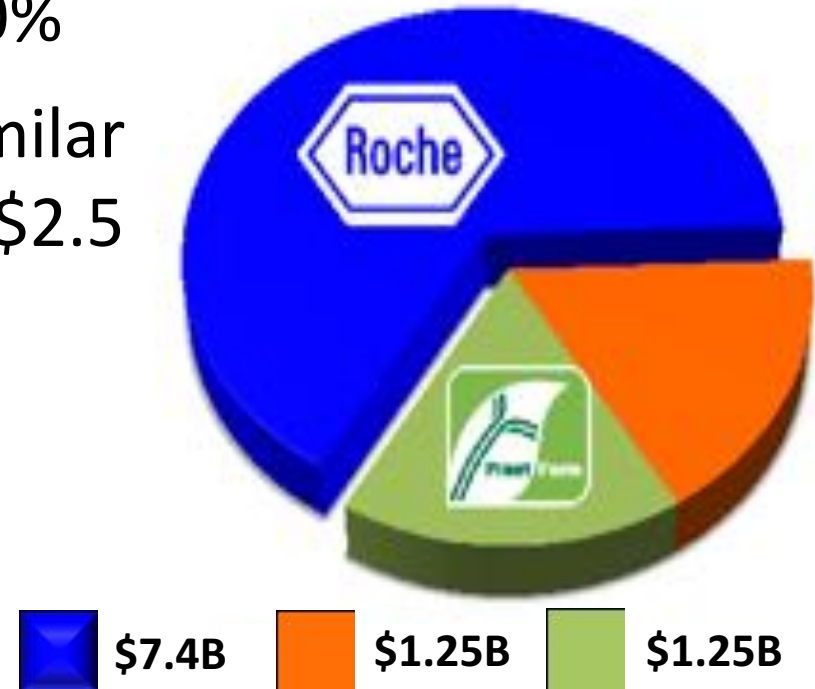




Herceptin[®] Large & Accessible Market

Anticipated market share for Herceptin[®] drugs 2018-21

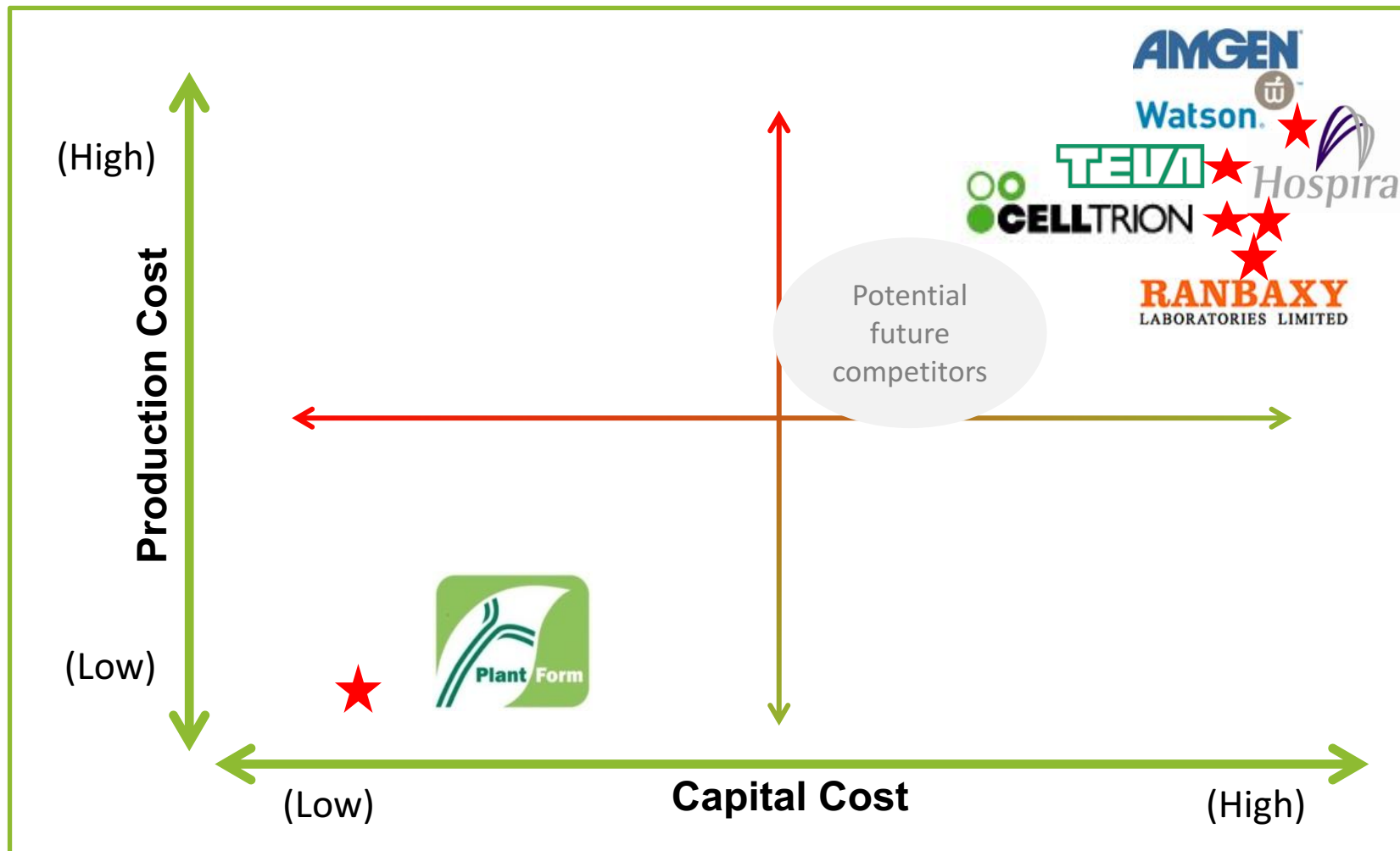
- Biosimilar share at least 30%
- Potential market for biosimilar Herceptin[®] estimated at >\$2.5 billion (~30%)



- PlantForm[®] potential share is half of biosimilar segment \$1.25 billion (15%)



Biosimilar Herceptin[®] Competitors





Ricin Antidote Countermeasure Program

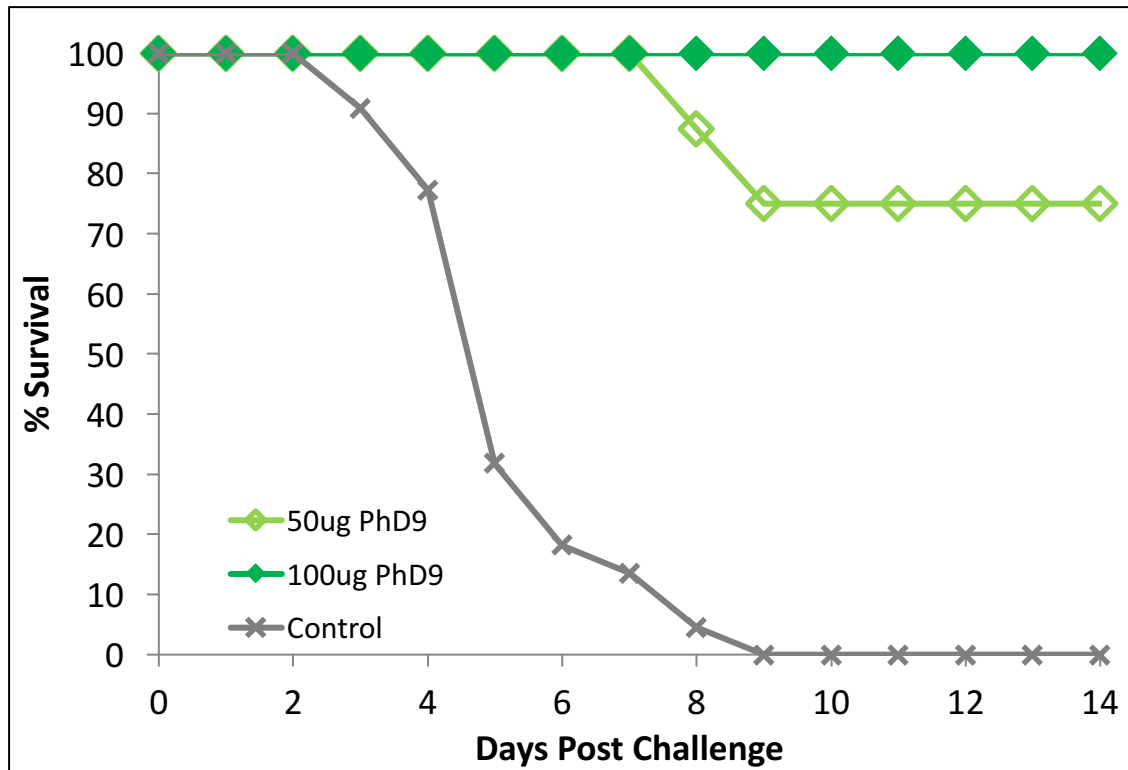
- Source castor oil - ~ a million tons of seeds processed annually
- Decorative plant used in landscapes, gardens
- 1-5% of bean is the ricin toxin
- One of most powerful poisons known; LD₅₀ 1-20 mg/kg ingested & 1-20 ug/kg injected or inhaled
- Easily extracted with high potency and lethality
- No medical countermeasure available





Ricin Antidote Countermeasure Program

100% survival of mice in inhalation challenge study



Challenge: Ricin by inhalation

Treatment: Antibody by intravenous injection at 16h post challenge



Partners to Market Strategy

Global Pharma



Global sales and marketing reach

Financial resources and presence in biosimilar market

Regional Pharma



Regional strength in key area(s)

Strategic intent to enter biosimilar market

Governments

Australia



Brazil



Canada



United Kingdom



USA



Governments support development and are also the customer for approved products



Partnering Joint Venture



PharmaPraxis, Brazil and PlantForm[®], Canada collaboration and license agreement

- To develop, manufacture and commercialize drugs using PlantForm's plant expression system
- Biosimilars/biobetters - Humira, and others
- Cobra snake bite antidote
- Zika Virus vaccine





Experienced Management Team



Don Stewart PhD
President & CEO

PlantForm founder
Experience in drug development and management in the biotechnology industry

Craig Binnie PhD
VP Drug Development

Experienced biologics drug developer with Pharma and Biotech

David Cayea, BA
Chief Operating Officer

Experience in international business development in Europe, Middle East and North America

Doug Cossar, PhD
VP Research

Experienced biologics drug research with Biotech, Government and CMOs.

Ron Hosking, CA
Chief Financial Officer

CFO experience in both multinational and startup biotech companies and large pharmaceutical licensing deals

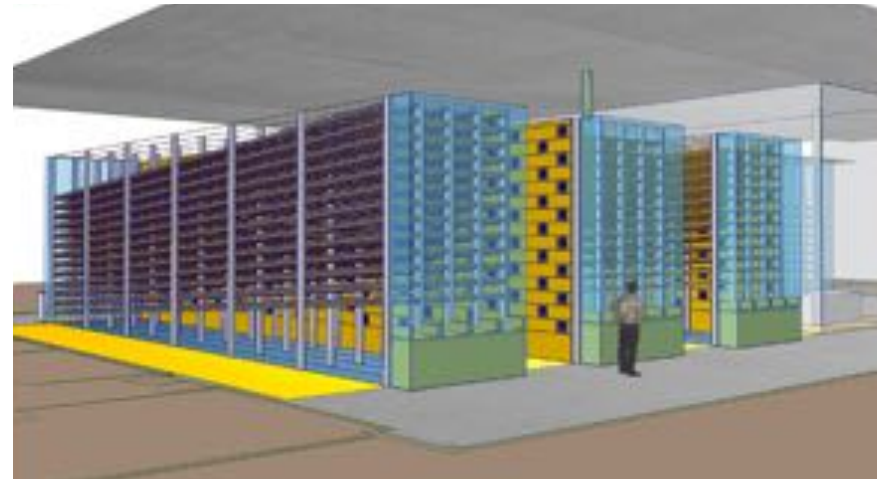
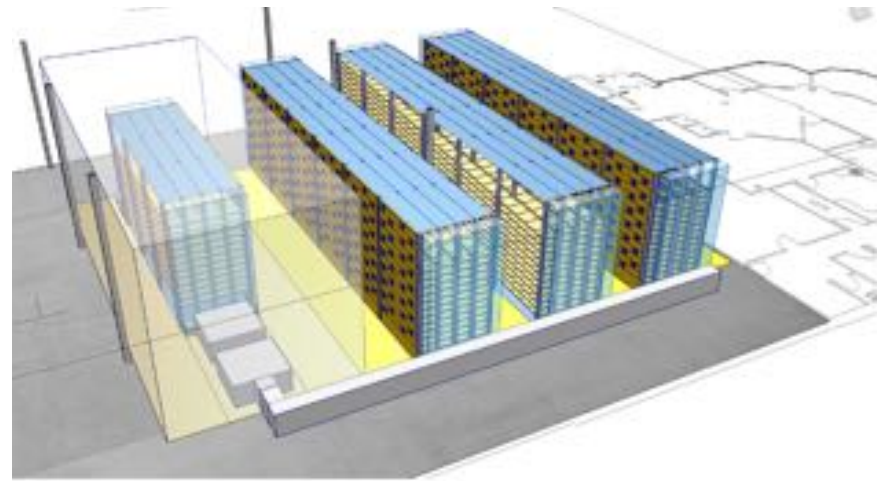




Proposed Manufacturing Facility

Small Scale Manufacturing Facility

- Clinical Trials and Market Entry production facility
- 35,000ft² (3,250m²)
- Includes upstream and downstream activities
- Design ongoing
- Preliminary costing \$25 million
- 35-50 skilled personnel





Summary Growth Forecast

Year end March 31

\$ million

(Est.)

Fiscal Year	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
REVENUES						
Sales	-	-	-	-	-	83
Royalties	-	-	-	-	-	57
Milestone	-	-	10	25	20	-
Other	1	1	3	5	6	4
COGS	-	-	-	-	-	(16)
EXPENSES						
Operations	3	7	21	39	37	14
NET INCOME						
	(2)	(6)	(8)	(9)	(11)	97



Ask

Current program

- Series A
 - \$10 million
- Pre-money
 - \$12 million

Use of Funds Series A

- Biosimilar Herceptin®
 - Development to completion of Phase 1 clinical trial
 - Engage major pharmaceutical partner



Future program

- Series B
 - \$25 million (manufacturing and validation for biosimilar Herceptin®)
- Other
 - \$10 million (facility)



Return

Exit option 1

- In ~2 years
- On completion of Phase 1 clinical trials
- Potential value increase 5x

Exit option 2

- In ~4-5 years
- On completion of Phase 3 clinical trials
- Potential value increase 25x
- Trade Sale or Listing on Public Market





Thank you

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