

ONCOFIBRO™ 



# TREACTIVUS™

*T-Cell Reactivator — Immunotherapy for Veterinary  
Oncology, Viral Diseases, and Longevity*

# Treactivus™

## *Immunotherapy for Veterinary Oncology, Viral Disease Treatment, and Longevity*

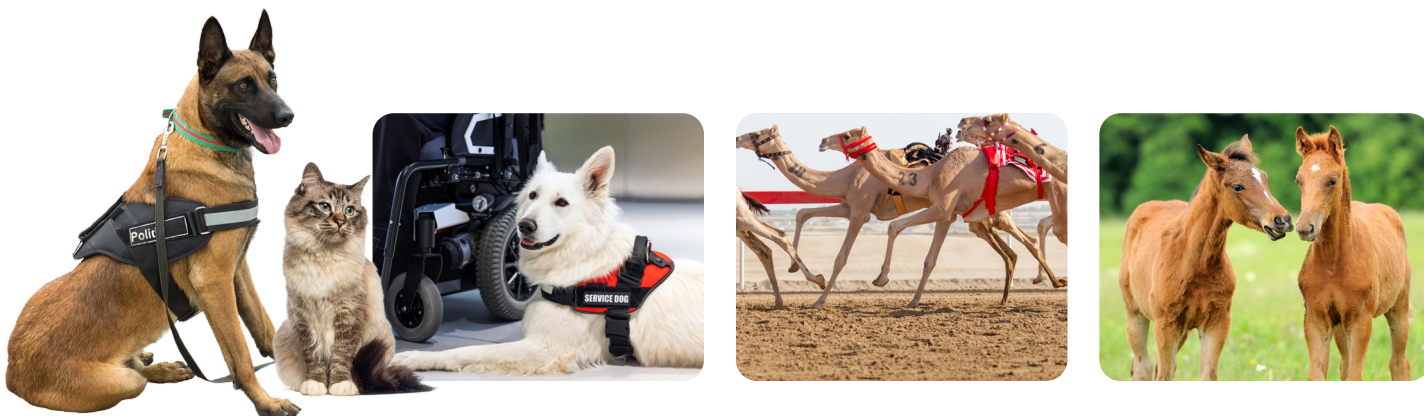
### Tackling Critical Challenges in Animal Health

As pets and livestock live longer, veterinarians face increasingly complex health challenges. The current standard of care often relies on oncology drugs repurposed from human medicine—chemotherapy, radiation, and other cytotoxic treatments not specifically designed for animals. While they may provide temporary benefits, these therapies commonly bring significant adverse side effects that can do more harm than good, limiting treatment success and impacting an animal's quality of life.

At the same time, viral diseases continue to compromise immune function, slow recovery, and increase susceptibility to secondary illnesses. In both companion and farm animals, these infections can prolong disease, worsen prognosis, and in severe cases, become life-threatening.

These challenges highlight the urgent need for safer, species-adaptable solutions that offer effective support against both cancer and viral diseases—without the toxicity associated with conventional human-derived treatments.

This need has driven the development of Treactivus™, a next-generation immunotherapy built for veterinary care.



### Introducing Treactivus™

Treactivus™ is T-cell reactivator veterinary immunotherapy made from our proprietary recombinant protein – Tat-MYC Fusion Protein (Tatmyctofusp). Treactivus™ is designed to restore immune strength in animals battling cancer or chronic viral infections.

#### How It Works:

- **Tat peptide** - a natural transporter that enables molecules to cross cell membranes
- **Myc regulatory domain** - master controller of immune cell activity.

Once inside the immune cell, Treactivus™ delivers a brief, controlled boost that recharges exhausted or suppressed T cells, restoring their energy and cytotoxic power. This helps the immune system break free from tumor- or virus-induced suppression and target diseased cells effectively.

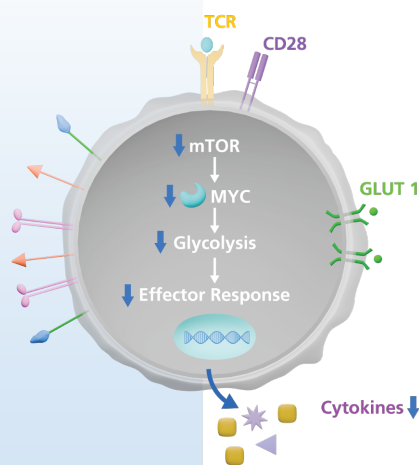


# How Tatmyctofusp Works: Reactivating T Cells from Exhaustion

## T CELL EXHAUSTION

### Persistent Antigen Exposure Suppresses T-Cell Metabolism

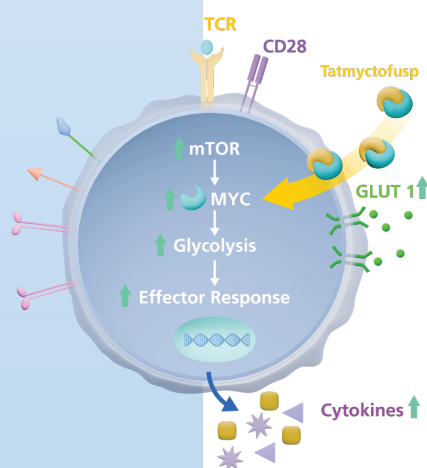
Chronic antigen stimulation causes T-cell exhaustion marked by increased PD-1/TIM-3/TIGIT expression. This checkpoint signalling suppresses AKT-mTOR-MYC pathways, reducing glycolysis and effector function.



## REPLENISHMENT OF MYC

### TREACTIVUS™ (Tatmyctofusp) Delivery & Bypass of Checkpoint Blockade

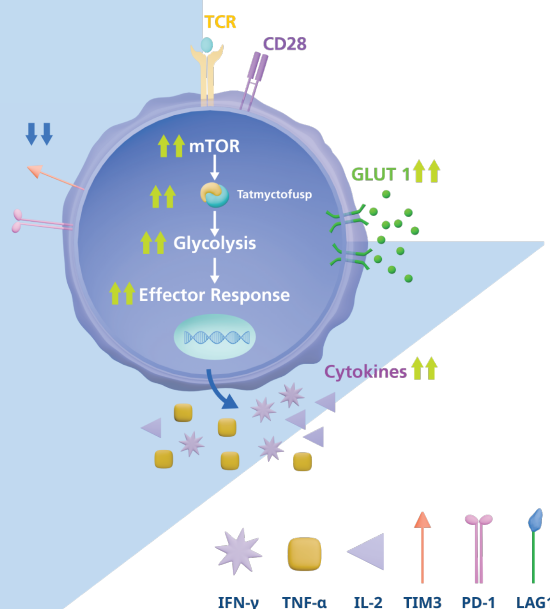
Tatmyctofusp penetrates the T cell and restores MYC-dependent transcriptional programs, reactivating glycolysis and biosynthetic pathways despite ongoing checkpoint inhibition.



## REVERSAL OF EXHAUSTION

### Metabolic Re-Engagement Reverses Exhaustion and Restores Function

Restored metabolic fitness drives a shift away from the exhausted phenotype, reducing inhibitory receptor expression and enhancing effector function and proliferation.



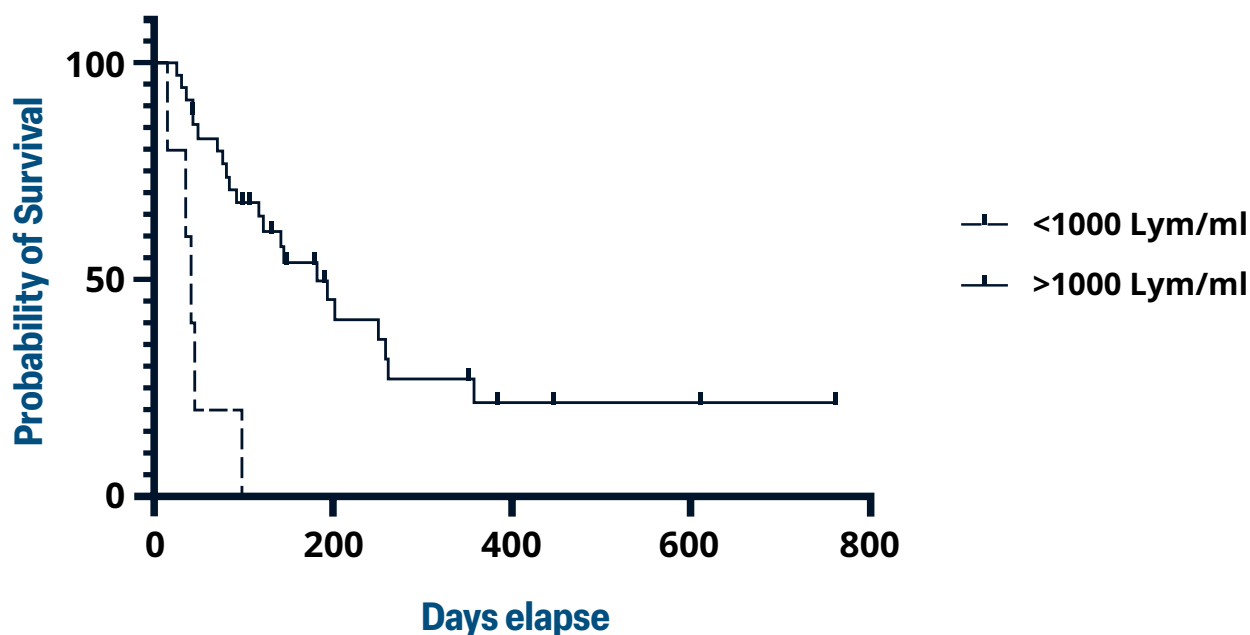


## Why Treactivus™

- **Tumor-agnostic & infection-agnostic** – Works across multiple cancer types and viral conditions.
- **Non-toxic alternative** – Unlike chemotherapy, it's designed to support natural immunity without harming healthy tissue.
- Empirically tested in dogs, cats and horses, with potential for llamas and camels under veterinary supervision



## Canine Survival



## Proven Results:

- **Improved Survival** – Dogs treated with Tatmyctofusp-activated immune cells lived significantly longer, with some surviving beyond 2 years ( $p < 0.0001$ ).
- **Broad Applicability** – Demonstrated benefits in oral melanoma, mast cell tumors, and breast tumors, with survival extending up to 1671 days in real-world cases.

## Tatmyctofusp Immunotherapy vs. Chemotherapy for FeLV+ Cat with Lymphoma

Factor	Tatmyctofusp	Conventional Chemotherapy (e.g., CHOP)
Toxicity	Very low	High, esp. for FeLV+ or CKD-risk cats
Bone marrow suppression	Rare	Common, often dose-limiting
Immunostimulation	Boosts anti-tumor immunity	Suppresses immune system
FeLV synergy	Potential immune control of virus	May worsen immunosuppression
Renal risk	Minimal	Cyclophosphamide and dehydration burden kidneys
Tumor specificity	Immune-mediated	Cytotoxic to all dividing cells

### Clinical Use and Administration

Treactivus™ has demonstrated a favorable safety profile in early studies. A standard course consists of 6 subcutaneous injections. Patients are treated once a week for the first four weeks, followed by every two weeks for an additional four weeks. Animals are eligible for treatment only if their total lymphocyte count is at least 1,000 cells/ml. The overall duration depends on the clinical condition—some pets benefit from a single course, while others may require repeated courses.

### Dosing by Body Weight:



Animals weighing less than **10 kg** receive **25 µg per dose**.

The 25 µg dose is supplied in a 100 µg cryovial (4 doses per vial)



Animals weighing **10–25 kg** receive **50 µg per dose**.

The 50 µg dose is supplied in a 200 µg cryovial (4 doses per vial)



Animals weighing more than **25 kg** receive **100 µg per dose**.

The 100 µg dose is supplied in a 400 µg cryovial (4 doses per vial)





## Safety & Monitoring

Treactivus™ is generally well-tolerated when administered under veterinary supervision.

Animals should be monitored for at least one-hour post-injection for changes in blood pressure, breathing, temperature, balance, or local reactions. Mild local reactions or temporary immune changes may occur; immunological profiling before each dose is recommended to ensure safety and optimize response.

## Preparation and Handling

Vials are stored at  $-20^{\circ}\text{C}$  and thawed carefully at room temperature or in hand (without shaking). Once thawed and drawn into a syringe, vials may be re-sealed and stored at  $2-8^{\circ}\text{C}$  for up to 14 days. A single vial may be used for multiple patients, provided aseptic technique is maintained.

## Why Vets Choose Treactivus™

Expands the treatment toolbox beyond surgery, chemo, and radiation.

Provides a versatile option for difficult or relapsed cases.

Draws on science and serves practical veterinary requirements.

Offers subcutaneous administration that minimizes stress and enables easy use.





*Cancer is complex, and we quickly saw that standard treatments such as chemotherapy can have real limits and long-term negative effects. Effective treatments should aim to stay ahead of the disease, and we believe Treactivus supports that approach. Treactivus™ is worth considering as a first point of call and not as a salvage therapy.*

- Eggo's Owner



#### **Eggo Omelette**

Akita Inu

10 December 2017 – 1 June 2025

Stage 5 B-Cell Lymphoma

## **Success Stories/Case study**

Eggo's story with Treactivus™

- Eggo was diagnosed with lymphoma in April 2024. She initially responded well to chemotherapy and went into remission. However, in December 2024, she relapsed, and her lymph nodes grew rapidly. A second course of chemotherapy was less effective in controlling the disease.
- Her owners then tried Treactivus™, which led to a notable reduction in her lymph nodes. Unfortunately, around the same time, Eggo was suspected of developing an infection in her spleen. By June 2025, imaging revealed fluid accumulation in her lungs. She ultimately passed away from cardiac arrest caused by pneumonia.
- The veterinarian suspected that prior chemotherapy had compromised Eggo's bone marrow, limiting her ability to produce enough red blood cells, platelets and neutrophils to fight the infection in her spleen, which likely contributed to the development of pneumonia



**Treactivus™ empowers the animal's own immune system — bringing hope where standard treatments fall short.**





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