

## LETTER to the EDITOR

Editorial Process: Submission:04/30/2024 Acceptance:08/19/2024

**Plasma Cell-Free DNA and MiRNA in Cholangiocarcinoma and Opisthorchiasis Viverrini Patients: Comment***Asian Pac J Cancer Prev*, 25 (8), 2579-2579**Dear Editor**

We found that “Investigation of Plasma Cell-Free DNA and MiRNA in Cholangiocarcinoma and Opisthorchiasis Viverrini Patients” is an interesting article. The present investigation assessed the plasma concentrations of circulating cell-free DNA (cfDNA) and cell-free microRNA (cf-miRNA) in three distinct health status groups: individuals with *Opisthorchis viverrini* infection, patients with cholangiocarcinoma, and healthy controls. The cfDNA content in the cholangiocarcinoma group was much higher than in the other two groups, according to the data, and it could distinguish between the two conditions with a sensitivity of 75.00% and specificity of 95.83%. With a sensitivity of 83.33% and specificity of 95.83% for identifying cholangiocarcinoma, the concentration of cf-miRNA was also significantly different in the cholangiocarcinoma group. Additionally, the study found a positive association between the plasma concentrations of cfDNA and cf-miRNA, indicating that these two indicators may be related.

The potential diagnostic use of cfDNA and cf-miRNA in differentiating between cholangiocarcinoma and other cancers is an essential consideration. These indicators' excellent sensitivity and specificity in identifying cholangiocarcinoma demonstrate their promise as non-invasive instruments for the early identification and surveillance of this cancer. Additionally, the positive connection found between cfDNA and cf-miRNA plasma concentrations raises the possibility that these biomarkers may work in tandem to diagnose and track cholangiocarcinoma [1].

A weakness of the study is the relatively small sample size, with only 12 participants in each health status group. A larger sample size would strengthen the statistical power of the results and provide more robust evidence for the diagnostic potential of cfDNA and cf-miRNA in cholangiocarcinoma. Additionally, further validation studies in larger cohorts are needed to confirm the findings and establish the clinical utility of these biomarkers in cholangiocarcinoma.

Future studies may look into the mechanisms driving cholangiocarcinoma's release of cfDNA and cf-miRNA in addition to looking into additional possible biomarkers for this cancer. Furthermore, long-term research could evaluate the predictive potential of cfDNA and cf-miRNA in cholangiocarcinoma patients' response to treatment and disease progression. All things considered, the study opens the door for more research in this field and offers

insightful information about the diagnostic capability of cfDNA and cf-miRNA in cholangiocarcinoma.

**Author Contribution Statement**

RM 1/2 ideas, writing, analyzing, approval. VW 1/2 ideas, supervision, approval.

**References**

1. Prasopdee S, Pholhelm M, Yusuk S, Tangphatsornruang S, Butthongkomvong K, Kunjantarachot A, et al. Investigation of plasma cell-free DNA and mirna in cholangiocarcinoma and opisthorchiasis viverrini patients. *Asian Pac J Cancer Prev*. 2024;25(3):739-46. <https://doi.org/10.31557/apjcp.2024.25.3.739>.

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**Reply to the letter to the editor: Plasma Cell Free DNA and MiRNA in Cholangiocarcinoma and Opisthorchiasis Viverrini Patients: Comment****Dear Editor**

We thank and appreciate Dr. Mungmunpantip and Dr. Wiwanitkit for their comments and suggestions regarding the small sample size. We believe this study to be viable as a preliminary investigation into the potential of cfDNA and cf-miRNA as minimally invasive diagnostic tools for cholangiocarcinoma. As suggested, further investigation in a larger cohort should be done to evaluate and validate the potential of cfDNA and cf-miRNA as biomarkers for cholangiocarcinoma diagnosis.

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