

The timing of antibiotic therapy and its impact on immunotherapy efficacy

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Letter to the Editor

The timing of antibiotic therapy and its impact on immunotherapy efficacy $^{\circ}$



To the Editor,

We read with interest the meta-analysis by Tsikala-Vafea et al. on whether antibiotic courses are associated with poorer clinical outcomes among cancer patients treated with immune checkpoint inhibitors (ICI) (Tsikala-Vafea et al., 2021). Based on the hypothesis of antibiotic-induced gut dysbiosis, which could decrease ICI efficacy, this challenging question has a practical impact on patient care. The timing of the antibiotic course is of great importance, and in Figure 7 the authors present a subgroup analysis according to whether the antibiotic course was administered "within 1 month" or "> 1 month" before ICI initiation. These results are commented on in the Discussion, presented in the Abstract, and mentioned in the Highlights on the article webpage. It seems to us, however, that one study accounting for 18% of the "> 1 month" subgroup (Pinato et al., 2019) should in fact belong to the "within 1 month" subgroup. If the authors confirm this misclassification, we would be interested to see if reclassifying this important study changes the final results and their interpretation.

Along with this re-analysis, we would also like to suggest that the antibiotic timeframes should be checked for consistency because the antibiotic timeframe associated with disease progression in the Abstract seems to contradict the one pointed to in the Highlights section.

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Conflict of interest

Alain Dupuy reports reimbursement for travel and/or accommodation expenses for attending medical meetings from Sanofi, and personal fees from Sanofi and Leo Pharma, outside the submitted work.

Ethical approval

Approval was not required.

References

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Tsikala-Vafea M, Belani N, Vieira K, Khan H, Farmakiotis D. Use of antibiotics is associated with worse clinical outcomes in patients with cancer treated with immune checkpoint inhibitors: A systematic review and meta-analysis. Int J Infect Dis 2021;106:142–54.

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^{\(\pi\)} Commenting on: Tsikala-Vafea M, Belani N, Vieira K, Khan H, Farmakiotis D. Use of antibiotics is associated with worse clinical outcomes in patients with cancer treated with immune checkpoint inhibitors: A systematic review and meta-analysis. Int | Infect Dis. 2021 May