

## Portosystemic Shunt Screen Submission form



Unit 11, Station Road, Southwater, Horsham, W. Sussex RH13 7HG  
Telephone: 01403 730176 Fax: 01403 732784

Vet. Surg. ....  
Practice .....  
Address .....  
.....  
.....  
Tel. No. ....  
Fax No. ....

Owner's name .....  
Details of litter .....  
Breed .....  
Name of dam .....  
Date of birth .....  
Date of sampling .....  
Date sent .....

Puppies should be identified to the satisfaction of the veterinary surgeon, so that each result can be matched up with the correct individual. Sample tubes must be clearly labelled to correspond with the identifications listed.

**Puppy identification:**

- |                     |                      |
|---------------------|----------------------|
| 1. .... dog / bitch | 9. .... dog / bitch  |
| 2. .... dog / bitch | 10. .... dog / bitch |
| 3. .... dog / bitch | 11. .... dog / bitch |
| 4. .... dog / bitch | 12. .... dog / bitch |
| 5. .... dog / bitch | 13. .... dog / bitch |
| 6. .... dog / bitch | 14. .... dog / bitch |
| 7. .... dog / bitch | 15. .... dog / bitch |
| 8. .... dog / bitch | 16. .... dog / bitch |

Sample requirement is 1.5 ml clotted blood from each puppy, collected 90 to 120 minutes after feeding. Please use either glass specimen bottles or gel tubes designed for whole blood. Plastic vials or centrifuge tubes are not suitable. If possible, samples should be separated in the practice and sent as serum.

The test is invalid if the puppies have not eaten a reasonable-sized meal before testing. It is therefore essential for certification purposes that the feeding is witnessed by a practice representative, who should sign the declaration below to confirm that this has been done.

I confirm that I witnessed these puppies being fed approximately 1½ to 2 hours before the blood samples were collected, and that each puppy ate a reasonable amount.

Signed ..... Print name .....  
Position in practice .....



*Partners:* George W. Tribe, BVM&S, MPhil, DLAS, CBiol, FIBiol, FRCVS, RCVS Registered Specialist  
Morag G. Kerr, BVMS, BSc, PhD, CBiol, FIBiol, MRCVS



Partners: George W. Tabe, BVMS, MPhil, DLAS, CBiol, FRCVS, RCVS Registered Specialist  
Morgan G. Kerr, BVMS, BSc, PhD, CBiol, MRCS

Morgan G. Kerr

Yours faithfully,

While the Irish Wolfhound is as yet the only breed investigated in large numbers, we are prepared to test litters from other breeds if required. There may, however, be a need for greater flexibility in interpretation until a larger database is built up for a range of breeds.

The study just completed indicated that the presence of a shunt is associated with postprandial bile acid concentrations of greater than 40  $\mu\text{mol/l}$ , usually considerably greater in fact, while concentrations less than 40  $\mu\text{mol/l}$  indicate the absence of a shunt. As a precaution, we insist on a re-test for any puppy with a result between 30 and 50  $\mu\text{mol/l}$ , and it is preferable in that event to carry out a dynamic (two-sample) test at that stage. However, this eventually does not arise very often, with most affected puppies being well above 50  $\mu\text{mol/l}$  and the vast majority of normal puppies being below 30  $\mu\text{mol/l}$ . During the study only 1.4% of puppies were recalled for re-testing (most of these being normal individuals with an initial result between 30 and 40  $\mu\text{mol/l}$ ). 98.6% were given a definite result on the first test. All of the remaining puppies gave a definite result on the second test.

The enclosed submission forms are intended to facilitate sending in samples for this test. It is of course not essential to use the forms, but it is absolutely essential that we have signed confirmation that the feeding of the puppies was witnessed by a practice representative. If such confirmation cannot be provided, we will certainly analyse the samples and give an opinion on the results, but we will *not* be able to sign certificates in respect of the litter.

I am writing to you as a practice which has submitted blood samples from Irish Wolfhound litters for screening for portosystemic shunts, to let you know that the pilot phase of the study has been completed and that a paper has been submitted to the *Veterinary Record* presenting the findings. In summary, it appears that the best discriminator between normal and affected puppies is the postprandial bile acid concentration, as opposed to the change in bile acid concentration with feeding. This has the marked advantage of allowing us to alter the screening protocol to require only a single serum sample from each puppy, taken 90 to 120 minutes after feeding. This should save time, money and stress to both puppies and veterinary surgeons! However, it does introduce the necessity for making certain that the whole litter has indeed been fed at the appropriate time before sampling. I cannot overemphasise the importance of this, as an affected puppy will appear to be normal on a fasted sample.

Dear Colleague,

October 1998.

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