

Guide to the British Veterinary Association / Kennel Club Chiari malformation / Syringomyelia (CM/SM) Scheme

The scheme aims to reduce or eliminate the incidence of inherited CM and SM in dogs. Grading is according to the severity of the CM and SM changes. The grade is qualified with a letter indicating the age group at the time of scanning as follows:

a = more than five years of age;

b = three to five years of age;

c = one to three years of age. The grade is not valid without the qualifying letter.

Chiari-like malformation (CM):

Grade 0 - No Chiari malformation

Grade 1 - Cerebellum indented (not rounded)

Grade 2 - Cerebellum impacted into, or herniated through, the foramen magnum.

Syringomyelia (SM):

When viewing the images for syringomyelia, presyrinx, which is cord oedema, is sometimes seen. This may be transitional.

Grade 0 - Normal (no central canal dilation, no presyrinx, no syrinx)

Grade 1 - Central canal dilation (CCD) less than 2mm in diameter

Grade 2 - Syringomyelia (central canal dilation which has an internal diameter of 2mm or greater, separate syrinx, or pre-syrinx with or without central canal dilation).

If the dog is not KC registered or closely related to a KC registered dog then an EBV cannot be generated and owners should refer to the breeding guidelines (below) and select breeding stock based on the CM/SM result. Owners should also refer to these breeding guidelines for breeds and crossbreeds that do not have an EBV scheme.

This cross chart is for SM only: Green colour = breed Red colour =do not breed.

Age (years)	SM Grade	Normal			CCD			SM		
		0a	0b	0c	1a	1b	1c	2a	2b	2c
>5	0a	Green	Green	Green	Green	Green	Green	Green	Green	Red
3-5	0b	Green	Green	Green	Green	Red	Red	Red	Red	
1-3	0c	Green	Green	Red	Green	Red	Red	Red	Red	
>5	1a	Green	Green	Green	Green	Green	Green	Green	Green	
3-5	1b	Green	Red	Red	Green	Red	Red	Red	Red	
1-3	1c	Green	Red	Red	Green	Red	Red	Red	Red	
>5	2a	Green	Red	Red	Green	Red	Red	Red	Red	
3-5	2b	Green	Red	Red	Green	Red	Red	Red	Red	
1-3	2c	Red								
Dog with clinical signs CM&/or SM any age		Red								