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Commentary Article

Experimental Pharmacology and Contribution of Animal Experiments to Therapeutic Discoveries

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ABOUT THE STUDY

Experimental pharmacology is based on null techniques, as little is known about the biochemical reactions that convert receptor activation into cellular responses. Null methods eliminate the need to understand these mechanisms. Similar receptor actions of drugs in a given system are believed to be similarly translated by cells. Under these circumstances, the equivalent ratio of drug concentration is independent of the cell stimulus response process [1]. Measuring Affinity and Efficacy in Functional Assays, the basic requirements of this method are the function of representing the first membrane drug event to elicit a response and the final. Failure to comply with this requirement will invalidate null methods such as comparison of agonist DR.

It is useful to consider the use of surrogate parameters as a prelude to certain discussions about the use of data-driven analysis. Ideally, the pharmacological data should be directly fitted to the specific model and parameters derived from this direct fit. However, there are times when a particular model predicts surrogate parameters that can be derived without fitting the data to the particular model. This can be an advantage. For example, an equivalent DR from a parallel concentration response curve right-shifted by an antagonist can be used in child analysis [2]. Therefore, the DR value can be used as a surrogate for the analysis of antagonism without the need to fit into an explicit model.

Experimental pharmacology and drug discovery are molecules, cells, and organisms by analyzing their interactions with other specific biological targets, including receptors and or enzymes, ion channels, transporters and transcription factors. We publish research on the mechanism of drug action at the level. Animal testing is a term used to describe the use of animals in educational, training and research experiments [3]. The terms animal testing, animal testing, animal testing, *in-vivo* testing, and biopsy have different meanings, but are often used interchangeably. The term "vivisection", a term preferred by those who oppose the use of animals in research, refers to the amputation or dissection of living animals. Researchers prefer to use the term "animal testing ".

Contribution of animal experiments to therapeutic discoveries

The greatest drug discovery in the 19th and 20th centuries was made possible by the use of animals. In the last century, all Nobel Prizes for medical research have relied on animal testing. The first Nobel Prize in Medicine in 1901 was serum therapy and research in horses [4]. The last Nobel laureate in physiology or medicine 2012 also worked on animals. There is a close correlation between rapid advances in animal research and advances in clinical medicine [5].

CONCLUSION

In the 1880s, Bering used horses to produce diphtheria antitoxins, developed vaccines against diphtheria and tetanus, and received the first Nobel Prize in Physiology or Medicine in 1901. Insulin was first isolated from dogs in 1922 and revolutionized the treatment of diabetes . Antibiotic treatments and vaccines for leprosy were developed using armadillos in the 1970s. Domagk introduced the antibacterial activity of protocol through a chicken experiment in 1939.

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