



Arcadia

B I O S C I E N C E S

First Quarter 2016
Financial Results and Business Highlights

May 10, 2016

Forward-looking statements



“Safe Harbor” statement under the Private Securities Litigation Reform Act of 1995: This presentation contains forward-looking statements about the company and its products, including statements relating to components of the company’s long-term financial success; the company’s traits, commercial products, and collaborations; the company’s ability to manage the regulatory processes for its traits and commercial products; the company’s anticipated financial results; current and future products under development; additional collaboration agreements; the regulatory process; business and financial plans; and other non-historical facts.

Forward-looking statements are subject to risks and uncertainties that could cause actual results to differ materially, and reported results should not be considered as an indication of future performance. These risks and uncertainties include, but are not limited to: the company’s and its partners’ ability to develop commercial products incorporating its traits and complete the regulatory review process for such products; continued competition in seed traits and other products; the company’s compliance with laws and regulations that impact the company’s business, and changes to such laws and regulations; the company’s reliance on its collaborators to commercialize products incorporating its seed traits; the company’s future capital requirements and ability to satisfy its capital needs; the company’s exposure to various contingencies, including those related to intellectual property protection, success of field trials, regulatory compliance, the speed with which regulatory approvals are received, and public acceptance of biotechnology products; developments related to foreign governmental regulations, political climate, currencies and economies; successful operation of the company’s joint ventures; fluctuations in commodity prices; the company’s ability to obtain a significant portion of the increased value to farmers from products that incorporate its traits; and the effect of weather conditions, natural disasters and accidents on the agriculture business or the company’s facilities.

Further information regarding these and other factors that could affect the company’s financial results is included in filings the company makes with the Securities and Exchange Commission from time to time, including the section entitled “Risk Factors” in the company’s Quarterly Report on Form 10-Q for the quarter ended March 31, 2016. These documents are or will be available on the SEC Filings section of the Investor Relations pages of the company’s website at www.arcadiabio.com. All information provided in this presentation and in the attachments is as of the date hereof, and Arcadia Biosciences, Inc. undertakes no duty to update this information.

Key financial results



	First Quarter		% Favorable/ (Unfavorable)
	2016	2015	
Total revenues	852	815	5%
Cost of product revenues	147	56	(163%)
R&D expense	2,202	1,832	(20%)
SG&A expense	3,436	2,638	(30%)
Loss from operations	(4,933)	(3,711)	(33%)
Net loss	(5,190)	(5,803)	11%
Net loss attributable to common stockholders	(5,190)	(7,695)	33%
Net loss per share attributable to common stockholders	(0.12)	(3.71)	N/A
Basic and diluted shares outstanding (weighted average)	44,215,156	2,075,407	

*\$ in thousands, except share and per share data
Unaudited*

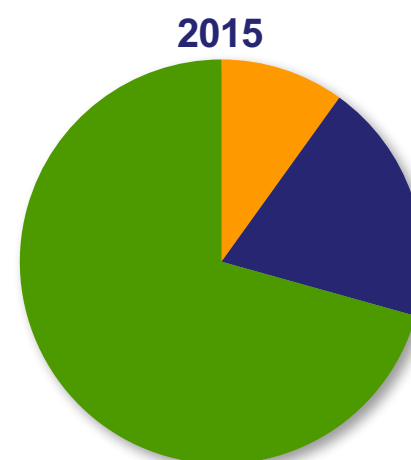
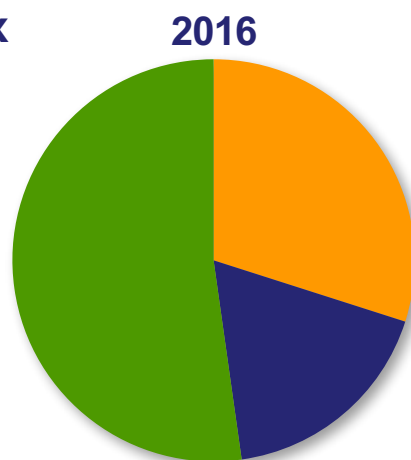
Revenue

	First Quarter		
	2016	2015	% Favorable/ (Unfavorable)
Product revenue	255	81	215%
License revenue	152	158	(4%)
Contract research and government grants	445	576	(23%)
Total revenues	852	815	5%

\$ in thousands; Unaudited

First quarter revenue mix comparison:

- Product revenue
- License revenue
- Contract research and government grants



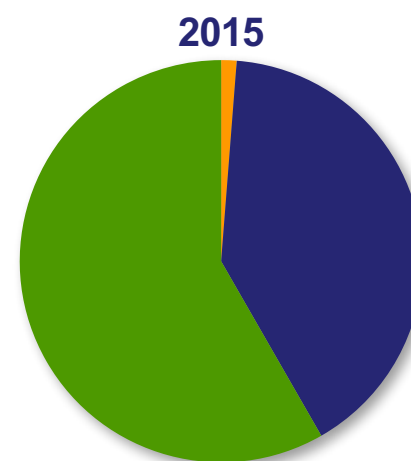
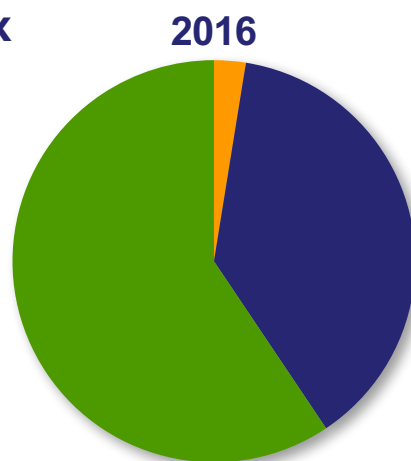
Operating expenses

	First Quarter		
	2016	2015	% Favorable/ (Unfavorable)
Cost of product revenues	147	56	(163%)
R&D expense	2,202	1,832	(20%)
SG&A expense	3,436	2,638	(30%)
Total operating expenses	5,785	4,526	(28%)

\$ in thousands; Unaudited

First quarter expense mix comparison:

- Cost of product revenues
- R&D expense
- SG&A expense



Regulatory, commercial and technical achievements continue to advance products

Regulatory



Regulatory submission for HB4 Stress Tolerant Soybeans in Uruguay. Approval in Argentina sets stage for future submissions in the US, Europe and China

Commercial



Collaboration with the largest family-owned retail seed company in the US to develop and commercialize stress tolerance traits in corn

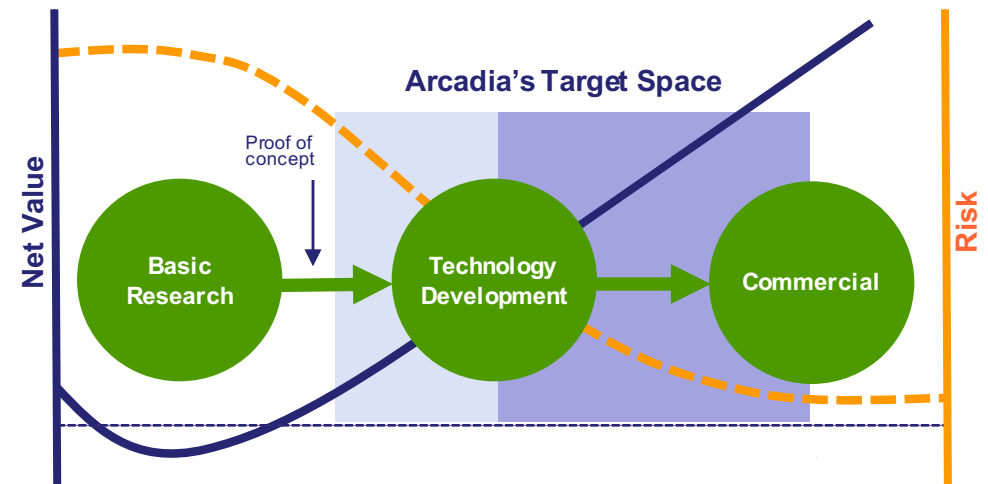
Technical



Double-digit yield increases in two years of field trials for Salinity Tolerant rice advances lead lines in trait introgression program

Business model is evolving as we get closer to commercialization

- ④ Capitalizing on a decade of investments as product candidates move closer to commercialization
- ④ Shifting focus to meet product development, regulatory and commercial needs
- ④ Managing expense and resource allocation to drive mid-term revenue and successful product launches
- ④ Targeting large-acre, high value crops: corn, rice, soybeans and wheat



Corn strategy leverages partner expertise and assets to advance yield and stress pipeline

Yield and Stress Traits – Corn

DEVELOPMENT PHASE / PROBABILITY OF SUCCESS

D	1	2	3	4	C
24-48 mo	12-24 mo	12-24 mo	12-24 mo	12-36 mo	
5%	25%	50%			

Market Potential

- Global: 433M acres
- Most valuable trait crop
- 53% of market value in the US
- Focus: Global

Value Creation

- Each 10% yield increase creates ~\$62 of added value per acre
- ~\$11B in annual trait value
- Trait share potential: High

Corn Highlights



- Leading global commercial development partner
- Proven crop protection products and pipeline complements Arcadia yield and stress platform
- Strong track record of broad trait licensing and collaboration
- Collaboration resulted in two product candidates in Phase 2 of development



- Largest family-owned retail corn seed company in the US
- Leadership position in key market segments
- Transformation, testing and product development capabilities



Source: FAO, Phillips McDougall, Company information

NUE rice addresses world's most important food crop through double-digit yield increases

Nitrogen Use Efficiency – Rice

DEVELOPMENT PHASE / PROBABILITY OF SUCCESS					
D	1	2	3	4	C
24-48 mo	12-24 mo	12-24 mo	12-24 mo	12-36 mo	
5%	25%	50%	75%		


Market Potential

- Global: 400M acres
- Most valuable global crop
- 3rd largest global crop by acres
- Focus: Asia

Value Creation

- Each 10% yield increase creates added value of ~\$63 per acre
- ~\$10B in annual trait value
- Trait share potential: High

Rice Highlights

- Partnered with major seed company and trait leader in India 

EVERY SEED COUNTS
- Completed US FDA Early Food Safety Evaluation
- Multiple field tests demonstrate double-digit yield increases in major rice types
 - 30% average yield increase based on 4 years of field trials in multiple environments at CIAT in Colombia
 - 19% average yield increase based on 2 years of field trials in multiple environments in Ghana and Uganda
- Introgression underway in Indica and Japonica rice varieties, which covers most of rice production worldwide



Source: FAO, CIAT, AATF, Phillips McDougall, Company information

Stress-tolerant soybeans lead Arcadia pipeline in regulatory and breeding advancements

Stress Tolerance – Soybeans

DEVELOPMENT PHASE / PROBABILITY OF SUCCESS

D	1	2	3	4	C
24-48 mo	12-24 mo	12-24 mo	12-24 mo	12-36 mo	
5%	25%	50%	75%	90%	

Market Potential

- Global: 272M acres
- 4th largest global crop
- Focus: Americas, Asia

Value Creation

- Each 10% yield increase creates added value of ~\$37 per acre
- ~\$4B globally in annual trait value
- Trait share potential: High

Soybean Highlights

- Joint venture with Bioceres, owned by ~300 of the largest soybean farmers in South America
- ~80% historic trait adoption in soybeans, highest of any crop
- HB4 trait in the hands of breeders covering more than 35% of soybean seed sales in South America
- Regulatory approval completed in Argentina, pending in Uruguay
- Regulatory submissions planned for largest single markets:
 - Production: US and Brazil
 - Consumption: China and Europe



Source: FAO, Phillips McDougall, Company information

NUE wheat drives significant yield increases in largest global crop

Nitrogen Use Efficiency – Wheat

DEVELOPMENT PHASE / PROBABILITY OF SUCCESS

D	1	2	3	4	C
24-48 mo	12-24 mo	12-24 mo	12-24 mo	12-36 mo	
5%	25%	50%	75%		

Market Potential

- Global: 536M acres
- Largest global crop
- Focus: North America, South America, Asia, Australia

Value Creation

- Each 10% yield increase creates ~\$24 of added value per acre
- ~\$5B added value globally
- Trait share potential: High

NUE Wheat Highlights

- Largest crop in the world lags in technology development
- Partnered with 4th largest global seed company, leader in wheat
- NUE trait has completed US FDA Early Food Safety Evaluation
- Field trials at multiple locations across multiple crop seasons demonstrate a mean yield increase of 10%
- Trait introgression underway in several wheat types
- Stacking with drought and water use efficiency traits to create most competitive yield stacks



Source: FAO, Phillips McDougall, Company information

Resistant starch wheat product addresses nutrition and health needs

Resistant Starch Wheat (non-GM)

DEVELOPMENT PHASE / PROBABILITY OF SUCCESS

D	1	2	3	4	C
24-48 mo	12-24 mo	12-24 mo	12-24 mo	12-36 mo	
5%	25%	50%	75%	90%	

Market Potential

- Global
- \$2B market opportunity

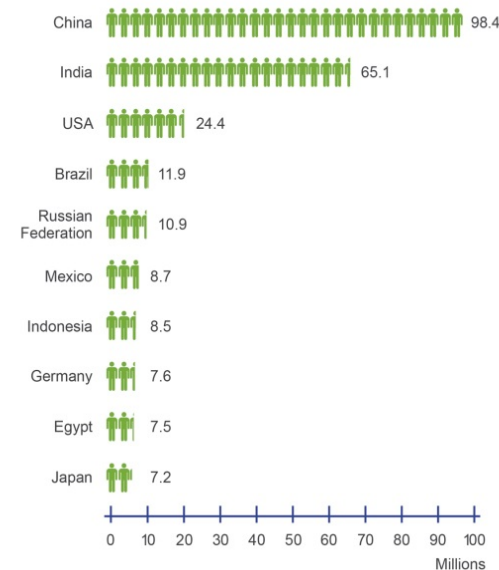
Value Creation

- Based on delivery of greater total dietary fiber in wheat products
- Trait share potential: Medium

Resistant Starch Wheat Highlights

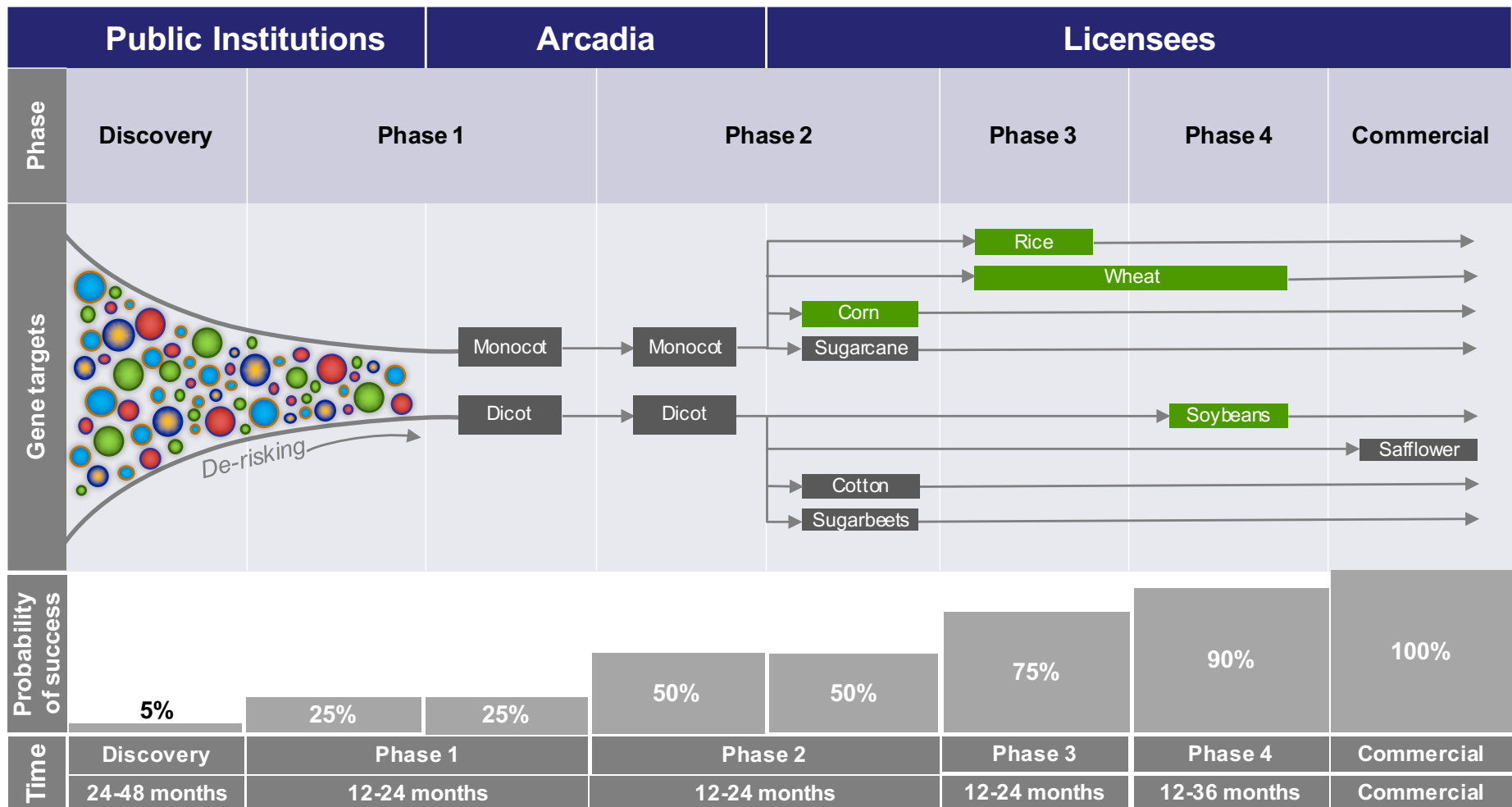
- Resistant starch wheat will lead the way for a series of products that improve wheat nutrition and functionality
- Increases dietary fiber and decreases glycemic index, important in diabetes mitigation
- Scaling-up production to meet pilot testing to support our partners' processing, formulation and commercial launch plans
- Trait introgression to make the trait available in major wheat types in key markets
- Converging breeding and partner product development efforts to support commercial launch in the next few years

Top 10 countries with people with diabetes (ages 20-79), 2013



Source: International Diabetes Federation, Company information

Collaborative framework accelerates advancements in top four global crops



D=Discovery 1=Proof of Concept 2=Greenhouse / Early Field Trials 3=Additional Field Trials / Product Development 4=Regulatory / Pre-Commercial

Source: Company information, Phillips McDougall, Seed Industry June 2014