PACK ON THE POUNDS THIS BIKINI SEASON

TAKE THAT WINTER WEIGHT ALL THE WAY THROUGH THE SUMMER

As the industry sees an uptick in opportunity from global influences, adding more pounds equates to more profit potential this summer. Take advantage and add value with Skycis®. Increase feed efficiency, weight-gain and ultimately, carcass weight with the only swine ionophore on the market.

Elanco

Skycis®

LEARN MORE AT ELANCO.US/SKYCIS

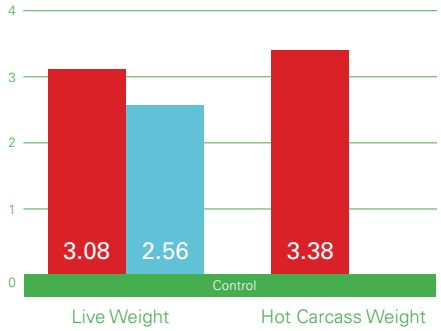
A BALANCED SYSTEM DELIVERS GROWTH

GET GROWTH, PERFORMANCE AND PROFITABILITY

Skycis's active ingredient, narasin, balances digestive system bacteria to deliver consistent growth and performance in growing and finishing pigs. An animal-use-only ionophore, Skycis drives weight gain and feed efficiency by improving feed utilization and increasing energy availability.[1]

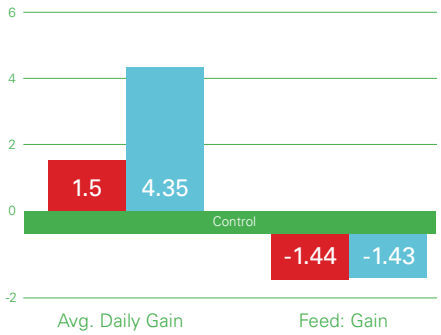
SKYCIS TRIAL RESULTS

Pounds Improvement Over Control*[1]



*Average increase shown across 8 extended feeding (greater than 50 days) and 4 phase (28-50 days) trials of Skycis versus control. Phase trials were completed during various periods of grow/finish (13.6 g/ton).

Percent Improvement Over Control[1]**



**Average improvement shown across 8 extended feeding (greater than 50 days) and 4 phase (28-50 days) trials of Skycis versus control. Phase trials were completed during various periods of grow/finish (13.6 g/ton).

WHEN TO FEED SKYCIS

Skycis can be fed throughout grow-finish or for a minimum of 28 days during early, mid or late grow-finish. For increased weight gain and improved feed efficiency, feed for at least 4 weeks at 18.1 to 27.2 grams per ton.

HOW TO FEED SKYCIS

Always read, understand and follow label directions including cautions and warnings. Communicate Skycis inclusions in feed to the full production system prior to use. Proper training, formulations, mixing and concentration levels are important to successfully implement Skycis.

When fed according to label directions, Skycis has:

- Zero-day withdrawal period
- No Veterinary Feed Directive (VFD) required

MEETING DISEASE CHALLENGES

- *Ileitis pressure?* Choose Tylan® Soluble (tylosin tartrate)
- *Respiratory outbreak?* Choose Pulmotil® AC

Elanco Tylan® Soluble™ Tylosin tartrate

Elanco Pulmotil® AC™ tilmicosin phosphate

Use Elanco's Tylan® Soluble or Pulmotil® AC to meet the most prevalent disease challenges.

TALK WITH YOUR ELANCO TECHNICAL CONSULTANT OR SALES REPRESENTATIVE TO LEARN HOW TO ADD POUNDS AND MAXIMIZE YOUR SUMMER PRODUCTIVITY WITH THE ONLY SWINE IONOPHORE ON THE MARKET.

Elanco Skycis®™

[1]Elanco Animal Heath. Data on file.

LEARN MORE AT ELANCO.US/SKYCIS

Elanco™

AF1542

Skycis™ 100

TM

Narasin

For Use in Swine Feeds only
Type A Medicated Article
Do Not Feed Undiluted

Important: Must be thoroughly mixed into feeds before use. Follow label directions.

Indication:

Indications	Appropriate Concentration of Narasin in Type C Medicated Feed
For increased rate of weight gain in growing-finishing swine when fed for at least 4 weeks	13.6 to 27.2 g/ton (15 ppm to 30 ppm)
For increased rate of weight gain and improved feed efficiency in growing-finishing swine when fed for at least 4 weeks	18.1 to 27.2 g/ton (20 ppm to 30 ppm)

No increased benefit in rate of weight gain has been shown when narasin concentrations in the diet are greater than 15 ppm (13.6 g/ton).

Active Ingredients: Narasin – 100 g per kg

Inactive Ingredients: Roughage products.

Feeding Directions: Feed continuously for at least four weeks to swine during the growing-finishing period as the sole ration. Effectiveness has not been demonstrated when fed for durations less than four weeks.

Mixing Directions: Thoroughly mix Skycis 100 Type A Medicated Article with non-medicated swine feed according to the table below to obtain the proper concentration in the Type B Medicated Feed (maximum 5,400 g/ton). The following table gives examples of how some Type B Medicated Feed concentrations can be prepared:

Pounds of Skycis 100 To Add per Ton To Make a Type B Medicated Feed	Resulting Narasin Concentration in Type B Medicated Feed [grams/ton (grams/pound)]
55.12	2,500 (1.25)
110.23	5,000 (2.50)

Thoroughly mix Skycis 100 Type A Medicated Article with a complete swine feed according to the table below to obtain the proper concentration in the Type C Medicated Feed. Prepare an intermediate pre-blend of the premix prior to mixing in a complete feed. Thoroughly mix the required amount in a convenient quantity of feed ingredients, then add to the remaining feed ingredients to make complete feed.

Pounds of Skycis 100 to Add Per Ton of Type C Medicated Feed	Resulting Narasin Concentration in Type C Medicated Feed
0.3 lb	13.6 g/ton (15 ppm)
0.4 lb	18.1 g/ton (20 ppm)
0.6 lb	27.2 g/ton (30 ppm)

Caution: Do not allow adult turkeys, horses or other equines access to narasin formulations. Ingestion of narasin by these species has been fatal. Not approved for use in breeding animals because safety and effectiveness have not been evaluated in these animals.

Swine being fed with Skycis (narasin) should not have access to feeds containing pleuromutilins (e.g., tiamulin) as adverse reactions may occur. If signs of toxicity occur, discontinue use.

NOT FOR HUMAN USE.

Warnings:

Withdrawal Period

No withdrawal period is required when used according to the label

When mixing and handling Skycis, use protective clothing, impervious gloves and a dust mask. Operators should wash thoroughly with soap and water after handling. If accidental eye contact occurs, immediately rinse thoroughly with water.

Store at or below 25°C (77°F). Excursions permitted to 37°C (99°F).

Not to be used after the date printed on the bag.

To report adverse effects, access medical information, or obtain additional product information, call 1-800-428-4441.

Skycis 100

Net Weight: **25 kg (55.12 lb)**

Manufactured For: Elanco US Inc.
Greenfield, IN 46140, USA

Restricted Drug (California) – Use Only as Directed

NADA 141-340, Approved by FDA

TAKE TIME

OBSERVE LABEL DIRECTIONS

Elanco™ AF1300

Tylan® Soluble™

Tylosin Tartrate

Equivalent to **100 g (3.53 oz)** tylosin base

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

For oral use in chickens, turkeys, swine, and honey bees.

Macrolide Antibiotic, NADA 13-076, approved by FDA

Indications

Chickens: For the control of mortality caused by necrotic enteritis (**NE**) associated with *Clostridium perfringens* in broiler chickens. As an aid in the treatment of chronic respiratory disease (**CRD**) associated with *Mycoplasma gallisepticum* in broiler and replacement chickens. For the control of CRD associated with *Mycoplasma gallisepticum* at the time of vaccination or other stress in chickens. For the control of CRD associated with *Mycoplasma synoviae* in broiler chickens.

Turkeys: For the reduction in severity of effects of infectious sinusitis associated with *Mycoplasma gallisepticum*.

Swine: For the treatment and control of swine dysentery (**SD**) associated with *Brachyspira hyodysenteriae*. For the treatment and control of SD associated with *Brachyspira hyodysenteriae* when followed immediately by Tylan Type A medicated article in feed.
For the control of porcine proliferative enteropathies (**PPE**, ileitis) associated with *Lawsonia intracellularis* when followed immediately by Tylan Type A medicated article in feed.

Honey Bees: For the control of American Foulbrood (*Paenibacillus larvae*).

Ingredients

Tylosin (as tylosin tartrate) ..... 100 g

Dosage and Administration

Dosages:

Chickens:

NE indication: 851 to 1,419 mg/gallon (225 to 375 ppm) in drinking water.

CRD indications: 2,000 mg/gallon (528 ppm) in drinking water.

Turkeys: 2,000 mg/gallon (528 ppm) in drinking water.

Swine: 250 mg/gallon (66 ppm) in drinking water.

Honey Bees: 200 mg/colony in confectioners/powdered sugar.

Mixing Directions for Medicated Drinking Water:

Always add the water to the powder. Do not pour the powder into the water. Prepare a fresh Tylan Soluble solution every three days. When mixing and handling tylosin, use protective clothing and impervious gloves. If using a water medicating pump see table below, otherwise mix as follows:
To assure thorough dissolution, first place the contents of one jar in a mixing container and add one gallon of water (3785 mL) to the powder to make a concentrated solution. To make medicated drinking water containing 250 mg/gallon (66 ppm), mix this concentrated solution with water to make 400 gallons (1514 liters) of medicated drinking water. To make medicated drinking water containing 851 to 1,419 mg/gallon (225 to 375 ppm), mix this concentrated solution with water to make from 117 gallons + 51 ounces (444 liters) to 70 gallons + 64 ounces (267 liters) of medicated drinking water, respectively. To make medicated drinking water containing 2,000 mg/gallon (528 ppm), mix this concentrated solution with water to make 50 gallons (189 liters) of medicated drinking water.

Mixing Directions for Water Medicating Pump (1:128 inclusion)*:

Desired Concentration in Drinking water	Jars of Tylan Soluble	Volume of Water to Make Stock Solution
250 mg/gallon (66 ppm)	1	3 gallons + 13 ounces
851 mg/gallon (225 ppm)	5	4 gallons + 77 ounces
1,419 mg/gallon (375 ppm)	9	5 gallons + 0 ounces
2,000 mg/gallon (528 ppm)	10	3 gallons + 115 ounces

*This table applies only if the water medicating pump is set to deliver 1 ounce of stock solution per gallon of drinking water.

Mixing Directions for use in Honey Bees: Mix 200 mg tylosin in 20 g confectioners/powdered sugar. Use immediately.

Directions for Use

Chickens: NE indication: Administer medicated drinking water for a single five day period in broiler chickens. To assure all birds receive the intended medication, only medicated water should be available. These practices should be followed to assure both food safety and responsible antimicrobial drug use in chickens: 1) Use in flocks exhibiting signs of a necrotic enteritis outbreak, for example, increased mortality and lesions characteristic of necrotic enteritis upon necropsy; 2) Administer the full dose and dosing regimen once medication is initiated; 3) Use of Tylan Soluble or another macrolide is not advised if additional therapy is needed beyond the original course of medication. **CRD indications:** Administer medicated drinking water for three days; however, medicated water may be administered for one to five days depending upon severity of infection. Treated chickens must consume enough medicated water to provide 50 mg per pound of body weight per day. Only medicated water should be available to the birds.
Turkeys: Administer medicated drinking water for three days; however, medicated water may be administered for two to five days depending upon severity of infection. Treated turkeys must consume enough medicated water to provide 60 mg per pound of body weight per day. Only medicated water should be available to the birds.
Swine: SD indication: Administer medicated drinking water for 3 to 10 days, depending upon severity of infection. Alternatively, administer medicated drinking water for 3 to 10 days, followed by 40 to 100 g tylosin per ton of complete feed (Type C medicated feed manufactured from Tylan Type A medicated article) for 2 to 6 weeks. Only medicated water should be available to swine while medicating with Tylan Soluble. **PPE indication:** Administer medicated drinking water for 3 to 10 days, followed by 40 to 100 g of tylosin per ton of complete feed (Type C medicated feed manufactured from Tylan A medicated article) for 2 to 6 weeks. Only medicated water should be available to swine while medicating with Tylan Soluble.
Honey Bee Colonies: Administer three treatments of medicated confectioners sugar once weekly for 3 weeks. The 200 mg dose is applied (dusted) over the top bars of the brood chamber.

Warnings

User Safety Warnings: Not for Human Use. Keep Out of Reach of Children. Avoid contact with human skin. Exposure to tylosin may cause a rash.

Residue Warnings: Chickens must not be slaughtered for food within 24 hours after treatment. Do not use in layers producing eggs for human consumption.
Turkeys must not be slaughtered for food within five days after treatment.
Swine must not be slaughtered for food within 48 hours after treatment.
Honey bees: The drug should be fed early in the spring or fall and consumed by the bees before the main honey flow begins, to avoid contamination of production honey. Complete treatments at least 4 weeks prior to main honey flow.

Manufactured For:
Elanco Animal Health
A Division of Eli Lilly and Company
Indianapolis, IN 46285, USA
Product of the United Kingdom

Store at or below 25°C (77°F)
Excursions Permitted to 40°C (104°F)
Avoid Moisture.

Restricted Drug (California) – Use Only as Directed.

To report suspected adverse events, for technical assistance, or to obtain a Material Safety Data Sheet (MSDS), call 1-800-428-4441.

Elanco™ AH0470

Pulmotil® AC™

960 ml

tilmicosin phosphate (250 mg/ml tilmicosin)

Aqueous concentrate for oral use in drinking water.

For swine only.

Macrolide Antibiotic.

Do not inject this product. Injection of tilmicosin has been shown to be fatal in swine and non-human primates, and may be fatal in horses and goats.

WARNING

Exposure to tilmicosin in humans has been associated with chest pain, increased heart rate, dizziness, headache, and nausea. Death has been reported following ingestion or injection of tilmicosin.

Avoid ingestion. Avoid direct skin and eye contact. In case of human exposure, call 1-800-722-0987 and consult a physician immediately.

NOTE TO THE PHYSICIAN:

The cardiovascular system is the target of toxicity and should be monitored closely. The primary cardiac effects are tachycardia and decreased contractility. Cardiovascular toxicity may be due to calcium channel blockade.

See User Safety Warnings for additional information.

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

Active Drug Ingredient: tilmicosin (as tilmicosin phosphate) 250 mg/ml

Description: Pulmotil is a formulation of the antibiotic tilmicosin. Tilmicosin is produced semi-synthetically and is in the macrolide class of antibiotics. Each milliliter (mL) of Pulmotil aqueous concentrate solution contains 250 mg of tilmicosin.

Indications: For the control of swine respiratory disease associated with *Pasteurella multocida* and *Haemophilus parasuis* in groups of swine in buildings where a respiratory disease outbreak is diagnosed.

For the control of swine respiratory disease associated with *Mycoplasma hyopneumoniae* in the presence of Porcine Reproductive and Respiratory Syndrome Virus (PRRSV) in groups of swine in buildings where a respiratory disease outbreak is diagnosed.

Dosage and Administration: Must be diluted before administration to animals. Include in the drinking water to provide a concentration of 200 mg tilmicosin per liter (200 ppm). One 960 ml bottle is sufficient to medicate 1200 liters (320 gallons) of drinking water for pigs. The medicated water should be administered for (5) five consecutive days.

Use within 24 hours of mixing with water. Do not use rusty containers for medicated water as they may affect product integrity.

When using a water medicating pump with a 1:128 inclusion rate, add 1 bottle (960 ml) of Pulmotil AC per 2.5 gallons of stock solution.

WARNINGS:

USER SAFETY WARNINGS: FOR USE IN ANIMALS ONLY. NOT FOR HUMAN USE. KEEP OUT OF REACH OF CHILDREN. SEE BOXED WARNING AND NOTE TO THE PHYSICIAN FOR ADDITIONAL INFORMATION. Wear overalls, impervious gloves and eye protection when mixing and handling the product. Wash hands after handling the product. Wash affected parts if skin contact occurs. If accidental eye contact occurs, immediately rinse thoroughly with water. To report suspected adverse events, for technical assistance, or to obtain a Material Safety Data Sheet (MSDS), call 1-800-428-4441.

RESIDUE WARNING: Swine intended for human consumption must not be slaughtered within 7 days of the last treatment with this product.

Note to the Physician:

The cardiovascular system is the target of toxicity and should be monitored closely. Cardiovascular toxicity may be due to calcium channel blockade. In dogs, administration of intravenous calcium offset tilmicosin-induced tachycardia and negative inotropy (decreased contractility). Dobutamine partially offset the negative inotropic effects induced by tilmicosin injection in dogs. ß-adrenergic antagonists, such as propranolol, exacerbated the negative inotropy of tilmicosin injection in dogs. Epinephrine potentiated lethality of tilmicosin injection in pigs. This antibiotic persists in tissues for several days.

Precautions:

Do not allow horses or other equines access to water containing tilmicosin. The safety of tilmicosin has not been established in male swine intended for breeding purposes.

Always treat the fewest number of animals necessary to control a respiratory disease outbreak. Prescriptions shall not be refilled. Concurrent use of Pulmotil AC and another macrolide by any route is not advised. Use of another macrolide immediately following this use of Pulmotil AC is not advised.

Adverse Reactions in Animals: Decreased water consumption was observed in healthy pigs administered tilmicosin in target animal safety studies. Ensure that pigs have continuous access to medicated water during the treatment period. Monitor pigs for signs of water refusal and dehydration while being treated. If decreased water consumption occurs, replace the medicated drinking water with fresh non-medicated water and contact your veterinarian.

Clinical Pharmacology: Tilmicosin is a macrolide antibiotic with *in vitro* antibacterial activity primarily against Gram-positive bacteria, although certain Gram-negative bacteria are also susceptible. Macrolides interfere with bacterial protein synthesis by reversibly binding to the 50S subunit of the ribosome. They are typically regarded as being bacteriostatic, but at high concentrations can be bactericidal. When administered orally to pigs via the drinking water, tilmicosin is rapidly absorbed and slowly eliminated from the body. Tilmicosin distributes rapidly to the target tissues. Detectable levels are found in lung tissue as early as 6 hours and peak at about 5 days after the commencement of treatment. The relationship of serum tilmicosin concentration to lung tilmicosin concentration or the concentrations in bronchial secretion has not been determined. In addition, the extent to which total lung concentrations represent free (active) drug has not been defined. Therefore, no conclusions can be made with regard to the clinical relevance of elevated tilmicosin concentrations in the lung. Tilmicosin has been shown to concentrate within alveolar macrophages. It is also found at fairly high concentrations in liver and kidney tissue, as it is excreted both via the bile into the feces and also via the urine.

Effectiveness: The effectiveness of Pulmotil AC for the control of SRD associated with *P. multocida* and *H. parasuis* was confirmed in a natural infection field study across six U.S. sites. A total of 960 commercial-type grower pigs were enrolled and assigned to the tilmicosin-treated group (200 mg tilmicosin/L in drinking water for 5 consecutive days), or a nonmedicated control group. Pigs that 1) were found dead and were diagnosed with SRD, or 2) had a depression score and a respiratory score ≥ 2 (on a scale from 0 [normal] to 3 [severe]) and a rectal temperature of ≥ 104.5 °F were considered clinically affected. At each site, treatments were initiated when at least 15% of the pigs were classified as clinically affected. After the 5-day treatment period and a 4-day post-treatment period, pigs were evaluated for treatment success (respiration and depression scores of 1 or 0 and rectal temperature < 104.5 °F), and were euthanized and evaluated for lung lesions. A significantly higher ($p = 0.0118$) success rate (based on back-transformed least squares means) was detected for the tilmicosin-treated group (275/473, 58.64%) compared to the control group (230/475, 47.89%).

The effectiveness of Pulmotil AC for the control of SRD associated with *M. hyopneumoniae* in the presence of PRRSV was confirmed in an induced infection model study. A total of 340 commercial-type pigs were enrolled and challenged with *M. hyopneumoniae* (single infection) or *M. hyopneumoniae* and PRRSV (co-infection). When necropsied sentinel pigs had at least 5% lung lesion involvement, study pigs were treated with Pulmotil AC (200 mg tilmicosin/L in drinking water) or non-medicated water for 5 consecutive days. After the 5-day treatment period and a 4 day post-treatment period, pigs were euthanized and evaluated for lung lesions.

For both the single infection and co-infection groups, the lung lesion percentage was statistically significantly different ($p = 0.005$ and $p = 0.0004$, respectively) in favor of the tilmicosin phosphate-treated group (21.01% and 31.74%, respectively) compared with the control group (28.26% and 43.04%, respectively).

Animal Safety: A pharmacokinetic study was conducted to evaluate Pulmotil AC concentrate solution in pigs. The results were compared to pharmacokinetic data generated with Pulmotil 90 Type A medicated article (NADA 141-064). The data demonstrates that blood and tissue levels of tilmicosin when administered to pigs at 200 mg/L (ppm) in water were consistently lower than when tilmicosin was administered to pigs at 181 g/ton (200 ppm) in feed.

A target animal safety study was conducted to evaluate the tolerance of Pulmotil AC concentrate solution in pigs when administered in drinking water. Twenty pigs were administered medicated water at 0, 200, 400, or 600 mg/L (0, IX, 2X, or 3X the labeled dose) for 5 consecutive days or 200 mg/L for 10 consecutive days. No treatment-related lesions were observed in any animals at necropsy. Water consumption was decreased in all tilmicosin-treated groups compared to the non-medicated group. One pig in the 600 mg/L group was euthanized due to decreased water consumption, neurological signs attributed to severe dehydration, and subsequent refusal to drink non-medicated water. Two pigs in the 400 mg/L group had reduced water intake and displayed mild clinical signs attributed to dehydration. One pig recovered after being offered non-medicated water. The second pig completed the treatment regimen without intervention.

Hydration and water consumption were evaluated during the control of SRD effectiveness field study. Tilmicosin was administered to study pigs in drinking water at 200 mg/l for 5 consecutive days. There was no statistically significant difference in water consumption between tilmicosin-treated pigs and pigs receiving non-medicated water. A subset of study pigs (20 tilmicosin-treated pigs and 20 non-medicated pigs) were evaluated for hydration via a physical examination and analysis of blood samples for hematocrit, total protein, creatinine, and blood urea nitrogen. There were no abnormal physical examination findings or clinically relevant differences in clinical pathology variables between tilmicosin-treated pigs and pigs receiving non-medicated water.

How Supplied: Pulmotil AC is provided in a 960 ml amber-colored plastic bottle sealed with a plastic screw cap.

Storage Conditions:

Store at or below 86° F (30° C). Protect from direct sunlight.

Restricted Drug (California) - Use Only as Directed
NADA # 141-361, Approved by FDA

Manufactured For:
Elanco Animal Health, A Division of Eli Lilly and Company, Indianapolis, IN 46285, USA