

Jefferies Animal Health Summit

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Robert Joseph

PRESIDENT & CHIEF EXECUTIVE OFFICER



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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



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



Report Card







2014 Report Card

- **Financial Progress**
 - Completed IPO in June 2014, raising \$50M
 - Initiated significant investments in strategic growth areas
- **Commercial Accomplishments**
 - Achieved strong sales growth across all business segments
 - 29% increase in sales reported for 2H 2014 (calendar year)
 - Demonstrated competitive strength in production animal business
 - Triple-digit annual sales growth in U.S. production animal business
 - 44% annual sales increase production animal business ex-US
 - Resurgence of sales and market share in AU and NZ from Bayer
 - Surpassed 30% market share in CAN
 - Zydax sales grew 18% in Australia 6 years after launch





2014 Report Card

- **R&D Investment and Progress**
 - Achieved significant clinical and regulatory progress for lead osteoarthritis drug; Zydax®
 - Received approval of Safety section from FDA
 - Reported positive large-scale pilot efficacy study results in September
 - Initiated a Zydax pivotal efficacy study at 28 sites in Q4, 2014
 - Completed API commercial manufacture scale up with Lonza
 - Developed Glyde Chews and developed AU & US launch plans
 - Developed preclinical and clinical studies across 6 pipeline programs commencing in 2015
 - Assessed multiple licensing opportunities





Strategy execution in 2015:

- Bringing Zydax[®] & Glyde[®] to Large Markets
 - Complete pivotal efficacy clinical trial
 - Complete and file CMC section
 - Establish US Canine sales team (40 reps) and launch Glyde (and potentially other in-licensed products)
- Strong Revenue growth in Dairy and Companion
 - US Dairy presence increasing to 7 territories; triple-digit sales growth
 - Double digit Canine sales growth in AU
 - Launch new versions of mySYNCH® & iKAM®
 - Expand geographic presence through marketing partner appointments
- Advancing 7 Proprietary Pipeline Programs
 - Multiple clinical and preclinical studies with quick read-outs
 - Pipeline additions through in-house development and licensing







Product & Pipeline Details





Zydax®

"the best OA drug I have used in my 30 years of veterinary practice"

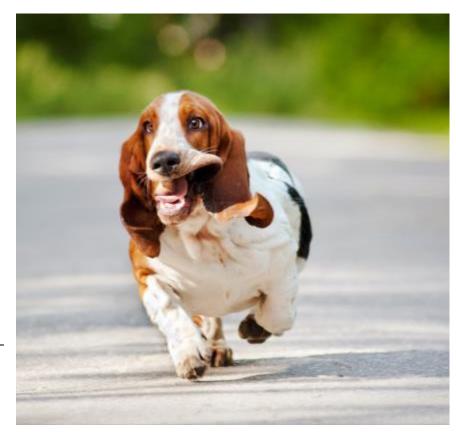
Leading Australian Veterinary Surgeon

Need

 All current and potential drugs are ostensibly anti-inflammatories which fail to target the primary cause of OA – cartilage degradation

Solution

- Zydax is a highly sulfated polymeric drug with a proven bi-modal action
 - stimulates proteoglycan synthesis
 - inhibits Aggrecanase-1
- Only drug to have successfully completed FDA required "owner assessed, clinical endpoint" efficacy trials

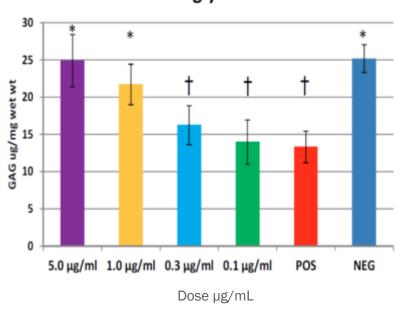


Zydax

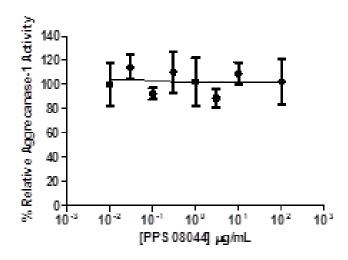
Mode of Action Studies

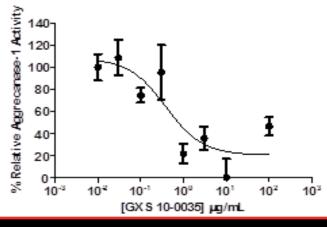
Anabolism

Tissue Proteoglycan Content



Catabolism

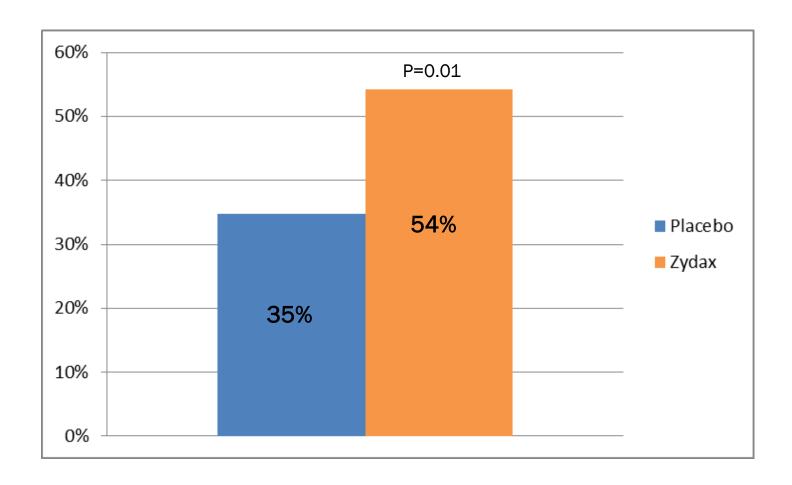






Zydax

Efficacy trial results: Percentage of dogs that <u>TOTAL Clinical End Point</u>





Milestones & Summary

		2014	2015	2016	2017
ZYDAX® (Osteoarthritis)	Dogs	Commence Pivotal Efficacy Trial, Q4	Submit All Data	Launch 1H: US & Europe	Launch 1H: Asia & Canada
	Horses		TAS	Efficacy	Launch 1H: EU & US , Asia

- Long patent remaining (2028) with opportunities for further IP
- Significant market success in comparable markets against NSAIDS, DMOADs and Nutraceuticals
- Successful M.O.A. studies and more planned
- Safety section and label language FDA approved
- Pilot efficacy studies successful
- Pivotal efficacy study running in 28 trial sites in AU & USA; complete Q2, 2015
- Lonza successfully scaled up commercial manufacture of API
- Final EU and US submissions Q2, 2015 with launch expected in 1H, 2016
- Potential to add feline indications in 2015
- Equine approvals will be pursued in 2015/16



PAR121 - Orthopedics

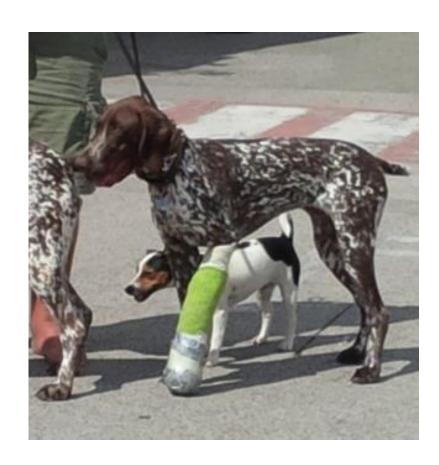
Market Need

- Dogs, and especially horses, do not tolerate casts or prolonged immobilization
- Multi-billion dollar canine orthopedic surgery market. In majority of equine cases, animal is euthanized

Solution

 PAR121 stimulates osteoblast differentiation to rapidly speed bone healing one week after fracture or orthopedic surgery

- 2015: Formulation development
- 2016: Pilot efficacy read out





PAR122 - Dermatology

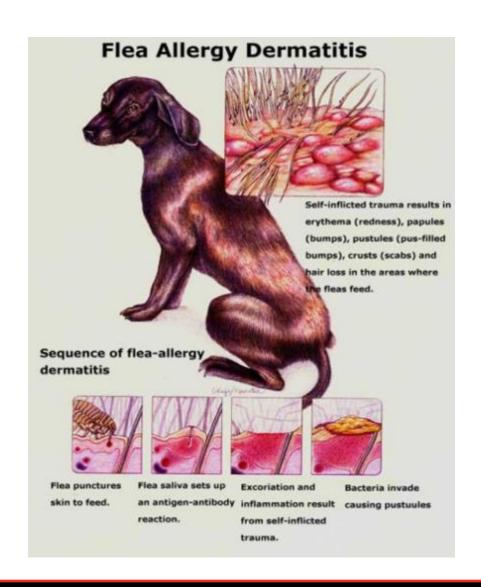
Market Need

- Flea Allergy Dermatitis ("FAD") is the biggest cause of atopic dermatitis
- New anti-pruritic medications will reduce itching but there is no effective treatment for the secondary problem of bacterial skin infection

Solution

 PAR122 is a first-in-class product that stimulates rapid epithelial cell differentiation to speed skin healing

- 2015: Formulation development
- 2016: Pilot efficacy read out





PAR061 - Mastitis

Market Need

- Current dry cow mastitis therapies require infusion of antibiotic paste directly into the teats of the udder
 - Process is cumbersome and laborious

Solution

- PARO61 is a pro-drug that crosses the blood-milk barrier and remains active for a prolonged period using an ion trap via a simple subcutaneous injection
- Revolutionizes dry cow therapy

- 2015: Formulation development
- 2016: Pilot efficacy read out



PAR081 - Anesthesia

Market Need

- Propofol is the most commonly used anesthetic; current propofol-based products have significant shortcomings
 - Emulsions are difficult to sterilize introducing high risk of bacterial infection

Solution

- PAR081 is a water soluble formulation
 - No risk of bacterial infection
 - More predictable anesthetic induction

- 2015: Formulation development
- 2016: Pivotal efficacy & TAS





Move from this

To this



PAR101 - Laminitis

Market Need

 No effective therapy to prevent or reverse laminitis; emphasis on symptomatic treatments, diet restrictions and exercise

Solution

- PAR101 is a daily oral therapeutic utilizing pioglitazone (insulin-sensitizer for type 2 diabetes in humans)
- Only known product in development targeting one of the major causes of laminitis, metabolic syndrome

- 2015: Pilot efficacy
- 2016: Pivotal efficacy & TAS

GONADOPRO – Cattle Reproduction

Market Opportunity

- Reproduction is the single biggest driver of economic gain on a dairy farm
- Options to improve conception rates involve long duration and complex breeding programs

Solution

- Combination formulation of GnRH and Progesterone enables 10-day breeding program
- 30% improvement in conception rates
- overcomes challenges associated with intravaginal progesterone devices

- 2015: In-vivo hormone profiles
- 2016: Pivotal efficacy



Upcoming Milestones





2015 Major Milestones and Catalysts

- Q1 update: strong sales growth; April
- Zydax Pivotal Efficacy Clinical Trial readout; late Q2
- FDA filing of Zydax CMC Package; late Q2
- FDA & EMA filing of full Zydax registration package; early Q3
- Appointment of Zydax Marketing Partner for EU, ROW; Q3
- Announcement of US Companion Animal commercialization infrastructure and US launch plans for Glyde; Q2
- Launch of new iKAM and mySYNCH Digital Tools; Q3
- Full results of Zydax trial, market research outcomes for US Companion Animal market (feeding commercialization plans); June Investor Day
- Multiple milestones and updates in 2H on Pipeline development





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