



VALLEY FEVER CENTER
FOR EXCELLENCE

Canine Nikkomycin Z Study Results

Nine dogs with Valley Fever pneumonia completed the full 60-day treatment protocol for the study. The dogs enrolled in the study with an assortment of the typical complaints for Valley Fever in the lungs: coughing, fever, lack of appetite, lack of energy. Eight of the dogs had a cough at the time of enrollment. All of them had x-rays typical of Valley Fever. Some of the dogs were only mildly sick and some were extremely sick. They had Valley Fever for 1 week to 1 year prior to enrollment and the average dog had been sick for 3 months and was not getting better on fluconazole during that time.

The best news: None of the dogs had ANY side effects to the medication and all of them had an improvement in appetite and energy according to their owners and all of them gained weight when weighed at the vet hospital for the exit examination. The drug looks very safe and well-tolerated by dogs.

The good news: 7 of the 9 dogs had real improvement in their Valley Fever symptoms, x-rays, and blood work. Three dogs did super well, with all symptoms and x-ray abnormalities resolving, and are currently off all medication and doing well, ranging from 4 to 17 months after the study. One of those dogs entered the study after not responding to fluconazole and had a complete response to nikkomycin Z in just two months. Another dog, a Golden Retriever puppy that entered the study very sick and not responding to fluconazole discovered what a tennis ball was after only two weeks on the nikkomycin Z. By the end of the study, she was a normal puppy with greatly improved x-rays and blood tests, and though she remains on an antifungal, she is expected to recover fully now. One dog had 75% improvement of a whole affected lung lobe that was not responding to fluconazole. Two other dogs had good improvement of their Valley Fever and the owners were very happy with how the dogs were doing, but both were expected to require long term antifungal medication to continue the healing process.

The less good news: Two dogs, both of which had very severe lung disease at the time of enrollment, failed to respond well to the nikkomycin Z. Owners of both dogs reported improvement in their dogs – better eating, more energy – but the x-rays and blood tests were not significantly improved at the end of two months. The nikkomycin Z may have been helping these dogs, too, but they needed longer treatment, or maybe it was not helping very much. We cannot tell the difference from this study.

Overall, nikkomycin Z helped most of the dogs treated with it and showed the potential to completely rid a dog of respiratory symptoms of Valley Fever after two months of treatment. We cannot draw any conclusions regarding how nikkomycin Z would help dogs with Valley Fever outside the lungs, nor if it would have made more dogs well if it could have been given for a longer period of time. Nikkomycin Z looks really promising as a new treatment for Valley Fever. It may take five years before it is commercially available.