



Jefferies Health Care Conference

June 2, 2015

Robert Joseph

PRESIDENT & CHIEF EXECUTIVE OFFICER

Cautionary Note Regarding Forward-Looking Statements

This presentation contains forward-looking statements and information within the meaning of the U.S. Private Securities Reform Act of 1995. Words such as “may,” “anticipate,” “estimate,” “expects,” “projects,” “intends,” “plans,” “develops,” “believes,” and words and terms of similar substance used in connection with any discussion of future operating or financial performance identify forward-looking statements. Forward-looking statements represent management’s present judgment regarding future events and are subject to a number of risk and uncertainties that could cause actual results to differ materially from those described in the forward-looking statements. These risks include, but are not limited to, risks and uncertainties regarding Parnell’s research and development activities, its ability to conduct clinical trials of product candidates and the results of such trials, as well as risks and uncertainties relating to litigation, government regulation, economic conditions, markets, products, competition, intellectual property, services and prices, key employees, future capital needs, dependence on third parties, and other factors, including those described in Parnell’s Annual Report on Form 20-F filed with the Securities and Exchange Commission, or SEC, on September 15, 2014, along with our other reports filed with the SEC. In light of these assumptions, risks, and uncertainties, the results and events discussed in the forward-looking statements contained in this presentation might not occur. Investors are cautioned not to place undue reliance on the forward-looking statements, which speak only as of the date of this presentation. Parnell is under no obligation, and expressly disclaims any obligation, to update or alter any forward-looking statements, whether as a result of new information, future events, or otherwise.

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









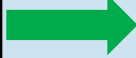
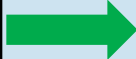
Experienced Leadership in Global Animal Healthcare with Track Record

Parnell's Business Strategy & Advantages

- We have developed, registered, manufactured and commercialized Production and Companion Animal drugs in major markets.
- We have existing, rapidly growing revenues that demonstrate we can compete against the major multinational incumbents.
- We know the veterinary market and have successfully implemented an innovative commercialization strategy using Digital Technology.
- We can develop and commercialise drugs at a much lower cost due to our existing in-house capabilities including manufacturing
- We are using this experience to leverage our fully integrated value chain to progress our pipeline drugs delivering innovation to large, existing markets with unmet needs

Products & Pipeline

Our Products & Pipeline

	Pilot Studies	Pivotal Studies	Anticipated Approval	Market Size
GONAbreed® & estroPLAN® (Fertility) – Cattle			Marketed (12 Countries)	\$200m
ZYDAX® (Osteoarthritis) – Dogs & Horses			Marketed (5 Countries; US/EU 2016)	\$400m
GLYDE™ (Osteoarthritis) – Dogs & Horses			Marketed (5 Countries)	\$500m
TERGIVE™ (Osteoarthritis) – Dogs			Marketed (1 Country)	\$400m
PAR121 (Orthopedics) – Dogs, Cats & Horses			2018	~\$200m
PAR122 (Dermatology) – Dogs			2018	~\$300m
PAR081 (Anesthesia) – Dogs & Cats			2017	\$120m
PAR101 (Diabetes & Laminitis) – Dogs & Horses			2017	~\$100m
GONADOPRO™ (Fertility) – Cattle			2017	\$200m
PAR061 (Mastitis) – Cattle			2019	\$400m

 Production Animal  Companion Animal

Positioned for rapid growth

Production Animal:

- **Triple digit sales growth in US Production Animal Business**
 - 7 territories in place, considering up to 3 more by year-end 2015
 - Market share and sales growing above plan – 189% YOY growth Q1, 2015
- **mySYNCH[®] launch in September, 2015**
 - Expect digital technology assets to create significant differentiation and potential subscription service revenue streams in future
- **Expect to appoint partner in 2015 to commercialize repro hormones in Europe with launch in 2H, 2016**
- **Reiterate global peak sales opportunity for reproduction hormones of \$20m – \$30m**
- **Will target in-licensing opportunities that can leverage digital technology asset (mySYNCH[®])**

Companion Animal:

- **Bringing Zydax[®] & Glyde[®] to Large Markets**
 - Pivotal Efficacy trial nearing completion – **JUNE 18, 2015**
 - CMC section to be filed concomitantly with Efficacy section in July, 2015
- **US Canine sales team under recruitment**
 - Expect to launch Glyde and iKAM[®] in September, 2015
 - 40 territory managers covering 6,000 clinics
 - Expect to leverage companion sales team for up to 12 months prior to launch of Zydax in 2H, 2016
- **Expect to appoint a marketing partner for Zydax and Glyde in Europe (and other major markets) in Q3, 2015.**
- **Reiterate significant global sales opportunity**
 - Depth of data package and market experience with Zydax provide confidence that Zydax will be uniquely positioned as a revolutionary therapeutic for the management of osteoarthritis in dogs

Pipeline:

- **Advancing 7 Proprietary Pipeline Programs**
 - Full details at Investor Day: June 18, 2015
- **Significant number of in-licensing opportunities under consideration:**
 - Expect to complete at least one in-licensing transaction in 2H, 2015
 - Continue to focus on major companion animal markets:
 - Mobility
 - Dermatology
 - Surgery
 - Considering development of additional nutraceuticals (to complement Glyde)
- **Progress species expansion opportunities for Zydax in 2015**
 - Feline & Equine

Contract Manufacturing

- Currently considering two opportunities
- Both could see reasonably rapid commencement and thus enhance utilization of our current spare capacity (75%)
- Multi-million dollar annual revenues with high margin

Zydax – a significant opportunity

Zydax[®] - a unique Disease Modifying OA Drug

- Parnell has spent \$7 million developing the API in Zydax
- We have also spent more than \$2 million on clinical trials in over 600 dogs in 30 clinical trial sites
- We are the only company in the last 30 years to have developed a novel class of OA drug
- We have sold over 1 million doses in Australia

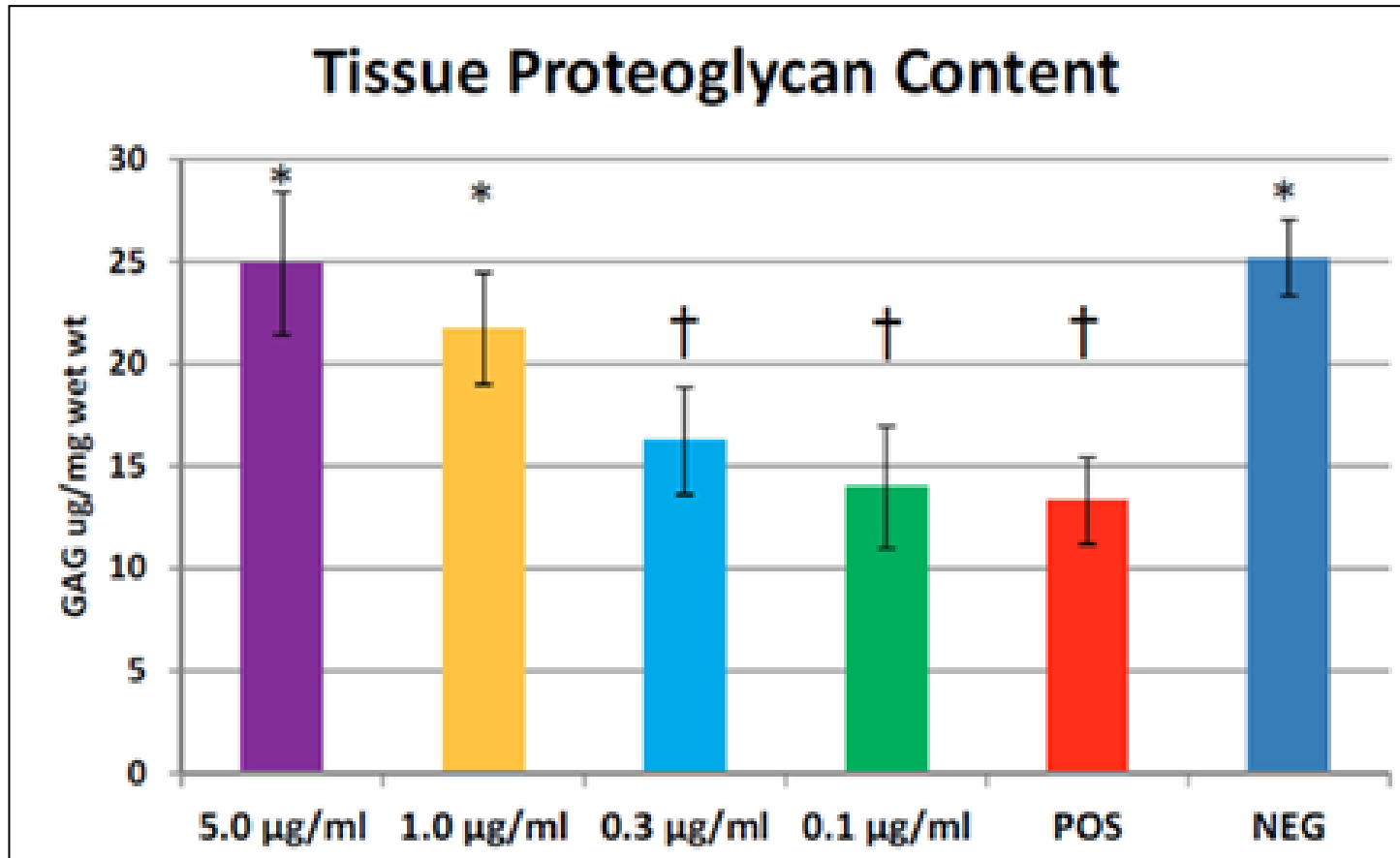


What is Zydax?

- Developed as an enhanced sulfated oligosaccharide (from PPS)
- 8-10 Xylan units that are each FULLY sulfated (19% - 20%)
- This leads to a UNIQUE structure that:
 - inhibits Aggrecanase-1
 - significantly increases Cartilage Proteoglycan content in 21 days
 - Significantly reduces Prostaglandin (pro-inflammatory) presence
 - Results in HIGHLY significant clinical outcomes
- Only Parnell has this compound and has patented it - GXS

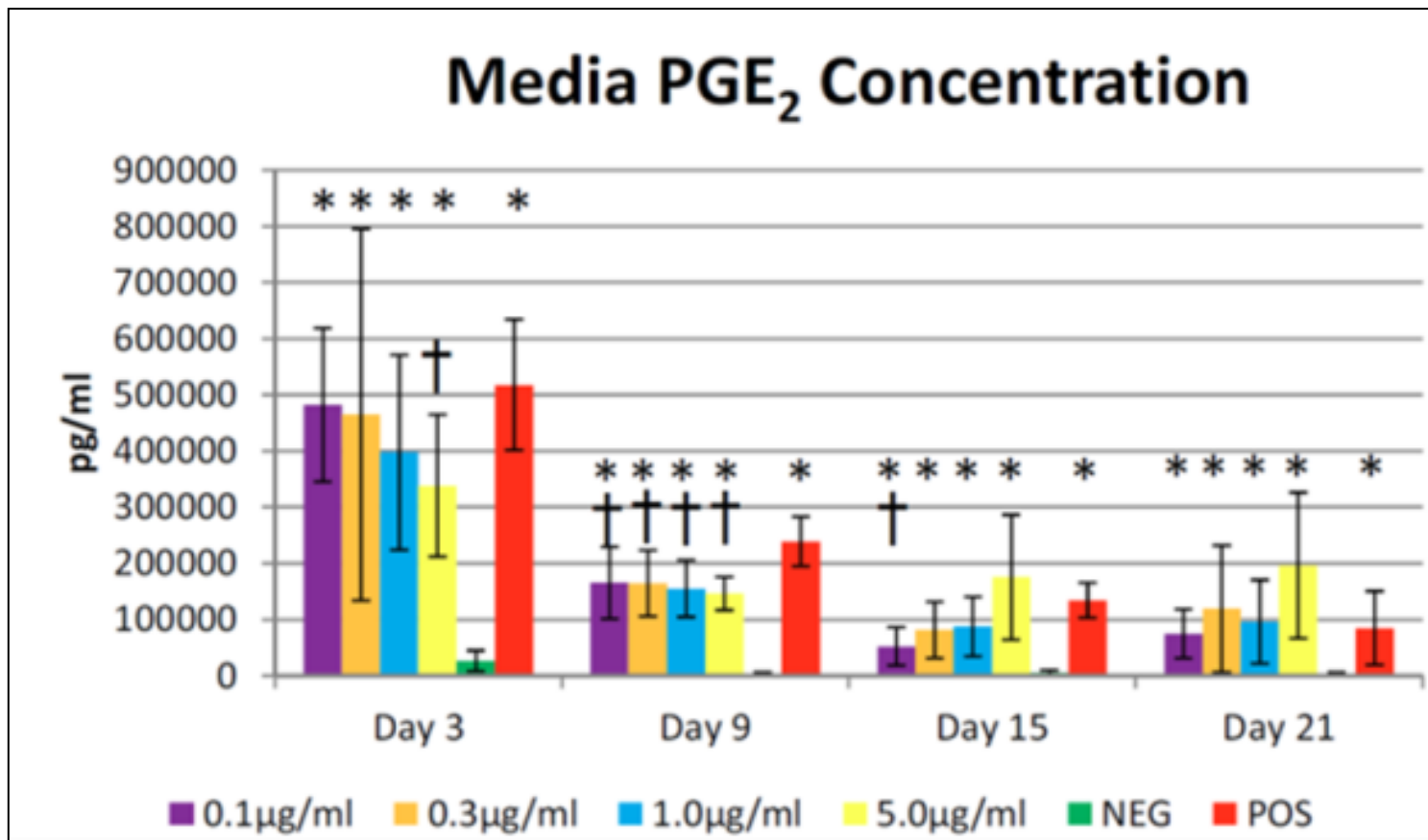
UNIQUE MECHANISM OF ACTION

- stimulate new cartilage growth



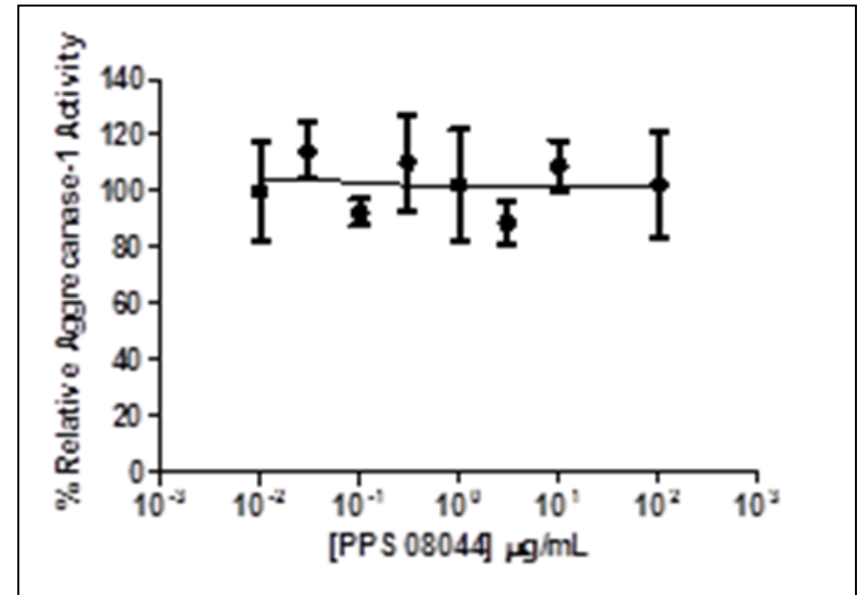
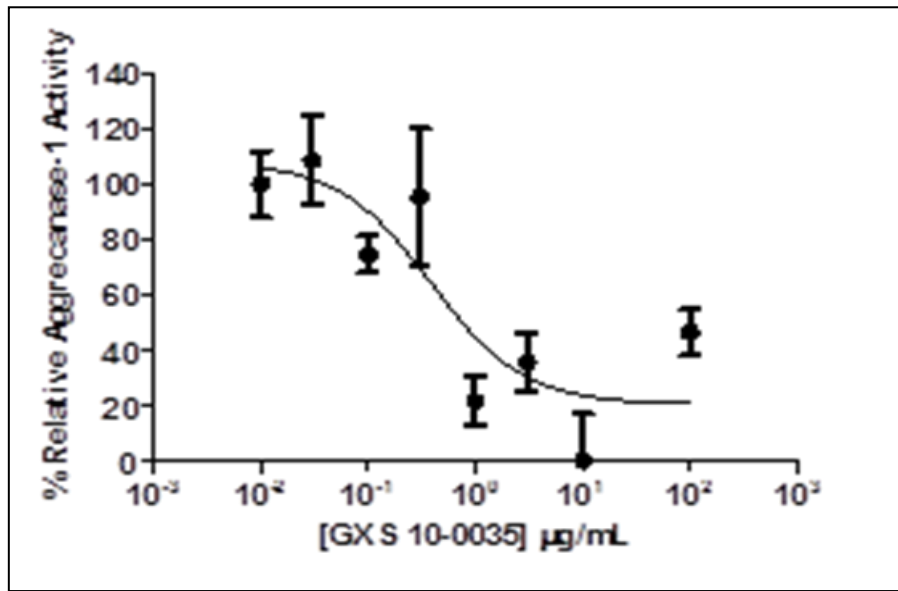
UNIQUE MECHANISM OF ACTION

- anti-inflammatory



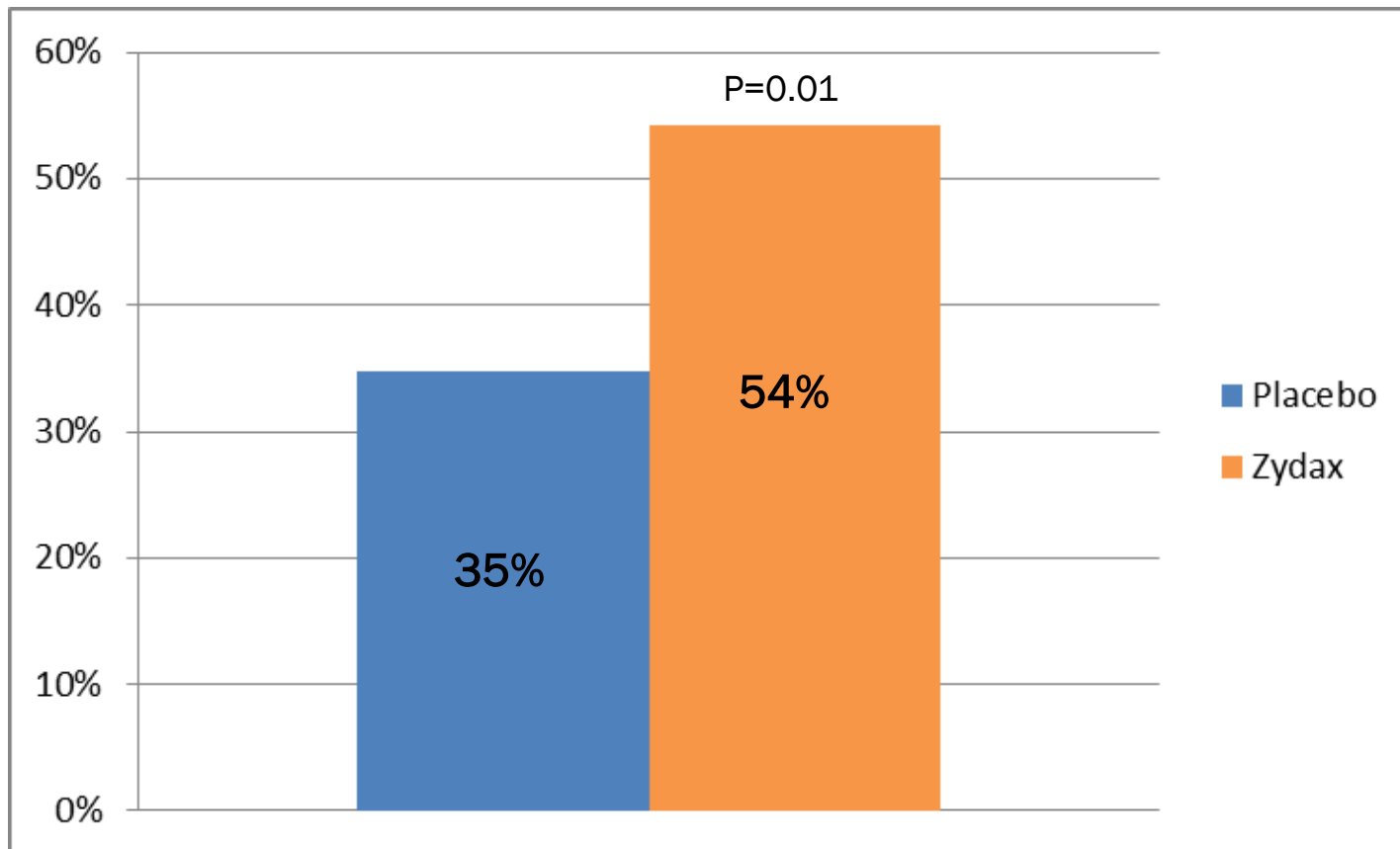
ONLY ZYDAX INHIBITS AGGREGANASE-1

- It is well established the PRIMARY cause of degenerative joint disease is the up-regulation of Aggrecanase-1
- In a head-to-head study against PPS, only ZYDAX was able to substantially reduce the activity of the up-regulated destructive enzymes present in OA



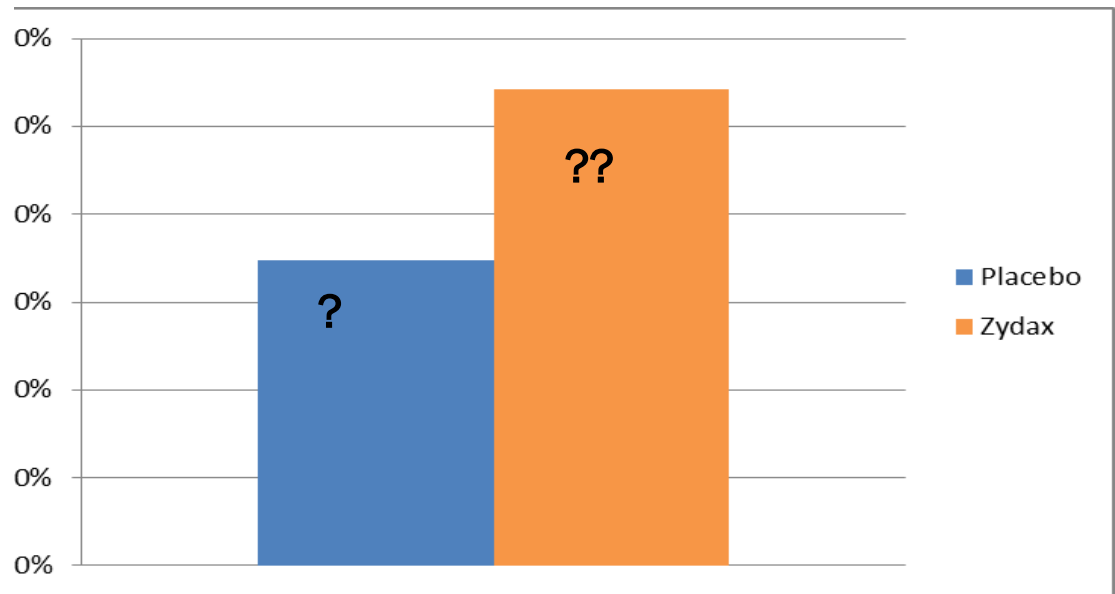
Pilot Efficacy Clinical Trial Outcomes

- Efficacy trial results: Percentage of dogs that had a >40% reduction in Pain and Interference caused by OA (Total Clinical End Point)



Pivotal Efficacy Clinical Trial

- ~315 dogs
- ~ 20 Clinical sites (USA & AU)
- Efficacy Assessment model: CSOM
- GCP (Gold Standard design)
- Results..... June 18, 2015!
- More clinical trials to come
 - ZYDAX – GLYDE study
 - Durability study
 - Prevention study
 - MOA studies
 - Cat studies
 - Human studies



Upcoming Milestones

2015 Major Milestones and Catalysts

- **Inaugural Investor and R&D Day – June 18, 2015**
 - New York Palace Hotel, 8:30am
 - Webcast available
 - Release of Zydax Clinical Trial Results
 - Communication of Global launch plans for Zydax and Glyde
 - Detailed development plans for new product pipeline
- **Filing of Zydax registration dossier with FDA and EMA**
 - July, 2015
 - Expect approval to take ~12 – 15 months
- **Zydax Co-marketing (EU) deal announcement**
- **First-half financial results – August 2016**

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