

Cardiovascular Toxicities Risk with Sunitinib in Cancer Patients: a Meta-analysis

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SUMMARY. The aim was to evaluate the risk of cardiovascular toxicities in cancer patients who were taking sunitinib. Randomized controlled trials using sunitinib to treat cancer patients published before November 15, 2020 were searched in Embase, Web of Science and PubMed. Outcome include cardiovascular toxicities such as hypertension, bleeding, and thromboembolism. A total of 11 studies including 5875 patients were included. The use of sunitinib can increase the cardiovascular toxicity of patients, such as all-grade hypertension (RR: 4.74, 95% CI 3.24-6.92), high-grade hypertension (RR: 4.13, 95% CI 2.95-5.76) and all-grades bleeding (RR: 3.16, 95% CI 2.38-4.20). However, sunitinib does not increase the risk of all-grade thromboembolism in cancer patients (RR: 1.45, 95% CI 0.44-4.79). Meta-analysis shows that the use of sunitinib can increase cardiovascular toxicity in cancer patients. Therefore, doctors should understand these risks clinically and carry out cardiovascular monitoring on a regular basis.

RESUMEN. El objetivo era evaluar el riesgo de toxicidad cardiovascular en pacientes con cáncer que tomaban sunitinib. Se buscaron ensayos controlados aleatorios que usaron sunitinib para tratar a pacientes con cáncer publicados antes del 15 de noviembre de 2020 en Embase, Web of Science y PubMed. Los resultados incluyen toxicidades cardiovasculares como hipertensión, hemorragia y tromboembolismo. Se incluyeron un total de 11 estudios con 5875 pacientes. El uso de sunitinib puede aumentar la toxicidad cardiovascular de los pacientes, como hipertensión de todos los grados (RR: 4,74, IC 95% 3,24-6,92), hipertensión de alto grado (RR: 4,13, IC 95% 2,95-5,76) y grados de sangrado (RR: 3,16, IC 95% 2,38-4,20). Sin embargo, sunitinib no aumenta el riesgo de tromboembolismo de todos los grados en pacientes con cáncer (RR: 1,45, IC del 95 %: 0,44-4,79). El metanálisis muestra que el uso de sunitinib puede aumentar la toxicidad cardiovascular en pacientes con cáncer. Por lo tanto, los médicos deben comprender estos riesgos clínicamente y realizar controles cardiovasculares de forma regular.

KEY WORDS: cardiovascular toxicities, meta-analysis, sunitinib.

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