

OPEN ACCESS

EDITED AND REVIEWED BY Chiara Porta, University of Eastern Piedmont, Italy

*CORRESPONDENCE

Luciano Mutti

Iuciano.mutti@univaq.it;

Iuciano.mutti@temple.edu

Emyr Yosef Bakker

ebakker@uclan.ac.uk

[†]These authors have contributed equally to this work

RECEIVED 10 September 2025 ACCEPTED 29 September 2025 PUBLISHED 15 October 2025

CITATION

Pentimalli F, Krstic-Demonacos M, Costa C, Mutti L and Bakker EY (2025) Correction: Intratumor microbiota as a novel potential prognostic indicator in mesothelioma. *Front. Immunol.* 16:1703111. doi: 10.3389/fimmu.2025.1703111

COPYRIGHT

© 2025 Pentimalli, Krstic-Demonacos, Costa, Mutti and Bakker. This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY). The use, distribution or reproduction in other forums is permitted, provided the original author(s) and the copyright owner(s) are credited and that the original publication in this journal is cited, in accordance with accepted academic practice. No use, distribution or reproduction is permitted which does not comply with these terms.

Correction: Intratumor microbiota as a novel potential prognostic indicator in mesothelioma

Francesca Pentimalli^{1†}, Marija Krstic-Demonacos², Caterina Costa^{3†}, Luciano Mutti^{4,5}* and Emyr Yosef Bakker⁶*

¹Department of Medicine and Surgery, LUM University "Giuseppe DeGennaro", Bari, Italy, ²Biomedical Research Centre, School of Science, Engineering and Environment, University of Salford, Salford, United Kingdom, ⁸Cell Biology and Biotherapy Unit, Istituto Nazionale Tumori-Scientific Institute for Research and Care (IRCCS)-Fondazione G. Pascale, Napoli, Italy, ⁴Center for Biotechnology, Sbarro Institute for Cancer Research and Molecular Medicine, College of Science and Technology, Temple University, Philadelphia, PA, United States, ⁵Department of Biotechnological and Applied Clinical Sciences, University of Aquila, L'Aquila, Italy, ⁶School of Medicine, University of Central Lancashire, Preston, United Kingdom

KEYWORDS

mesothelioma, microbiota, microbiome, bioinformatics, Kaplan-Meier, DEG (differentially expressed gene) analysis, functional annotation analysis, Cox proportional hazards modelling

A Correction on

Intratumor microbiota as a novel potential prognostic indicator in mesothelioma

By Pentimalli F, Krstic-Demonacos M, Costa C, Mutti L and Bakker EY (2023). Front. Immunol. 14:1129513. doi: 10.3389/fimmu.2023.1129513

An underpinning article cited in the original version of this manuscript [Poore et al, 2020 (https://www.nature.com/articles/s41586-020-2095-1)] was retracted in June 2024. This was on the basis of criticisms published by Gihawi and colleagues in 2023 (https://pubmed.ncbi.nlm.nih.gov/37811944/), which occurred after the publication of the original version of this manuscript. Whilst the rebuttal by Sepich-Poore and colleagues remains live to this date (https://www.nature.com/articles/s41388-024-02974-w), the retraction of the 2020 article may impact the validity of some specific information in our article (e.g. some exact genera), though the original overarching conclusions may still hold merit.

A correction has been made to the section **Methods**, *Identifying microbiome differences*, Paragraph 2:

"This analysis automatically generated the Kaplan-Meier survival curve between the two groups, alongside the microbiome signatures comparison. In order to calculate a more precise p-value alongside the hazard ratio for the survival data, the resultant raw Kaplan-Meier data was downloaded and input to KMPlot using the upload function (23, 24). The microbiome signatures data were originally added to cBioPortal for a number of cancers on the basis of another study, which has since been retracted based on criticisms from Gihawi and colleagues (https://pubmed.ncbi.nlm.nih.gov/37811944/). Although the authors' rebuttal in which they said they reproduced their findings remains live (https://

Pentimalli et al. 10.3389/fimmu.2025.1703111

www.nature.com/articles/s41388-024-02974-w), it is worth noting that this retraction means that some specific information in this manuscript (e.g. exact genera) may be uncertain, even if there may still be merit in the overarching findings.

Clinical parameters for patients were also obtained via the Compare analysis, as were the differentially expressed genes."

A correction has been made to the section **Methods**, *Contaminant removal*, Paragraphs 1 and 2:

"Due to the recognised issue of contaminants (i.e., tumour sample contamination by external microbes during data collection and processing) when considering microbiome data, a decontamination analysis was performed on the list of genera that were statistically significantly associated (based on q-value) with patient survival.

This was performed through cross-examination with supplementary information from the aforementioned original article which added the signatures to cBioPortal."

The original version of this article has been updated.

Publisher's note

All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers. Any product that may be evaluated in this article, or claim that may be made by its manufacturer, is not guaranteed or endorsed by the publisher.