

Message from the President



The month of July, 2021 marks the 7th anniversary of NovaVive Inc. It's really quite remarkable to realize all that has been accomplished in that time. Most significantly, I would say that our Company and products are becoming more readily recognizable in the animal health community.

Our Mycobacterium Cell Wall Fraction (MCWF) immunotherapies offer alternatives to mainstream therapies for several health conditions. As general immune

system stimulants, they boost an animal's internal immune system to fight disease, whether bacterial, viral or cancer.

In the case of canine cancer, word of mouth about Immunocidin[®], our product for canine mammary cancer, has led to an experimental proof-of-concept study in canine osteosarcoma (bone cancer). Given that there are no approved therapies for this tumor type, there has been a significant amount of interest among pet owners. To date, more than 30 dogs have been enrolled in a pilot study assessing the effect of Immunocidin on dogs with osteosarcoma. Promising results are being seen, which could lead to a larger controlled study in osteosarcoma in the future. The protocol calls for a combination of IV and oral dosing of Immunocidin.

A number of bovine (cattle) veterinarians have come across our therapy for the treatment of bacterial diarrhea in neonatal calves

(Amplimmune[®]) and have asked if it could be helpful in mature cows. This has led to a number of small demonstration studies on dairy farms to assess the effects.

We are pleased to have such a versatile technology as our primary focus at NovaVive. As additional uses for the technology are found and proven successful, we can plan for large-scale studies—in collaboration with regulatory authorities in different jurisdictions—that could lead to new label approvals.

The possibilities are endless, and we have to remind ourselves to focus on a few opportunities at a time.

It's so gratifying to hear positive feedback about our products and Company on a regular basis, and I'm proud of our ongoing accomplishments seven years in.

Q&A with Dr. Jeannette Kelly, Veterinary Oncologist

We recently interviewed Dr. Jeannette Kelly, veterinary oncologist at Veterinary Cancer Care in Santa Fe, New Mexico, to gather her thoughts about our canine cancer immunotherapy, Immunocidin[®]. She has been using Immunocidin in her clinic since 2016.

Q: What did you discover when you used Immunocidin at the same time as chemotherapy in dogs and cats with cancer?

As a general rule, patients felt good when they were receiving Immunocidin; just an overall well-being. Maybe the day of it, a little tired, but after that 24-hour mark, they had more energy and were more playful.

Q: Have you seen any side effects with Immunocidin? Were these of concern to you?

We've only had a handful of side effects. We've had dogs become hypotensive (decreased blood pressure) and collapse. So there's been a few events like that. Again, very mild. The symptoms resolve right away when we stop the infusion. We've had some dogs develop fever. Dogs that generally have side effects are dogs that usually have side effects to everything; dogs that we've known for a while that are very medication sensitive. So your average dog – and actually cats – do very well.

Q: How many patients diagnosed with cancer do you think have been treated with Immunocidin in your clinic so far?

Hundreds.

Q: Do you consider Immunocidin valuable as a therapy for pets nearing the end of life? If so, why?

As a general rule, most clients will report that the dog feels good with their Immunocidin. So as long as the patient isn't having any side effect – because it is end of life – we don't want any side effects with end of life – as long as they feel good, it can help stimulate their immune system and help them feel good, I think it's a wonderful thing.



continued on page 2

Before & After Immunocidin® Equine Sarcoid Treatment



Immediately after 1st treatment.



After 2nd treatment.



Final outcome.

This is Casey, a 5yo Dutch Harness horse with a fibroblastic sarcoid tumor near his eye. Fibroblastic tumors are one of six equine sarcoid tumor types.

These tumors—commonly found around the eyes, head/face, neck, chest, shoulders, or the sites of old scars—are believed to be caused by bovine papilloma virus transmitted by flies.

Casey's tumor received no previous treatment. His veterinarian recommended Immunocidin® Equine, our USDA- and CFIA-approved immunotherapy for equine sarcoids.

A total of 5mL of our product was administered intratumorally three times at approximately 25-day intervals. The photos at left were taken at the beginning of, during, and after treatment with Immunocidin® Equine.

Casey's owners were ecstatic: "Needless to say that we are thrilled with the results."

Q&A with Dr. Jeannette Kelly (continued)

Q: Based on your experience, do you think it is safe to administer Immunocidin in dogs and cats weekly or every two weeks?

Yes. I haven't seen any sort of kidney failure or any sort of problems with their laboratory parameters or any problems with pulmonary edema. I haven't seen anything that could be attributed to the Immunocidin thus far, so I feel like it's very safe actually.

Q: Has anything surprised you about the effects of Immunocidin therapy?

I'm surprised at some of the survival times for our patients – longer survival times. We don't know if it has to do with the Immunocidin, but that is something that really needs to be explored; a nice controlled trial.

Also, the fact that patients do so well with intravenous usage.

I'm surprised how safe it's been. When I first started using it, I would only use it

in dogs that were very sick and didn't have any other options and now, I feel very safe using it in healthy dogs that have other options. So I think the safety is probably what surprises me the most.

Q: What do your clients say about Immunocidin after their pets have been treated with it?

I think the number one thing that I consistently hear is just increased energy. Overall, (the pet) just seems brighter, more alert, with more energy.

Q: Can you comment on the cost of Immunocidin versus other therapies in animals with cancer? Or for use in end-of-life care?

I think it's a very economical option for people.

Q: What do you see as the advantages of immunotherapy in general?



Immunotherapy is lovely because you're not damaging any normal tissue and anything that you can do to up-regulate a patient's immune system – their own immune system – is wonderful. I mean the chances of any long-term side effect is extremely minimal.

Q: What type of research study would you like to conduct using Immunocidin?

I think that using Immunocidin as a single agent in a controlled trial would be wonderful. And if it could be fully funded, that would be amazing.

I would pick a tumor type like hemangiosarcoma, something pretty fast growing. Potentially, osteosarcoma. Those are pretty consistent cancers that we see a lot of.

NovaVive Business Update

