Alternatives for Acute Oral Systemic Toxicity Testing: NICEATM/ICCVAM Current and Planned Activities

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One of ICCVAM's highest priorities is identifying alternative methods for acute oral systemic toxicity testing. Recently, ICCVAM recommended two cell culture test methods that can be used to estimate starting doses for acute oral toxicity tests. To further refine and reduce animal use for such testing, we are evaluating how such assays can be used to set the starting dose for mixtures, which represent a significant percentage of acute testing studies. We are also making available high quality rodent acute oral toxicity data that can be used in the development and validation of more predictive alternatives. We are also organizing an international workshop to (1) identify predictive and more humane endpoints that may be used to terminate studies earlier, and (2) identify and standardize procedures for collecting mechanistic information from acute oral toxicity testing that will aid in developing batteries of predictive *in vitro* test methods. Also, the U.S. National Toxicology Program (NTP) has initiated a high throughput screening (HTS) program to identify rapid biochemical or cell-based tests that can be used to screen large numbers of environmental substances for their potential biological activity. One goal of this initiative is to identify batteries of HTS assays that ultimately may reduce or replace the use of animals in toxicological tests. Supported by: NIEHS N01-ES-35504.