

HCM Testing and Breeding

(Based on the PawPeds recommendations at <http://pawpeds.com/>)

1. Recommendations for Testing

The first HCM test should be done before the cat (male or female) is used in a breeding program. The HCM test should be performed by a board-certified cardiologist. Further testing is recommended on a yearly basis or before the next breeding, as long as the cat is used in a breeding program. It is wise to test later at an older age, after a cat is retired from the breeding program.

Test the oldest cats available in a pedigree to determine that they are HCM negative, at least up to the age of 8 years. It is also wise to do a search for HCM positive cats in the pedigree, utilizing the list of openly declared HCM positive cats. (http://www.tibcs.com/BGBulletin/HCM_List-05-03-15.xlsx)

2. Recommendations for Breeding

When selling a Bengal to be used in breeding, the breeder should disclose the the parents' HCM testing and any relatives with either HCM Positive or Equivocal status.

2.1 Normal heart

Cats with a normal heart status according to HCM screening, without any close relatives¹ diagnosed with HCM, can be used in breeding.

2.2 Diagnosed with HCM

Cats diagnosed with HCM of any degree should not be used for breeding under any circumstances. If possible, they should be spayed or neutered and allowed to live as pets in an environment with as little stress as possible.

Cats diagnosed with HCM should be published on TIBCS HCM List.

2.3 Cats with "Equivocal" test results

An "Equivocal" result means that something found in the heart during the HCM test is not considered 'normal.' At the time of the test it is not clear whether it is HCM or whether it could prove to be a normal condition for that particular cat.

An Equivocal result does not automatically mean the cat will develop HCM! Other things like high blood pressure, kidney insufficiency, or something else could cause the anomaly. The cat could also have a normal variation on the 'standard' values, such as the papillary muscles could be larger than those of the average cat, or left ventricle wall thickness could be greater than normal, etc. Cats who have either larger papillary muscles than those of the average cat or left ventricle wall thickness greater than 5,0 mm should be declared Equivocal. Only continued testing will show if this abnormality is HCM or not.

It is not recommended to use cats with an equivocal test result in a breeding program. These cats should be retested after six months or a year, depending on the recommendation of the cardiologist. They should only be used as breeders if the second test shows that the cat's heart is normal.

Cats with "Equivocal" results should be published on TIBCS HCM List.

3. Close Relatives of HCM-Positive Cats

The following is recommended for the close relatives¹ of a cat diagnosed with HCM.

3.1 Parents of an affected cat

Because HCM is a hereditary disease, if a Bengal tests positive for HCM, then either the father, the mother, or both parents also have an issue with HCM. The father and the mother of an HCM-affected cat should be retested as soon as possible. In addition to having their heart tested, the pedigree of the parents should be examined closely, looking for other known HCM-positive cats. A normal-testing parent of an HCM-positive cat can continue to be used in a breeding program with great caution. They should only be bred to a risk-free partner (a cat with a normal heart and with no close relatives¹ or ancestors diagnosed with HCM). Two cats that have produced a HCM positive cat should not be bred together again, under any circumstances.

3.2 Siblings (brothers and sisters) of an affected cat

The brothers and sisters of an HCM-affected cat should not be used in a breeding program before they prove to have a normal heart at the age of five years. If their heart continues to test normal without changes at the age of five years, they can be used in a breeding program with great caution. They should only be bred to a risk-free partner, i.e., a cat with a normal heart and no close relatives diagnosed with HCM.

3.3 Half-Siblings of an affected cat

The half-brothers and the half-sisters of an HCM-afflicted cat should be re-tested as soon as possible. If the heart proves to be normal, a half-brother and a half-sister of a HCM positive cat may continue to be used in a breeding program with great caution. They should only be bred to a risk-free partner, i.e., a cat with a normal heart and with no close relatives¹ diagnosed with HCM.

3.4 Sons and daughters of an affected cat

The sons and daughters of an HCM-affected cat should not be used in a breeding program before they prove to have a normal heart at the age of five years. If their heart is still normal at the age of five years, they can be used in a breeding program with great caution. They should only be bred to a risk-free partner (a cat with a normal heart and with no close relatives¹ diagnosed with HCM).

¹ As used in these Recommendations, "close relatives" means siblings (brothers and sisters), as well as parents and offspring (sons and daughters).