



# Jefferies Animal Health Summit

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# The Parnell Opportunity in Animal Healthcare:

## *Established Commercial Presence & Valuable Product Pipeline*

5 Marketed Products; US Market Expansion Underway

Robust Pipeline with 7 Products in Development

Integrated Development, Manufacturing & Commercial Capabilities








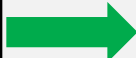
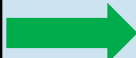

Unique Commercialization Model Utilizing Digital Technologies

Experienced Leadership in Global Animal Healthcare with Track Record

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# Products & Pipeline

# Our Products & Pipeline

	Pilot Studies	Pivotal Studies	Anticipated Approval	Market Size
GONAbreed® & estroPLAN® (Fertility) – Cattle			Marketed (12 Countries)	\$200m
ZYDAX® (Osteoarthritis): Dogs, Cats & Horses			Marketed (AU) New Approvals: US ('16) EU/CAN ('17) Asia/LATAM ('18)	\$400m
ZYDAX® (Interstitial Cystitis): Cats			2018	\$400m
GLYDE® (Osteoarthritis): Dogs & Horses (Cats)			Marketed (AU, US)	\$500m
PAR121 (Orthopedics): Dogs, Cats & Horses			2018	~\$200m
PAR122 (Dermatology): Dogs, Cats			2018	~\$300m
PAR081 (Anesthesia): Dogs & Cats			2018	\$120m
PAR101 (Diabetes & Laminitis): Horses			2018	~\$100m
GONADOPRO™ (Fertility): Cattle			2018	\$200m
PAR061 (Mastitis): Cattle			2019	\$400m

 Production Animal    Companion Animal

Positioned for rapid  
growth

# Parnell's Business Strategy & Advantages

- Developed, registered, manufactured and commercialized Production and Companion Animal drugs in major markets
- Existing, rapidly growing revenues competing against major multinational incumbents
- Successfully implemented an innovative commercialization strategy using Digital Technology
- Progressing innovative pipeline
- Major advantage of having Manufacturing in-house
- Attracting unique business development & licensing opportunities as well as Contract Manufacturing

# 2015 Report Card

- Commercial Highlights
  - Achieved strong sales growth across all business segments
    - Total Revenue grew 58% to \$13.2M
    - Production Animal Revenue grew 42% to \$11.1M
    - Companion Animal Revenue grew 58% to \$2.1M
- Development Highlights
  - Zydax
    - Strong results from efficacy clinical trial, filed with FDA and EMA
  - PAR121/122
    - Received \$1M grant from Nagoya Protocol to develop extraction infrastructure in Cook Islands
  - mySYNCH & FETCH
    - Developed and Launched in 2015
  - Luminous
    - New Dermatology Nutraceutical



# 2016 Companion Animal Guidance

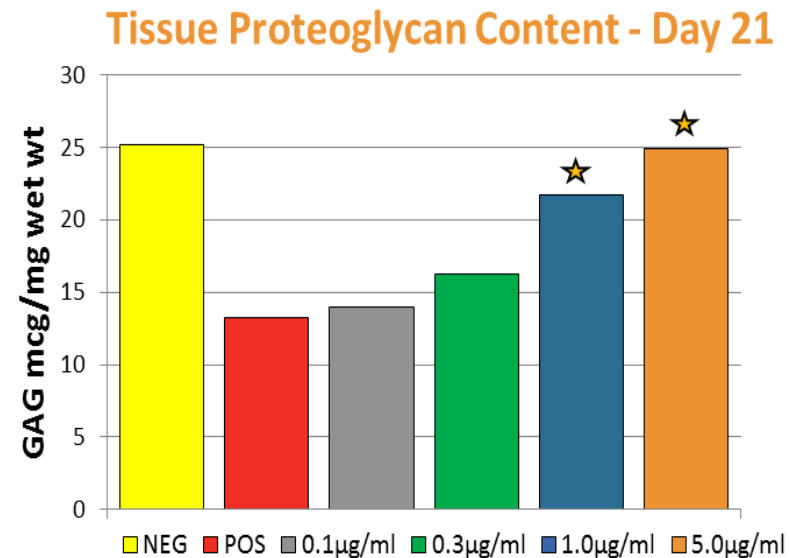
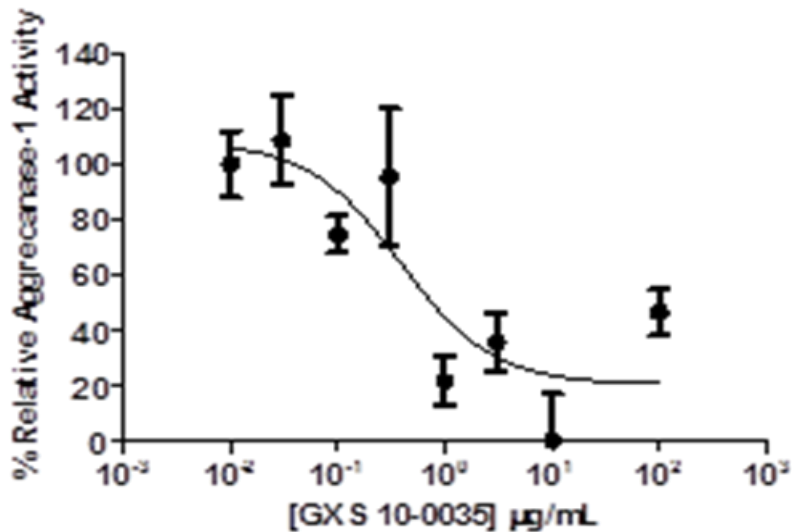
- Bringing Zydax<sup>®</sup> & Glyde<sup>®</sup> to Large Markets
  - Filed with FDA and EMA; expecting approval Q4, 2016 (US) & Q1, 2017 (EU)
  - Launched Glyde and FETCH in USA Sep, 2015 (early trajectory is promising)
- Establish US Canine Commercial Team
  - Established a sales and marketing team of 55 covering 12,000 clinics
  - Expect to add in-licensed products to leverage this valuable investment
  - Provides twelve-month opportunity to pre-position Zydax in OA market
- Negotiating appointment of major multi-national to market Zydax in non-US markets (e.g. EU, Asia, LATAM)
- Reiterate expectation of significant global sales opportunity
  - Unique positioning and market experience with Zydax provide confidence that Zydax will be a revolutionary therapeutic for the management of OA

**ZYDAX<sup>®</sup>**

*a revolutionary OA treatment*

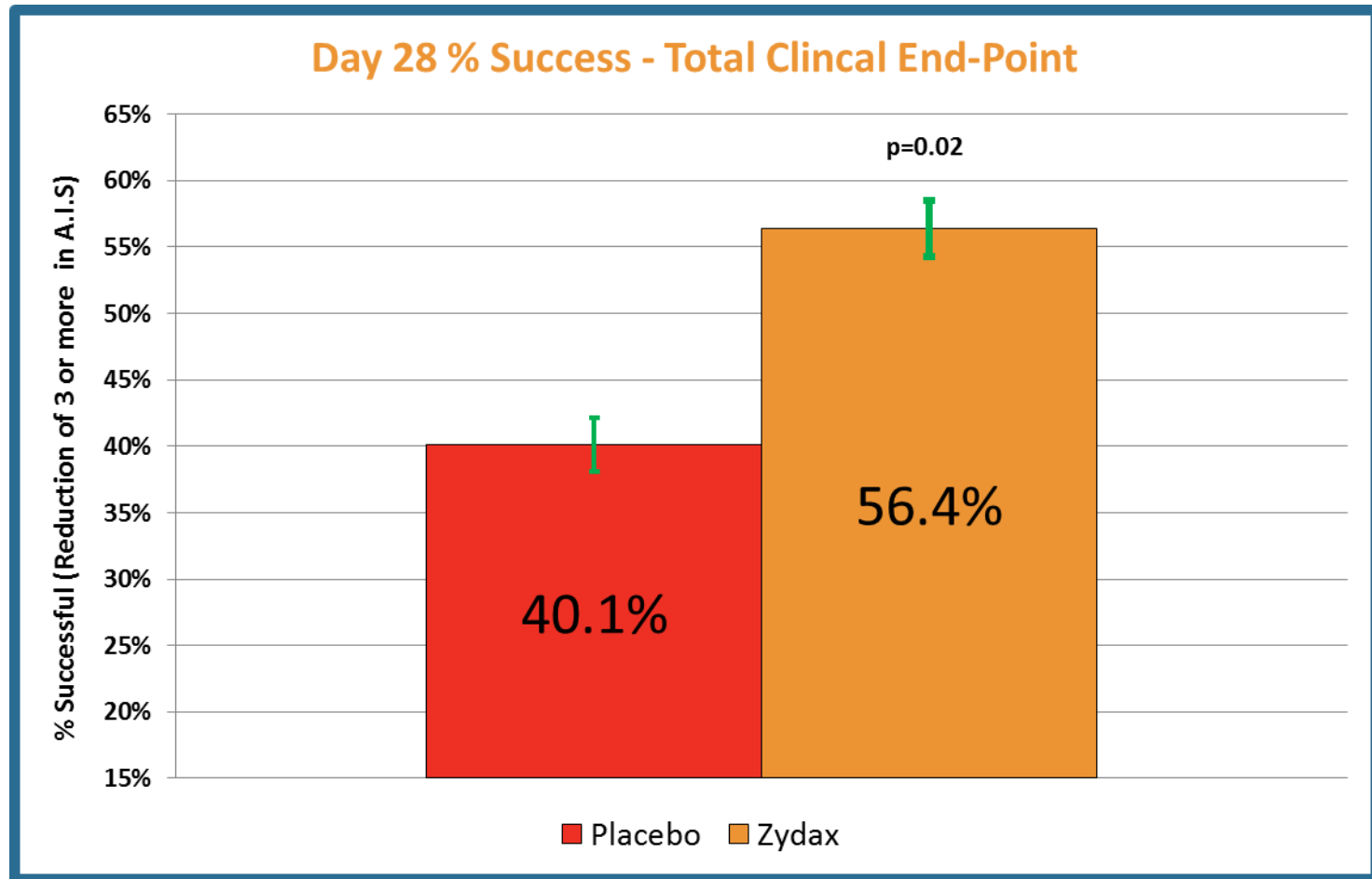
# Zydux inhibits enzyme that degrades cartilage and increases cartilage production

- up-regulation of Aggrecanase-1 enzyme is the PRIMARY cause of degenerative joint disease, only ZYDAX substantially reduces the activity of this destructive enzyme
- Zydux quickly regenerates cartilage by significantly increasing the major component of cartilage; proteoglycans



# Zydax Pivotal Efficacy Clinical Trial Outcomes

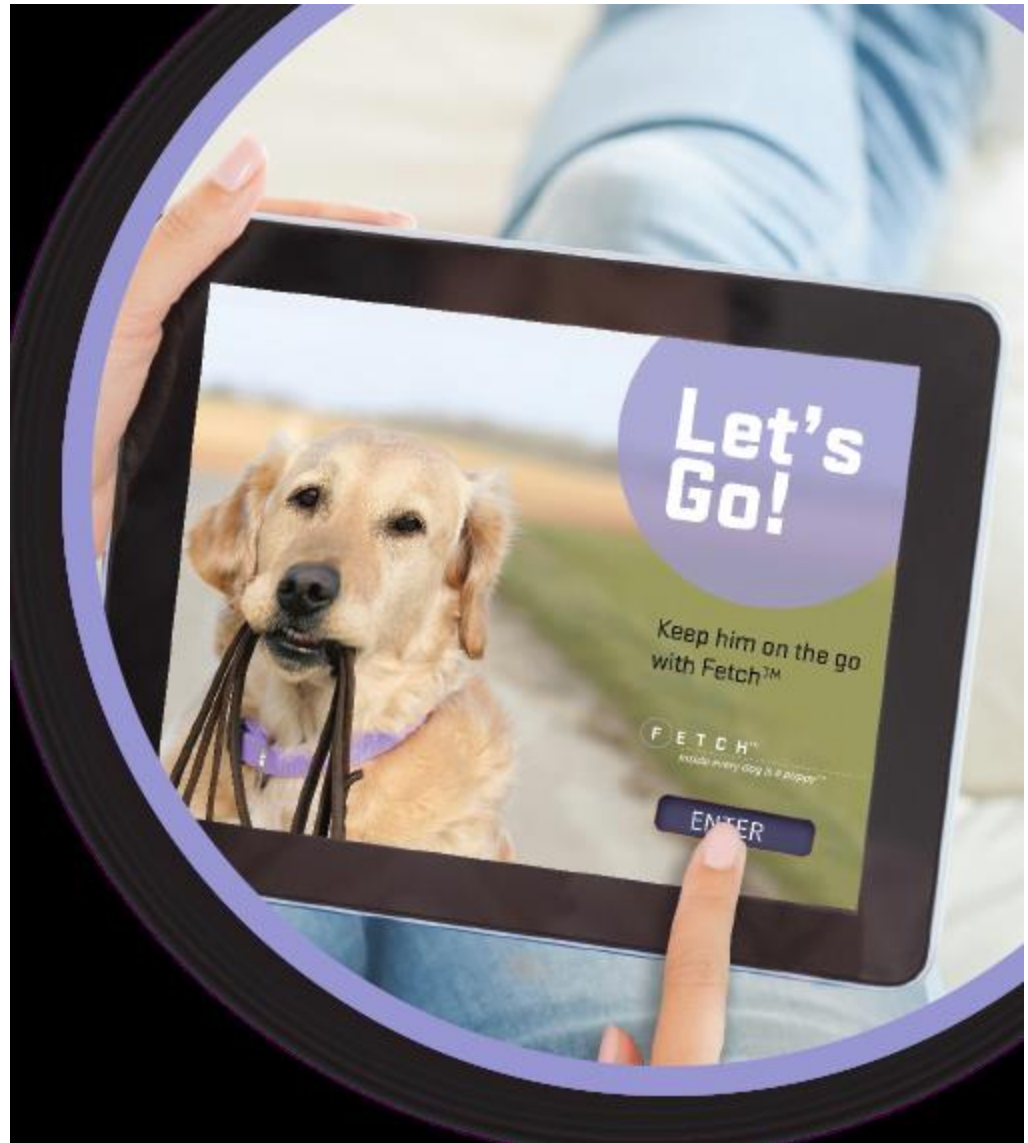
- Zydax significantly reduced the clinical signs of osteoarthritis after 4 injections as assessed by pet owners using a validated mobility scoring system



# Digital Technology

## *FETCH*

- App's fully developed by Parnell for veterinarians and pet parents
- Designed to significantly improve the diagnostics leakage that exists in OA
  - 40% of dogs in the US and EU have OA
  - Less than 5% are treated
  - No safe, proven long term therapies currently marketed
  - No one “owns” the share of mind of pet parents in the digital space



# Nutraceuticals

## GLYDE

- Nutraceutical market for osteoarthritis is currently larger than pharmaceuticals
- Significant growth in the overall supplements market mirroring growth in popularity of human products
- Glyde is uniquely positioned
  - Contains building blocks of cartilage (glycosaminoglycans)
  - Contains a unique natural anti-inflammatory
- Expect to leverage success of Glyde into other nutraceutical categories
  - Dermatology, Cardiology, Dental



# 2016 Production Animal Guidance

- Triple digit sales growth in US Production Animal Business
  - 7 territories in place, considering up to 3 more in 2016
  - 2015 Sales grew 283% to \$8.1M with market share reaching 10%
  - Expect Double Digit sales growth in 2016
- mySYNCH<sup>®</sup> launched at AABP, September, 2015
  - Expect digital technology assets to create significant differentiation and potential subscription service revenue streams in future
- Expect to appoint Marketing Partner for Europe (and other geographies) with expected launch 2017
- Reiterate expected global peak sales opportunity for reproduction hormones of \$20m – \$30m

# Digital Technology

## *mySYNCH*

- Enables Veterinarians and Dairy Producers to significantly improve breeding efficiency
  - Reproduction is the #1 cause of economic gain on a dairy farm
  - Significant opportunity to improve the implementation of breeding programs through better data management
  - Opportunity to use benchmarking to drive further improvements

YOU HAVE THE DATA, NOW YOU CAN SEE IT CLEARLY. WATCH MYSYNCH IN ACTION.

More about mySYNCH

Smith Family Farm

Type: Free Stall

Herd Size: 510

PII Breed: Holstein Friesian

60°F

Dashboard Reports Farm Profile Education Settings

Introduction Anatomy & Physiology The Estrous Cycle The Science of Breeding Programs Breeding Program Practice Optimizing Breeding Programs

Introduction

Inefficient management of reproduction is one of the largest sources of economic loss to the producer. By learning the fundamentals of reproduction programs and their precise implementation, producers can manage their herd more efficiently and maximize their profits.

Switch Languages

HD vimeo



# 2015 Contract Manufacturing Guidance Update

- Finalizing two major contract manufacturing deals with a large multinationals
  - Potential to expand scope of engagement
- These deals will leverage our current spare capacity (75%) and be highly profitable/accretive with multi-million dollar revenues

# 2015 R&D Pipeline Update:

- Advancing 7 Proprietary Pipeline Programs
- PAR121/122: UN Grant to develop infrastructure in the Cook Islands for extraction of starting substrate
- Zydax extensions: Feline & Equine
- Zydax Clinical Study investigating Durability of Effect and “Treatment to Success” for dogs with severe OA
- Significant number of in-licensing opportunities under consideration:
  - Expect to complete multiple in-licensing transactions in 2016
  - Continue to focus on major companion animal markets
  - Drugs/Nutraceuticals/Med-Device

# 2015/16 Major Milestones and Catalysts

- Zydax Canine: FDA first review April, 2016
- Revenue growth (Q1 Financials; April 21, 2016)
- Glyde & FETCH launch in USA – early trajectory
- Contract Manufacturing Deal Announcements – Q2
- Business Development Updates – Q2
  - Zydax Marketing Partner appointment update
  - Expectations for short-term product additions
  - Expectations for pipeline product additions
- R&D milestone updates
  - PAR121/122 development updates (proof of concept study outcomes)
  - Zydax Feline Target Animal Safety and Target Animal Efficacy
  - Zydax Equine Target Animal Safety and Target Animal Efficacy
  - Zydax Canine Durability of Effect study outcomes

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