AKRETIV Animal Health Inc.

Life Sciences' Outsourced Veterinary Division ™

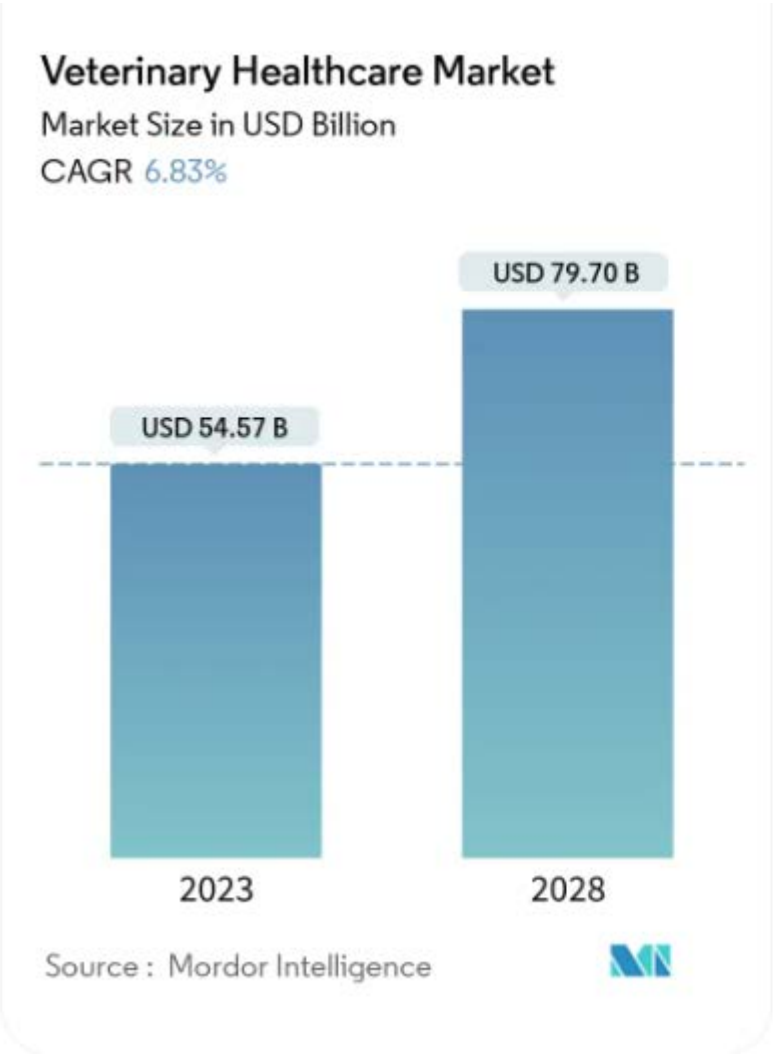
Version 012025 Summary

www.akretivAH.com

Mission Statement

Develop innovative products for animal health sourced from human health development pipelines by offering a unique **partnered program** model that brings accretive financial upside, significant translational insights and manufacturing regulatory validation to human life sciences companies.

Companion animals market size (>$50B)

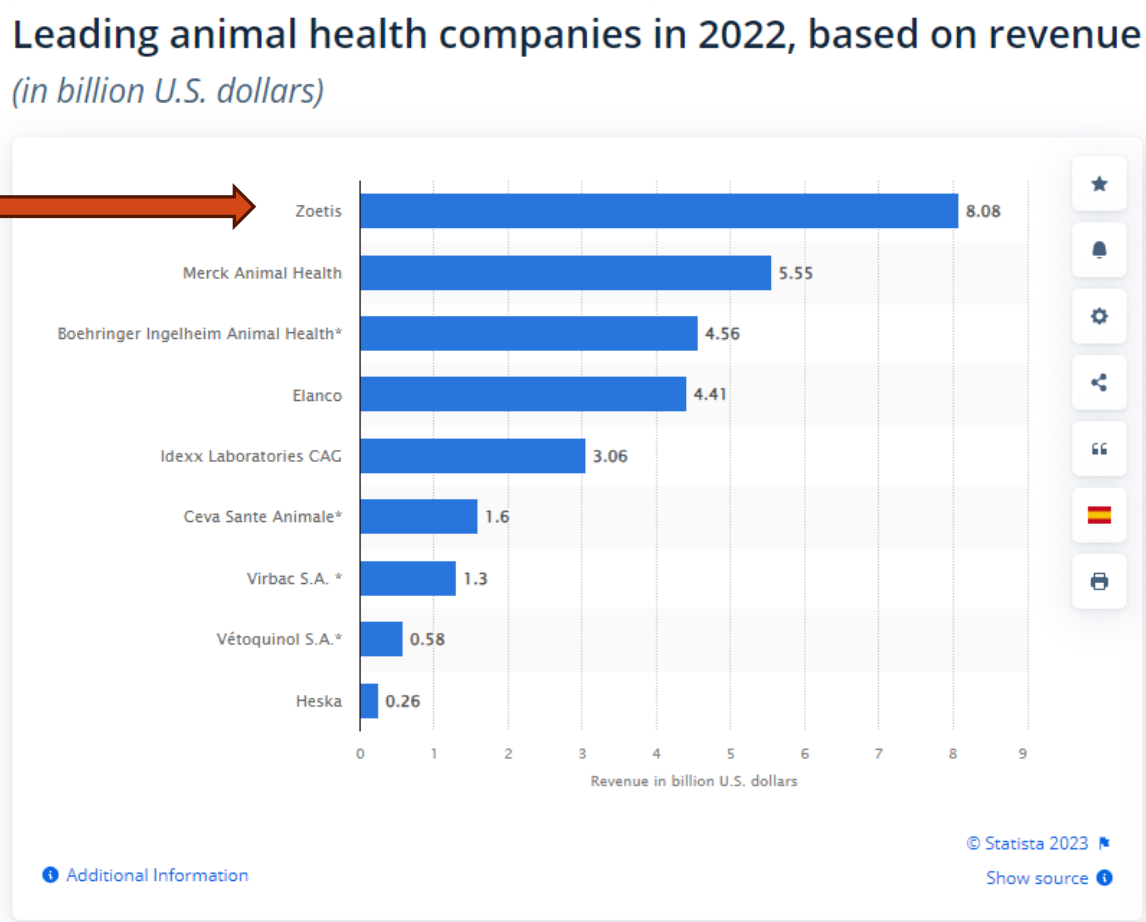


Study Period	2019-2027
Market Size (2023)	USD 54.57 Billion
Market Size (2028)	USD 79.70 Billion
CAGR (2023 - 2028)	6.83 %
Fastest Growing Market	Asia-Pacific
Largest Market	North America

Major Players

*Disclaimer: Major Players sorted in no particular order

Value of Veterinary divisions to Human Pharma …



- **Zoetis (used to be Pfizer AH)**
  - **$8B Sales**
  - **$75B Market Cap**

- **Still owns Merck AH**
- **$5.5B sales for 2022**
- **10% of Merck total sales**
- **Growth 6%**

Human Life Sciences companies not leveraging Animal Health opportunities are missing significant accretive profits.

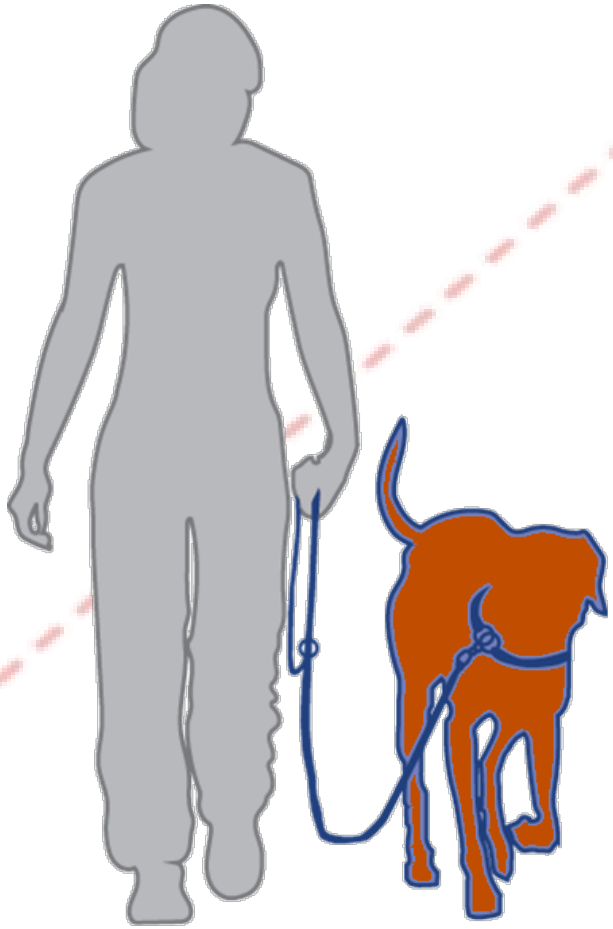
Animal Health Program Valuation at/prior to Approval (NADA)

- **Animal Health blockbusters @ $100M+**
- **Deal inflection points (later stages most valuable)**
  - Most animal health products only become marketable assets once pivotal studies are completed (usually 1 to 2 years prior to a regulatory approval)
  - Early development deals are usually valued at single digit $M upfront + development cost reimbursement + low double-digit royalties on future sales (mediocre terms by human life sciences standards).
  - Approved marketable assets can get valuations around **$50M to $100M**.
- **Comparable Deals in animal health (exit late-stage values)**
  - Aratana, Galliprant (NSAID) deal = bought by Elanco for $234M cash
  - Zoetis acquired Nexvet Bio (immunotherapeutics in late stage) for $85M
  - Kindred Biosciences ($450M deal) for Mabs in late development (derm, parvovirus, pain)

Animal health is still "small" if compared to human healthcare … but significant value to be leveraged!

We are creating a uniquely synergistic model for the future!

Human Life Sciences (Pharma/Biotech/Devices)



AKRETIV Animal Health

Life Sciences' Outsourced Veterinary Division ™.

Business Model

- Partnering model allows life science company to retain control over IP/manufacturing and gives them financially de-risked access to animal health (Akretiv investors fund clinical studies and regulatory filing to bring assets to market).
- Flexible deal structure from traditional out-licensing through fully partnered program (depending on partner stage and financial runway) to maximize returns for human life sciences company (as compared to mediocre early-stage deals proposed by large animal health companies).
- Good financial returns (% of upside from program completion deals, sales royalties and supply agreement), translational insights from animal studies, early feedback on manufacturing, potentially shortening go to market timelines for human therapeutics.
- Akretiv gets value from innovative, partially derisked assets to develop a rich pipeline. Peak financial upside generated at program completion with exit deals (cash at licensing/distribution agreement with strategics and royalties on sales) add to a streamlined cost structure.

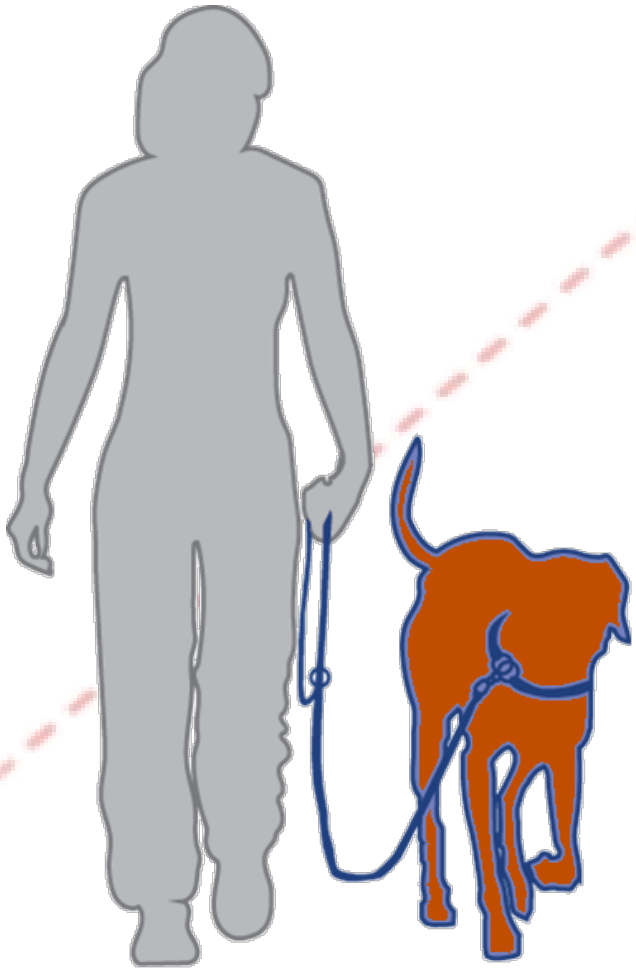
Win/Win Life Science Partnered Model

Human Pharma/Biotech

Accretive Profits
Translational Insights
Faster Time to Market (vs human)

Retain Control over IP
Oversight over Development (Steering committee)

Excellent ROI (profit-sharing model and alternative financing for equity)



AKRETIV AH

Dedicated animal health expert team

Established relationships with animal health pharmaceutical companies (distribution deals, strategic exits)

Network of investors to support efficient funded development

Value created through commercial royalties of approved animal health drugs (or licensing exit)

Accretive value creation between human and animal health industries

Animal Health "Traditional" Deal Structure vs. Akretiv Partnering Model

	TRADITIONAL (Out-Licensing)	PARTNERED*	OUTSOURCED (Contracted)
Cash Upfront	$0.5M - $1.5M	No	No
Royalties (Net Sales)	5% to 8%	10% to 15%	Expect 30% on distribution deal (minus AKR 10%)
Milestone Payments	Approval Sales Milestones	20% of BD Deal	100% BD Deal (minus AKR 10%)
Development Cost	$0	$0	$5M to $8M + AKR fees (20%)
Financing Cost	No cost (AKR funded)	No Cost Or Interest only	100% funding by client
ROI Conservative (25M/Y Product)	$2M + $1.5M/Y	$3M/Y	$7.5M/Y
ROI on asset sale ($75M asset value)	$2M upfront $10M asset sale	$15M	$60M
ROI Blockbuster ($100M/Y product)	$2M to $10M + $5M/Y	$12.5M/Y	$20M/Y

** Partnered model on post-IND therapeutics with or without financing provided by Life Science partner is the Akretiv preferred agreement format, as we believe it balances risk and rewards fairly and provides significant more upside than traditional out-licensing deals*

Competition

- Only one similar company (to our knowledge) focuses on a human <> animal health synergistic business model (based in Europe).
- Some companies try to bring human programs into animal health (monoclonal platform, small molecule drugs) through large pharma (parent company) pipeline or as focused single program start-ups.
- Companies working on translational programs are more focused on in-licensing than partnered development or profit-sharing structured deals.
- The proposed model brings accretive value to both partners while offering a risk mitigation approach (convertible loan funding) to human partner company

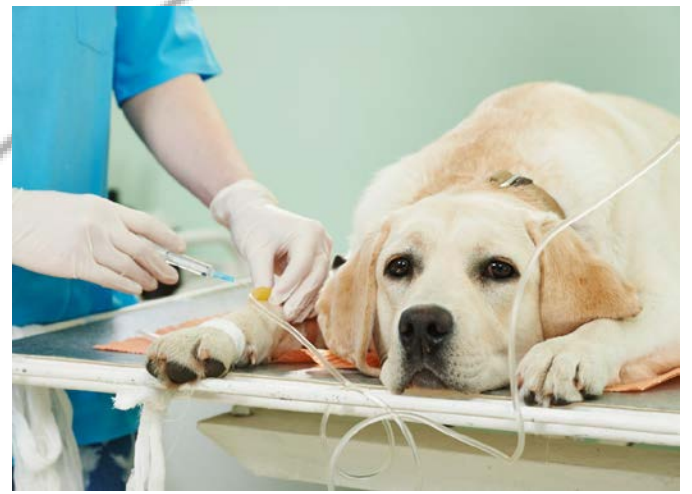
Translational Pet Population and Target Diseases

- Very few companies have utilized the naturally occurring diseases in pets for translational acceleration of their programs (historical bias to rodent based disease models for drug screening)
- Current team has proven pet trials can be used to accelerate human drug development and pilot new indications in parallel overall de-risking platform therapeutics programs
- Enormous untapped opportunities for human and animal health synergistic drug developments ("One Health" concept).
  - One Health Basics | One Health | CDC
  - Cross-cutting Topics: One Health Initiative | FDA

Translational patient populations

Pets are part of the family
(share our environment and lifestyle)

Pets are living longer
(Naturally Occurring Diseases)

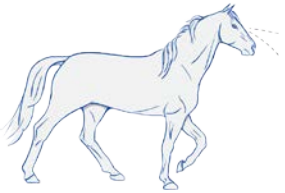


Owners are willing to enroll their pets in clinical trials to improve their quality of life

US Cared For Pet Patient Population

84 million canines

94 million felines



7.6 million equines

$35.9B spent on Vet Care and Therapeutics (US)

Source: AVMA Pet Demographics 2020, FDA CVM estimates, APPA Pet Owner and Demographic Survey

Most diseases that affect People can be found in Pets …

Example of Target Diseases of Interest	US Pet Patients
Canine Osteoarthritis & DJD (Degenerative Joint Disease)	5,911,230
Canine KCS (Keratoconjunctivitis Seca)	4,126,200
Canine CKD (Chronic Kidney Disease)	2,242,500
Canine Atopic Dermatitis	1,794,000
Canine ACL rupture (cruciate ligament)	747,500
Canine Diabetes	448,500
Canine IBD (Inflammatory Bowel Disease)	224,250
Canine Bone Cancer	125,580
Feline CKD (Chronic Kidney Disease)	2,336,000
Feline DJD (Degenerative Joint Disease)	1,168,000
Feline IBD (Inflammatory Bowel Disease)	876,000
Feline Gingival Stomatitis	876,000
Feline Cystitis	730,000
Feline Diabetes	408,800
Equine Osteoarthritis	510,000
Equine Uveitis (immune)	340,000
Equine Tendon & Ligament tears	340,000
Equine navicular syndrome	204,000
Equine Laminitis	170,000
Equine EIPH (Exercise Induced Pulmonary Hemorrhage)	142,800

Non-exhaustive list of conditions and associated pet target populations.

6M dogs diagnosed with cancer each year (US)
2M treated beyond palliative conservative care

Veterinary Cancer Registry Diagnoses, Dogs

	# of cases	% of total cases
Mast Cell Tumor	910	13.22%
Lymphoma	573	8.32%
Melanoma	363	5.27%
Hemangiosarcoma	322	4.68%
Osteosarcoma	318	4.62%
Squamous Cell Carcinoma	281	4.08%
Fibrosarcoma	242	3.51%
Mammary Tumor	145	2.11%
Transitional Cell Carcinoma	141	2.05%
Thyroid Tumor	78	1.13%
Histiocytoma	47	0.68%
Basal Cell Tumor	16	0.23%

Registry effort (academia) to collect and type on self-reported cases (2,000 registered).

Source: Multiple Literature References and Market Research Reports

Animal Health Market Summary

- Animal Health Recession Resistant
- CAGR of 4.5% (2012-2022), projected to be around 7% for the next decade
- Market Expected continue steady growth to reach $70B by 2030
- Core Markets: Pain, Dermatology, Metabolic Diseases, Oncology
- 10 to 15 years behind human healthcare for innovation …

Most common medical conditions for cats and dogs (2021 US/Canada)

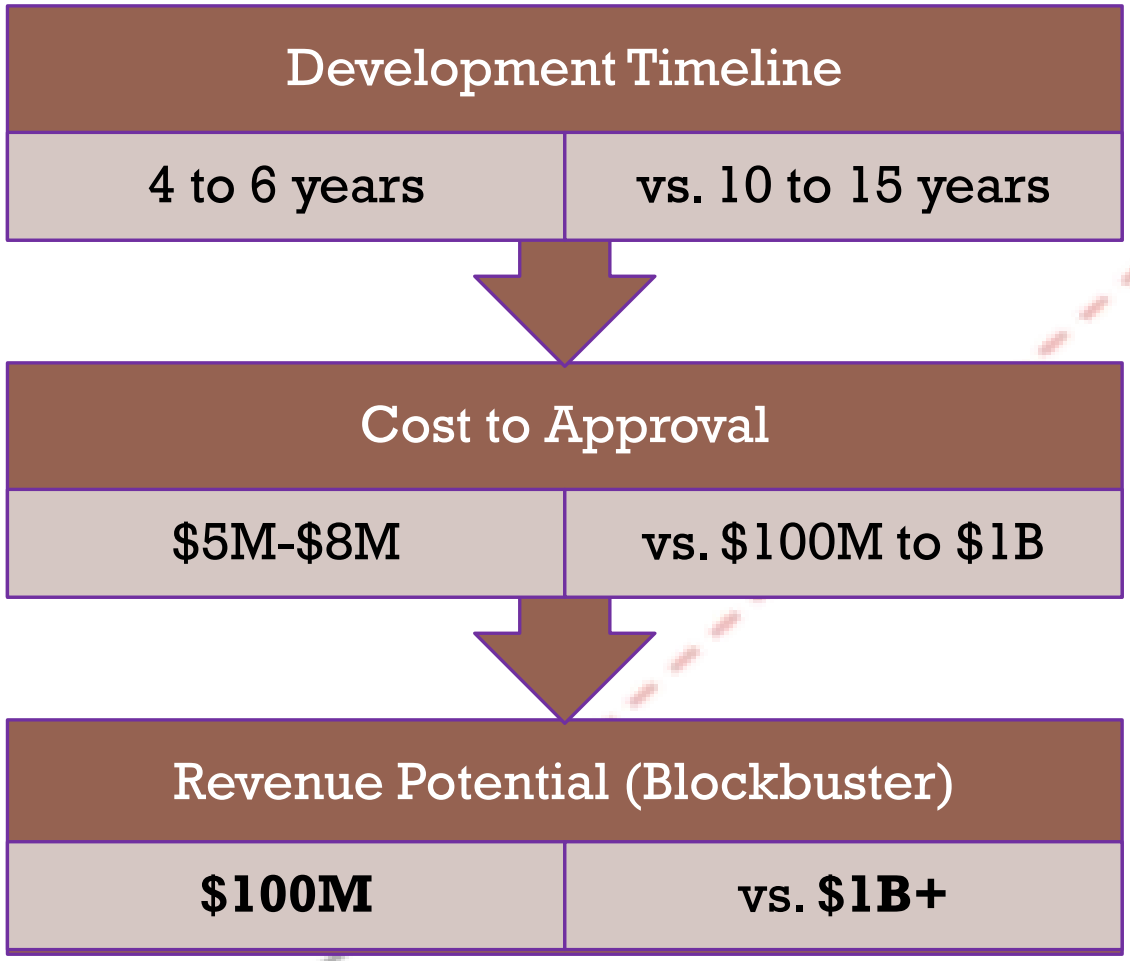
Dogs	Cats
Otitis / Ear Infection	Urinary Tract Infection
Gastroenteritis	Diabetes
Diarrhea	Gastroenteritis
Skin Conditions (Infections, Allergies, Mass)	Otitis / Ear Infection
Urinary Tract Infection	Diarrhea
Vomiting / Emesis	Kidney Disease / Renal Failure
Allergies	Upper Respiratory Infection
Arthritis	Vomiting / Emesis
Dermatitis	Conjunctivitis / Eye Condition
Cruciate Ligament	Inflammatory Bowel Disease
Lameness	Hyperthyroidism

Source: NAPHIA State of the Industry Report, 2022 © - May 16, 2022

Opportunities

- Great potential to maximize drug value by pursuing human and animal health markets in parallel
- Streamlining (reduction of costs of goods at scale) through shared manufacturing capabilities for human and animal health applications
- Translational studies can bring unique insights to human drug development that accelerates moving through clinical stages and improves the quality of the clinical data generated
- Budgets required for animal health developments are a fraction of the cost for human drugs (the return for the risk is much less)

Animal vs. Human Drug Development



- Faster Path to Market (AH vs HH)
- Lower Development Cost
- Accretive Revenue shared with HH company (in our model)
- Clinical Insights Applicable to Pre-NDA Programs can accelerate HH drug development

Most conservative evaluations (de novo programs). Programs starting with existing toxicology data and/or CMC for human assets can likely be taken to NADA approval (US) in 5 years or less, and for a cost at or below the listed $5M (alternative pathways, conditional approvals)

Regulatory Pathway for Animal Health Therapeutics (FDA CVM)

Regulatory Activities	CVM activity
CMC	TS CVM review
INAD	Initial data preparation for A0000 CVM submission
	Categorical exclusion (environmental impact)
	Obtain INAD number
Z Meetings	CVM meetings (PSM or protocol)
Safety (target species)	TASS protocol review (assumes 2 reviews)
	TAS TS CVM review (assumes 2 reviews)
Effectiveness (target species)	H-Submission outcome
	Pivotal protocol review (assumes 2 reviews)
	TAE TS CVM review (assumes 1 review)
	Administrative review for full approval
Minor Technical Sections	CVM review

- Studies done in target species streamlines clinical study path
- Clinical insights can be gathered from pilot studies in months not years (vs HH)
- Rolling submissions for animal drugs allows for human CMC adjustments early in the cycle (manufacturing insights)

Pipeline

- **First Option Secured.**

AKT-100 Immune Stimulant for prevention of secondary bacterial infections in pets.

- **Other Options in Progress.**

AKT-200 (Pain Control) in advanced discussions with human life sciences companies.

- Multiple other efforts to expand pipeline of opportunities.

Pipeline detailed overview including product presentations and market assessments available under confidentiality agreement (separate document).

PROGRAM	Therapeutic Area	Core Indications	Mode of Action
AKT-101 (optioned)	Immune-Stimulant	Prevention of secondary respiratory infections in dogs and cats	Oral bacterial lysate triggers non-specific immune response strengthening immune system against infections.
AKT-201 (internal)	Pain and Inflammation	Feline Gingivostomatitis + Equine Navicular Dx	Potent TRPV1 agonist defunctionalizes targeted nerves at site of injection interrupting pain signaling (non-opioid)
Not Assigned (in negotiation)	CNS	Epileptic Seizures (K9)	Benzodiazepine used for control of seizure episodes
Not Assigned (in negotiation)	Inflammation	Osteoarthritis Pain and Inflammation	PAI-1 inhibitor. New modality for chronic musculoskeletal pain, and neuropathic pain control
Not Assigned (in negotiation)	CNS	Fear and Anxiety + Neuropathic Pain	5HT1 agonist targeting central system (mood, anxiety and stress responses)
Not Assigned (option pending)	Urinary	Prevention of Urinary Tract Infections in cats with recurring UTIs	Immuno-modulating bacterial Lysate designed to support immune system responses to urinary tract pathogens,

Details available to interested investors under CDA (separate presentation)

Partially Derisked Partnership Deals take 12-18 months to secure!

- **CDA** in order to initiate assessment (towards letter of intent)
- **Data room access** (preclinical and manufacturing data) in order to assess the human asset program gaps for animal health commercial readiness
- Positive review –> discuss **option** and **licensing** terms
- Proceed to Letter of intent (non-binding term sheet)
- Program Development Plan (market, development timelines, regulatory, CMC)
- Program Financing Plan
- **Option Agreement**
- (Execute Proof of Concept Studies)
- **(Licensing Agreement)**
- (Initiate Full Asset Development and Registration Program)

Founding Executive Team

Alexis Nahama, DVM — Founder, *CEO*

- 25+ years of experience in the biotechnology, animal health and life sciences industry
- 10 years executive experience in human Lide Sciences/Biotech
- Led global development and commercialization of multiple prescription drugs
- Executive team (head of marketing) for $9B publicly traded company (VCA Antech)
- 30 publications in the field of translational, pain and business development

Silvia Chang, MBA — Co-Founder, Head Operations

- 25+ years of experience in the biotechnology, animal health and life sciences industry
- Led development (including CMC) of many biopharmaceutical, small molecule products
- Built, staffed and started up GMP manufacturing facility
- Successfully established functions and built teams in start up environment

Board of Directors

Alexis Nahama (LinkedIn Profile)

Brian Sun (LinkedIn Profile)

Stephane Richard (LinkedIn Profile)

Gilles Guillemette (LinkedIn Profile)

Brian Cooley (LinkedIn Profile)

Scientific Advisors

Michael Iadarola

Robert Allen

Roshni Ramachandran

Corporate Goals (Investment)

- Build a sustainable, efficient, reproducible partnering model to bring innovation from human healthcare into animal health
- Secure three assets for partnered program within first two years of activity
- Ensure corporate valuation generates healthy returns for investors on a 3 to 5 years horizon

Financial Plan

- Break-even within 5 years assuming no direct sales (non-regulated products) and only one exit from FDA regulated program
- NPV with 10 year look out $28M-$127M (value incrementally increases with number of programs in development)

P&L and financials available for accredited investors upon request (and CDA)

Confidential pipeline information available to relevant parties upon request (and CDA)

CONTACT

Alexis Nahama, DVM

Founder, CEO