

TABLE 1 | Suggested Guidelines by Breed for Age of Neutering.

Suggested guidelines for age of neutering: 35 breeds										
	Males					Females				
	Leave intact	Choice	Beyond 6 months	Beyond 11 months	Beyond 23 months	Leave intact	Choice	Beyond 6 months	Beyond 11 months	Beyond 23 months
Australian Cattle Dog	✓							✓		
Australian Shepherd	✓						✓			
Beagle				✓			✓			
Bernese Mt. Dog					✓		✓			
Border Collie				✓					✓	
Boston Terrier				✓			✓			
Boxer					✓					✓
Bulldog	✓						✓			
Cavalier King Charles Spaniel	✓						✓			
Chihuahua	✓						✓			
Cocker Spaniel			✓							✓
Collie	✓								✓	
Corgi			✓				✓			
Dachshund	✓						✓			
Doberman Pinscher	✓									✓
English Springer Spaniel	✓							✓		
German Shepherd					✓					✓
Golden Retriever				✓			✓			
Great Dane	✓						✓			
Irish Wolfhound					✓		✓			
Jack Russell Terrier	✓						✓			
Labrador Retriever			✓						✓	
Maltese	✓						✓			
Miniature Schnauzer	✓						✓			
Pomeranian	✓						✓			
Poodle (Toy)	✓						✓			
Poodle (Miniature)				✓			✓			
Poodle (Standard)					✓		✓			
Pug	✓						✓			
Rottweiler				✓				✓		
Saint Bernard	✓							✓		
Shetland Sheepdog	✓								✓	
Shih Tzu	✓								✓	
West Highland White Terrier	✓						✓			
Yorkshire Terrier	✓						✓			

Summary of spaying and neutering guidelines based on findings regarding increased risk of joint disorders and cancers. The term "choice" means there was no increased risk for any age.

seen through age 8 or beyond was fairly small, so the analysis results might change with an increased sample size of these older dogs.

The following are brief summaries for each of the breeds along with suggested guidelines for age of neutering. See **Appendix 1** for the complete data set, including statistical analyses for each breed.

Australian Cattle Dog

The study population was 61 intact males, 58 neutered males, 48 intact females, and 70 spayed females for a total of 237 cases. In this sample, 5 percent of intact males and 2 percent of intact females were diagnosed with one or more joint disorders. Neutering males was not associated with any increased risk in joint disorders, but there was an association with spaying females