Scintica: INSTRUMENTATION

Questions & Answers

## WEBINAR:

# (May 29th, 2024) Advancements in Intravital Microscopy- Insights for Preclinical Research Applications

**Questions and answers from the May 29,2024 webinar titled "Advancements in Intravital Microscopy- Insights for Preclinical Research Applications."**

This document includes questions we received and answered during the webinar, as well as those that we did not have time to address.

1. **Can we track mRNA-based therapeutic compounds as small as 20-50nm in vivo? And how long can you image?**

   [Dr. Abi Karunendiran]: So, with the Intravital System, we are able to do subcellular resolution, which allows you to look at subcellular organelles. So, you should be able to look at mRNA assisted drug deliveries. In terms of the time, that just depends on the model itself. So, I would say maybe within 24 hours. But if the model is healthy and the drug delivery system is efficient, then probably longer. But it just depends on the system.

2. **How do I choose whether confocal or two-photon modality would be suitable for my application?**

   [Dr. Abi Karunendiran]: Both of these modalities offer different advantages. With two-photon, you're able to dive into deeper layers of your tissue, and you're also able to do some label imaging. So, if you require second harmonic imaging to look at collagen structure or muscle structure, it would be probably best to have two-photon modality. If you would prefer to have a wide arrangement of dyes as well as have the optical sectioning, then the confocal modality would be best. But with the IVM system, you also have the option of having dual, having the best of both.