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Press Information

Vets Urged to Take Proactive Role in Tackling Hereditary Disease

The [World Small Animal Veterinary Association](#) has called on vets to take a proactive role in tackling hereditary disease and to advise breeders on the tests available to them before they breed from their animals. Speaking at a press briefing during BSAVA Congress 2017, Dr Cathryn Mellersh, Head of Canine Genetics at the Animal Health Trust and a member of the WSAVA Hereditary Disease Committee, also urged vets not to shy away from telling owners if they have made a bad choice to try to deter them from making the same mistake again.

During her briefing Dr Mellersh explained that concern about hereditary disease, particularly in dogs, had grown significantly in recent years, thanks to an increased awareness of the risks it poses to animals, both within the veterinary profession and among owners and breeders. She said that the proactive approach and financial support offered by the Kennel Club to tackle the problem was also to be welcomed.

Dr Mellersh also explained that this heightened awareness had coincided with a period of rapid progress in the development of tools and resources to tackle Hereditary Disease, including the online [DNA database](#), created by the WSAVA's Hereditary

Disease Committee and supported by Mars Veterinary, which is accessible, free of charge to veterinarians around the world.

She focused on Mendelian diseases, typically caused by mutations in a single gene, explaining that these diseases, usually restricted to single breeds, could be highly debilitating and required specialist diagnosis. The example she gave was that of primary open angle glaucoma in Shar Pei - a painful and blinding inherited eye disease for which her research group has just developed a DNA test. She emphasised that most Mendelian diseases were amenable to DNA test development, however, and that, if the gene was recessive, they could be difficult to eliminate without one.

She said: "We ask vets to advise breeders to use DNA test results to avoid breeding clinically affected dogs and to reduce the frequency of mutation within a breed, over time, without damaging genetic diversity. When selecting a test, it is important that they ensure that the test they are using is based on sound science and on the right mutation for the breed being tested."

Dr Mellersh also warned vets not to advise against breeding with carriers and said that dogs should not be excluded from breeding on the basis of a single mutation that they could test for. "The disease mutation that the DNA test is for is not the only mutation that a carrier has," she said. "Most dogs carry at least 50 recessive mutations so, if carriers are not bred from and only clear dogs used then there is a risk that other mutations carried by these clear dogs will increase in frequency within the breed and new inherited diseases could emerge."

She continued: "The ranges of resources available to help vets in this area is growing all the time and includes the WSAVA database hosted by PennGen and a Kennel Club database which lists the DNA tests recommended or required by Assured Breeders. For those looking to increase their knowledge in this area, hereditary disease is one of the key issues to be discussed during this year's [WSAVA World Congress in](#) Copenhagen

from 25-28 September. Many of the world's experts will be there and a full lecture stream is planned."

Dr Mellersh concluded: "I ask vets to work with us and to contribute to the very real progress that is being made to tackle hereditary disease, particularly in dogs. Advances in technology are driving this progress and it is also being supported by many breeders and by the Kennel Club.

"The greatest challenge we face is that of educating the general public that they should be mindful of hereditary disease when choosing a puppy and should seek out those whose breeders have had the appropriate DNA tests and clinical screens."

She added: "It is, of course, not always possible to reach owners before they buy a puppy but should their dog later go on to develop a condition that is well-known in the breed, then I ask them to explain this to owners so that, should they buy another dog, they do not make the same mistake. As a vet, you will also often be the first port of call for advice by first time breeders and this gives you a golden opportunity to advise them as to the tests they should undertake and, depending on the results, whether they should go ahead with breeding or not.

"Working together as a profession, being willing to discuss difficult issues with owners and breeders and utilising the resources and tools created by organisations such as the WSAVA, are all required to ensure that we increase the momentum we are already achieving in tackling canine hereditary disease in the UK and around the world."

The WSAVA works to enhance the clinical care of companion animals globally, representing around 200,000 veterinarians around the world through 101 member associations.

About Mars Veterinary

Mars Veterinary is a business unit of Mars Petcare, the U.S. operations of the world's largest pet care company at the privately-held Mars, Incorporated. Mars Veterinary has spent nearly two decades researching canine genetics starting with an instrumental role in the Canine Genomics project in 1999. Through the development of the world's largest breed database and strategic partnerships with leading universities and genetics researchers, they are able to offer some of the most comprehensive companion animal DNA tests on the market. These tests include the canine breed identification test, WISDOM PANEL® and the OPTIMAL SELECTION™ canine and feline breeder diagnostic tests. The Mars Veterinary mission is to facilitate responsible pet care by enhancing the well-being and relationship between pets, pet owners, breeders and veterinarians through valuable insights into pets as individuals. For more information, visit www.wisdompanel.com.

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