

## Risk of new-onset fracture in patients using different types of sedative hypnotics: A population-based cohort study

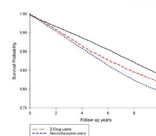
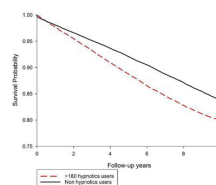
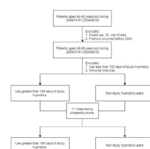
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Fracture is a burden for elders it causes inconvenience and also people around them. In terms of public interests, fractures often need considerable amount of time to recover, so, it's a burden when it comes to health insurance. In 1993, Taiwan has turned into aging society, and in 2018, aged society. So this burden is only going to add-on. Taking hypnotics is one of the potential hazard for all kinds of fracture. Hypnotics' relationship towards fractures has been discussed in some previous researches, but most of those have limited condition or dedicated theme and most of those were talking about hypnotic's abuse, instead of drug epidemiology. Our study uses National Health Insurance Research Database to perform retrospective cohort study to investigate the incidence rate of Taiwanese aged 40-90 years old and analyze the cause-effect relationship between using hypnotics and the occurrence of new onset fractures. This study aims to screen out insured citizen of Taiwan, aged 40-90 on 2004, who were using 20 types of sedative hypnotics we defined and cumulative hypnotics use before fracture were greater than 180 days, exclude people that have fractures already occurred during 2002-2003 until new onset occurred or end of follow-up time. Also, descriptive statistics were used to discover clinical effects on hypnotics, and methods like Cox proportional hazard regression model, and Kaplan-Meier for analyzing hypnotics and fractures' relationship. Due to high usage hypnotics in Taiwan among elderly, the use of hypnotics greater than 180 days may then cause increasing incident of fracture occurrence.



### Biography

Tsang-Hsiang Chang is currently studying Master Program of Pharmaceutical Manufacture at China Medical University, Taiwan. His research topics mainly focus on database mining (e.g. National Health Insurance Database).