

# Therapeutic drug monitoring of biologic agents in inflammatory bowel disease: limits and improvements.

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July 7, 2020

## Abstract

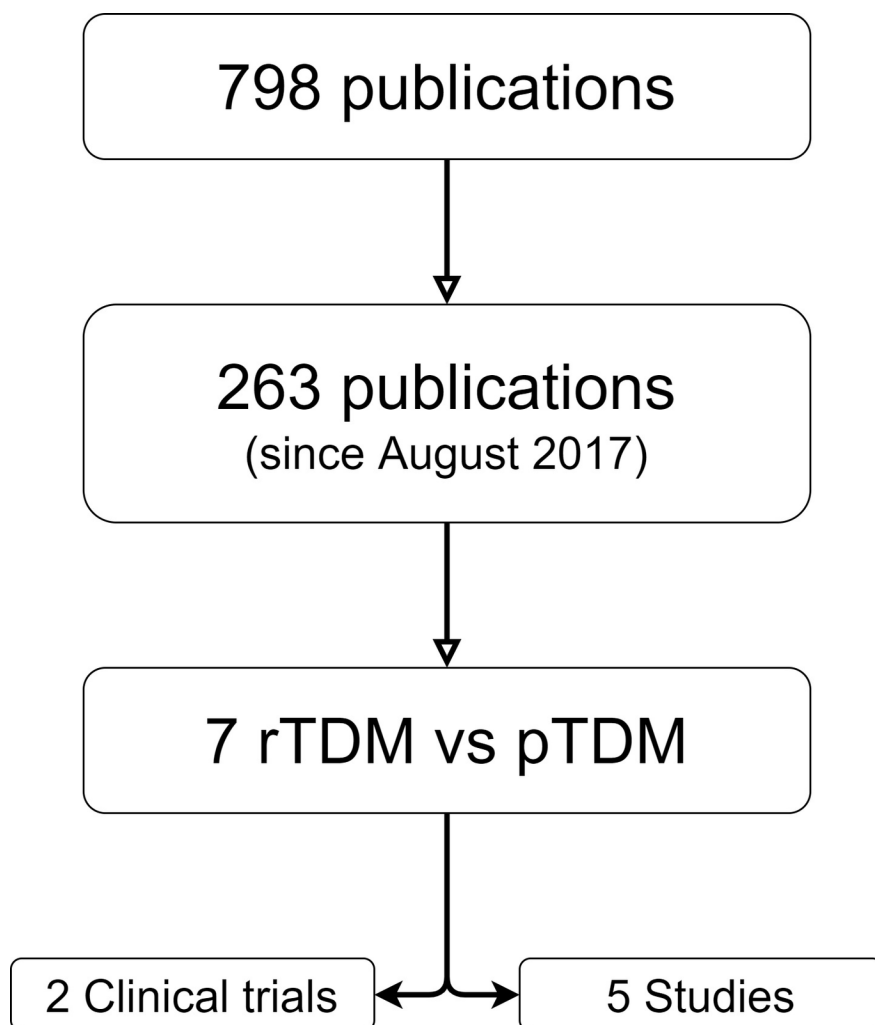
Since the publication of the American Gastroenterological Association's (AGA) recommendations in 2017, there have been no significant changes in the biological monitoring recommendations. Lack of evidence on proactive therapeutic drug monitoring (pTDM) over the reactive therapeutic drug monitoring (rTDM) and the absence of recommendations on the individualized dosage methods have been limiting. The aims of this review were to identify updates on TDM strategies and in individualized dosing methods. For the analysis of the TDM strategies and individualized dosing method, a search was carried out in PubMed and Cochrane Central. In TDM case, since 2017. A total of 263 publications were found. Only 7 related to pTDM. Two of them were clinical trials and one systematic review. Of the 8 studies analyzed, 7 found benefit from pTDM over rTDM and one found no difference. Only one study was prospective. Regarding the individualized dosing method, 229 results were found. Population pharmacokinetics was the most widely used technique to explore and develop individual dosage models. It has been used to analyze the influence of factors on drug concentrations (serum albumin, weight... etc. We have not found major changes in TDM strategies. The available evidence is limited and of low quality. Retrospective designs and low power of the studies are the main problems. Population pharmacokinetics methods are the most widely used. But are more used to identify factors that affect drug concentrations than for dosage individualization.

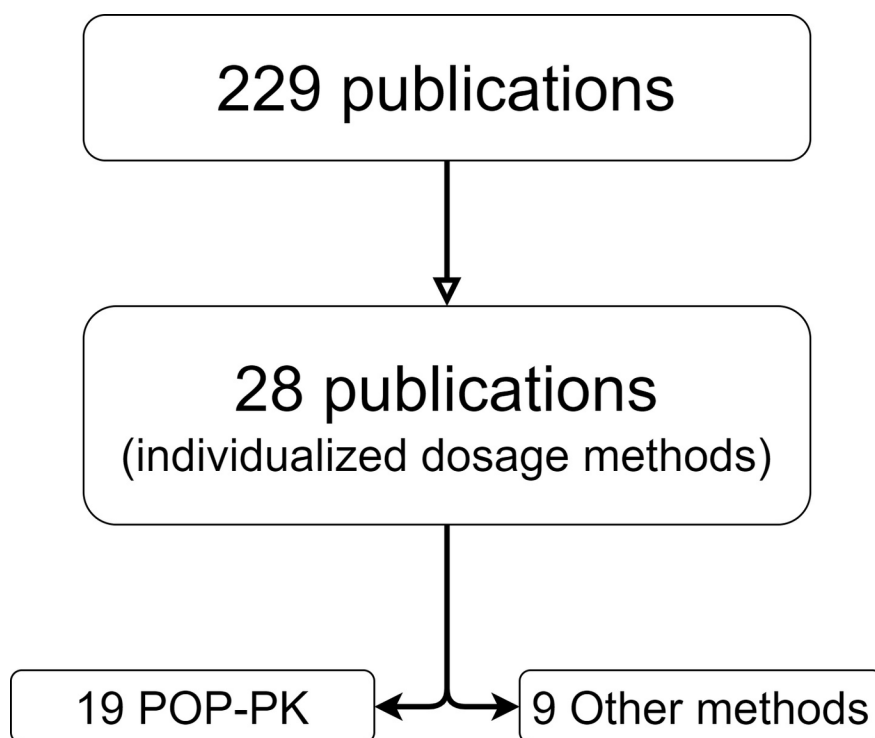
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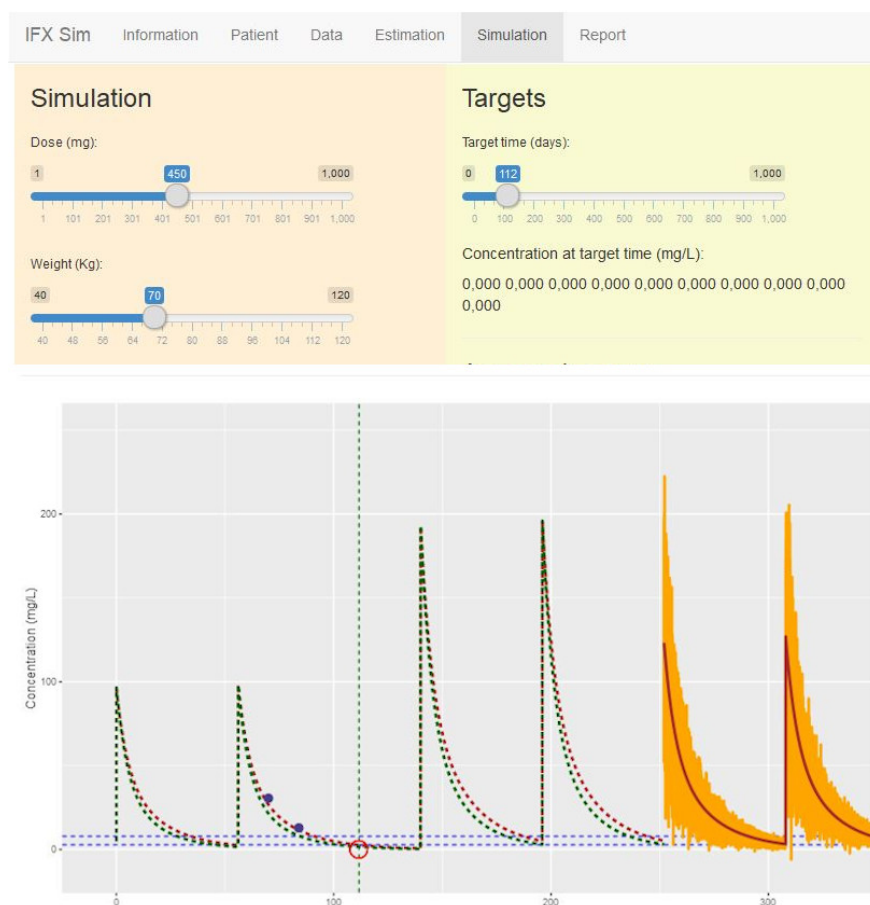
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