Commentary

Commentary on "Comparative analysis of malnutrition diagnosis methods in lung cancer patients using a Bayesian latent class model"

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Dear Editor,

We read the article by Nakyeyune et al., titled "Comparative analysis of malnutrition diagnosis methods in lung cancer patients using a Bayesian latent class model" with great interest. Malnutrition is prevalent and has important impact on patient outcomes, but at present, there is still a lack of agreement on its definition and diagnosis methods. Authors compared the malnutrition diagnosis methods in lung cancer patients using the Bayesian latent class model, which could access the diagnostic performance without a "gold standard". Admittedly, this is a novel and tempting attempt to compare different nutritional assessment methods under the circumstances that there is no recognized method to diagnose malnutrition. Nevertheless, there are some concerns about this study which need further consideration and explanation.

Clinical nutrition management should follow a system sequence-nutritional screening, nutritional assessment and nutrition intervention, which has been recommended and recognized by the European Society for Clinical Nutrition and Metabolism (ESPEN),² American Society for Parental and Enteral Nutrition (ASPEN),³ and Chinese Society for Oncology Nutrition and Supportive Care (CSONSC).4 Nutritional screening is a rapid and simple process and all patients should be screened by healthcare provider at every visit, while nutritional assessment is a detailed and comprehensive examination to identify nutritional status and help guide nutritional intervention. Nutritional screening and nutritional assessment are two different terminologies and have different evaluating tools or methods. However, the present article confused the two concepts. Nutritional risk screening 2002 (NRS 2002) is a screening tool to detect the risk of developing malnutrition and predict the probability of a better or worse outcome due to nutritional factors.^{2,5} Patients with NRS 2002 score ≥ 3 are classified as nutritionally at-risk and have potential malnutrition,⁵ instead of "...already malnourished and in need of nutritional therapy". Patient Generated Subjective Global Assessment (PG-SGA)⁶ and Global Leadership Initiative on Malnutrition (GLIM)⁷ criteria are assessment tools to identify whether patients have malnutrition and severity of malnutrition, instead of "PG-SGA is currently considered the standard for screening and ...". It is inappropriate to hold the idea that nutritional screening is equal to nutritional assessment, and the NRS 2002

should not be compared with PG-SGA or GLIM.

Another problem is that the consensus report of the Global Nutrition Community has proposed that diagnosis of malnutrition using the GLIM criteria has two steps.⁷ First step is nutritional screening using a validated screening tool, and the second step is to assess the present and severity of malnutrition according to the GLIM criteria. However, this study did not conduct the first step to diagnose malnutrition according to the GLIM criteria and we wonder the reason why authors conducted the diagnosis procedure in this way.

In conclusion, this study is an original attempt to compare performance of different diagnostic tools combining the Bayesian latent class model in the absence of a gold standard of malnutrition. However, consideration and clarification of the aforementioned points is necessary and important, which can help readers interpret the results and conclusion of this study accurately.

AUTHOR DISCLOSURES

The authors declare no conflict of interest.

REFERENCES

- 1. Nakyeyune R, Ruan X, Wang X, Zhang Q, Shao Y, Shen Y et al. Comparative analysis of malnutrition diagnosis methods in lung cancer patients using a Bayesian latent class model. Asia Pac J Clin Nutr. 2022;31:181-90. doi: 10. 6133/apjcn. 202206 31(2).0003.
- Kondrup J, Allison SP, Elia M, Vellas B, Plauth M. ESPEN guidelines for nutrition screening 2002. Clin Nutr. 2003;22: 415-21.
- 3. Charles M, Charlene C, Druyan Mary E. A.S.P.E.N. clinical guidelines: Nutrition screening, assessment, and intervention in adults. J Parenter Enteral Nutr. 2011;35:16-24.
- 4. Hang-ping S, Ming-hua C, Wei C. Rethinking for three-level diagnosis of malnutrition. Chinese Journal of Frontier Medicine. 2020;12:1-7. (In Chinese)
- Kondrup J, Rasmussen HH, Hamberg O, Stanga Z. Nutritional risk screening (NRS 2002): a new method based on an analysis of controlled clinical trials. Clin Nutr. 2003; 22:321-36. doi: 10.1016/s0261-5614(02)00214-5.
- 6. Ottery FD. Rethinking nutritional support of the cancer patient: the new field of nutritional oncology. Semin Oncol. 1994;21:770-8.
- 7. Cederholm T, Jensen GL, Correia M, Gorreia MITD, Fukshima R, Higashiguchi T et al. GLIM criteria for the diagnosis of malnutrition A consensus report from the

global clinical nutrition community. Clin Nutr. 2019;38:1-9. doi: 10.1016/j.clnu.2018.08.002.

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