

## Prevalence, Severity and Risk Factor of Potential Drug-Drug Interactions in Cancer Patients: a Retrospective Cross-Sectional Study

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**SUMMARY.** Cancer patients often receive multiple drugs, but concomitant administration of multiple drugs increases the risk of potential drug-drug interactions (pDDIs). This study aimed to determine the prevalence, severity, and risk factors of pDDIs in cancer patients, which can help promote rational drug use. A total of 417 patients were enrolled, with 1,858 pDDIs were detected, the overall prevalence of pDDIs was 70.74%. Most patients have 1-5 pDDIs (41.49%), and the severity proportions of Major, Moderate, and Minor were 12.70%, 10.12%, and 77.18%, respectively. The top three drugs involved were dexamethasone (4 times), promethazine (4 times), and ondansetron (3 times), respectively. A significant association of pDDIs was found in the number of medications administered. This study indicates that pDDIs were prevalent among patients undergoing anticancer drug treatment, to enhance clinical efficacy and decrease the incidence of adverse reactions, it is imperative to strengthen the management and prevention of pDDIs.

**RESUMEN.** Los pacientes con cáncer a menudo reciben múltiples medicamentos, pero la administración concomitante de múltiples medicamentos aumenta el riesgo de posibles interacciones entre medicamentos (pDDI). Este estudio tuvo como objetivo determinar la prevalencia, la gravedad y los factores de riesgo de las pDDI en pacientes con cáncer, lo que puede ayudar a promover el uso racional de los medicamentos. Se inscribieron un total de 417 pacientes, se detectaron 1.858 pDDI y la prevalencia general de pDDI fue del 70,74%. La mayoría de los pacientes tienen de 1 a 5 pDDI (41,49%) y las proporciones de gravedad de Mayor, Moderada y Menor fueron 12,70%, 10,12% y 77,18%, respectivamente. Los tres principales fármacos implicados fueron dexametasona (cuatro veces), prometazina (cuatro veces) y ondansetrón (tres veces), respectivamente. Se encontró una asociación significativa de pDDI en el número de medicamentos administrados. Este estudio indica que las pDDI eran prevalentes entre los pacientes sometidos a tratamiento con medicamentos contra el cáncer; para mejorar la eficacia clínica y disminuir la incidencia de reacciones adversas, es imperativo fortalecer el manejo y la prevención de las pDDI.

**KEY WORDS:** potential drug-drug interactions, prevalence, risk factor, severity.

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