Tumor Biol. (2014) 35:8353–8354
DOI 10.1007/s13277-014-2507-7

EDITORIAL

Comment on Han L et al.: Prognostic value of circulating tumor cells in patients with pancreatic cancer: a meta-analysis

Chenggang Li · Zhiming Zhao · Rong Liu

Received: 20 July 2014 / Accepted: 14 August 2014 / Published online: 30 August 2014

Dear Editor

We read with great interests on the recent paper by Han L et al. "Prognostic value of circulating tumor cells in patients with pancreatic cancer: a meta-analysis" published online in *Tumor Biology* [1]. The investigators (Han L et al.) performed a meta-analysis of nine cohort studies to assess the prognostic value of circulating tumor cells (CTC) in patients with pancreatic cancer. They concluded that CTC-positive pancreatic cancer patients may have worser progression free survival (PFS) and overall survival (OS) than CTC-negative patients. Detection of CTC in peripheral blood may be a promising biomarker for the detection and prognosis of pancreatic cancer. It is the first comprehensive meta-analysis of all eligible studies concerning the prognostic role of CTC in patients with pancreatic cancer. Nevertheless, we have several queries which we would like to communicate with the investigators.

1. We think that there are some deficiencies in the literature search. The investigators just provided us some keywords and MeSH terms, while did not describe the search strategy report for databases in details, which played important roles in the meta-analysis. Manual searches were also not expressed clearly. The lack of a manual search protocol may be regarded as a drawback of this meta-analysis. If possible, we suggest that the investigators provide us a complete search protocol to strengthen the credibility of the meta-analysis.
2. The investigators conducted the Newcastle-Ottawa Scale (NOS) criteria to assess the methodological quality of the included studies [2–10]. They included the study by Uchikura K et al. [10], which NOS scale was just 5. Based on the NOS criteria, we are wondering whether this study could be included or not.
3. The investigators just extracted data to calculate hazard ratios (HR) for OS and PFS comparing CTC-positive to CTC-negative patients. However, they did not extract data to calculate odds ratios (OR) for objective response ratio (ORR) comparing CTC-positive to CTC-negative patients. To make the meta-analysis better, these correlations should be added in the meta-analysis.
4. The investigators clarified that "The random effect model (the DerSimonian Laird method) was conducted when there was a significant Q test with $P<0.10$ or $I^2>30$ %." Frequently, the heterogeneity was considered by $P<0.10$ or $I^2>50$ %. We hope that the investigators could make some explanations for the discrepancy.
5. The investigators showed forest plots for the difference in OS and PFS between CTC-positive and CTC-negative pancreatic cancer patients just in one figure. If possible, we suggest that the forest plots for OS and PFS should be showed in two single figures.
6. The investigators did not strictly follow the meta-analysis of observational studies in epidemiology (MOOSE). As a minor suggestion, adding MOOSE checklist might make this meta-analysis better.

Thanks go to the investigators for their contributions to supplying us with an assessment of prognostic value of CTC in patients with pancreatic cancer. However, further detailed studies are still required to confirm these findings.

C. Li (✉) · Z. Zhao · R. Liu
Department of Surgical Oncology, Chinese PLA General Hospital, 28 Fuxing Road, Beijing 100853, People's Republic of China
e-mail: lcgang301@sohu.com

References

1. Han L, Chen W, Zhao Q. Prognostic value of circulating tumor cells in patients with pancreatic cancer: a meta-analysis. Tumor Biol. 2014;35(1):2473–80.

2. Khoja L, Backen A, Sloane R, Menasce L, Ryder D, et al. A pilot study to explore circulating tumour cells in pancreatic cancer as a novel biomarker. Br J Cancer. 2012;106:508–16.
3. Bidard FC, Huguet F, Louvet C, Mineur L, Bouche O, et al. Circulating tumor cells in locally advanced pancreatic adenocarcinoma: the ancillary CirCe 07 study to the LAP 07 trial. Ann Oncol. 2013;24:2057–61.
4. de Albuquerque A, Kubisch I, Breier G, Stamminger G, Fersis N, et al. Multimarker gene analysis of circulating tumor cells in pancreatic cancer patients: a feasibility study. Oncology. 2012;82:3–10.
5. Hu L, Zhou JH, Yu ZQ, Yi YX, Ding H, et al. Clinical significance of h-TERT and c-Met expression in the peripheral blood circulation of pancreatic cancer patients. Chin J Clin Oncol. 2013;40:208–11.
6. Soeth E, Grigoleit U, Moellmann B, Roder C, Schniewind B, et al. Detection of tumor cell dissemination in pancreatic ductal carcinoma patients by CK 20 RT-PCR indicates poor survival. J Cancer Res Clin Oncol. 2005;131:669–76.
7. Hirooka S, Yanagimoto H, Satoi S, Yamamoto T, Toyokawa H, et al. The role of circulating dendritic cells in patients with unresectable pancreatic cancer. Anticancer Res. 2011;31:3827–34.
8. Kurihara T, Itoi T, Sofuni A, Itokawa F, Tsuchiya T, et al. Detection of circulating tumor cells in patients with pancreatic cancer: a preliminary result. J Hepatobiliary Pancreatol Surg. 2008;15:189–95.
9. Sergeant G, Roskams T, van Pelt J, Houtmeyers F, Aerts R, et al. Perioperative cancer cell dissemination detected with a real-time RTPCR assay for EpCAM is not associated with worse prognosis in pancreatic ductal adenocarcinoma. BMC Cancer. 2011;11:47.
10. Uchikura K, Takao S, Nakajo A, Miyazono F, Nakashima S, et al. Intraoperative molecular detection of circulating tumor cells by reverse transcription-polymerase chain reaction in patients with biliary-pancreatic cancer is associated with hematogenous metastasis. Ann Surg Oncol. 2002;9:364–70.