

## ARVC 1 & ARVC 2

Info from NCSU 1/27/24

Below is an explanation for each possible test result so you can better understand all the possible Results and make informed Breeding decisions

Negative Result: for both ARVC1 and ARVC 2	The absence of both mutations in a Boxer indicates that the risk of developing ARVC is low. It is still possible for a dog to develop heart disease. However a negative result for both ARVC1 and ARVC2 indicates that a dog does not have either mutation known to cause ARVC
Positive result : for NCSU ARVC 1 only	Dogs that are positive for ARVC1 have an increased likelihood of developing ARVC, but are not necessarily guaranteed to experience symptoms of serious disease
Breeding Recommendations:	Dogs that are positive for ARVC 1 should <b>NEVER</b> be bred to a dog that is NCSU positive for ARVC 2 since this will lead to dogs that are of the highest risk of developing ARVC. Dogs that are positive Homozygous for ARVC 1 should ideally not be bred
Positive result : For NCSU ARVC 2 only	Dogs that are positive for ARVC 2 have an increased likelihood of developing ARVC, but are not necessarily guaranteed to experience symptoms of serious disease
Breeding recommendations:	Dogs that are positive for ARVC 2 should <b>NEVER</b> be bred to a dog that is NCSU positive for ARVC 1 since this will lead to dogs that are of the highest risk of developing ARVC. Dogs that are positive Homozygous for ARVC 2 should ideally not be bred
Positive result for: NCSU ARVC1 and NCSU ARVC 2:	<b>Dogs that are positive for both ARVC1 and ARVC2 are at very high risk of developing ARVC</b> , and should be carefully monitored by your veterinarian for signs of disease. Annual evaluation by a Cardiologist with an Echocardiogram and Holter Monitor, after 3 years of age is recommended
Breeding recommendations:	<b>Dogs that are positive for both ARVC1 and ARVC 2 are at the highest risk of developing ARVC</b> and ideally should not be bred, since they can pass both traits on. They should <b>NEVER</b> be bred to a dog that is positive for either test