

# SAFETY AND EFFICACY OF HIGH DOSES OF IRINOTECAN IN PATIENTS WITH METASTATIC COLORECTAL CANCER TREATED WITH FOLFIRI SCHEME BASED ON UGT1A1 GENOTYPE: A SYSTEMATIC REVIEW

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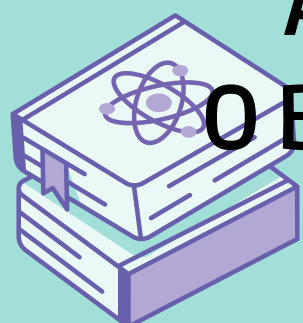
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## AIM AND OBJECTIVES



To analyze published data about the use of a higher dose than 180 mg/m<sup>2</sup> of irinotecan and its relationship with the efficacy and safety in metastatic colorectal cancer (mCRC) patients with the *UGT1A1\*1/\*1* and *\*1/\*28* genotypes treated with the FOLFIRI scheme.

## RESULTS

595 REFERENCES

13 SELECTED

7(53.8%) EVALUATED EFFICACY AND SAFETY

85.7% were in favor of increasing the dose in terms of ORR and PFS but none of them in OS

6(46.2%) EVALUATED SAFETY



Most of patients with *UGT1A1\*1/\*1* and *\*1/\*28* genotypes tolerated greater doses than 180 mg/m<sup>2</sup>

## BACKGROUND AND IMPORTANCE

Irinotecan's antineoplastic activity, as well as its safety, depends on the action of its active-metabolite, SN-38, which is inactivated by UDP-glucuronosyltransferase (UGT), an enzyme encoded by the UGT1A1 gene.

The presence of the \*28 allele decreases the elimination of SN-38. Some studies have shown the possibility of using doses of irinotecan higher than 180 mg/m<sup>2</sup> in patients with the *UGT1A1\*1/\*1* and *\*1/\*28* genotypes

## MATERIAL AND METHODS



A SYSTEMATIC REVIEW IN MEDLINE WAS CARRIED OUT USING PRISMA METHOD (Articles published up to nov 2020)

### MESH TERMS

IRINOTECAN  
UGT1A1

Four reviewers independently assessed the eligibility of each study. To assess the methodological quality of the RCT and the observational studies included, the Jadad and the Newcastle-Ottawa (NOS) scales were used, respectively.

## CONCLUSIONS

The present systematic review shows the convenience of assessing the irinotecan dose adjustment within the FOLFIRI scheme based on UGT1A1 polymorphisms, with a potential increase in the probabilities of an adequate clinical response.