Abstract

A Study on Gross and Histopatoloigical Terms for Pathological Examination in Chronic and Carcinogenic Inhalation Toxicity Facility

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Objectives

The objective of this study is to standardize gross and histopahtogical terms and translate them into korean language for the operation of chronic and carcinogenic inhalation toxicity facility on the basis of surveying the use of pathology terms at domestic and foreign toxicity testing institutions such as CRO(Contract Research Organization) and collecting related references.

Methods

In this study, we surveyed the use and standardization of pathology terms at domestic and foreign toxicity testing institutions, collected the toxicological pathology terms references based on the result of survey

and standardized gross and histopahtogical terms and translated them into korean language.

Results

We surveyed the use and standardization of KIT, Biotoxtech, KCL, KTR, Huntingdon life sciences, ITR Laboratories Canada Inc. and Eisai co., Ltd. In gross lesion terms, most of domestic institutions used toxicogical pathology glossary(national insititute of toxicolocial research, NITR, 2003 year). However, foreign institutions did not use specific glossary and standardized gross lesion terms by themselves and had study pathologist use them at their own discretion.

In hisopathological terms, most of domestic and foreign institutions have used SSNDC guideline and Covance glossary and refered to INHAND recently. Therefore, based on toxicogical pathology glossary(NITR, 2003 year), gross lesion terms were standardized including anatomical descriptive term, general descriptive term, necropy descriptive term(color, consistency, distribution, quantity severity, shape, site and direction), and tems for specific lesions in organs. Also, histophatology terms were standardized including hepatobilliary system(liver, gall bladder), respiratory system(nasal cavity, larynx, trachea, bronchi, bronchiole, alveoli), urinary system(kidney, renal pelvis, urethra, ureter, urinary bladder), male reproductive system(testis, epididymis, prostate, seminal vesicle, coagulating gland, bulbourethral gland), female reproductive system(ovary, oviduct, uterine cervix and vagina), mammary gland, Zymbal gland, preputial gland, clitoral gland, skin, soft tissue, adipose tissue, skeletal muscle, endocrine system(adrenal gland, pituitary gland, pineal gland, thyroid gland,

parathyroid gland, pancreas), gatrointestinal system(oral cavity, tongue, esophagus, salivary gland, forestomach, gladular stomach, small intestine, large intestine), cardiovascular system(heart, blood vessel), bone, joint, tooth, lymphoid and hematopoietic system(thymus, spleen, bone marrow, and lymph node) and sensory organs(eye, conjunctiva, Haderian gland, and lacrimal gland) based on INHAND, goRENI, SSNDC and Covance glossary.

Conclusion

Toxicological pathology terms were standardized for the operation of chronic and carcinogenic inhalation toxicity facility. It is expected to increase the efficiency of slide reading in Pristima system and to ensure GLP reliability of chronic and carcinogenic inhalation studies by applying to PAT SOP. Also, it can be used as training materials for GLP staffs.

Key words : Toxicological pathology terms, Chronic and carcinogenic inhalation toxicity facility, Gross lesions, Histopathological lesions