



The statistical significance may be misinterpreted

Yiu-Tai Li^a, Wen-Hsun Chang^{b,c,d,*}

^aDepartment of Obstetrics and Gynecology, Kuo General Hospital, Tainan, Taiwan, ROC; ^bDepartment of Obstetrics and Gynecology, Taipei Veterans General Hospital, Taipei, Taiwan, ROC; ^cDepartment of Nursing, Taipei Veterans General Hospital, Taipei, Taiwan, ROC; ^dFemale Cancer Foundation, Taipei, Taiwan, ROC

DEAR EDITOR,

The following article entitled “High expression of NLRP12 predicts poor prognosis in patients with intracranial glioma” published in the January issue of the *Journal of the Chinese Medical Association* appeals to our attention.¹ Dr. Cheng’s group tried to investigate the relationship between the expression of nucleotide-binding domain leucine-rich repeat 12 (*NLRP12*) and the outcome of intracranial glioma.¹ The authors found that the degree of malignancy and prognosis of intracranial glioma are highly correlated with *NLRP12* expression and concluded that the overexpression of *NLRP12* may be an independent prognostic factor and play a potential target for the treatment of intracranial glioma.¹ We have found a possibility of misusing statistics of their article.

We are wondering to know why the authors did not include “stage” for univariate and multivariate COX regression analysis. In our limited knowledge, stage may be the most importantly independent prognostic factors for all solid tumors.^{2–5} In fact, the authors have clearly demonstrated the strong correlation between the high *NLRP12* expression and advanced stage of intracranial glioma, suggesting that the expression of *NLRP12* may depend on the tumor stage or vice versa.

Recently, due to significantly improved technology with a better understanding of tumorigenesis and the continuous innovation of targeted therapy and chemotherapy regimens, the multidisciplinary decision-making and multimodality approach has directed patient-tailored therapy.^{6–8} Therefore, any new identified biomarker may be at a highest chance for developing a brand-new and precisely targeted agent and offering the best benefit–risk ratio between the therapeutic efficacy and therapy-related toxicity.^{9,10} We applaud the great work of the authors;

however, our concern is still looking forward to seeing the kind response by authors.

REFERENCES

1. Cheng YW, Chen YY, Lin CJ, Chen YT, Lieu AS, Tsai HP, et al. High expression of NLRP12 predicts poor prognosis in patients with intracranial glioma. *J Chin Med Assoc* 2023;86:86–95.
2. Liu CH, Yang ST, Chao WT, Lin JC, Lee NR, Chang WH, et al. Pretreatment radiologically enlarged lymph nodes as a significant prognostic factor in clinical stage IIB cervical cancer: evidence from a Taiwanese tertiary care center in reaching consensus. *Diagnostics (Basel)* 2022;12:1230.
3. Wang PH, Yang ST, Liu CH, Chang WH, Lee FK, Lee WL. Endometrial cancer: part I. Basic concept. *Taiwan J Obstet Gynecol* 2022;61:951–9.
4. Wang PH, Liu CH, Yang ST. Risk-stratification system for pre-operative evaluation. *J Chin Med Assoc* 2023;86:259–61.
5. Li YT, Chang WH. Is it possible that advanced-stage gastric cancer patients can be cured by surgery alone? *J Chin Med Assoc* 2023;86:348–9.
6. Wang LW, Liu YS, Jiang JK. The effect of Mitomycin-C in neoadjuvant concurrent chemoradiotherapy for rectal cancer. *J Chin Med Assoc* 2022;85:1120–5.
7. Wang PH, Yang ST, Liu CH. Neoadjuvant therapy (NAT). *J Chin Med Assoc* 2023;86:133–4.
8. Su MH, Wu HH, Huang HY, Lee NR, Chang WH, Lin SC, et al. Comparing paclitaxel-platinum with ifosfamide-platinum as the front-line chemotherapy for patients with advanced-stage uterine carcinosarcoma. *J Chin Med Assoc* 2022;85:204–11.
9. Liu CH, Yang ST, Wang PH. DNA mismatch repair deficient (dMMR) endometrial cancer. *Taiwan J Obstet Gynecol* 2022;61:741–3.
10. Li YT, Yang ST, Wang PH. Molecular pathology and prognosis of endometrial cancer. *Taiwan J Obstet Gynecol* 2022;61:921–2.

* Address correspondence. Miss Wen-Hsun Chang, Department of Nursing, Taipei Veterans General Hospital, 201, Section 2, Shi-Pai Road, Taipei 112, Taiwan, ROC. E-mail address: whchang@vghtpe.gov.tw (W.-H. Chang).

Conflicts of interest: The authors declare that they have no conflicts of interest related to the subject matter or materials discussed in this article.

Journal of Chinese Medical Association. (2023) 86: 534.

Received December 26, 2022; accepted December 30, 2022.

doi: 10.1097/JCMA.0000000000000874.

Copyright © 2023, the Chinese Medical Association. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>)