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The Silent Diagnosis Identifying and Managing Feline HCM

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HCM THREATENS 1 IN 7 CATS^{1,2}

SCREEN CATS AND FIGHT BACK

Felycin®-CA1 (sirolimus delayed-release tablets) is the first and only disease-modifying drug conditionally approved by the FDA to effectively manage ventricular hypertrophy in cats with subclinical hypertrophic cardiomyopathy (HCM). Early detection is what gives these cats a fighting chance.



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See full prescribing information in this
publication for additional information.

¹ Fuentes VL, Abbott J, Chetboul V, et al. ACVIM consensus statement guidelines for the classification, diagnosis, and management of cardiomyopathies in cats. *JVIM* 2020;34:1062-1077.

² Kittleson MD, Cote E. The feline cardiomyopathies: Hypertrophic cardiomyopathy. *JFMS* 2021;23:1028-1051.

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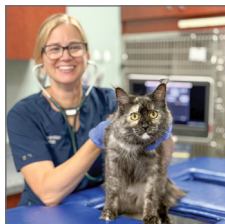
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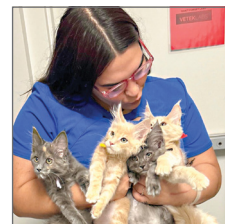
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Cats get a paw up on **HEART DISEASE**

By Kim Campbell Thornton

In a twist, a version of a medication in clinical trials to extend the healthy lifespan of dogs was conditionally approved in March 2025 by the U. S. Food and Drug Administration (FDA)¹ to treat hypertrophic cardiomyopathy (HCM) in cats. It is expected to be available this summer for veterinarians to manage the disease, which affects one in seven cats, or about 15 percent.

At the Feline Cardiology Symposium in April 2025, presented by EveryCat Health Foundation (EHF) and North Carolina State College of Veterinary Medicine, veterinarians, veterinary technicians, and cat owners gathered to hear a dozen speakers on the future of feline cardiology, ranging from screening and diagnostics to therapies for feline arterial thromboembolism to nutrition, as well as topics for pet owners, such as recognizing respiratory distress, managing constipation and navigating end-of-life decisions. Here are some of the main takeaways for primary care veterinarians.

Medication news

Veterinarians and cat owners will rejoice that the new medication, Felycin®-CA1 (sirolimus delayed-release tablets) (the CA1 stands for conditional approval), requires only weekly dosing. That eases the burden on both patient and pet parent, says Brian J. Peters, DVM, owner of Petology Animal Hospital in Naples, Fla., and a member of the EHF education committee.

Historically, HCM has had few treatment options. It often goes undiagnosed, with the first sign being sudden death. Barriers to treatment of HCM include owners' financial constraints to pursue cardiology referral and the limited availability of board-certified cardiologists—fewer than 500—in the U. S., according to Dr. Peters.

“We will now have a therapy available that may minimize the risk of the catastrophic and fatal complications of this disease process,” he says.

While it is not yet being used in cats, a new drug in the human market, aficamten,² reduces cardiac contractility and may one day help cats with HCM.

How the drug was developed

A formulation of rapamycin—a naturally occurring compound that has been used to help prevent organ transplant rejection, among other things—is the basis of Felycin®-CA1 (sirolimus delayed-release tablets), studied in a randomized double-blind clinical trial³ directed by Joshua A. Stern, DVM, PhD, ACVIM (Cardiology) carried out at University of California (UC), Davis, and North Carolina State University (NCSU), where Stern is currently associate dean.

The study showed that in cats diagnosed with HCM, hypertrophy slowed. Rapamycin affects pathways involving protein synthesis, muscle development, and cellular turnover. The compound has been looked at in diseases that resemble HCM, including mouse studies showing that rapamycin prevents the heart muscle from thickening or reverses thickening over time, Dr. Stern says in his lecture on the future of HCM therapy.

“Lots and lots of evidence in the literature pointed in this direction,” Stern says. “The data was there, just waiting for us to look at it and connect the dots.”

The 43 cats enrolled in the study had subclinical HCM. They received the drug or a placebo once a week and underwent three cardiac ultrasounds over a six-month period.

“Thank goodness we had some compliant cats,” Stern says.

One important question was whether rapamycin could be used safely



Ideally, echocardiography is performed by board-certified veterinary cardiologists in unsedated cats in quiet conditions, and cats should be handled with minimal restraint. Adequate echocardiographic images are most commonly performed in lateral recumbency.

in cats. Because it is typically used in humans at much higher doses to prevent organ transplant rejection, there was concern that it might negatively affect immune function.

“We didn’t see any evidence of that,” Stern says. “We’re using a lower dose at a very infrequent schedule, so we didn’t see any safety concerns in terms of bone marrow suppression or immune suppression. We didn’t see any GI side effects.”

Cats that received the placebo worsened over time. One developed a urethral obstruction.

In older cats with heart murmurs, gallop sounds, or arrhythmias, it is recommended to check serum T4 concentration and blood pressure.



Cats that received the study drug experienced no disease progression or a reduction in thickness of the heart wall, even at a low dose.

“That’s the best news,” Stern says. “It’s the lowest dose we can give once a week that we are going to be using.”

Blood clots are a problem in cats with HCM, but tissue testing of the drug found it had positive impacts on complement and coagulation cascades. Research teams continue to study this drug effect.

That does not mean there were no adverse events. One cat that was pre-diabetic developed diabetic ketoacidosis and died, so rapamycin is not an option for cats at risk of diabetes or those that are already diabetic. Two cats, despite receiving the drug, progressed to left-sided congestive heart failure, and one experienced sudden death after syncope/seizure.

Currently, researchers are seeking cats with subclinical HCM to be enrolled in the HALT Study,⁴ which aims to continue over a longer period to study the effectiveness of delayed-release rapamycin in managing ventricular hypertrophy in cats with subclinical HCM. This study is also randomized and double-blinded. Cats can be enrolled at one of approximately 22 sites across the country.

“These cats will get a lot of free monitoring and help us understand how this drug is working in this longer study period,” Stern says.

Screening and diagnostics

It is important to identify cats at risk early on. While most cats with HCM are non-pedigreed males, any cat—especially cats six to eight years old or older—can develop it, and certain breeds are predisposed. These include Maine coons, ragdolls, British shorthairs, Persians, Bengals, sphynx, Norwegian forest cats, and Birmans. Genetic testing is available for Maine coons and ragdolls.

In these breeds, screening can influence breeding practices.

“If we are better able to understand the underlying pathophysiology or genetics of this disease in a larger population of cats, we might be better able to prevent passing on these genetic mutations to future offspring,” says Joanna Kaplan, DVM, DACVIM (Cardiology), who spoke on screening for feline heart disease.

For any cat, though, early detection and monitoring are important. Dr. Kaplan says, “In the ideal world, we would be able to catch this disease early before a cat develops any signs or symptoms and be able to intervene early. For a long time, we haven’t had excellent options to intervene in the preclinical setting. This may change with the new delayed-release formulation of rapamycin by Trivium. However, the

pathophysiology of HCM is complex and not necessarily the same in all cats. Therefore, there is still much to learn about how we might be able to intervene early to delay progression or onset of HCM.”

It is also important to rule out secondary conditions that can mimic HCM, as treating these may lead to partial or complete reversal of left ventricular hypertrophy, Dr. Kaplan says. The two most common secondary causes include systemic hypertension and hyperthyroidism, but other underlying causes to consider, depending on the clinical picture, include reduced preload in a severely dehydrated cat, transient myocardial thickening, acromegaly, or neoplastic infiltration.

For instance, Kaplan says, “If you have a severely dehydrated cat, the walls might look thicker and the heart chamber sizes small. If you give fluids to that cat, then those left ventricular walls might measure normal again.”

Another example is a more recently recognized phenomenon: transient myocardial thickening. This may be seen more commonly in younger cats who have experienced a sudden stressful event, such as construction in the home or a big party with many guests. Typically, the cat presents with respiratory distress and is diagnosed with and treated for heart failure. Over time, left ventricular wall thickness and left atrial size normalize and the situation resolves.

Unfortunately, lack of physical examination findings can make diagnosing HCM in the occult setting difficult. For example, up to 80 percent and 19 percent of cats with HCM may have a cardiac murmur or gallop sound on physical examination, respectively. However, a large proportion of cats with HCM have no auscultation abnormalities on physical exam, and these cats are more likely to be missed in the early stages of disease. In addition, murmurs can be dynamic and may not be present at all veterinary visits.

“They might have it on one day when they’re quite stressed and they might not have it on another day,” Kaplan says. “They might have it in a clinical setting but not at home.”

A murmur or gallop sound is not conclusive for HCM, and other conditions can cause a murmur, including congenital heart disease,

What else to know

Briefly, here are some additional takeaways from attendees and from the speaker’s lectures.

“Delve deep when asking clients what their cats eat. Ask about the specific brand, including flavor, and check that label for pulses such as peas, lentils, chickpeas, and beans, and a statement that it is complete and balanced. Measure the cat’s plasma and whole blood taurine, and supplement with taurine until you receive the results. If the diet is high in pulses, which can be in grain-free or grain-inclusive diets, or is deficient in some other way, have the owner switch it. Treat CHF and arrhythmias aggressively and monitor the cat frequently.”

— Lisa Freeman, DVM, PhD, DACVIM (Nutrition), professor and nutritionist, Cardiology Section, Tufts Cummings School of Veterinary Medicine, speaking on nutrition and feline cardiomyopathy

“Since HCM can present without external signs, cats aged nine years or older undergoing interventions that could possibly precipitate heart problems, such as anesthesia, treatment with IV fluids, or use of extended-release corticosteroids, should be screened.”

— Rebecca Bloch, DVM, MPH, DACVPM, Postdoctoral Research Associate, Department of Population Health and Pathobiology, NCSU CVM, Raleigh, N.C.

“Nutrition is critical for the management of different disease states. We have to preserve the cat’s quality of life while remembering the cat is a cat and being mindful of preferences they have, in terms of texture specifically. Above all, we have to make sure it’s a diet the cat will eat.”

—Katie Tolbert, DVM, PhD, DACVIM (Nutrition), Associate Professor, Gastrointestinal Laboratory, Small Animal Clinical Sciences, Texas A&M University

“Although HCM can be a fatal disease for cats, up to 70 percent of cats with subclinical disease die from something other than cardiac disease. For cats in whom HCM is identified early, there are interventions that can improve the chances of living a healthy life.”

—Dr. Rebecca Bloch

A cardiac ultrasound or echocardiogram is the most accurate means of diagnosing hypertrophic cardiomyopathy and determining prognosis in cats.

severe anemia, and hyperthyroidism. Regardless, Kaplan recommends an echocardiogram in any cat with a cardiac murmur, gallop sound, or arrhythmia detected on physical examination.

The American College of Veterinary Internal Medicine (ACVIM) has consensus statement guidelines⁵ for diagnosis, classification, and management of cardiomyopathies in cats. Establishing a diagnosis can call for the following:

- History and physical exam
- Echocardiogram
- Total T4 for cats older than six years
- Doppler BP
- Point of care ultrasound
- Genetic testing for Maine coon and ragdoll cats
- NTproBNP (blood biomarker)
- cTnl
- ECG
- Thoracic radiographs

More details are available in the ACVIM guidelines. The ability to predict HCM is still in the future, but the ability to do so could permit disease-modifying therapies to be started earlier and improve understanding of factors driving disease penetrance and progression, says Jose Novo Matos, DVM, PhD, DECVIM (Cardiology),

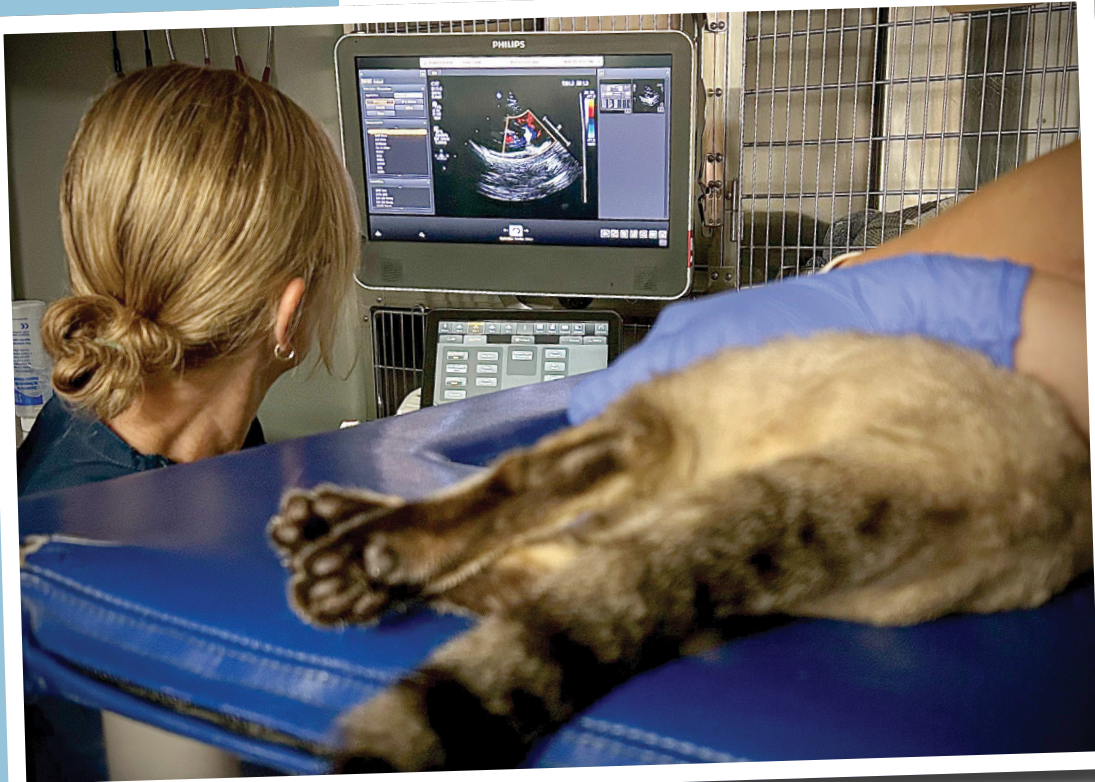
professor and head of cardiology at University of Cambridge, in his talk “HCM and Predicting the Future.”

“The holy grail is precision medicine where we can tailor treatment to individual cats, using different drugs or changing environment.” ●

Kim Campbell Thornton has been writing about dogs, cats, wildlife, and marine life since 1985, and is a recipient of multiple awards for her articles and books from the Cat Writers Association, Dog Writers Association of America, and American Society of Journalists and Authors.

REFERENCES

- ¹ <https://www.fda.gov/animal-veterinary/cvm-updates/fda-conditionally-approves-drug-management-ventricular-hypertrophy-cats>
- ² <https://www.nature.com/articles/s44161-024-00503-2>
- ³ <https://avmajournals.avma.org/view/journals/javma/261/11/javma.23.04.0187.xml>
- ⁴ <https://www.hcmincats.com/halt>
- ⁵ <https://onlinelibrary.wiley.com/doi/10.1111/jvim.15745>



5 STEPS FOR SCREENING HCM

felycin®-CA1
(sirolimus delayed-release tablets)

Feline hypertrophic cardiomyopathy (HCM) develops silently, with little to no warning—until it's too late to intervene. Proactive screening is the only way to catch it early enough to manage.

ALWAYS—EVERY CAT, EVERY VISIT

IF STEPS 1 & 2 INDICATE POTENTIAL HCM

01

Assess the patient for risk factors

Note if the patient is an older male of a predisposed breed. Ask about family history of HCM and heart disease.

NOTE: While breed and genetics play a role, any cat could develop HCM.

02

Look for cardiac irregularities

Check for a murmur, arrhythmia or gallop sound during the heart auscultation.

NOTE: Cardiac irregularities don't always indicate HCM, but they are worth investigating.

03

Conduct an NT-proBNP blood test and POCUS

Recommend running both for a fuller picture of a cat's heart health. NT-proBNP flags strain on the heart and a POCUS can detect left arterial enlargement (LAE).

04

Refer to cardiologist for echocardiogram

Considered the gold standard for HCM diagnosis, an echo can distinguish the disease from other cardiomyopathies.

NOTE: If not available, repeat POCUS every 6–12 months to determine if therapeutic intervention is needed.¹

05

Manage with Felycin®-CA1

(sirolimus delayed-release tablets)

Once-weekly Felycin-CA1 can help prevent and delay disease progression in cats diagnosed with subclinical HCM.

LEARN MORE ABOUT HCM AND FELYCIN-CA1 AT [FELYCIN.COM](https://www.felycin.com)

See full prescribing information in this publication for additional information.

¹Stern, Joshua A. "Step by Step: A Diagnostic Strategy for Identifying Feline Hypertrophic Cardiomyopathy." *Vetfolio*.

The 60-second

check that can
change outcomes
for HCM patients

By Heather Davis, DVM, PhD, DACVS-LA

Maine coons, ragdolls and Sphynxes are among the breeds with documented HCM predisposition, making their owners strong candidates for early home-monitoring conversations.

Hypertrophic cardiomyopathy (HCM) is the most common cardiovascular disease in domestic cats, affecting approximately one in seven, and it remains the leading cause of mortality in adult cats nine years of age and older.^{1,2} Despite its prevalence, HCM is notoriously difficult to identify in a clinical setting. Many affected cats remain subclinical for years, showing no outward signs of disease until they present acutely with congestive heart failure (CHF), arterial thromboembolism, or sudden cardiac death.³ For the practicing veterinarian, this clinical reality has historically presented a significant challenge: identifying cats at risk and monitoring them through a disease process that often progresses silently between visits.

Until recently, management of subclinical HCM centered on watchful waiting. Once a diagnosis was established via echocardiography, options were largely limited to periodic re-evaluation and client counseling. That landscape is beginning to change, and alongside emerging pharmacologic therapy, one of the most underutilized tools in feline cardiology is something a client can do at home in 60 seconds: sleeping respiratory rate (SRR) monitoring.

Why SRR matters

A healthy cat's SRR typically falls below 30 breaths per minute in the home environment, and published studies demonstrate cats with subclinical heart disease, including HCM, generally maintain stable values below that threshold.^{4,5} When SRR begins to rise persistently, it may signal developing pulmonary edema or pleural effusion before the cat exhibits overt clinical signs of respiratory distress.

The clinical value of home-based respiratory rate measurement lies in its ability to capture true baseline cardiopulmonary function. Respiratory rates recorded during in-clinic examinations are frequently elevated by transport, handling, and stress-associated sympathetic activity. SRR measurements taken while a cat is genuinely asleep in its home environment minimize these confounders and more accurately reflect the physiologic baseline.⁴

This principle has precedent in canine cardiology. In dogs with preclinical myxomatous mitral valve disease, rising resting respiratory rates have been shown to identify impending CHF days before overt respiratory distress develops.⁶ The same pathophysiologic principle applies in feline cardiac patients. A client who identifies a sustained increase in SRR and contacts the clinic during routine hours represents a fundamentally different clinical situation than an owner presenting to an emergency facility with a cat in acute respiratory crisis.

Integrating SRR monitoring into clinical practice

Timing of client education matters. The appointment at which an HCM diagnosis is first communicated is not the optimal time to introduce a detailed home-monitoring protocol; the client is still processing clinical information and grappling with prognostic uncertainty. A more effective approach is to introduce the concept briefly at diagnosis and reserve detailed instruction for the follow-up visit.

At the recheck appointment, teaching SRR monitoring requires approximately five minutes of clinical time. The cat must be genuinely asleep, not simply resting with eyes closed. Purring should disqualify the measurement, as it alters the respiratory pattern.⁵ Each complete chest rise and fall constitutes one breath. A 30-second count multiplied by two is sufficient, although a full 60-second measurement provides greater accuracy. Owners may elect to video-record the measurement for retrospective counting if preferred.

Establishing an individualized baseline is essential. Clients should be encouraged to collect two to three measurements per week during the first several weeks to define a cat-specific norm. While the published clinical threshold is 30 breaths per minute, an individual cat may routinely maintain 16 or 24 breaths per minute at baseline. Knowing that specific value makes subsequent deviation easier to identify.⁷

Clients should also be counseled that a single elevated reading does not constitute an emergency. Transient elevations may reflect light sleep, ambient temperature, or measurement error. Owners should confirm



Clients who feel included in monitoring are more likely to attend follow-up appointments and to contact the clinic early when trends change.

elevated values across two to three consecutive measurement sessions before contacting the clinic.^{6,7} However, a persistent SRR above 30 breaths per minute, or a sustained increase of 20 percent or more above a cat's established baseline, warrants timely veterinary assessment.

Changing the dynamic

Beyond its clinical utility, SRR monitoring meaningfully reshapes the relationship between the client and the veterinary care team. An HCM diagnosis can leave owners feeling helpless, as the disease is largely invisible between clinical visits, and long-term outcomes can be uncertain. Providing the client with a structured, low-burden home task gives them an active role in their cat's care and reinforces the collaborative nature of chronic disease management.

When an owner presents at a recheck appointment with documented SRR data, whether recorded in a notebook, a phone application, or a notes app, the clinical conversation shifts. The owner becomes a participant in monitoring rather than a passive recipient of information. Clients who feel included in monitoring are more likely to attend follow-up appointments and to contact the clinic early when trends change.

Data shared between visits, whether by phone, email, or practice portal, can also inform clinical decision-making without requiring an in-person evaluation for every concern. A gradual upward trend may prompt an expedited recheck, a medication adjustment, or reassurance that values remain within an acceptable range. This type of proactive, data-informed communication supports long-term client trust and is increasingly feasible within modern practice workflows.

An evolving therapeutic landscape

The case for structured home monitoring has only strengthened as the therapeutic landscape for feline HCM has begun to evolve. For decades, management of subclinical HCM was limited to monitoring and supportive care, as no pharmacologic intervention was approved to address the underlying disease process.⁸

That has changed. Research into the mammalian target of rapamycin (mTOR) pathway has identified a mechanism by which dysregulated cellular signaling drives pathologic ventricular hypertrophy, and clinical trial data have demonstrated that targeted mTOR inhibition can slow or halt the progression of left ventricular wall thickening in cats with subclinical HCM.^{9,10} The U.S. Food and Drug Administration (FDA) has granted conditional approval to Felycin®-CA1 (sirolimus delayed-release tablets), the first and only disease-modifying drug conditionally approved by the agency to manage HCM.¹¹ Currently, a large multicenter pivotal trial (HALT HCM) is currently underway to generate the data required to support its full approval.¹¹

As additional therapeutic options enter clinical practice, the rationale for structured home monitoring becomes more compelling. Cats receiving ongoing therapy require consistent follow-up to

assess response, and SRR monitoring provides an accessible, low-burden mechanism for owners to contribute clinical data between echocardiographic re-evaluations. A stable or declining trend may offer reassurance; a rising trend may warrant earlier assessment. In either case, the data is clinically actionable, and the owner generates it in the home environment at no cost.

Home monitoring also complements screening efforts in cat breeds with documented predisposition to HCM, including Maine coons, ragdolls, British shorthairs, Persians, and Sphynxes.^{1,2} There is no clinical reason SRR monitoring cannot be introduced to owners of at-risk breeds prior to a formal diagnosis, as part of routine wellness counseling. Broader adoption of the practice across the cat-owning population supports earlier detection of cardiac decompensation in cats whose baseline values begin to shift.

A foundational practice worth five minutes

Teaching a client to count their cat's sleeping breaths takes approximately five minutes of clinical time. The data yielded by that brief instruction can inform months of clinical decision-making, support earlier intervention, and strengthen the collaborative relationship that underpins effective chronic disease management. With new therapies entering the clinical toolkit, expanded screening recommendations, and pivotal trials underway, SRR monitoring is a foundational practice that costs nothing, carries no risk, and has the potential to meaningfully change outcomes for feline HCM patients.

The next time a client asks what can be done for their cat after an HCM diagnosis, the answer can begin with something simple and actionable: watching their cat sleep. ●

Heather Davis, DVM, PhD, DACVS-LA, is the senior director of Medical Affairs and Veterinary Services at Pegasus Laboratories/PRN Pharmacal, where she supports the development and clinical integration of innovative therapies for companion animals. She can be reached at hdavis@pegasuslabs.com.

REFERENCES

- ¹ Payne JR, Brodbelt DC, Luis Fuentes V. Cardiomyopathy prevalence in 780 apparently healthy cats in rehoming centres (the CatScan study). *J Vet Cardiol*. 2015;17(Suppl 1):S244-S257.
- ² Kittleson MD, Meurs KM, Harris SP. The genetic basis of hypertrophic cardiomyopathy in cats and humans. *J Vet Cardiol*. 2015;17(Suppl 1):S53-S73.
- ³ Fox PR, Keene BW, Lamb K, et al. International collaborative study to assess cardiovascular risk and evaluate long-term health in cats with preclinical hypertrophic cardiomyopathy and apparently healthy cats: The REVEAL Study. *J Vet Intern Med*. 2018;32(3):930-943.
- ⁴ Ljungvall I, Rishniw M, Porciello F, Häggström J, Ohad D. Sleeping and resting respiratory rates in healthy adult cats and cats with subclinical heart disease. *J Feline Med Surg*. 2014;16(4):281-290.
- ⁵ Porciello F, Rishniw M, Ljungvall I, et al. Sleeping and resting respiratory rates in dogs and cats with medically-controlled left-sided congestive heart failure. *Vet J*. 2016;207:164-168.
- ⁶ Ohad DG, Rishniw M, Ljungvall I, Porciello F, Häggström J. Sleeping and resting respiratory rates in dogs with subclinical heart disease. *J Am Vet Med Assoc*. 2013;243(6):839-843.
- ⁷ VCA Animal Hospitals. Home breathing rate evaluation. Accessed April 2026. <https://vcahospitals.com/know-your-pet/home-breathing-rate-evaluation>
- ⁸ U.S. Food and Drug Administration. FDA conditionally approves drug for management of ventricular hypertrophy in cats. March 14, 2025. Accessed April 2026. <https://www.fda.gov/animal-veterinary/cvm-updates/fda-conditionally-approves-drug-management-ventricular-hypertrophy-cats>
- ⁹ Kaplan JL, Rivas VN, Walker AL, et al. Delayed-release rapamycin halts progression of left ventricular hypertrophy in subclinical feline hypertrophic cardiomyopathy: results of the RAPACAT trial. *J Am Vet Med Assoc*. 2023;261(11):1628-1637.
- ¹⁰ Stern JA, et al. Multi-omic, histopathologic, and clinicopathologic effects of once-weekly oral rapamycin in a naturally occurring feline model of hypertrophic cardiomyopathy: a pilot study. *Animals*. 2023;13(19):3014.
- ¹¹ TriviumVet. TriviumVet secures FDA conditional approval for first treatment for feline cardiac disease. March 2025. Accessed April 2026.

THE CONVERSATION THAT COMES AFTER AN HCM DIAGNOSIS

felycin®-CA1
(sirolimus delayed-release tablets)

The right words build trust, bring cat owners back, and make your practice the one that manages hypertrophic cardiomyopathy (HCM)—not just the one that hands it off.

Deliver the news with compassion

Most cat owners will hear “heart disease” and jump straight to the worst case, so don’t leave them alone with that thought. Make sure they know that bringing their cat in was the best thing they could have done.

Example

So all of the tests confirm that *[cat’s name]* has HCM. I know that’s hard to hear, but bringing them in was exactly the right call, and it means we can start a management plan.

Talk honestly about prognosis

Prognosis conversations require both honesty and reassurance. Acknowledge the seriousness of the disease and leave clients with a realistic but hopeful path forward, not just a diagnosis.

Example

This is something *[cat’s name]* will have for the rest of their life, and it’s important to know HCM can be serious in some cases. The good news is, when diagnosed at the subclinical stage, there is medication that can help slow disease progression.

Make it a plan, not just a diagnosis

Screening finds HCM. This conversation is what turns that finding into a plan that can offer hope, and for subclinical cats, Felycin®-CA1 (sirolimus delayed-release tablets) is now part of that plan.

Example

Because we caught HCM early and *[cat’s name]* is otherwise healthy, they are a candidate for Felycin-CA1. It’s a once-weekly tablet designed to manage the disease. It’s not a cure, but when paired with routine checks and at-home monitoring, you can feel confident you are being as proactive as you can be to give *[cat’s name]* the best chance of survival.

FOR TOOLS TO TALK WITH CAT OWNERS ABOUT HCM, VISIT [FELYCIN.COM/RESOURCES](https://felycin.com/resources)

See full prescribing information in this publication for additional information.



Courtesy Abby Merket

Why vet techs are critical to feline HCM care

How team-based care can help bridge the gap between early detection and long-term management in feline heart disease.

By Kelsey Marriott, BS, AAS, CVT

A seemingly healthy cat presents for a routine visit; within days, it is in respiratory distress. For many feline patients with hypertrophic cardiomyopathy (HCM), this scenario is not uncommon. Often described as a “silent disease,” HCM can progress unnoticed until a critical event occurs. By the time clinical signs become obvious, many patients are already in congestive heart failure (CHF) or have developed an arterial thromboembolism.¹

In these cases, early recognition and long-term management rely on more than diagnostics alone. They depend on careful observation, clear communication, and consistency. Veterinary technicians are central to this process, helping identify subtle changes, support diagnostics, and guide clients through care at home, while also contributing to a collaborative, team-based approach to patient care.

Understanding feline HCM

Feline HCM is the most commonly diagnosed cardiac disease in cats, affecting an estimated 10 to 15 percent of the population.² In affected cats, the left ventricular walls thicken over time, making the heart muscle less flexible and reducing its ability to relax and fill effectively between beats (Figure 1).³ Although systolic function may appear normal or even increased, reduced filling leads to rising pressures and a greater risk of fluid accumulation in or around the lungs.⁴



Abby Merket of Dr. Kelly's Surgical Unit in Queen Creek, Ariz., showcases skilled, hands-on patient care while managing multiple feline companions with confidence and compassion, highlighting the heart, adaptability, and excellence behind every veterinary professional.

Some cats develop a more complex form of the disease, hypertrophic obstructive cardiomyopathy (HOCM), where blood flow leaving the heart becomes partially restricted. This often occurs when the mitral valve moves abnormally during contraction and interferes with the outflow tract, disrupting normal circulation and, in some cases, contributing to valve leakage.⁵ These patients can be particularly sensitive to stress, making low-stress handling and thoughtful restraint essential during evaluation and treatment.⁵

Early detection: The technician's role

One of the most significant challenges of feline HCM is its silent progression, as many cats may appear completely normal for years despite having advanced underlying disease. Clients may report slightly faster breathing at rest, decreased activity, or occasional panting after exertion.

These subtle details are easy to overlook in a busy practice, yet they may be early indicators of cardiac disease. Early identification is especially important because Felcyn®-CA1 (sirolimus delayed-release tablets) can help manage HCM when it is detected in the subclinical stage, before more obvious clinical signs develop. Recognizing these early changes may therefore create an opportunity to intervene sooner and help support a cat's cardiac health.

Technicians are often the first to recognize these patterns. During intake and patient assessment, they frequently gather the most detailed histories and spend the most time observing the patient. Small findings, such as a mildly elevated resting respiratory rate or a change in demeanor, may prompt further investigation and lead to earlier diagnosis, ultimately supporting better outcomes for the entire care team.

Diagnostics and clinical support

Diagnostics are essential for confirming disease, but how they are performed can significantly influence outcomes. Technicians play a key role in ensuring diagnostics are performed efficiently and with minimal stress on the patient. In acute respiratory cases, quickly distinguishing between cardiac and noncardiac causes of distress is especially important.⁶

Cardiac biomarkers, such as NT-proBNP, have become valuable tools in this setting. This biomarker is released when the heart muscle is under stress, helping to identify patients more likely to have underlying heart disease.⁶ Consider using a rapid test that allows for a 10-minute, cage-side assessment, supporting timely clinical decision-making.⁷ From sample handling to test execution and communication of results, technicians are integral to making this tool effective in practice.⁶

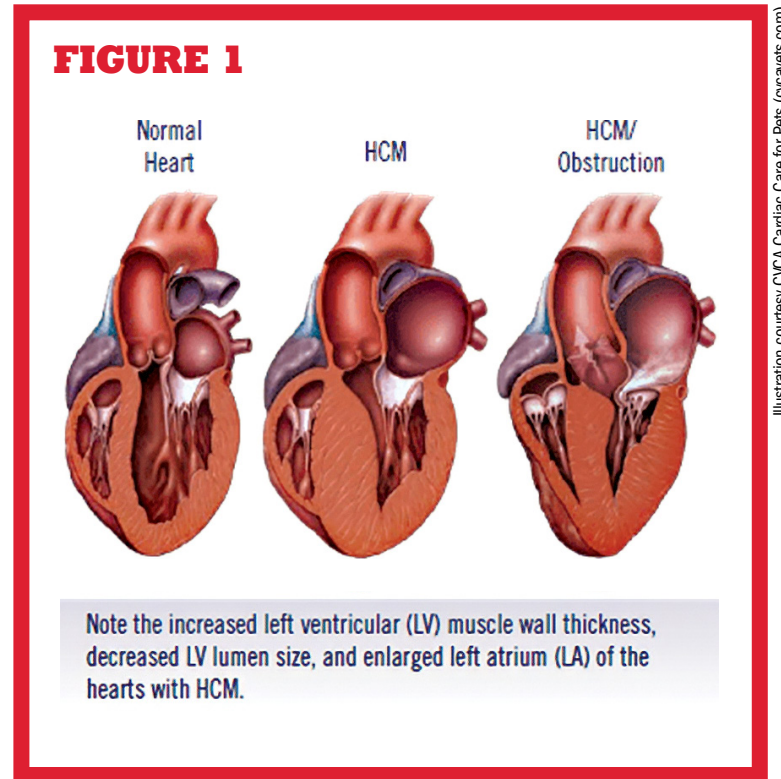
Thoracic radiographs remain a key tool for identifying fluid in or around the lungs associated with CHF, while systemic blood pressure measurement helps rule out hypertension as a contributing factor.⁴ Echocardiography remains the gold standard for diagnosis, providing direct visualization of cardiac structure and function, including wall thickness, atrial size, and outflow obstruction.² Throughout these procedures, technicians help maintain patient stability, minimize stress, and support the accuracy of results.

Client education and long-term management

While diagnostics are critical, some of the most meaningful impacts occur beyond the clinic. Veterinary technicians play a vital role in translating complex disease processes into practical, actionable guidance for clients.

One of the most effective tools for monitoring feline cardiac patients is resting respiratory rate (RRR). Teaching clients to measure and track this parameter is a simple, effective way to detect early signs of CHF.¹ Clients should be instructed to count breaths while the cat is resting or sleeping, with normal values typically under 30 breaths per minute.¹ More importantly, they should be encouraged to track trends over time, as gradual increases often signal early decompensation.¹

Medication management is another area where technician support is essential. Cats with HCM are often prescribed medications such as furosemide to manage fluid accumulation and clopidogrel to reduce the risk of thromboembolism.⁸ These treatment plans can feel overwhelming, particularly when long-term management is required. Technicians help bridge this gap by demonstrating administration



Comparison of a normal feline heart and hearts affected by hypertrophic cardiomyopathy (HCM), demonstrating progressive left ventricular wall thickening, reduced chamber volume, and left atrial enlargement.

techniques, reinforcing compliance, and building client confidence in managing care at home.⁸

Nutritional support plays a key role in long-term management. Patients with chronic heart disease may develop cardiac cachexia, characterized by muscle loss and weight decline, which can negatively impact overall outcomes.⁹ Technicians are essential in guiding clients on appropriate nutrition and limiting excess sodium, helping to support both quality of life and effective disease management.⁹



Nyssa Montoya, CVT, provides calm, compassionate pre-surgical care as she prepares her feline patient for a safe procedure.

Team-based care

Despite advances in diagnostics and management, feline HCM remains unpredictable, and not all patients respond consistently to treatment. This variability highlights the importance of ongoing monitoring, client education, and individualized care plans.

Feline HCM is often described as a silent disease, but it requires active awareness and engagement from the entire veterinary team. Veterinary technicians are uniquely positioned to influence patient outcomes through early recognition, thoughtful handling, and effective client communication.

As veterinary medicine continues to advance, optimizing outcomes in feline cardiac disease will depend not only on diagnostics but also on how effectively veterinary teams leverage technicians' skills for early detection, client education, and long-term management. ●

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REFERENCES

- ¹ Rishniw M. Hypertrophic cardiomyopathy in cats. Veterinary Partner. 2026.
- ² Cornell University College of Veterinary Medicine. Hypertrophic cardiomyopathy. 2025.
- ³ Kittleson MD. Feline hypertrophic cardiomyopathy: Getting into the thick of it. WSAVA Proceedings. 2014.
- ⁴ Weir M, Ward E. Cardiomyopathy in cats. VCA Animal Hospitals. 2025.
- ⁵ NC State University. Cardiology: Feline hypertrophic cardiomyopathy. 2026.
- ⁶ Peyron C, Bernardin F. Cardiac biomarkers in the cat. Royal Canin Academy.
- ⁷ IDEXX Laboratories. SNAP feline proBNP update. 2019.
- ⁸ Dale S. Feline hypertrophic cardiomyopathy. NAVTA. 2026.
- ⁹ Burns KM. Feline hypertrophic cardiomyopathy and the role of nutrition. Today's Veterinary Nurse. 2022.

felycin®-CA1
(sirolimus delayed-release tablets)

Cardiac drug for oral use in cats only

Conditionally approved by FDA pending a full demonstration of effectiveness under application number 141-604.

It is a violation of Federal law to use this product other than as directed in the labeling.

CAUTION: Federal law restricts this drug to use by or on the order of a licensed veterinarian.

DESCRIPTION:
FELYCIN®-CA1 (sirolimus delayed-release tablets) contains the active ingredient sirolimus. FELYCIN®-CA1 is available in 0.4 mg, 1.2 mg, and 2.4 mg tablet strengths. FELYCIN®-CA1 are enteric film-coated biconvex tablets, plain on both sides. The 0.4 mg tablet is orange, the 1.2 mg tablet is blue, and the 2.4 mg tablet is white.

INDICATION:
FELYCIN®-CA1 (sirolimus delayed-release tablets) is indicated for the management of ventricular hypertrophy in cats with subclinical hypertrophic cardiomyopathy (HCM).

Subclinical HCM refers to cats with left ventricular (LV) hypertrophy (LV wall thickness of ≥6 mm at end diastole by 2D or M-mode assessment) in the absence of systemic hypertension, other causes of compensatory myocardial hypertrophy, current or historic symptoms of congestive heart failure, arterial thromboembolism, and severe LV outflow tract obstruction.

DOSAGE AND ADMINISTRATION:
Administer FELYCIN®-CA1 at a target dosage of 0.3 mg/kg orally once weekly (see Table 1).

FELYCIN®-CA1 should be swallowed whole and not chewed. Do not split or crush tablets.

FELYCIN®-CA1 should be administered in conjunction with a meal.

Table 1. Dosing table (0.3 mg/kg once per week)

Body Weight (kg)	Number of Tablets		
	0.4 mg	1.2 mg	2.4 mg
2.5 – 3.2	2	0	0
3.3 – 4.8	0	1	0
4.9 – 6.4	1	1	0
6.5 – 9.6	0	0	1
>9.6	0	1	1

Due to the available tablet strengths, cats weighing less than 2.5 kg cannot be accurately dosed.

CONTRAINDICATIONS:
Do not use FELYCIN®-CA1 in cats with diabetes mellitus. Discontinue immediately if a cat receiving FELYCIN®-CA1 is diagnosed with diabetes mellitus. The administration of FELYCIN®-CA1 to a cat that developed diabetes mellitus was associated with the development of diabetic ketoacidosis and death (see **Adverse Reactions**).

Do not administer FELYCIN®-CA1 in cats with pre-existing liver disease (see **Adverse Reactions, Precautions, and Target Animal Safety**).

WARNINGS:
User Safety Warnings: Not for use in humans. Keep out of reach of children. Contact a physician in case of accidental ingestion by humans.

Accidental Ingestion of FELYCIN®-CA1:
In case of accidental ingestion seek medical advice immediately and show the package insert or the label to the physician.

Sirolimus can cause a range of adverse effects including fever, hypertension, headache, and adverse gastrointestinal effects.

Drug Handling and Administration:
Pregnant and breastfeeding women should avoid contact with FELYCIN®-CA1. People with known hypersensitivity to sirolimus should administer FELYCIN®-CA1 with caution. Always store tablets in the original packaging and only remove the required number of tablets from the blister at the time of dosing.

Ensure that any tablets that are not swallowed by the cat are disposed of immediately.

Avoid direct contact with vomit, saliva, and tablet remnants. When cleaning up vomit, saliva, or tablet remnants, wear gloves and wash hands afterwards.

During normal handling of FELYCIN®-CA1, the coating on the tablets will prevent contact with the active ingredient, sirolimus. However, if the coating is broken down through ingestion or vomiting by the cat, exposure to sirolimus can occur.

To obtain a copy of the Safety Data Sheet (SDS), contact PRN Pharmacal at 1-800-874-9764.

Animal Safety Warnings:
Sirolimus is a known substrate for cytochrome P-450 3A4 (CYP3A4) and P-glycoprotein (P-gp) in humans. Administration of FELYCIN®-CA1 with drugs that inhibit CYP 3A4 or P-gp, such as calcium channel blockers, amiodarone, azoles (e.g., ketoconazole), or cyclosporine, may increase risk for toxicity. Use caution when administering FELYCIN®-CA1 in cats with the MDRI mutation or when administering

concomitantly with another P-gp substrate (e.g., epinormectin and emodepside). Treatment with FELYCIN®-CA1 could impact the cat's ability to mount an adequate immune response to vaccinations.

Concurrent administration of FELYCIN®-CA1 did not impact the cat's ability to mount an adequate immune response to a killed rabies vaccine (see **Clinical Pharmacology** and **Target Animal Safety**). The impact of concurrent administration of FELYCIN®-CA1 on vaccination for FHV-1, FCV, FPV, and FeLV has not been evaluated.

Keep FELYCIN®-CA1 in a secure location out of reach of dogs, cats, and other animals to prevent accidental ingestion or overdose.

PRECAUTIONS:
For use only in otherwise healthy cats with subclinical HCM in the absence of other causes of compensatory myocardial hypertrophy (e.g., systemic hypertension), current or historic symptoms of congestive heart failure, arterial thromboembolism, and severe LV outflow tract obstruction.

A diagnosis of subclinical HCM should be made by means of a comprehensive physical examination including blood pressure measurement to rule out systemic hypertension, and cardiac examination which should include echocardiography to confirm the presence of LV hypertrophy and radiography to rule out congestive heart failure.

Echocardiographic examination is recommended in all cases to diagnose subclinical HCM. A diagnosis of subclinical HCM is based on an end-diastolic left ventricular wall thickness of ≥6 mm measured by 2D or M-mode assessment.

Sirolimus undergoes extensive hepatic metabolism in humans. Prior to initiation of treatment with FELYCIN®-CA1, a comprehensive physical examination and screening bloodwork including a serum biochemical profile should be conducted to rule out pre-existing liver dysfunction.

Treatment with FELYCIN®-CA1 has been associated with the elevation of the transaminase enzymes, which include alanine aminotransferase (ALT) and aspartate aminotransferase (AST).

Bloodwork should be repeated 1 to 2 months following initiation of treatment, and every 6 to 12 months thereafter. If mild transaminase elevations are observed (up to 2X the upper limit of normal (ULN)), bloodwork should be repeated in 2 months. If these values remain elevated, discontinue treatment with FELYCIN®-CA1.

Discontinue treatment with FELYCIN®-CA1 if transaminase values exceed 2X the upper limit of normal (ULN), if other liver enzymes besides ALT or AST are elevated, or if clinical signs of liver dysfunction are noted.

Available information does not indicate that FELYCIN®-CA1 is immunosuppressive at the doses administered. The use of FELYCIN®-CA1 in cats with chronic viral diseases like feline viral rhinotracheitis has not been evaluated.

The safety and effectiveness of FELYCIN®-CA1 has not been evaluated in cats with other cardiomyopathy phenotypes.

The safety and effectiveness of FELYCIN®-CA1 has not been evaluated in cats receiving beta blockers or corticosteroids.

The safety and effectiveness of FELYCIN®-CA1 has not been evaluated in cats with chronic kidney disease, hyperthyroidism, or other significant systemic disease.

The effectiveness of FELYCIN®-CA1 has not been evaluated in sexually intact cats. Therefore, FELYCIN®-CA1 should not be used in animals intended for breeding.

ADVERSE REACTIONS:
In a well-controlled pilot field study, 43 cats with subclinical HCM were administered either the label dose of FELYCIN®-CA1 (0.3 mg/kg once weekly; n=15), twice the label dose (0.6 mg/kg once weekly; n=15), or a placebo control tablet (n=13). Cats were followed for 180 days or until removal from the study (see **Reasonable Expectation of Effectiveness**).

Cardiac: The most frequently observed adverse reactions in cats treated with FELYCIN®-CA1 were cardiovascular in nature, relating to the progression of HCM, and included arrhythmia, congestive heart failure, syncope, and pericardial effusion.

Three of the cats receiving twice the label dose of FELYCIN®-CA1 (0.6 mg/kg) progressed to congestive heart failure or sudden death. Two of these cats had severe pre-existing structural disease. The third cat did not have severe structural disease at enrollment but had markedly elevated serum N-terminal pro-brain natriuretic peptide (NT-proBNP) at enrollment (1344 pmol/L, normal <100 pmol/L), which can indicate an increased risk of disease progression. The relationship to treatment with FELYCIN®-CA1 is unknown due to the small sample size of this study and the variable disease progression of HCM.

Non-Cardiac: Other adverse reactions observed in cats treated with FELYCIN®-CA1 were lethargy, vomiting, diarrhea, and inappetence.

Diabetes Mellitus: One cat receiving the label dose (0.3 mg/kg) of FELYCIN®-CA1 developed diabetes mellitus during the study, manifesting as hypercholesterolemia, hyperglycemia, and glucosuria with prior evidence of urinary tract infection at scheduled visits. Treatment for diabetes was not initiated and the cat continued on the study. Subsequently, the cat presented in diabetic ketoacidosis, and despite intensive medical management, the cat died of acute cardiac arrest.

Pre-Existing Liver Disease: In a separate pilot field study conducted in cats with chronic kidney disease (CKD), one cat was enrolled with a history of elevated alkaline phosphatase (ALP). After treatment with the label dose (0.3 mg/kg) of FELYCIN®-CA1, this cat experienced a progressive decline in appetite, elevation of liver enzymes, including ALP, ALT, and AST, and icterus, and was euthanized approximately 4 months after exiting the study.

CONTACT INFORMATION:

To report suspected adverse drug experiences or for technical assistance contact PRN Pharmacal at 1-800-874-9764. For additional information about reporting adverse drug experiences for animal drugs, contact FDA at 1-888-FDA-VETS or online at www.fda.gov/reportanimalae.

CLINICAL PHARMACOLOGY:

Mode of action: Sirolimus is an immuno-suppressant that targets and inhibits the mammalian target of rapamycin C1 (mTORC1) protein complex, a central regulator of cell growth and nutrient response. Studies in rodent models suggest mTOR inhibition by sirolimus attenuates cardiac hypertrophy by promoting autophagy, attenuating oxidative stress and blocking pro-inflammatory responses, thereby resulting in an improvement in cardiac function in rodents.

Pharmacokinetics: In a laboratory safety study in healthy adult cats after repeat oral dosing of FELYCIN®-CA1 once per week for 24 weeks (See **Target Animal Safety**), mean dose normalized maximum plasma concentration (C_{max}) values decreased with an increasing dose suggesting that absorption of sirolimus may be saturated at higher dosing levels in cats. The comparison between the area under the curve from dosing extrapolated to infinity (AUC_{inf}) at Day 0 and area under the curve from the time of dosing to the last quantifiable concentration (AUC_{last}) at Day 147 suggests the pharmacokinetics are non-linear after multiple dosing.

At 0.38 mg/kg, accumulation was observed between Days 0 and 147 with geometric mean accumulation ratios for the C_{max} and area under the curve AUC_{last} of 1.33 and 1.62, respectively.

Table 2. Arithmetic mean (± standard deviation) of sirolimus pharmacokinetic parameters following the first administration of FELYCIN®-CA1 (maximum proposed label dose 0.38 mg per kg body weight) in male and female cats in a laboratory study.

Parameter	Estimate
AUC_{last} (h•ng/mL)	288 ± 198
C_{max} (ng/mL)	22.0 ± 15.8
$t_{1/2}$ (h)	71.8 ± 42.0
T_{max} (h)*	1.50 (1.00-12.0)

AUC_{last} = area under the curve from dosing to 168 hours
 C_{max} = maximum plasma concentration
 $t_{1/2}$ = half-life
 T_{max} = time to maximum plasma concentration *Median (range)

REASONABLE EXPECTATION OF EFFECTIVENESS:

A reasonable expectation of effectiveness may be demonstrated based on evidence such as, but not limited to, pilot data in the target species or studies from published literature.

FELYCIN®-CA1 is conditionally approved pending a full demonstration of effectiveness.

Additional information for Conditional Approvals can be found at www.fda.gov/animalca.

A reasonable expectation of effectiveness for FELYCIN®-CA1 is based on published scientific literature and results from a pilot field study conducted at two US referral cardiology centers.

Published literature, including studies in a mouse model of concentric left ventricular (LV) hypertrophy and in human patients following cardiac transplantation, demonstrated that sirolimus decreased LV hypertrophy and improved diastolic function.

Pilot Field Study: A well-controlled pilot field study enrolled a total of 43 cats of various breeds. The cats received either FELYCIN®-CA1 at the label dose of 0.3 mg/kg once weekly (n=15), FELYCIN®-CA1 at 0.6 mg/kg once weekly (n=15), or placebo control tablets once weekly (n=13).

Cats ranged between 1 and 12 years of age and weighed between 3.3 and 14 kg at enrollment; 37 of the 43 cats were male. Cats were confirmed to have evidence of subclinical HCM prior to enrollment based on echocardiographic findings of LV hypertrophy (LV wall thickness of ≥6 mm at end diastole by 2D or M-mode assessment), with no evidence of congestive heart failure (CHF), arterial thromboembolism, or arrhythmias requiring specific anti-arrhythmic therapy. Cats were ineligible if they were found to have evidence of cardiogenic pulmonary edema, severe LV outflow tract obstruction (LV outflow tract gradient ≤50 mmHg), clinically significant tachyarrhythmias, cardiac disease other than HCM, systemic hypertension, significant systemic disease, or were receiving long-term corticosteroid treatment. Concomitant use of oral clopidogrel and/or angiotensin-converting enzyme (ACE) inhibitors was permitted if administered for at least 2 weeks prior to study enrollment. No new

cardiac medications were permitted during the study.

Exploratory analyses were conducted evaluating measures of LV hypertrophy and left atrial dilation in addition to comparing the relationship between disease progression/ response and baseline patient characteristics. Effectiveness was based on changes in maximum wall thickness (MWT) of the LV.

Of the 43 cats enrolled in the study, 36 cats were still enrolled at the final evaluation on Day 180. Six cats (5 high dose and 1 control) were excluded due to the progression of heart disease, death, or owner removal.

Echocardiographic values were comparable between the three study groups at baseline. Following 180 days of treatment, differences in LV MWT were evident. Cats treated with 0.3 mg/kg (label dose) of FELYCIN®-CA1 had a lower mean MWT and the difference between the 0.3 mg/kg FELYCIN®-CA1 group and the control group was statistically significant across Day 60 and Day 180. No statistically significant treatment effects were detected for other echocardiographic values.

Within the 36 evaluable cases at Day 180, MWT decreased by a mean value of 0.17 mm in the 0.3 mg/kg (label dose) group (n=14). In contrast, MWT increased by a mean of 0.94 mm in the placebo group (n=12), and by 0.50 mm in the 0.6 mg/kg group (n=10).

TARGET ANIMAL SAFETY:

Margin of Safety Study: A 24-week laboratory margin of safety study was conducted in 32 healthy laboratory cats, aged 10 to 11 months at enrollment. Cats were randomized into 4 groups of 8 cats with 4 male and 4 female cats in each group. FELYCIN®-CA1 was administered at a dose of 0, 0.38, 1.13, and 1.88 mg/kg (0X, 1.3X, 3.8X, and 6.3X the label dose of 0.3 mg/kg) for 24 weeks. Cats were dosed in a fed state and cats in the control group were untreated. No clinically significant effects on physical examination, food consumption, bodyweight, or postmortem examination parameters were identified.

Of the 24 cats that received FELYCIN®-CA1, 15 cats experienced at least one transaminase value elevation (i.e., AST and ALT) during the course of the study. These cats were in all 3 FELYCIN®-CA1 dosing groups and a dose-response was not present. Transaminase elevations were not observed in the control cats. Some of the elevations were transient and/or mild (i.e., less than 2X the upper limit of the reference range). Four male littermates were found to have the most severe elevations, with maximum AST values of 110 to 515 U/L (reference range 16 to 34 U/L) and maximum ALT values of 255 to 4552 U/L (reference range 41 to 160 U/L). Transaminase elevations were recorded at the first bloodwork collection time point (Day 26/27) after the treatment initiation in 3 of the 4 littermates, and elevations

were present throughout the 24-week dosing period. All affected cats remained clinically normal and postmortem examination revealed no signs of liver pathology.

Pilot Safety Study: In a pilot laboratory study, 32 cats (11 males and 21 females, aged 2 to 5 years) were allocated to 4 groups of 8 cats. FELYCIN®-CA1 was administered 3 times per week at doses of 0, 0.15, 0.45, or 0.75 mg/kg (0X, 1.5X, 4.5X, or 7.5X the label dose) for 4 weeks, followed by a 4-week recovery period. The clinical observations, physical examinations, and body weight evaluations did not reveal findings of clinical or toxicological significance during the study. Mild transaminase elevations were observed in 8 of the 24 cats receiving FELYCIN®-CA1. By Day 55, all ALT values were within the reference range and AST values were either within the reference range or showing a downward trend after the discontinuation of treatment with FELYCIN®-CA1.

Vaccine Response Study: In a laboratory study, 20 healthy, vaccine-naïve cats (4 per sex in the control group and 6 per sex in the treated group), approximately 4 months of age at study initiation were administered FELYCIN®-CA1 at 0 and 0.9 mg/kg (0X and 3X the label dose) once a week for 56 days (Days 0, 7, 14, 21, 28, 35, 42, 49, and 56). Cats were dosed in a fed state and the control cats were sham dosed. A commercially available killed rabies vaccine was administered to all cats on Day 29. All cats (control and treated) in the study demonstrated an adequate immune (serologic) response to the killed rabies virus vaccine on Day 57. The clinical observations, physical examinations, and clinical pathology assessments revealed no clinically significant abnormal findings.

HOW SUPPLIED:

FELYCIN®-CA1 (sirolimus delayed-release tablets) 0.4 mg, 1.2 mg and 2.4 mg are enteric film-coated biconvex tablets, plain on both sides.

FELYCIN®-CA1 is supplied in a carton containing a child resistant blister with 12 tablets.

STORAGE CONDITIONS:

Store at 20-25° C (68-77° F), excursions permitted between 15-30° C (59-86° F).

Manufactured For:
PRN™ Pharmacal, Pensacola, FL 32514



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