



Forward Looking Statements

This presentation contains forward-looking statements within the meaning of the U.S. Private Securities Litigation Reform Act of 1995. All statements contained in this presentation that do not relate to matters of historical fact should be considered forward-looking statements, including, but not limited to, statements regarding our expectations about the trials, regulatory approval, manufacturing, distribution and commercialization of our current and future product candidates, and statements regarding our anticipated revenues, expenses, margins, profits and use of cash.

These forward-looking statements are based on our current expectations. These statements are not promises or guarantees, but involve known and unknown risks, uncertainties and other important factors that may cause our actual results to be materially different from any future results expressed or implied by the forward-looking statements. These risks include, but are not limited to, the following: our limited operating history and expectations of losses for the foreseeable future; the absence of significant revenue from our product candidates for the foreseeable future; our potential inability to obtain any necessary additional financing; our substantial dependence on the success of our lead product candidates, which may not be successfully commercialized even if they are approved for marketing; the effect of competition; our potential inability to obtain regulatory approval for our existing or future product candidates; our dependence on third parties to conduct some of our development activities; our dependence upon third-party manufacturers for supplies of our product candidates; uncertainties regarding the outcomes of trials regarding our product candidates; our potential failure to attract and retain senior management and key scientific personnel; uncertainty about our ability to develop a satisfactory sales organization; our significant costs of operating as a public company; our potential inability to obtain patent protection and other intellectual property protection for our product candidates; potential claims by third parties alleging our infringement of their patents and other intellectual property rights; our potential failure to comply with regulatory requirements, which are subject to change on an ongoing basis; the potential volatility of our stock price; and the significant control over our business by our principal stockholders and management.

For a further description of these risks and other risks that we face, please see the risk factors described in our filings with the U.S. Securities and Exchange Commission (the SEC), including the risk factors discussed under the caption "Risk Factors" in our Annual Report on Form 10-K and any subsequent updates that may be contained in our Quarterly Reports on Form 10-Q filed with the SEC. As a result of the risks described above and in our filings with the SEC, actual results may differ materially from those indicated by the forward-looking statements made in this presentation. Forward-looking statements contained in this presentation speak only as of the date of this presentation and we undertake no obligation to update or revise these statements, except as may be required by law.

Pets Are Family Members

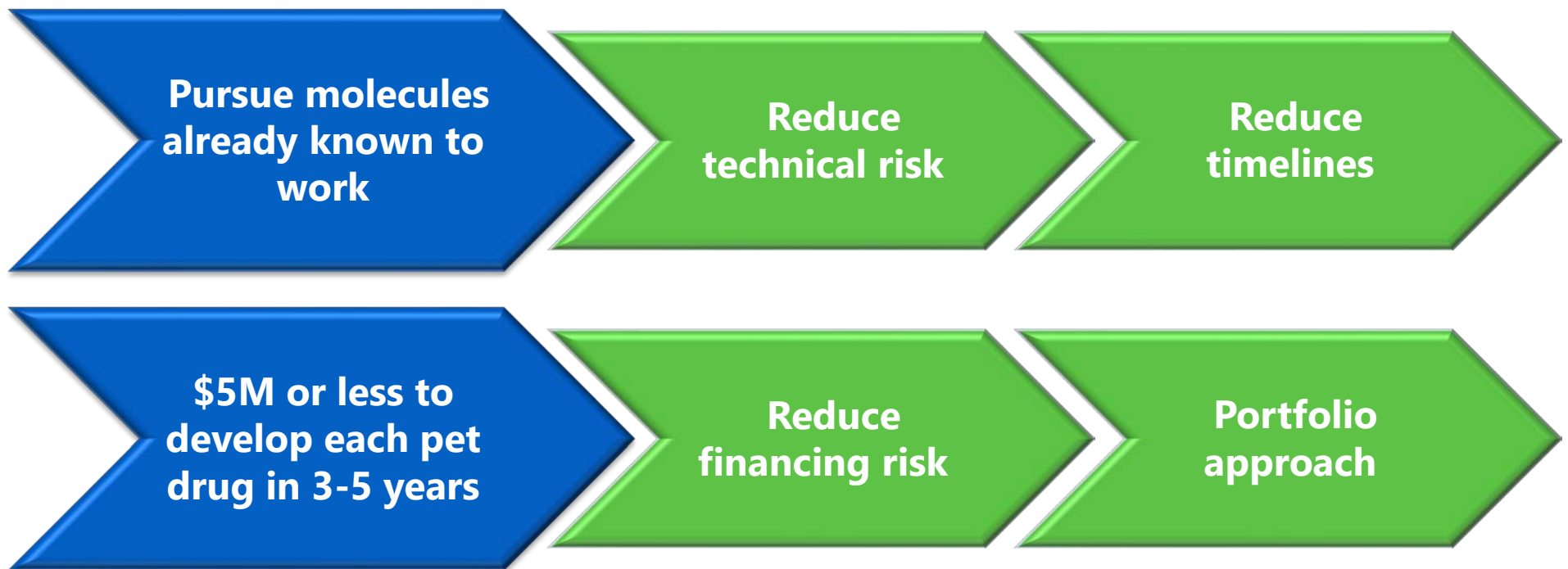
In 2016, pet owners in the U.S. spent \$66.7 billion on pets (an increase of 10.7% from 2015)

40% of pets sleep in bed with pet parents

We spend \$700 million a year on Valentine's Day presents for pets












KindredBio's Strategy: Repurpose Human Drugs for Pets














Deep Product Pipeline

Small Molecules

Molecule	Indication	Formulation	Laboratory Pilot Studies	Field Pilot Studies	Pivotal Clinical Study	NADA & Launch Preparation
<i>Small Molecule Product Candidates</i>						
Mirataz™ (mirtazapine transdermal ointment)	Management of weight loss in cats					
Zimeta™ (dipyrone injection)	Fever in horses					
Zimeta™ (dipyrone oral gel)	Fever in horses					
KIND-014	Equine gastric ulcers					
KIND-015	Metabolic syndrome in horses					

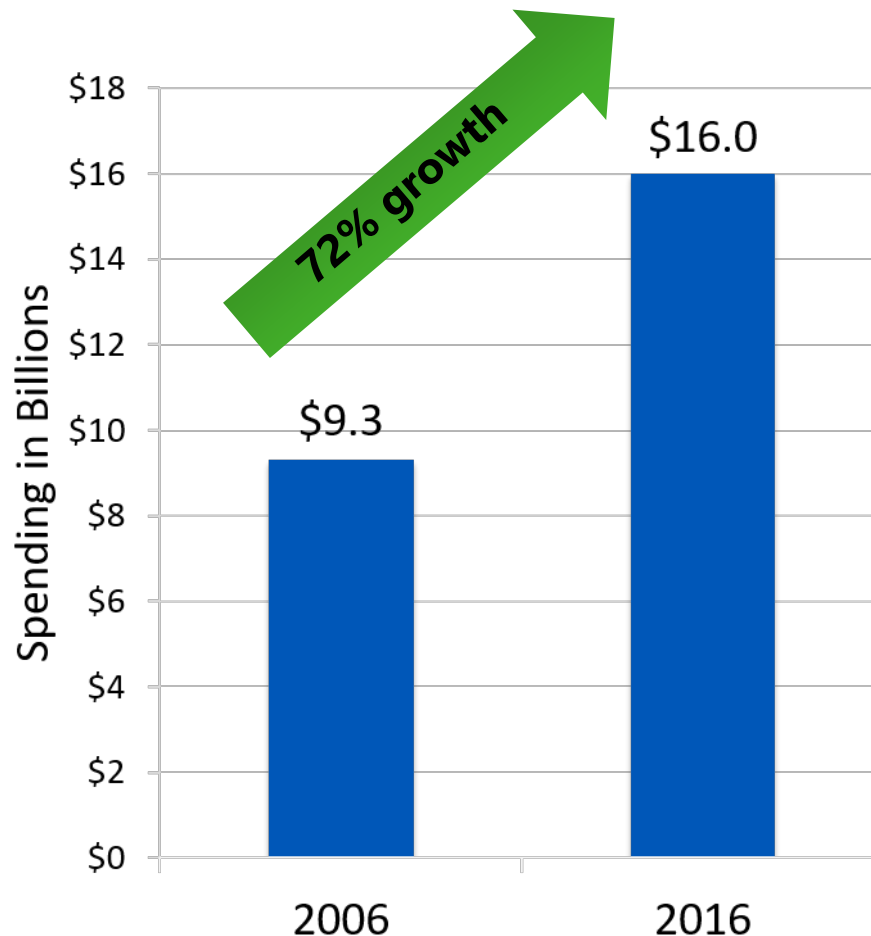
Deep Product Pipeline Biologics

Molecule	Indication	Discovery/Process Development	Pilot/Pivotal Clinical Studies	NADA & Launch Preparation
<i>Biologic Product Candidates</i>				
epoCat™ (feline erythropoietin)	Anemia in cats			
Anti-IL31 Antibody	Atopic dermatitis in dogs			
Anti-IL17 Antibody	Atopic dermatitis in dogs			
Anti-IL4/13 SINK	Atopic dermatitis in dogs			
Anti-TNF Antibody	Sick newborn foals			
Anti-TNF Antibody	Inflammatory bowel disease in dogs			
KIND-Bodies	Multiple indications			
Anti-IgE antibody	Allergic diseases in dogs			
Anti-VEGF antibody	Cancer in dogs			
Anti-CD20 antibody	Cancer and autoimmune diseases in dogs			
Checkpoint Inhibitors	Cancer in dogs			

Two Upcoming Approvals



Veterinary Market is Growing Rapidly



The veterinary care market grew 72% from 2006 to 2016

Animal health stocks increased 35% in 2016, versus S&P 500 at 8.3% (as of Aug 2016, Reuters)

There is a High Willingness to Pay...

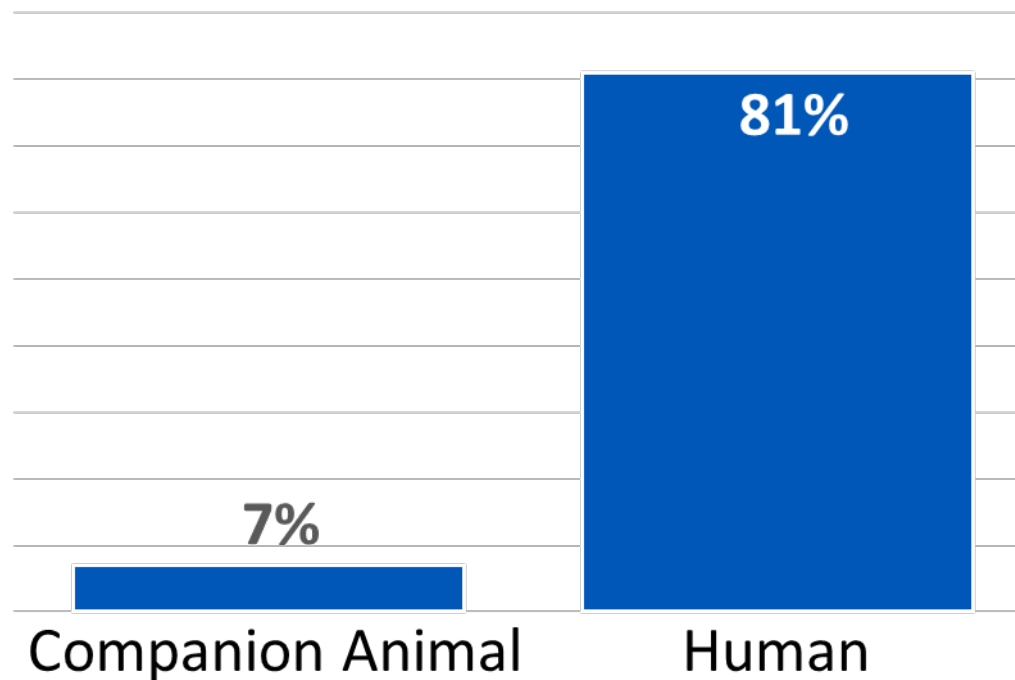
A 2010 survey¹ indicated that pet owners are willing to spend on their seriously ill pets if they require medical treatment:

	\$500	\$1,000	\$2,000	\$5,000
Extremely/Very likely	62%	42%	35%	22%
Somewhat likely	18%	20%	28%	20%
Not too likely/Not at all likely	18%	36%	36%	55%
Don't know	1%	2%	1%	3%

A more recent study (2017)² found that, on average, pet owners who have both dogs and cats would spend \$10,000 to save one of their pets from a life-threatening illness or disease.

Low Generic Penetration

Generic Dispensing Rates



Few pet generic companies

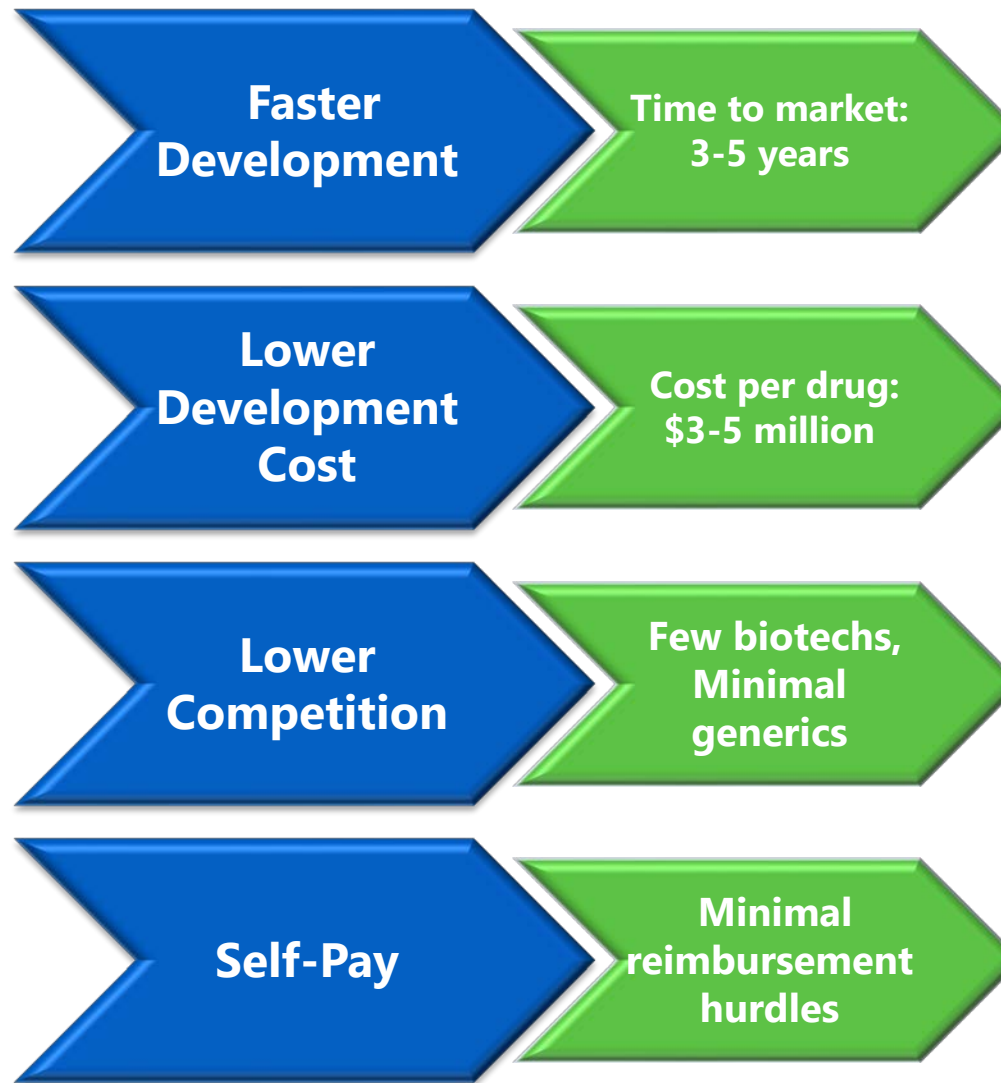
No automatic substitution

Requires sales & marketing effort

Rimadyl reached peak sales
several years after loss of
exclusivity

Relationship-oriented industry

Veterinary vs. Human Pharmaceuticals



Mirataz™ (mirtazapine transdermal ointment)

Transdermal drug for the management of weight loss in cats

Proprietary Accusorb™ transdermal technology

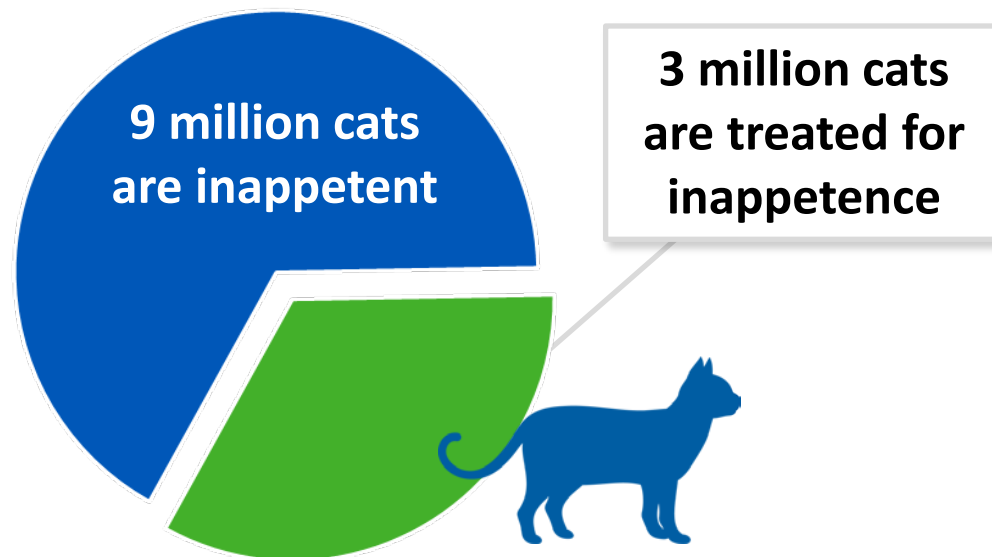
Effectiveness section of NADA already approved

Full approval expected in Q1/Q2 2017, if FDA review proceeds as expected

European Marketing Authorization application accepted for review

Currently no FDA-approved product is available

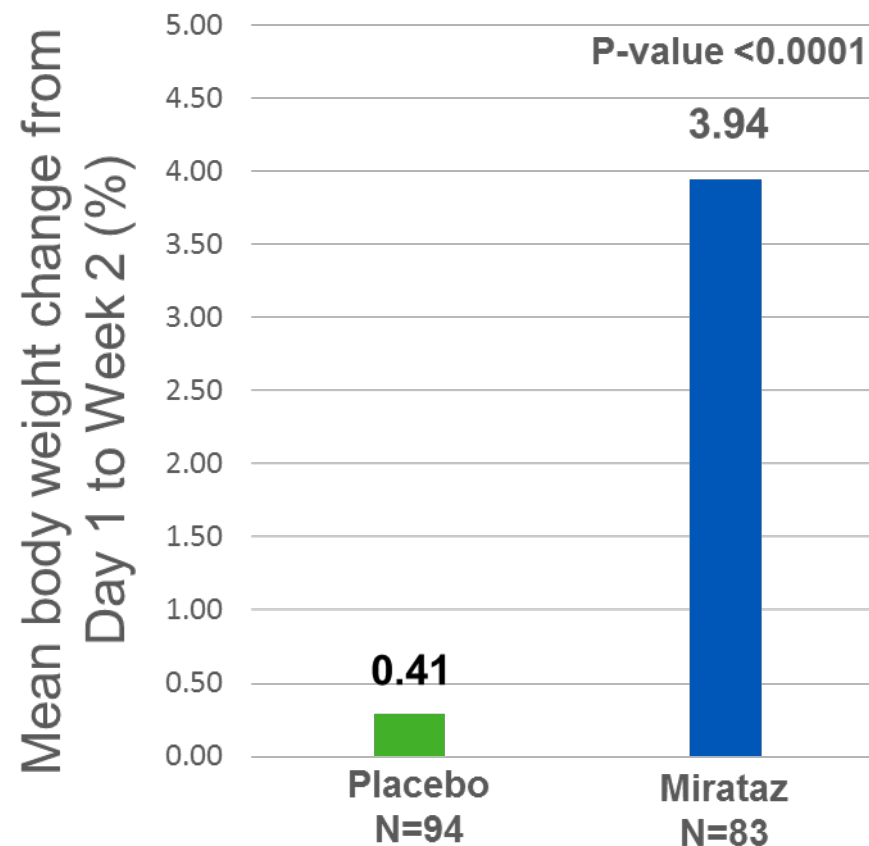
The leading cause for visits to veterinarian for cats (~7 cats/week/DVM)



Mirataz Pivotal Field Study Results

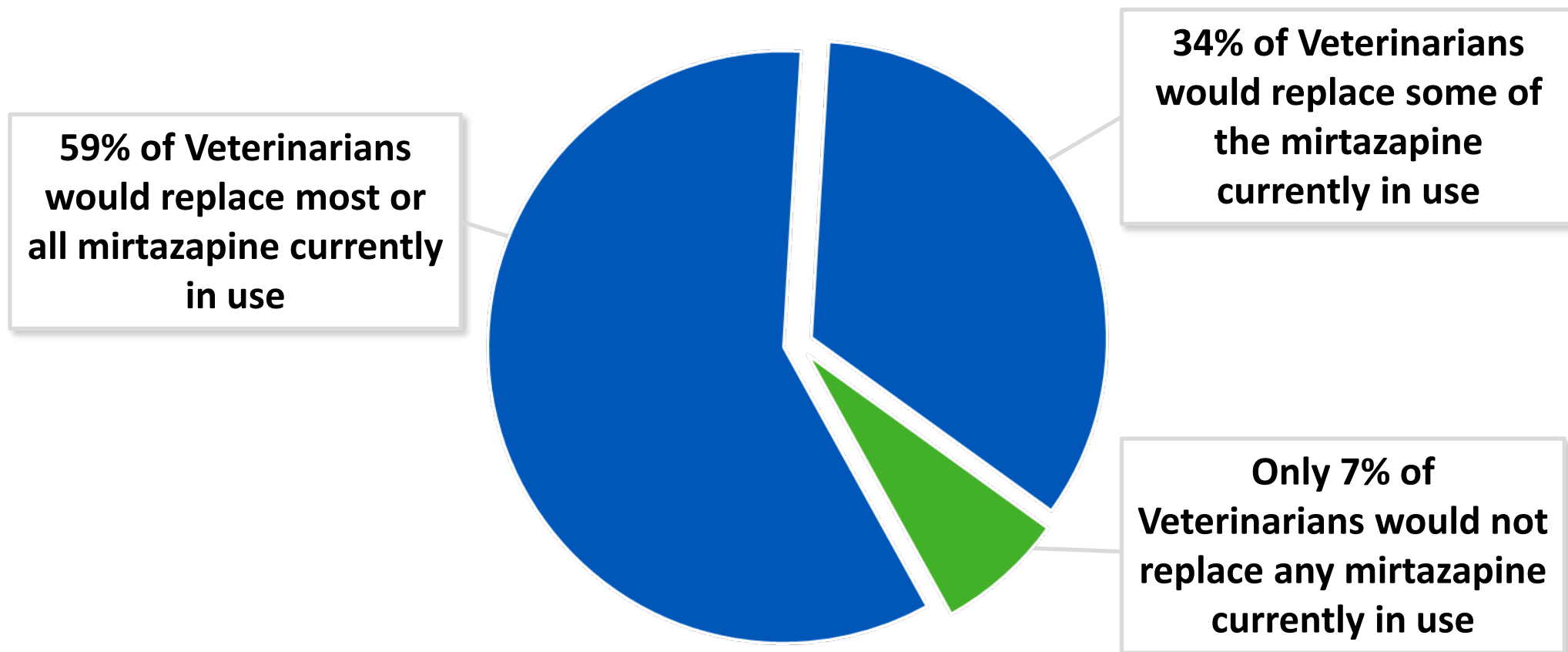
Randomized, double-blind, placebo-controlled study (N=230)

Primary endpoint: percentage change in body weight from Day 1 to Week 2



Mirataz New Product Opportunity

71% of Veterinarians use mirtazapine and the majority say they would switch to the transdermal gel formulation.



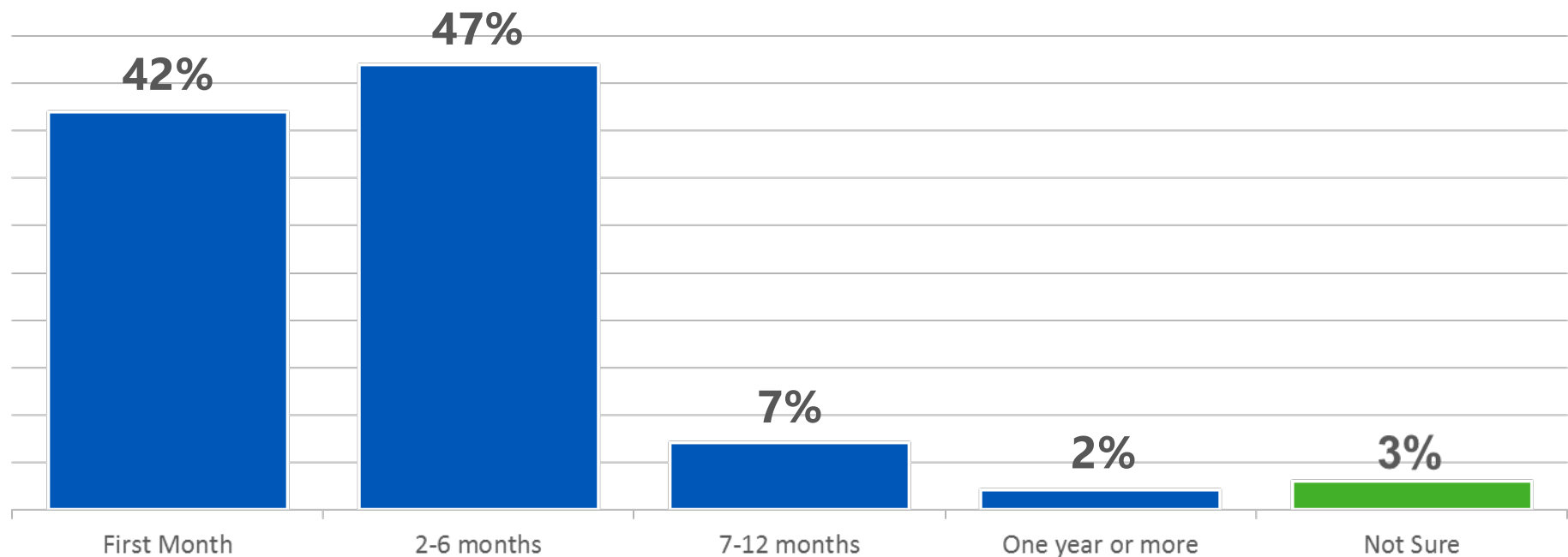
Mirataz New Product Opportunity

49% of Veterinarians report that ease of administering the medication and/or client medication compliance is a **primary factor** in selecting a medication for feline weight loss

74% of Veterinarians report that the **difficulty of giving medication** impacts feline weight loss treatment rates

Mirataz New Product Opportunity

95% of Veterinarians would use Mirataz in the first year



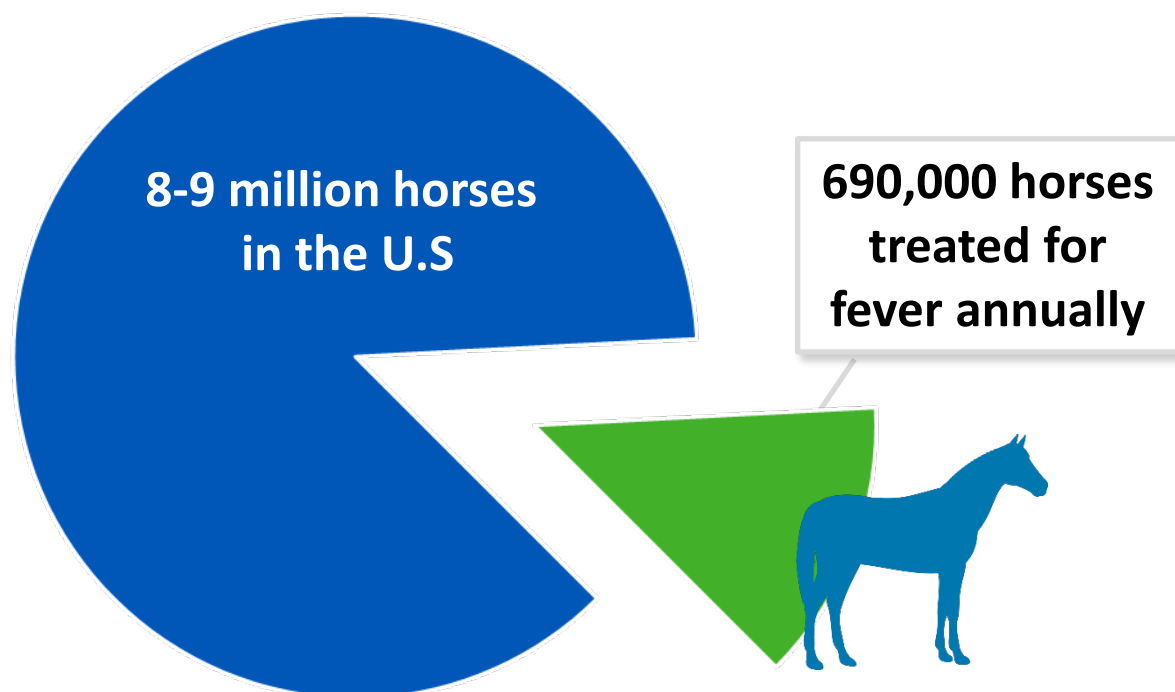
Zimeta™ (dipyrrone injection)

IV and Oral drug for the control of pyrexia (fever) in horses

IV effectiveness section of NADA already approved

Full approval for IV expected in Q1/Q2 2018,
if FDA review proceeds as expected

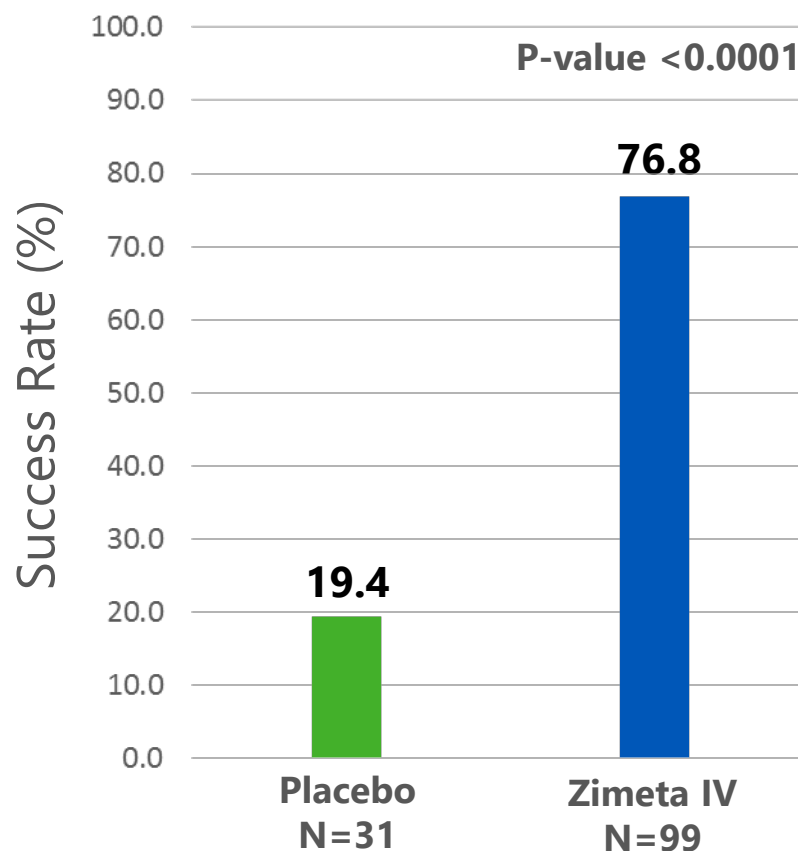
Positive pivotal effectiveness study reported for Oral in Dec 2017



Zimeta Pivotal Field Study Results (IV)

Randomized, double-blind, placebo-controlled (N=130)

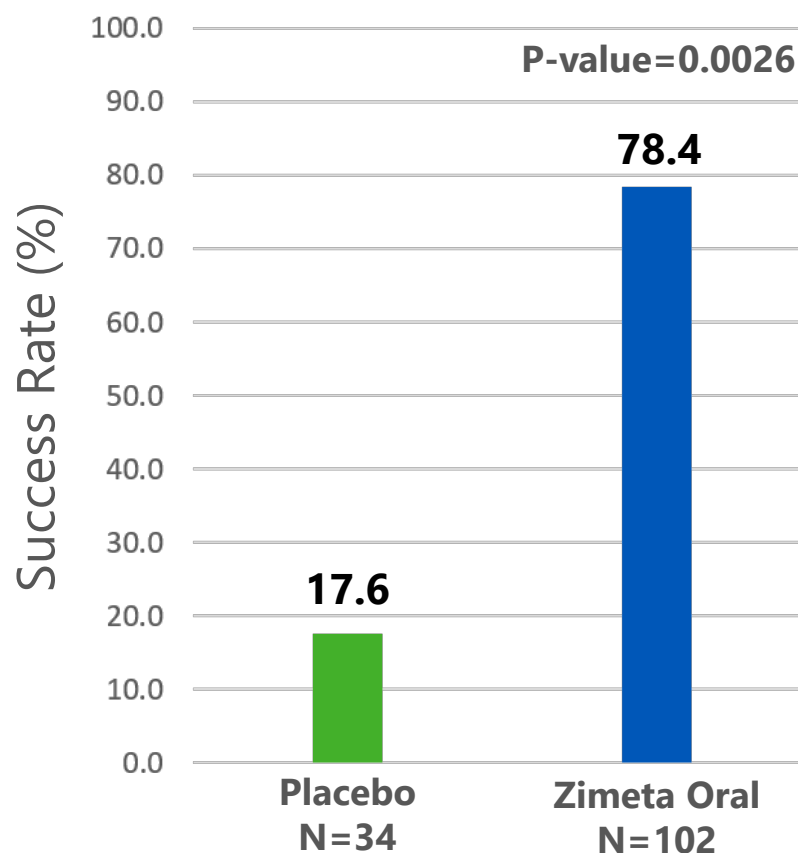
Primary endpoint: improvement or resolution of fever



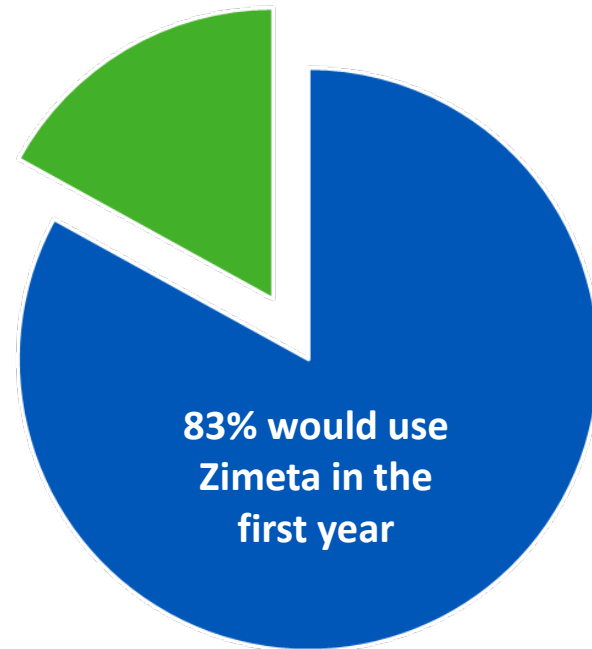
Zimeta Pivotal Field Study Results (Oral)

Randomized, double-blind, placebo-controlled (N=139)

Primary endpoint: improvement or resolution of fever



Zimeta New Product Opportunity



Commercialization

Equine Commercialization:

Launch and commercialize in the U.S. products with 3-5 person direct sales force, in conjunction with distributors

Dog/Cat Commercialization:

Launch and commercialize in the U.S. products with 20-25 person direct sales force, in conjunction with distributors

Biologics

Industry leading biologics programs

State-of-the-art in-house biologics manufacturing plant completed

Highly experienced biologics team

Experience developing Lucentis[®], Xolair[®], Tysabri[®], Avastin[®], Rituxan[®], Herceptin[®], Enbrel[®], and multiple other biologics

Internal caninization/felinization/equinization expertise

Biologics candidates

Feline erythropoietin

Checkpoint inhibitors

Interleukin antibodies

New technologies, including KIND-Bodies

KIND-510: Feline Erythropoietin

Proprietary recombinant feline erythropoietin (epoCat™)

Strong internal expertise in erythropoietin biology and engineering

Initial laboratory study completed - positive efficacy signal, as evidenced by increased reticulocyte formation

Pilot effectiveness field study initiated in Q3 2017

High unmet medical need

Over 50% of elderly cats (≥ 15 years) develop kidney disease, often leading to anemia

Human erythropoietin is immunogenic in cats

KIND-511: Anti-TNF Antibody for Septic Foals

Sick newborn foals are challenging and difficult to treat

Approximately 50% mortality

Initial pilot field study for Anti-Tumor Necrosis Factor (Anti-TNF) completed

By Kaplan-Meier analysis, the difference in survival between the control and placebo groups was statistically significant ($p=0.0293$)

Key Focus Area: Atopic Dermatitis

Atopic dermatitis is a large market

Combined Apoquel[®]/Cytopoint[®] projected peak sales ~\$500M

Multiple candidates being developed

Anti-IL31 antibody

Anti-IL4/IL13 SINK (fusion protein)

Anti-IL17a antibody

Anti-IgE antibody

Anti-CD20 antibody

Initial pilot safety and PK studies of anti-IL31, anti-IL17 and SINK have been completed and the molecules were well tolerated

Additional pilot efficacy studies to begin shortly

Key Focus Area: Cancer

Multiple antibody candidates

Anti-CTLA4 antibody

Anti-PD1 antibody

Anti-PDL1 antibody

Anti-CD20 antibody

Exclusivity and IP Position

Full intellectual property protection anticipated for antibody portfolio

Use and formulation patents for small molecules
20 years of patent protection from date of filing

Regulatory Exclusivity

5 years in U.S.

10 years in E.U.

Lifecycle Management

New formulations, combinations and derivatives

Select Summary Financials

**For the quarter
ended
September 30, 2017**

\$ millions

Operating expenses:

Research and development \$4.9

General and administrative \$3.2

Total cash operating expenses \$6.8
(excluding stock-based compensation)

Total operating expenses \$8.1
(including stock-based compensation)

Total cash, cash equivalents and investments \$89.3
(As of September 30, 2017)

Capital Structure & Stock History

**Shares
Outstanding¹**

28.2 M

Options²

4.5 M

Market Cap³

US\$266.3M

**Working
Capital⁴**

US\$83.6 M

¹ As of December 31, 2017

² As of September 30, 2017; avg. \$6.57

³ As of close of market December 31, 2017

⁴ As of September 30, 2017



Analyst Coverage

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Summary

