FIVE COMMON MISTAKES DURING THE PRE-CLINICAL STAGE

Whether you are an old-hand or completely green, it always makes sense to learn from the experience of others. None of us are mistake-proof, but as we all know, there's a lot we can do to reduce or eliminate mistakes and their consequences.

We have put together for you five of the most common mistakes we have encountered in working with companies and developers in the pre-clinical stage.

1. "IF WE'RE ALREADY TESTING THIS TARGET, LET'S ALSO CHECK THAT…"

It is very tempting to load several targets onto one trial, especially when your budget is limited, your clock is ticking and your board is nagging you. While sometimes testing several parameters in one trial may be the right approach, you have to be very careful of overloading your trial with *too many* parameters. Each parameter you define might require a completely different protocol, and overloading several parameters onto one trial might compromise each of the protocols, resulting in a wasted effort.

To maximize the probability of success for your trial, clearly define your trial goals and the accompanying parameters. Always ask yourself what is the *primary* purpose of the trial at this stage. Define the scope of this trial and for whom the results are intended. Always keep your focus on the primary target of the trial, and carefully check whether you have overloaded your trial with too many targets.

While initially it may appear reasonable and cheaper to test several related targets in one global trial, building a gradual plan, in which each relevant target is the primary focus, will, in the long run, be wiser and even cost-effective.

2. "THIS IS HOW YOU TEST IT IN HUMANS"

It's true, your product is not designated for use in animals, but you will be testing it on an animal model. It is only human for you to want to replicate the application of your product on an animal in the same manner as you would on humans. However, the anatomical and physiological differences between animals and humans must be considered when designing the pre-clinical protocol. This may require an adjustment in your conceptual framework of the trial design.

In some cases, designing a unique and dedicated application of the product that is appropriately adjusted to the subject animal model may raise eyebrows but will, in the end, give you the desired outcome, relevant to the specific stage of your development.

3. "I DON'T NEED A CONTROL GROUP"

Many times when we are investigating the performance or safety of a product, we are specifically asked by the Company or the developer to *NOT* use a control group. The reason is typically to reduce costs or even due to strategic considerations.

When your product's results stand alone, with no control reference to be compared to, you're missing an important comparative parameter that may establish your product's competitive advantage or added value. You may even want to use a control reference just to show that

your product is "as good as". Sometimes, even a self-control or a sham control may provide the needed perspective of the results.

Use of the control group *establishes* your results. You don't need to orally explain the basis for the results when they are compared to actual data of a control reference, especially when it comes to the regulator.

4. "IT IS WAY TOO EARLY TO APPROACH THE FDA"

It is too often that companies avoid approaching the FDA in early stages of the development. The most common fear is revealing your product or its' design at an early stage. There is also the concern that an early approach to the FDA might unnecessarily complicate the development process.

However, you should know, that in the past few years, the FDA has become quite user friendly. Open lines of communications between the FDA and companies or their consultants have been established, allowing both sides to consult and learn the requirements of the specific development. In many cases, these approaches allow the company or its consultants to learn of the regulator's true intensions, and streamline the development process. Remember, just as you want your product to get to market, the FDA wants to establish a clear procedure for getting approved products to market in as short time as possible.

Learning your regulatory track from the regulator will put you on track.

5. I AM READY FOR GLP

In most cases, a GLP study is a very important and sometimes an essential milestone in the R&D process. However, it is not a substitute for the required pre-clinical studies. It is in the pre-clinical stage that you establish the desired results of your product. Do not consider your GLP study as a part of your research. You should get to the GLP study only when you are pretty sure you will get the results you need. Use the GLP study to confirm what you already know about your product from the pre-clinical study, but in a non-biased environment. Consider your GLP study as *show-time*, and use your preclinical studies as your *dress-rehearsal*.

In case you're finding yourself falling into these mistakes, or even if you're already licking your wounds, it is never too late to stop and reassess your next moves. Ask yourself the "hard" questions that can focus your project to the target, and keep asking yourself those questions through the entire process, to make sure all your vectors are directed to your goal. Do not hesitate to consult. The experience of others can be one of your more important assets.

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