



TIME TO LIVE LIFE TO THE FULL

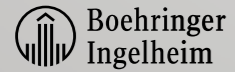
A take-home guide for owners whose dogs have been prescribed Vetmedin® for their heart condition



Reference: 1. Häggström *et al.*, (2008) *J Vet Intern Med* 22:1124-1135.

Advice on the use of Vetmedin® or other therapies should be sought from your veterinary surgeon. Vetmedin® contains pimobendan. Prescription only medicine. Further information available from Boehringer Ingelheim Vetmedica, Bracknell, Berkshire, RG12 8YS, UK.

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Must-have medicine



The heart of a good life



Although you've just found out your dog has a heart problem, don't lose heart. There are lots of reasons to feel positive about the future.

Firstly, your vet has prescribed Vetmedin® because it can improve your dog's symptoms and help them to get the most out of life. It can also help to extend their lifespan.

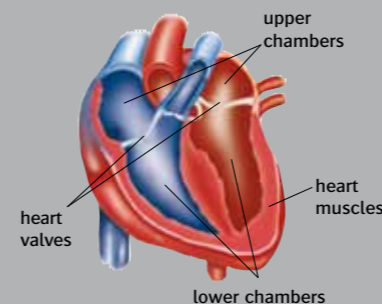
Secondly, there are things you can get involved in:

-  **Read this brochure to find out more about your dog's heart, common heart conditions, the steps you can take and how Vetmedin® can help**
-  **Use the diary to help your vet see how well your dog is doing on treatment and plan the next steps**

Your life together goes on, despite heart disease

What makes dogs tick

HEART STRUCTURE



Just like in humans, a dog's heart acts like a pump to drive the circulation of the blood around the body. With each heart beat, it delivers blood rich in oxygen and nutrients to all the vital organs and tissues, keeping the dog fit and healthy.

The heart's pumping power lies in its muscles. These are normally thick and powerful, helping blood reach as far as the outer extremities of the body.

Inside, the heart is divided into separate chambers – the upper ones receive blood from the body, the lower ones pump it out again. In-between these chambers are the heart valves, which open and shut in sequence to make sure the blood flows in the right direction. They are normally smooth and form a perfect seal when closed.

That's the picture of health. But what happens in heart disease?

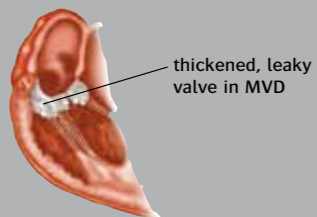
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When the heart goes wrong

Heart disease is actually very common in dogs, especially as they get older. It usually affects either the valves or the heart muscle. Your vet will be able to tell you which type of problem your dog has.

ENDOCARDIOSIS OF THE VALVES



Valve disease

The most common heart condition affects the mitral +/- tricuspid valves which lie between the lower and upper chamber of the heart. This is generally known as mitral valve disease (MVD) or sometimes called 'endocardiosis' or 'valvular insufficiency'.

In MVD, the heart valve gradually becomes thick, lumpy, distorted and leaky, so that blood can flow in the wrong direction. Vets can pick up the sound of this backward flow as a heart murmur, when they listen with a stethoscope.

Dogs with a leaky valve can live for many years without problems. Eventually, MVD progresses and the dog develops symptoms (see later on for information on congestive heart failure).

Some dogs may have a genetic predisposition to MVD. It's more common in smaller breeds such as Cavalier King Charles Spaniels, Poodles, Schnauzers, Chihuahuas, Dachshunds, Fox Terriers and Boston Terriers.

NORMAL HEART



ENLARGED HEART IN DCM



Heart muscle disease

Another common disease of a dog's heart is one that affects the heart muscle and is known as dilated cardiomyopathy (DCM).

In DCM, the heart muscle gradually becomes weakened and floppy. The heart enlarges and becomes very inefficient at pumping blood around the body. As in valve disease, a dog with DCM can often live with the problem for a period of time, as the body makes adjustments to cope with the changes. Eventually, DCM does affect the dog's health (see overleaf on congestive heart failure).

DCM affects most commonly medium to large breeds, such as Dobermans, Cocker and Springer Spaniels, Boxers, Irish Setters, German Shepherds, Great Danes, St Bernards and Irish Wolfhounds. In rare cases, it can sometimes be linked to specific nutritional deficiencies.

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When the heart needs help

Congestive heart failure

Dogs with MVD and DCM can go on for months or years with no obvious signs of ill health. However, over time, inefficient heart valves or weak heart muscles cause the heart's function to deteriorate. This is a stage known as congestive heart failure, when the heart is no longer able to pump sufficient blood around the body. The dog becomes unwell and their quality of life is affected.





The warning signs you and your vet may have noticed

Signs of congestive heart failure include:

-  **Lack of energy or depressed appearance**
-  **Reduced ability to exercise**
-  **Poor appetite**
-  **Anxiety and restlessness during the night**
-  **Difficulty in breathing**
-  **Coughing**
-  **Weakness**
-  **Fainting**

When your vet examines your dog, they may find signs relating to heart disease, and congestive heart failure. These can include a heart murmur, harsh sounds when listening to the lungs, fluid in the abdomen and poor pulses. Your vet may also recommend further tests to help determine the cause of your dog's problem.

These may include:

-  **Blood tests – to check your dog's health and specific heart-related blood markers**
-  **X-rays – to assess the size of your dog's heart and check whether there is fluid in their lungs**
-  **An echocardiogram – this is an ultrasound examination of the heart, and is used to examine the heart in detail**
-  **An electrocardiogram – this checks the electrical rhythm of your dog's heart**



This is when veterinary advice and the right choice of treatment can make a real difference to your dog's life.

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When the heart needs help

Treating heart disease in dogs

It's important to realise that heart disease in dogs is not curable and surgery is very rarely an option. The good news is that there are several medicines, like Vetmedin® (discussed overleaf), which can help relieve uncomfortable symptoms and allow your dog to enjoy a better life.

In general, these medicines are divided into those that:



-  **Remove excess fluid that builds up in the lungs or abdomen (diuretics)**
-  **Open up blood vessels to reduce the work load on a weak heart (vasodilators)**
-  **Increase the strength or rate of the heart beat to help improve the pumping action of the heart (inotropes)**



Your vet will always tailor treatment to suit the individual needs of your dog. It is likely that over time your vet will need to adjust your dog's treatment, and will therefore need to see you and your dog regularly. Remember that it is important to monitor your dog closely whilst on treatment, especially for the return of any signs listed. If there are any changes it is important to consult your vet without delay.

Other ways to help your dog

Talk to your vet about the lifestyle changes they may want you to introduce, to help your dog cope with their heart condition. These may include:

-  **Changes to the exercise routine**
-  **Dietary changes**

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All about Vetmedin®

These are a few common questions and answers you may find helpful. Don't forget to ask your vet if you have any further queries.

What is Vetmedin® and how does it work?

Vetmedin® is a treatment for dogs with congestive heart failure due to MVD or DCM. It acts in two ways:

-  To open up blood vessels carrying blood to and from the heart, to reduce the workload on your dog's heart
-  To increase the strength of your dog's heart beat, to improve the pumping action

This combined action is called inodilation.

Your vet may also prescribe other medicines at the same time.

How can Vetmedin® help?

Vetmedin® can relieve the symptoms of heart failure and so help your dog have a more comfortable life. A recent global trial called QUEST also showed how Vetmedin® can help prolong the life of dogs suffering from heart failure relating to underlying mitral valve disease.¹

How is Vetmedin® given?

Vetmedin® is available as a flavoured tablet or capsule. It should be given to your dog by mouth twice a day, approximately one hour before food, ideally 12 hours apart in the morning and at night. Use the dose that your vet recommends.

How long does Vetmedin® take to work?

Every dog is different, and their response depends on how ill they are to start with. But you should start to see an improvement in your dog within a week, which may get even more noticeable in the following weeks.

What if a dose of Vetmedin® is missed?

Don't worry. Just give the next dose at the normal time. There's no need to increase the dose.

Does Vetmedin® have any side effects?

Normally, dogs tolerate Vetmedin® very well. Very rarely, dogs may experience vomiting or diarrhoea. If this happens or if you are concerned about your dog for any reason, please contact your vet for advice.

How long will my dog live on Vetmedin®?

It's not easy to predict how quickly heart disease will progress in an individual dog. With milder disease and treatment, many dogs live for long periods. And they can certainly live a better quality of life when they respond well to treatment. Ask your vet for advice about your dog's future.

Where can I find out more about Vetmedin®?

More information about Vetmedin® and heart disease in dogs can be found at www.vetmedin.co.uk

1. Häggström *et al.*, (2008) J Vet Intern Med 22:1124-1135.