



# Earlier predictors for treatment outcome among single dose methotrexate for an ectopic pregnancy

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Dear Editors,

We read with great interest the study of Brunello et al. in a recent issue of the Journal [1]. The authors address the important issue of early prediction of methotrexate (MTX) treatment success for an ectopic pregnancy (EP), specifically the prognostic significance of early kinetics in  $\beta$ -hCG. The authors should be congratulated for addressing this important issue which gains recent interest. Yet, there are some issues which warrant further clarification.

First, the authors state that MTX treatment protocol in their study was an intramuscular administration of MTX (1 mg/kg), while citing the seminal protocol developed by Stovall et al. [2]. It is interesting to underline that the aforementioned protocol by Stovall et al., and current guidelines [3] are a single dose MTX of 50 mg/m<sup>2</sup> of body surface area. More interestingly, the authors acknowledge their low success rate of treatment success and found no explanation for this issue. It might be recommended that treatment protocol should follow guidelines, this might aid in treatment success rate. Second, the study cohort is relatively small ( $n = 121$ ) for current literature. This might explain why the authors have found that early  $\beta$ -hCG kinetics does not adequately predict treatment outcome and that initial serum  $\beta$ -hCG measurement was the only significant prognostic factor for MTX efficacy—this in contrast to recent literature that early  $\beta$ -hCG kinetics is indeed an early determinant of treatment success but the  $\beta$ -hCG level itself on day 1 is of no predictive value [4]. At Last, if an early predictors are on the spotlight, it should be acknowledged that earlier predictors have been studied and found to be predictive for MTX treatment success such as pretreatment  $\beta$ -hCG kinetics [4, 5].

We encourage further well designed prospective studies assessing follow-up protocols and early predictors for MTX treatment success in tubal ectopic pregnancy.

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## Compliance with ethical standards

**Conflict of interest** All authors declare that they have no conflict of interest.

**Ethical approval** This article does not contain any studies with human participants or animals performed by any of the authors.

**Informed consent** This article does not contain any studies with human participants performed by any of the authors.

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