



If your pet has been found to have a mammary (breast) mass you are, understandably, deeply concerned. We have produced this information leaflet to help you come to the best decision for you and your pet. A benign tumour is not dangerous; a malignant one though is and depending on how malignant can spread and cause death.

The first thing to say is that Cats and Dogs are different when dealing with mammary masses. **But whatever the species one golden rule applies - IF YOU SEE A BREAST LUMP HAVE IT REMOVED AS SOON AS POSSIBLE.**

Should we wait and observe it? - NO

We are able to say this because we know from studies that in **Dogs** if a lump is removed the size of it when removed determines how likely it is to be malignant. The smaller the lump the less likely it is to be malignant as the following table shows:

Tumour size (max diameter)	% of which will be malignant
Less than 1cm	2%
1 to 1.9 cm	3%
2 to 2.9 cm	15%
3 to 3.9 cm	55%
Greater than 4cm	58%

So we hope you can see that waiting to see if it grows only risks that it will do just that. And then there is an increased risk that it will be malignant as it is widely believed many breast tumours which start off as benign can become malignant in time.

The picture in **Cats** is less well known except to say that in cats up to 80% of tumours can be malignant. Thus it is advised a more radical approach is taken with any surgery performed. We also have the following figures on survival times **after surgery** on breast tumours in cats:

Tumours less than 2 cm in diameter	Tumours greater than 3 cm in diameter
Reported survival is greater than 3 years	Survival times less than 1 year

Should we do a biopsy first? - NO

In the past we have done fine needle biopsies which did not need a sedative or anaesthetic. However, these have been shown to be unreliable. So now we advocate a clinical assessment of the mass – how big is it? Is there any enlargement of the local lymph nodes? Is it freely mobile and not attached to the underlying tissues? If no bad features are found we would then advocate early



removal of the mass with histology (analysis) done after removal to confirm sufficient tissue was removed. We would then discuss the implications of the histology report with you.

In **dogs** this histological analysis or 'staging' has been shown to offer further information on likely survival times:

Histological stage	Likely survival time after surgery
Stage 1	Cured and so normal lifespan
Stage 2	1 year
Stage 3	3 months
Stage 4	3 months
Inflammatory carcinoma	1 to 2 months

Is chemotherapy of any use? – NO

Currently in animals, chemotherapy shows poor results and so we would advise that surgery is the mainstay of any treatment for breast tumours.

How much breast tissue do you need to remove? – That depends on a number of factors.

These would be discussed in greater detail by the vet but, in general, the guidance is as follows:

If lump < 0.5cm	If lump < 3cm	Multiple lumps on one side only	Multiple lumps on both side	Local lymph nodes enlarged	If a cat
Just the lump itself with a 1cm margin	The breast in which the lump is located	The breast which contains the lump, the local lymph node and all intervening breast tissue	The breast which contains the lump, the local lymph node and all intervening breast tissue	All the breast tissue on that side and the enlarged lymph node	All the breast tissue on BOTH sides with a 3-4 week gap between removal of each side

Clearly there is a lot to consider and one must also weigh up the cost, how your pet will cope and likely survival times. These are complex issues which we would be glad to discuss further with you.