Search for preventive drugs against anticancer drug-induced side effects using a large-scale medical information database

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Treatment outcomes of cancer patients have improved with progress in oncology medication therapy, but side effects caused by anticancer agents are becoming widespread. Side effects caused by anticancer drugs not only significantly lower the patient’s QOL but also often lead to dose reduction or discontinuation of the anticancer drugs. Addressing these side effects is important for improving patient prognosis. Therefore, improvement of the quality of cancer therapy through the development of preventive drugs against anticancer drug-induced side effects is an urgent goal.

In recent years, clinical research has been carried out in Japan using large-scale medical information sources such as disease/side effect databases, in order to accurately evaluate the effects of drug used in clinical practice. Research utilizing such a large-scale medical information database can cover various patient parameters and a wide range of observation areas. Therefore, this approach is suitable for conducting clinical research on rare diseases and low-frequency side effects. In this symposium, we will introduce research conducted using drug discovery tools and cell/animal experiments based on a large-scale medical information database to search for preventive agents against anticancer drug-induced side effects, as well as consider future prospects for this approach.