9-7-16

Lori D. White, Ph.D., PMP
NTP Designated Federal Officer
NIEHS/NIH
P.O. Box 12233, MD K2-03
Research Triangle Park, NC 27709
whiteld@niehs.nih.gov

SACATM COMMENTS

Submission of comments to the Scientific Advisory Committee on Alternative Toxicological Methods (SACATM) on September 27th. The following are AxoSim's comments for "A Strategy for Implementing the Vision for Toxicity Testing in the 21st Century", organized by dicussion topics:

1.

Pharmaceutical companies are reluctant to use tissue-chip models, placing the burden of validation predominantly on the companies and institutions developing human-relevant methods. The lack of access to animal-based tests as benchmarks is indeed problematic. For some older drugs, animal toxicity data has been published, setting some precedence. Unfortunately, information on new drugs, which often have more nuanced toxic effects, is typically siloed within pharmaceutical companies. Therefore, the only way to convince these companies is on an individual basis, which takes significant time and effort. Under this paradigm, unless and until one of these companies wants to be a champion for human-relevant testing, implementation will languish. A concerted effort by a coalition combining pharma, regulatory agencies, and innovative human-relevant entities appears to be the only way to both broadly validate and do so in a way that does not compromise near term human safety. Side-by-side comparisons will be critical, but requiring innovators of fledgling technologies to shoulder this endeavor is detrimental and counter-intuitive to the cause.

2.

Human toxicological data is currently overseen by the FDA, as well as agencies such as the EPA. This data exists for historical drugs and is new data is consistently being collected. The ability to use this data for validation will require access to this data, first and foremost. A coalition, such as the one describe above, which brings together all of the parties involved will be necessary. Pharmaceutical companies have an internal interest in keeping data secure, but historical data should be accessible, and a mechanism for blinding data about more sensitive could be put in place to preempt this concern.

3.

To begin, a coalition between agencies and stakeholders must be formed and effectively managed. The regulatory agencies will have to put pressure on the larger stakeholders to motivate cooperation, and a consistent dialogue will need to be maintained to continually align mutual interests. There has to be a commercial motivation to push forward the scientific and ethical agenda, therefore all parties must work together.

4.

Institutional considerations will be largely influenced by political motivations, therefore regulatory and policy determinations are the single most critical aspects. Education for and amongst stakeholders will also be paramount, but these will again be motivated by policy and politics. As a pointed suggestion for policy, current FDA regulations specifically mention requiring animal testing prior to clinical trials. Language which allowed for validated human-relevant testing would accelerate progress for modern toxicology testing. All parties agree that human-relevant testing will be a step-forward in advancing clinical safety, and small regulatory changes have the potential to cause a shift in pharmaceutical toxicology programs.

Sincerely,

Lowry

J. Lowry Curley, PhD
Chief Executive Officer
AxoSim
1441 Canal St.
New Orleans, LA 70112
(504)355-3242
Lowry.curley@axosim.com