This is provisional English translation of an excerpt from the original full report.

Risk Assessment Report

Ipronidazole

(Veterinary Medicinal Products)

Food Safety Commission of Japan (FSCJ)
October 2015

ABSTRACT

FSCJ conducted a risk assessment of ipronidazole (CAS No. 14885-29-1), a paraciticide, based on documents of the Joint FAO/WHO Expert Committee on Food Additives (JECFA) and others.

The data used in the assessment include pharmacokinetics (rats, pigs, turkeys and dogs), residues (pigs and turkeys), genotoxicity, acute toxicity (mice, rats and rabbits), subacute toxicity (rats and dogs), chronic toxicity and carcinogenicity (mice, rats and dogs), reproductive-developmental toxicity (rats and rabbits), and others.

In an *in vitro* bacterial reverse mutation test (Ames test) and Functuation test, ipronidazole was positive, and also was positive in an *ex vivo* reverse mutation test by host-mediated assay. On the other hand, a report mentioned that genotoxicity of ipronidazole in mammals was not conclusive due to the inappropriate experimental conditions. Based on these data integrated, FSCJ concluded that genotoxic potential of pronidazole relavant to human health coulnd not be excluded.

Carcinogenicity of ipronidazole was examined in an 89-week or a 100-week carcinogenicity study in mice, and in a 109-week chronic toxicity and carcinogenicity combined study in rats. A significant increase in incidence of lung tumors was observed in mice treated with 1,000 ppm, and an increase in the incidence of mammary tumors was observed in female rats treated with 2,000 ppm, suggesting carcinogenicity of ipronidazole. On the basis of the genototixic potential and the treatment-related increases of tumors in rodents, a possible participation of genotoxicity in their oncogenesis was not excluded.

Hence, FSCJ concluded that an acceptable daily intake (ADI) should not be specified.