

CORRIGENDUM

Corrigendum to “Pan-Asian adapted ESMO Clinical Practice Guidelines for the diagnosis, treatment and follow-up of patients with biliary tract cancer”



[ESMO Open 9 (2024) 103647]

L.-T. Chen^{1,2,*}, A. Vogel^{3,4}, C. Hsu^{5,6}, M.-H. Chen⁷, W. Fang⁸, E. A. Pangarsa⁹, A. Sharma¹⁰, M. Ikeda¹¹, J. O. Park¹², C. K. Tan¹³, E. Regala¹⁴, D. Tai¹⁵, S. Tanasanvimon¹⁶, C. Charoentum¹⁷, C. E. Chee¹⁸, A. Lui^{19,20}, J. Sow²¹, D.-Y. Oh²², M. Ueno²³, A. Ramaswamy²⁴, W. S. Jeo²⁵, J. Zhou²⁶, G. Curigliano^{27,28}, T. Yoshino²⁹, L.-Y. Bai³⁰, G. Pentheroudakis³¹, N.-J. Chiang⁷, A. Cervantes^{32,33}, J.-S. Chen³⁴ & M. Ducreux^{35,36}

¹Kaohsiung Medical University Hospital, Center for Cancer Research, Kaohsiung Medical University, Kaohsiung, Taiwan; ²National Institute of Cancer Research, National Health Research Institutes, Tainan, Taiwan; ³Department of Gastroenterology, Hepatology and Endocrinology, Medical School of Hannover, Hannover, Germany; ⁴Division of Gastroenterology and Hepatology, Toronto General Hospital, Medical Oncology, Princess Margaret Cancer Centre, Toronto, Canada; ⁵Department of Oncology, National Taiwan University Hospital, Taipei, Taiwan; ⁶Department of Medical Oncology, National Taiwan University Cancer Center, Taipei, Taiwan; ⁷Department of Oncology, Taipei Veterans General Hospital, Taipei, Taiwan; ⁸Department of Medical Oncology, The First Affiliated Hospital, Zhejiang University School of Medicine, Hangzhou, China; ⁹Haematology Medical Oncology Division, Department of Oncology, Faculty of Medicine, Diponegoro University/Dr. Kariadi Hospital, Semarang, Indonesia; ¹⁰Department of Medical Oncology, Max Institute of Cancer Care, Max Super Specialty Hospital, Saket, New Delhi, India; ¹¹Department of Hepatobiliary and Pancreatic Oncology, National Cancer Center Hospital East, Kashiwa, Japan; ¹²Division of Hematology-Oncology, Department of Medicine, Samsung Medical Center, Sungkyunkwan University School of Medicine, Seoul, Korea; ¹³Department of Oncology and Nuclear Medicine, Thomson Hospital Kota Damansara, Petaling Jaya, Selangor, Malaysia; ¹⁴Clinical Division Building, University of Santo Tomas Hospital, Sampaloc, Manila, Philippines; ¹⁵Division of Medical Oncology, National Cancer Centre Singapore, Singapore, Singapore; ¹⁶Division of Medical Oncology, Department of Internal Medicine, Faculty of Medicine, Chulalongkorn University, King Chulalongkorn Memorial Hospital, Thai Red Cross Society, Bangkok; ¹⁷Department of Internal Medicine, Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand; ¹⁸Department of Haematology-Oncology, National University Cancer Institute, National University Health System, Singapore, Singapore; ¹⁹Department of Internal Medicine, Metro Davao Medical and Research Center, Davao City, The Philippines; ²⁰Section of Medical Oncology, Department of Internal Medicine, Southern Philippines Medical Center, Davao City, The Philippines; ²¹Department of Oncology, Curie Oncology Kuala Lumpur, Kuala Lumpur, Malaysia; ²²Department of Internal Medicine, Seoul National University Hospital, Seoul, Korea; ²³Department of Gastroenterology, Kanagawa Cancer Center, Yokohama, Japan; ²⁴Department of Medical Oncology, Tata Memorial Hospital, Homi Bhabha National Institute, Parel, Mumbai, India; ²⁵Division of Digestive Surgery, Department of General Surgery, Faculty of Medicine, Universitas Indonesia, Cipto Mangunkusumo Hospital, Jakarta, Indonesia; ²⁶Department of Gastrointestinal Oncology, Peking University Cancer Hospital & Institute, Beijing, China; ²⁷Istituto Europeo di Oncologia, Milano, IRCCS, Milano, Italy; ²⁸Department of Oncology and Haematology, University of Milano, Milano, Italy; ²⁹Department of Gastroenterology and Gastrointestinal Oncology, National Cancer Center Hospital East, Kashiwa, Japan; ³⁰Division of Hematology and Oncology, Department of Internal Medicine, China Medical University Hospital, China Medical University, Taichung, Taiwan; ³¹ESMO, Lugano, Switzerland; ³²Department of Medical Oncology, INCLIVA Biomedical Research Institute, University of Valencia, Valencia; ³³CIBERONC. Instituto de Salud Carlos III, Madrid, Spain; ³⁴Department of Internal Medicine, Chang Gung Memorial Hospital and Chang Gung University, Taoyuan, Taiwan; ³⁵INSERM U1279, Université Paris-Saclay, Villejuif, France; ³⁶Department of Cancer Medicine, Gustave Roussy, Villejuif, France

The authors report that in the original publication the ESMO-MCBS v1.1 scores for durvalumab-cisplatin-gemcitabine and pembrolizumab-cisplatin-gemcitabine are 4 and 1, respectively. The higher ESMO-MCBS v1.1 score for cisplatin-gemcitabine-durvalumab is due to the high 2-year OS gain observed with this regimen (14.2%). This was, however, based on only 9 patients (2.6% of the durvalumab-treated patients) who were still alive at that time. Thus, it should be noted that it does not currently provide evidence that durvalumab is vastly superior to pembrolizumab in combination with cisplatin-gemcitabine as both drugs incur similar clinical benefit with a HR OS of 0.75 and 0.83 and absolute median OS benefit of 1.6 and 1.8 months, respectively. Future updates to the ESMO-MCBS methodology will account for the proportion of study patients included in tail of the curve survival analyses, resulting in a lower MCBS score for durvalumab-cisplatin-gemcitabine.

Recommendation 4a should read as follows:

“Recommendation 4a. The combination of cisplatin-gemcitabine with durvalumab or pembrolizumab should be considered as standard of care in first-line BTC [I, A; ESMO-Magnitude of Clinical Benefit (MCBS) v1.1 score for durvalumab: 4; ESMO-MCBS v1.1 score for pembrolizumab: 1]. Cisplatin-gemcitabine-S1 is an alternative therapeutic option for fit patients [II, B].”

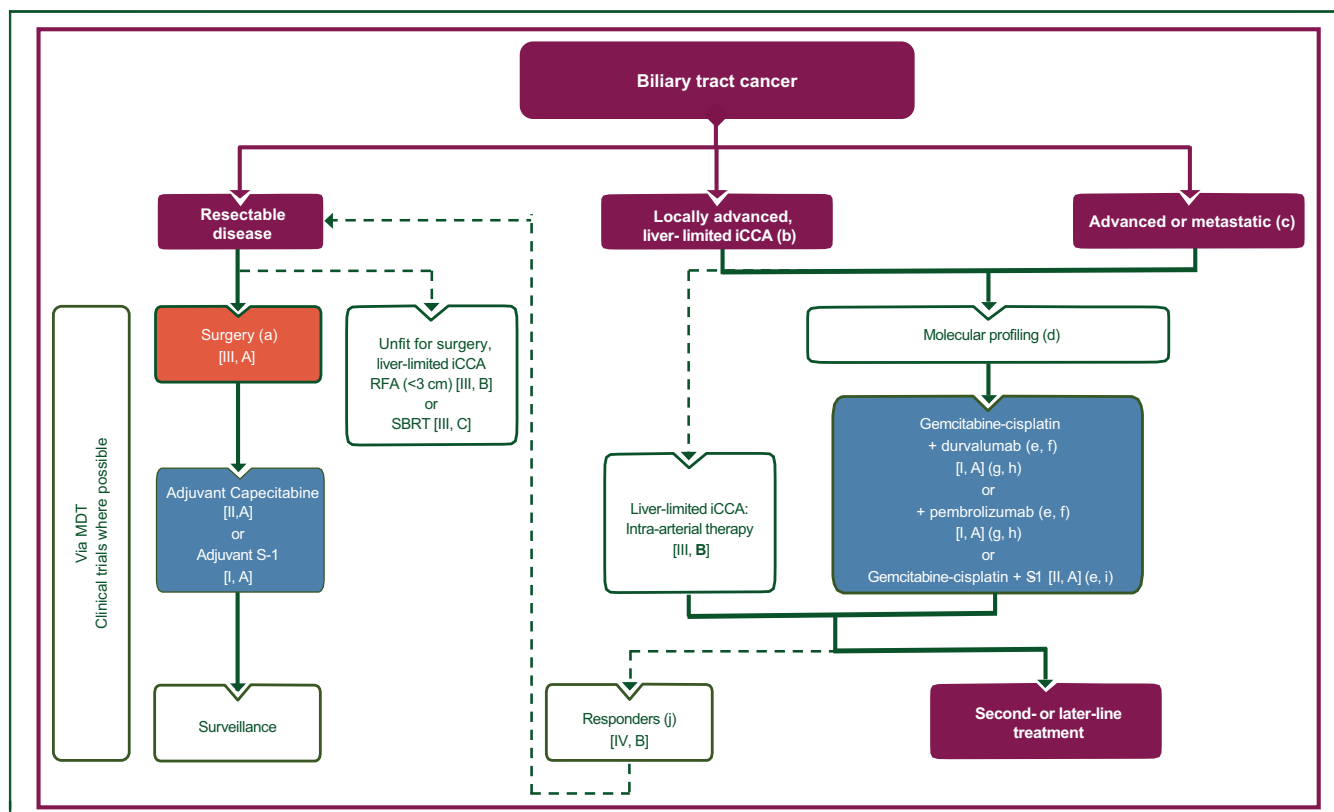
The revised Figure 1 Algorithm for the treatment of biliary tract cancer is given below.

DOI of original article: <https://doi.org/10.1016/j.esmoop.2024.103647>

*Correspondence to: Prof. Li-Tzong Chen, Kaohsiung Medical University Hospital, Center for Cancer Research, Kaohsiung Medical University, Kaohsiung, Taiwan

E-mail: leochen@nhri.org.tw (L.-T. Chen).

2059-7029/© 2024 The Author(s). Published by Elsevier Ltd on behalf of European Society for Medical Oncology. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).



Algorithm for the treatment of biliary tract cancer.

Purple boxes: general categories or stratification; red boxes: surgery; white boxes: other aspects of management; blue boxes: systemic anticancer therapy; dashed lines: optional recommendation.

BTC, biliary tract cancer; ChT, chemotherapy; dCCA, distal cholangiocarcinoma; dMMR, mismatch repair deficiency; EMA, European Medicines Agency; ESCAT, ESMO Scale for Clinical Actionability of Molecular Targets; FDA, US Food and Drug Administration; FGFR2, fibroblast growth factor receptor 2; FOLFOLX, 5-fluorouracil, leucovorin and oxaliplatin; GBC, gallbladder cancer; HER2, human epidermal growth factor receptor 2; iCCA, intrahepatic cholangiocarcinoma; IDH1, isocitrate dehydrogenase 1; MCBS, ESMO-Magnitude of Clinical Benefit Scale; MDT, multidisciplinary team; MSI-H, microsatellite instability-high; NTRK, neurotrophic tyrosine receptor kinase; pCCA, perihilar cholangiocarcinoma; PD-1, programmed cell death protein 1; PS, performance status; RFA, radiofrequency ablation; S-1, tegafur, gimeracil and oteracil; SBRT, stereotactic body RT; RET, rearranged during transfection; TMB-H, tumour mutational burden-high.

(a) Special considerations: (i) consider the need for preoperative drainage; (ii) avoid percutaneous biopsy in resectable d/pCCA; (iii) assess future liver remnant; (iv) neoadjuvant approach (selected cases); (v) completion surgery for incidental GBC stage $\geq$ T1b.

(b) Salvage surgery or local therapies should be considered in responding patients with initially inoperable disease.

(c) Clinical trial recommended when available.

(d) Molecular profiling should be carried out before/during first-line therapy. Gene panel should include *FGFR2*, *IDH1*, *HER2/neu* and *BRAF* to test for hotspot mutations, but may also include genes such as *NTRK* and *c-MET*. The rapidly evolving landscape of drug targets and predictive biomarkers may necessitate larger panels in the future.

(e) Cisplatin-gemcitabine-durvalumab [I, A], cisplatin-gemcitabine-pembrolizumab [I, A], and cisplatin-gemcitabine-S-1 [II, A] are recommended for first-line treatment. Consider gemcitabine monotherapy in patients with a compromised PS or significant debility who are at risk of toxicity from platinum-containing ChT regimens; oxaliplatin or carboplatin can replace cisplatin in the presence of renal insufficiency or ototoxicity; gemcitabine plus S-1 can be considered for patients with or susceptible to peripheral sensory neuropathy.

(f) EMA and FDA approved.

(g) ESMO-MCBS v1.1³⁶ was used to calculate scores for therapies/indications approved by the EMA or FDA. The scores have been calculated by the ESMO-MCBS Working Group and validated by the ESMO Guidelines Committee (<https://www.esmo.org/guidelines/esmo-mcbs/esmo-mcbs-evaluation-forms>).

(h) "The ESMO-MCBS v1.1 scores for durvalumab-cisplatin-gemcitabine and pembrolizumab-cisplatin-gemcitabine are 4 and 1, respectively. The higher ESMO-MCBS v1.1 score for cisplatin-gemcitabine-durvalumab is due to the high 2-year OS gain observed with this regimen (14.2%). This was, however, based on only 9 patients (2.6% of the durvalumab-treated patients) who were still alive at that time. Thus, it should be noted that it does not currently provide evidence that durvalumab is in some way better than pembrolizumab in combination with cisplatin-gemcitabine as both drugs incur the same benefit with an HR OS of 0.7 and absolute benefit of 1.5 months. Future updates to the ESMO-MCBS methodology will account for the proportion of study patients included in survival analyses, resulting in a lower MCBS score for durvalumab-cisplatin-gemcitabine."

(i) Not FDA or EMA approved.

(j) Reconsider surgery in the event of adequate response to treatment.

³⁶Cherny NI, Dafni U, Bogaerts J et al. ESMO-Magnitude of Clinical Benefit Scale version 1.1. *Ann Oncol* 2017; 28(10): 2340-2366.

The authors would like to apologise for any inconvenience caused.