#### **RESPONSE TO LETTER**

# Response to Article "Serum Levels of Galectin-9 are Increased in Cervical Cancer Patients and are Higher in Advanced Clinical Stages" [Response to Letter]

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## Dear editor

We appreciate the comments of Panjaitan et al regarding our recent publication. They state the importance of detecting other galectins, in respect that we have considered to evaluate serum galectin-9 as a potential biomarker for cervical cancer because this protein plays an important role as an immunomodulator, so it could be related with the immune status of the patients and the progression of the disease.<sup>1</sup> The study of other serum galectins such as galectin-1, galectin-3 and galectin-8 in cervical cancer would certainly generate important information and complement the results obtained in this study.

With respect to the studies focused on galectin-9 expression tissue, Punt et al reported that presence of galectin-9 showed a trend toward improved survival and Beyer et al reported that high expression of galectin-9 was correlated with better prognosis, so these studies are not contradictory.<sup>2,3</sup> But, the results of serum concentration of galectin-9 obtained in our study showed that serum concentration increases in advanced FIGO stages and it is not related with the level of expression in the tumor tissue; these results suggest that galectin-9 could be playing different roles in the tumor cells and in the serum.

Considering that human papillomavirus infection is the etiological agent of cervical cancer, some studies support that this infection could be modulating galectin-9 expression. Chen et al evaluated the expression level of galectin-9 in monocytes of cervical cancer patients, HPV-positive and HPV negative, and they reported higher levels of galectin-9 in the monocytes of patients with HPV-positive cervical cancer.<sup>4</sup> In our study it was not possible to evaluate the expression level of galectin-9 in cervical cancer tissue negative to the human papillomavirus, because all the analyzed samples were HPV positive. Previous results in Mexican women have reported the HPV prevalence in 100% of cervical cancer samples.<sup>5</sup> Further studies are required to identify the mechanisms that regulate the expression of galectin-9.

## Disclosure

The authors report no conflicts of interest in this communication.

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https://doi.org/10.2147/OTT.S399119