

FROM THE GLOBAL LEADER IN VETERINARY ENDOCRINOLOGY

NEW
vidalta[®] 
PROLONGED RELEASE CARBIMAZOLE

The **NEW** *once-daily*
hyperthyroidism treatment



FROM GURRRR...

When cat owners start to wonder what has happened to their little darling ...

Hyperthyroidism is the most common endocrinopathy in cats, affecting as many as 1 in 300 cats.¹ It is an insidious, progressive disease mainly seen in middle aged to older cats. Subtle changes in appetite, condition or behaviour may not be noticed immediately. But as the disease progresses, owners become aware of a change in personality as their pet becomes more demanding – akin to a tiger rather than the delightful cat they are accustomed to.

Etiology

90% of cases are due to benign adenomatous hyperplasia of both thyroid gland lobes (>70% of cases) leading to hypersecretion of thyroxine (T4) and tri-iodothyronine (T3).

Diagnosis

Diagnosis of hyperthyroidism is based on history, physical examination and blood profile.



Clinical signs (not all may be present):

- Weight loss
- Palpable thyroid
- Cardiac abnormalities (e.g. tachycardia, gallop rhythm)
- Systemic hypertension
- Agitated, stressed, or difficult to handle
- Vomiting and/or diarrhoea
- Polyuria and polydipsia
- Depression, weakness, dyspnea or seizures

Serum biochemistry

- Total thyroxine (tT4) above the reference range.*

* Reference ranges can vary. Most laboratories have a reference range for tT4 of up to 50 nmol/L.

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...BACK TO **PURRRRR**

The new *once-daily* hyperthyroidism treatment to help improve owner compliance

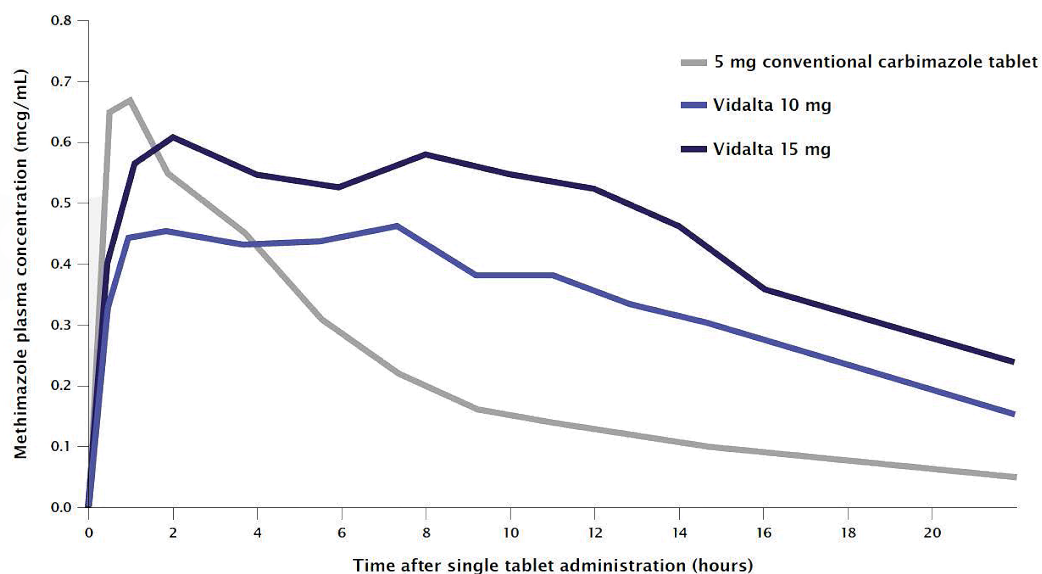
Until now, hyperthyroid cats needed to be treated two or even three times daily, making treatment even more of a challenge. In a recent survey,² 93% of veterinarians believed that twice-daily treatment in cats has compliance issues. Furthermore, surgical thyroidectomy carries potential risks and radioactive iodine treatment requires extensive periods of complete isolation and may not be locally available.

Prolonged release formulation for *once-daily* dosing

Vidalta is the first prolonged release formulation of carbimazole

- Carbimazole has inherent anti-thyroid activity but is almost entirely converted to thiamazole (methimazole) in the body where it preferentially accumulates and is stored in the thyroid glands.
- Thiamazole prevents the synthesis of thyroid hormones by inhibiting thyroid peroxidase catalysed reactions.

Prolonged release profile of Vidalta



Vidalta offers genuine once-daily dosing – as demonstrated by sustained concentrations of thiamazole and the absence of a pronounced thiamazole peak.³ The terminal half-life of Vidalta is more than twice that of thiamazole, confirming its prolonged release properties.³

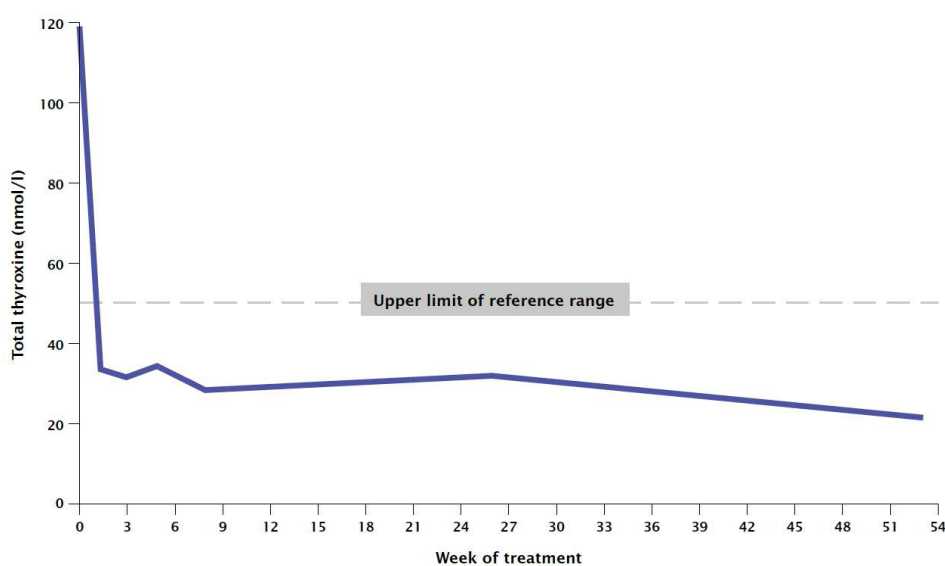
Rapid action

Vidalta results in rapid normalisation of tT4 and resolution of clinical signs of hyperthyroidism. tT4 may decrease to euthyroid levels in as little as 10 days of commencing treatment.

Effective long-term

In clinical trials with Vidalta, resolution or improvement of clinical signs occurred in the majority of cats within the first 8 weeks of treatment.⁴ This was mirrored by improvement in tT4.

Rapid and long-term improvement in tT4 in hyperthyroid cats treated with Vidalta



Cats (n=44) with tT4 of 118 nmol/L (median, range 50-320 nmol/L) and clinical signs of hyperthyroidism were treated with Vidalta 15 mg once-daily in an open, multicentre clinical trial.⁴ Physical examinations, haematology and biochemistry were carried out after 10 days and 3, 5 and 8 weeks of treatment and thereafter every 3 to 6 months. The dose was adjusted as necessary based on clinical signs and tT4 (haematology and biochemistry).⁴ A significant decrease in tT4 was seen within 10 days of starting treatment.³ tT4 was 27 nmol/L on average at 8 weeks and 28 nmol/L at the end of the study.⁴

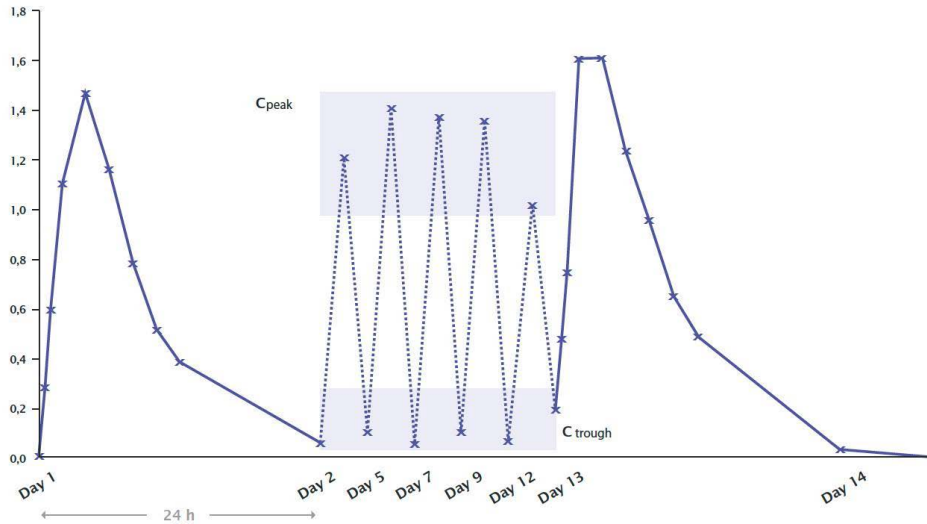
Safety: sustained release

Carbimazole has been successfully used to treat hyperthyroidism for decades.⁵

- Vidalta's excellent safety is also thought to be due to its prolonged release profile meaning there are no pronounced plasma thiamazole peaks.³

Absence of accumulation on repeated dosing

- Repeated dosing of Vidalta does not result in accumulation of thiamazole in plasma.³



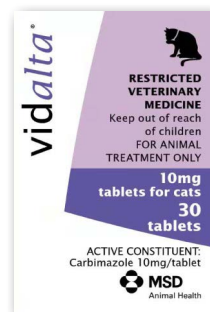
Reversible action

- Vidalta does not inhibit the action of preformed thyroid hormones in the thyroid glands or circulation. If treatment is stopped, thyroid hormone levels return rapidly to pre-treatment values.

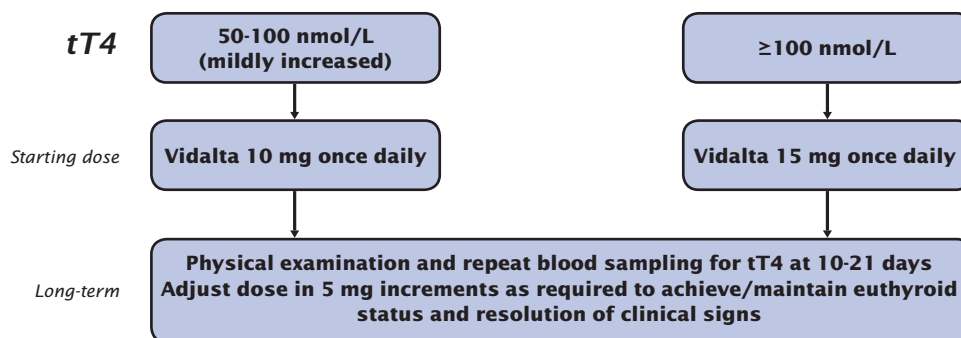
Convenient dosing

Vidalta is available in two tablet strengths:

Vidalta 10 mg, Vidalta 15 mg
30 tablet pack



Suggested treatment protocol



Further information:

Absorption is increased with food – tablets should be administered at the same time every day. Tablets may be given with or without food as long as this is consistent from day to day.

VIDALTA[®] tablets for cats

Vidalta 10 mg are round pink tablets, each containing 10 mg carbimazole and 0.25 mg red ferric oxide (E 172). Vidalta 15 mg are round dark pink tablets, each containing 15 mg carbimazole and 0.75 mg red ferric oxide (E 172).

INDICATIONS

For the treatment of hyperthyroidism and hyperthyroidism-associated clinical signs in cats.

Dosage and administration

For oral use only.

Vidalta tablets should be administered at the same time every day, in particular with relation to feeding. Do not break or crush Vidalta tablets as this will affect the sustained release properties of the tablet. The prolonged release formulation of Vidalta enables a 24 hour dosing interval. The aim of treatment is to maintain total thyroxin concentrations (TT4) in the lower end of the reference range. Accordingly, the following dose recommendations for dosing during adjustment and maintenance phases are suggested. However dosing adjustment should be primarily based upon the clinical assessment of the individual cat. Monitoring of TT4, full haematology and liver and kidney parameters is advised at each recommended follow up visit.

Adjustment phase

The starting dose is a single daily oral administration of one tablet of VIDALTA 15 mg (15 mg carbimazole) per cat. Consideration could be given to a starting dose of Vidalta 10 mg daily where the TT4 concentration is only mildly increased, e.g. between 50 nmol/L and 100 nmol/L. With the recommended starting dose of one Vidalta 15 mg tablet once daily, total thyroxin concentration (TT4) may decrease to within the euthyroid range (TT4 < 50 nmol/L) shortly after treatment initiation. A dose adjustment may be required as early as 10 days after commencing treatment. Dose adjustment should be also performed 3, 5 and 8 weeks after initiation of treatment, depending on both clinical and hormonal responses to treatment.

Maintenance phase

Follow-up visits every 3 to 6 months are recommended. The dose should be adjusted individually based on clinical signs and total thyroxin concentration (TT4). It is advisable to check TT4 10-14 days after dose adjustment. The therapeutic dose of Vidalta ranges between 10 mg (one 10 mg tablet) and 25 mg (one 10 mg tablet and one 15 mg tablet) once daily. Some cats require doses of less than 10 mg carbimazole daily. Every other day dosing with 10 mg or 15 mg of carbimazole may be sufficient to control the disease. Dose increases should not be made in increments of greater than 5 mg. Doses above 20 mg have only been trialled in a small number of cats and should be used with caution.

CONTRADICTIONS

Do not use in cats with haematological disorders such as anaemia, neutropenia; lymphopenia, or thrombocytopenia. Do not use in cats with coagulopathies. Do not use in pregnant or lactating queens. Do not use in cats with hypersensitivity to mercaptoimidazoles (carbimazole or methimazole).

PRECAUTIONS

Methimazole, the active metabolite of carbimazole, inhibits thyroid hormone production and therefore cessation of treatment with carbimazole will result in a rapid (within 48 hours) return to pre-treatment thyroid hormone levels. Chronic administration is therefore necessary unless surgical or radiation-induced thyroidectomy is performed. A small proportion of cats with thyroid adenoma may fail to respond or have a poor response to treatment. Thyroid carcinoma is a rare cause of hyperthyroidism in the cat and medical management alone is not recommended in such cases as it is not curative.

The safety of the veterinary medicinal product has not been established in pregnant or lactating queens. However, since methimazole crosses the placenta, distributes into milk and reaches approximately the same concentration as in maternal serum, the product should not be used in pregnant or lactating queens. Concomitant treatment with phenobarbitone may reduce the clinical efficacy of carbimazole. The concomitant use of benzimidazole anthelmintics (fenbendazole or mebendazole) has been shown to reduce the hepatic oxidation of this therapeutic class and may therefore induce an increase of their circulating rates. Accordingly, co-administration of carbimazole with a benzimidazole is not recommended. Methimazole may display immunomodulating properties. This should be taken into account when considering vaccination of the cat. In case of overdosage, adverse effects that may appear include, but are not limited to: weight loss, inappetence, vomiting and lethargy. Coat and skin abnormalities (erythema, alopecia), as well as haematological/biochemical changes (eosinophilia, lymphocytosis, neutropenia, lymphopenia, slight leukopenia, agranulocytosis, thrombocytopenia

or haemolytic anaemia) may also appear. Hepatitis and nephritis have been reported. These adverse effects may become severe in case of chronic overdosing. In most cases, adverse effects are reversible upon treatment discontinuation and appropriate veterinary care. Total thyroxin concentrations (TT4) below the lower limit of the reference range may be observed during treatment although this is rarely linked to overt clinical signs. Decreasing the dose will lead to an increase of the TT4. Dose adjustment should not be made based on TT4 only.

ADVERSE EFFECTS

Most frequent common adverse reactions encompass vomiting, diarrhoea, reduced appetite, loss of condition, lethargy, tachycardia, polydipsia, dehydration, and polyuria. Dermatological signs (pruritus, moist dermatitis, erythema, alopecia) have also been reported. These clinical signs are usually mild, adequately controlled by symptomatic therapy and do not require treatment discontinuation. Weight loss, dyspnoea, aggressiveness, disorientation, ataxia or pyrexia have also been reported in rare cases. Treatment of hyperthyroidism may result in a reduction in the glomerular filtration rate. This can lead to unmasking of pre-existent renal dysfunction. Renal function should therefore be monitored (BUN and creatinine) before and during treatment, preferably at each visit of the dose adjustment and maintenance phases. The dose should be adjusted according to the risk assessment for the individual case. Treatment of hyperthyroidism with carbimazole may also induce an elevation of liver enzymes (ALP and ALT) or a worsening of pre-existing hepatic disorders. Liver enzymes should therefore be monitored before and during treatment, preferably at each visit of the dose adjustment and maintenance phases. Severe cases may require temporary or permanent treatment discontinuation. Liver enzyme elevations are usually reversible following drug discontinuation, although symptomatic therapy (nutritional and fluid support) may be required.

Anaemia, increase or decrease in white blood cell count, neutrophilia, thrombocytopenia, eosinophilia and/or lymphopenia may also occur, in particular during the first 4-6 weeks of treatment. Haematology parameters should therefore be monitored on a regular basis before and during treatment, preferably at each visit of the dose adjustment phase and maintenance phase. Treatment discontinuation may be required in case of persistent and marked disorder. In most of the cases, the abnormality will resolve spontaneously within 1 month after treatment discontinuation. Positive antinuclear antibody titres have also been reported. If you notice any serious effects or other effects not mentioned in this leaflet, please talk to your veterinarian.

SIDE EFFECTS

Treatment of hyperthyroidism may result in a reduction in the glomerular filtration rate. This can lead to unmasking of pre-existent renal dysfunction. Treatment of hyperthyroidism may also induce an elevation of liver enzymes or a worsening of pre-existing hepatic disorders. Renal and liver function should therefore be monitored before and during treatment. Treatment should be adjusted according to the risk assessment for the individual case. Doses above 20 mg have only been trialled in a small number of cats. Adverse reactions may occur at this dose, therefore careful monitoring is recommended and the dose should be adjusted according to the risk assessment for the individual case.

SAFETY DIRECTIONS

Vidalta should be used for oral treatment of cats only. Wash hands with soap and water after handling the tablet or litter used by treated animals. Do not eat, drink or smoke while handling the tablet or used litter. Do not handle this product if you are allergic to hyperthyroidism inhibitors. As carbimazole is a suspected human teratogen, women of child-bearing age should wear gloves when handling litter and/or vomit of treated cats. In the case of accidental ingestion, seek medical advice immediately and show the package insert or the label to the doctor.

See Safety Data Sheet for further information. www.msd-animal-health.co.nz

FIRST AID

If swallowed do not induce vomiting. If exposed or concerned get medical advice.

DISPOSAL

Dispose of used packaging in household rubbish or recycle. Unused tablets should be returned to a veterinary clinic.

STORAGE

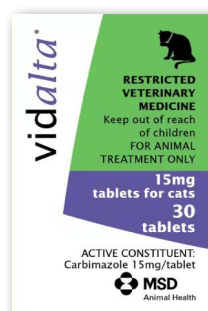
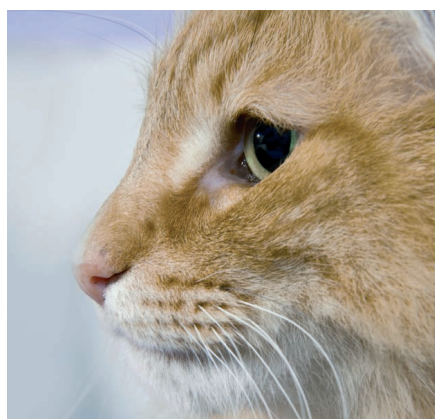
Store below 25°C. Protect from humidity and light. Keep the plastic container tightly closed to protect from moisture. Do not remove the desiccant.

References:

- Gerber H, Peter H, Ferguson DC and Petersen ME. (1994) Etiopathology of feline toxic nodular goitre. *Vet Clin North Am Small Anim Pract.* 24: 541-565.
- Market research (2007).
- Frenais R, Burgaud S and Horspool LJI. (2008) Pharmacokinetics of controlled-release carbimazole tablets support once-daily dosing in cats. *J Vet Pharmacol Therap.* 31: 213-219.
- Frenais R, Rosenberg D, Burgaud S & Horspool LJI. (2009) Clinical efficacy and safety of a once-daily formulation of carbimazole in cats with hyperthyroidism. *Journal of Small Animal Practice* 50:510-515.
- Solomon DH. (1986) Treatment of Graves' hyperthyroidism. In: *Werner's The Thyroid: A Fundamental and Clinical Text.* 5th edn. Eds SH Ingbar & LE Braverman. JB Lippincott, Philadelphia. pp. 987-1014.

Why Vidalta?

- Once-daily dosing to improve compliance
- Rapid action for fast clinical results
- Proven long term efficacy
- Known safety profile for peace of mind
- Small tablet size for ease of administration
- Two tablet strengths for flexible dosing



Available only under Veterinary Authorisation. ACVM Registration No: A10622.
Schering-Plough Animal Health Limited, 33 Whakatiki Street, Upper Hutt. Phone: 0800 800 543.
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