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## Correspondence

### The use of VMP regimen as the first line chemotherapy for low-risk gestational trophoblastic neoplasia



We read the recent article published by Dr. Zhu in the May issue of the *Taiwanese Journal of the Obstetrics and Gynecology* with interest [1]. The authors commented that the 5-day VMP regimen could be used as the front-line therapy in the management of patients with low-risk gestational trophoblastic neoplasia (GTN), based on the authors' consideration in China, such as high complete remission rate (more than 80%) after 5-day VMP treatment, acceptable rate of adverse events (mainly myelosuppression: 14.8%), a large population of patients, inconvenience to visit to the hospital, and inadequate hospital beds available, contributing to the need of shortening time and fewer cycles of chemotherapy, and prolonging the progression free survival [1]. We respected the excellent outcome of patients treated by the authors' institute and congratulated the success of their publication; however, there are some concerns about the current report and we hope to discuss with the authors.

First, as the authors shown in the text [1], the authors reported that the overall primary complete remission rate was 63.6% (42/66) after single-agent methotrexate (MTX) treatment. The authors also described the cut-off value of  $\beta$ -hCG ( $\beta$ -human chorionic gonadotropin) as 2800 IU/L for high risk of developing resistance of low-risk GTM when MTX was administered as a primary treatment in their center, and this data was based on their previous research; unfortunately, we did not find their previous works in the text. The authors might be interested in their previous work.

Second, as shown by authors, the mean number of VMP courses was 4 (range 1–6) to achieve complete remission [1]. Compared with previous reports [2,3], the median number of methotrexate courses was 7 (range 1–14) [2] or 8 (range 2–26) [3], the requiring course for chemotherapy indeed significantly decreased (4 versus 7 or 4 versus 8). Since both VMP regimen and single agent methotrexate treatment were repeated every two weeks, the duration of treatment could be significantly shorter in the VMP group than that in the methotrexate group, and this result fulfilled the requirement of the authors in China [1]. However, this observation might not be adequate strong to support the suggestion of using multi-agent chemotherapy, such as VMP regimen in place of single agent chemotherapy in the management of low-risk GTN, because the other regimen, containing the single agent, such as actinomycin-D, also needs an average of 4 cycles in the low-risk GTN patients (range 2–14) [3]. In addition, the single agent actinomycin D regimen seemed to provide a higher complete response rate than single agent methotrexate did [3], and this concept is also confirmed by a Cochrane review in 2016 [4]. The consensus of the European Organization for Treatment of Trophoblastic Diseases

(EOTTD) in 2015 still suggested that single agent chemotherapy is the recommended treatment for low-risk GTN with an overall cure rate close to 100% [5]. Of most importance, the consensus of the EOTTD still recommended that methotrexate is the first line single agent treatment of low-risk GTN, although other single agent chemotherapy, such as actinomycin D might be much more effective. Finally, even though the patients with low-risk GTN failed to respond to single agent methotrexate treatment initially, the other single agent chemotherapy is still a choice of the second-line therapy. All debated the initial use of multiagent chemotherapy for patients with low-risk GTN.

#### Conflicts of interest

All authors declare no conflict of interest.

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