Abstract

A study of the hazard evaluation of carcinogens

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Objectives: There is a need for assessment and management of proactive dimension for worker exposed to suspected carcinogenic chemicals. In this study, we tried to proposals for carcinogenicity evaluation method of substance through the documentation search of overseas institutional, since the evaluation of carcinogens through animal experiments has become possible for the carcinogenic hazard evaluation.

Methods and Results: We investigated the selection of a candidate substance for evaluation, carcinogenicity test method using the experimental animals, research and evaluation method of carcinogenicity from overseas organizations such as National Toxicology Program(NTP), International Agency for Research on Cancer(IARC), United States Environmental Protection Agency(EPA), Organization for Economic Cooperation and Development(OECD). NTP and IARC criteria and procedures for candidate substance selection is in the clear and systematic. Carcinogenicity tests with laboratory animals, although there detailed difference, what you want to see was the same. Method of carcinogenicity evaluation, the reference is clearly systematic, and the evaluation of dose-response relationship has also been specifically described.

Conclusions: It will be able to take advantage of research performance and the protection of the health of workers through the management of the carcinogenicity by improvement, completion and training of the investigated content.

Keywords: Evaluation of carcinogenic, Carcinogenic study, candidate carcinogenic substance, laboratory animal, risk assessment