

## Beginning with the End in Mind

Developing and registering products for use in veterinary medicine is often viewed as a quick path to revenues, especially when compared to human medicine. This view is fuelled by a number of factors including the time required to gain approval, the cost of development, and the ability to conduct work in the target species to develop direct evidence of safety and efficacy among others. Some of these views can be misleading, including underestimation of the quality standards for veterinary products, overestimation of the market, and failure to appreciate the role of the animal owner in the ultimate success of the product.

Human medicine recognises that patient compliance is a significant factor in the success or failure of a product to address the condition for which it is intended. Not only is this also true in treating animals, it is more important, as the ability to administer a product, or conversely its difficulty, is a leading determinant in the success or failure of a particular product. This is even more the case when treating conditions which require long-term or daily administration — the very targets attractive to drug developers and investors.

Therefore, it is important to begin the decision process regarding development of an asset into a veterinary product with the end in mind. Who is the real customer? How is the drug to be delivered? How often must the product be administered? What are the side-effects, including not just adverse events but odour and appearance (is a topically administered product deemed “too greasy” for example)? When making answering these questions, convenience and compliance can spell the difference between a successfully marketed product and one which fails to meet expectations, so consideration to these points should be at the forefront of the development process.

These points are evidenced when considering the successful product introductions in recent years. The ability to provide heartworm control to a dog in a presentation regarded by both the owner and the pet as a treat, being able to administer parasite control to cattle as pour-on, prevention of fleas and ticks with single, monthly topical applications instead of dips and baths, and now a new generation of flea and tick control presented in an oral presentation promising to be viewed as a treat. Certainly, the safety and efficacy of these, and other, products have positioned them well with both veterinarian and consumer. But their ease of administration, in both form and frequency, has enabled the capture of market share, the ability to command premium pricing, and the capacity to resist the introduction of competitors including those with generic active ingredients, even at lower cost per dose.

In considering products for development, certainly there are stories of an individual who spent a considerable amount of money for the treatment of a beloved pet for



cancer. However, there are exponentially more examples of pet owners who also love their pet but weigh the benefit of treatment against the struggle to push a tablet into the throat of the animal. And asking the pet owner to do this two or three times per day only exacerbates the challenge. The owner may decide that the animal seems to be “doing better” after a couple of days or that the pet “is not really that sick after all” in order to justify discontinuing treatment.

Certainly, discovery and development of novel products and active ingredients are exciting activities which often reward companies, entrepreneurs, and investors. By no means should these undertakings be discounted as a means to enter the veterinary market and become financially successful. However, it is equally important to consider how the product will be delivered to the animal and incorporate this feature at the onset of the development programme. No matter how well the active works, getting the product into the animal is a critical component of its effectiveness.

By starting with the end in mind, the result is far more likely to yield the market share, penetration, and financial outcomes envisioned for the intended product.



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