

Drug use Evaluation of Pyrotinib Based on Real-world Data and TOPSIS Method

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SUMMARY. Pyrotinib is used as a targeted drug for the treatment of recurrent or metastatic breast cancer with positive epidermal growth factor receptor 2 (HER2), which has received trastuzumab or not, but there was unreasonable in clinical use. This study collected real-world data on the use of pyrotinib in our hospital from November 2020 to May 2022, established evaluation criteria for pyrotinib drug utilization, and used TOPSIS method to evaluate its rationality of use. The results showed that only 11 cases (2.49%) were reasonable ($C_i \geq 0.8$), 106 cases (24.04%) were basic reasonable ($0.6 \leq C_i < 0.8$), and 324 cases (73.47%) were unreasonable ($C_i < 0.6$). The main manifestations of irrationality were the previous chemotherapy regimen, the dosage and the combination therapy. In summary, the TOPSIS method can comprehensively evaluate the use of pyrotinib, the rationality of pyrotinib use in our hospital was relatively low, and supervision should be strengthened to promote its rational and standardized use.

RESUMEN. Pyrotinib se utiliza como fármaco dirigido para el tratamiento del cáncer de mama recurrente o metastásico con receptor 2 del factor de crecimiento epidérmico positivo (HER2), que haya recibido trastuzumab o no, pero que no haya sido razonable en su uso clínico. Este estudio recopiló datos del mundo real sobre el uso de pirotinib en nuestro hospital desde noviembre de 2020 hasta mayo de 2022, estableció criterios de evaluación para la utilización del fármaco pirotinib y utilizó el método TOPSIS para evaluar su racionalidad de uso. Los resultados mostraron que sólo 11 casos (2,49%) fueron razonables ($C_i \geq 0,8$), 106 casos (24,04%) fueron básicamente razonables ($0,6 \leq C_i < 0,8$) y 324 casos (73,47%) fueron irrazonables ($C_i < 0,6$). Las principales manifestaciones de irracionalidad fueron el régimen de quimioterapia previo, la posología y la terapia combinada. En resumen, el método TOPSIS puede evaluar de manera integral el uso de pirotinib, la racionalidad del uso de pirotinib en nuestro hospital fue relativamente baja y se debe fortalecer la supervisión para promover su uso racional y estandarizado.

KEY WORDS: evaluation, pyrotinib, TOPSIS, unreasonable.

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