

Henry Ford Health

Henry Ford Health Scholarly Commons

Surgery Articles

Surgery

2-27-2023

ASO Visual Abstract: Optimizing Circulating Tumor DNA Use in the Perioperative Setting for Intrahepatic Cholangiocarcinoma-Diagnosis, Screening, Minimal Residual Disease Detection, and Treatment Response Monitoring

Woo Jin Choi

Tommy Ivanics

Henry Ford Health, tivanic1@hfhs.org

Annabel Gravely

Steven Gallinger

Gonzalo Sapisochin

See next page for additional authors

Follow this and additional works at: https://scholarlycommons.henryford.com/surgery_articles

Recommended Citation

Choi WJ, Ivanics T, Gravely A, Gallinger S, Sapisochin G, and O'Kane GM. ASO Visual Abstract: Optimizing Circulating Tumor DNA Use in the Perioperative Setting for Intrahepatic Cholangiocarcinoma-Diagnosis, Screening, Minimal Residual Disease Detection, and Treatment Response Monitoring. *Ann Surg Oncol* 2023.

This Article is brought to you for free and open access by the Surgery at Henry Ford Health Scholarly Commons. It has been accepted for inclusion in Surgery Articles by an authorized administrator of Henry Ford Health Scholarly Commons.

Authors

Woo Jin Choi, Tommy Ivanics, Annabel Gravely, Steven Gallinger, Gonzalo Sapisochin, and Grainne M. O'Kane



ASO Visual Abstract: Optimizing Circulating Tumor DNA Use in the Perioperative Setting for Intrahepatic Cholangiocarcinoma—Diagnosis, Screening, Minimal Residual Disease Detection, and Treatment Response Monitoring

Woo Jin Choi, MD^{1,2,3}, Tommy Ivanics, MD, MPH^{4,5}, Annabel Gravely³, Steven Gallinger, MD, MSc, FRCS^{1,3}, Gonzalo Sapisochin, MD, PhD, MSc^{1,3}, and Grainne M. O’Kane, MB, BCh, BAO, MD⁶

¹Department of Surgery, University of Toronto, Toronto, ON, Canada; ²Institute of Health Policy, Management and Evaluation, Dalla Lana School of Public Health, University of Toronto, Toronto, ON, Canada; ³Division of General Surgery, University of Toronto Staff Surgeon, HBP and Multi Organ Transplant Program, University Health Network, Toronto, ON, Canada; ⁴Department of Surgery, Henry Ford Hospital, Detroit, MI; ⁵Department of Surgical Sciences, Uppsala University, Uppsala, Sweden; ⁶Department of Medical Oncology, Trinity St. James’s Cancer Institute, Trinity College Dublin, St. James’s Hospital, Dublin, Ireland

In this review (<https://doi.org/10.1245/s10434-023-13126-x>), we present the current evidence and future perspectives on the use of circulating tumor DNA (ctDNA) in

the diagnosis, management, and understanding the prognosis of patients with intrahepatic cholangiocarcinoma undergoing surgery.

Gonzalo Sapisochin and Grainne M. O’Kane: Co-senior authors contributed equally to this work.

© Society of Surgical Oncology 2023

G. Sapisochin, MD, PhD, MSc
e-mail: gonzalo.sapisochin@uhn.ca

G. M. O’Kane, MB, BCh, BAO, MD
e-mail: grainne.okane@uhn.ca

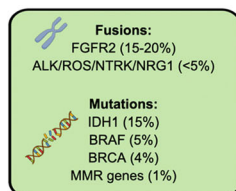
Optimizing Circulating Tumor DNA Use in the Perioperative Setting for Intrahepatic Cholangiocarcinoma: Diagnosis, Screening, Minimal Residual Disease Detection and Treatment Response Monitoring

Objectives: To review the evidence concerning the potential uses of ctDNA as a diagnostic, prognostic, and therapy guiding tool for people with intrahepatic cholangiocarcinoma (iCCA) undergoing surgery.

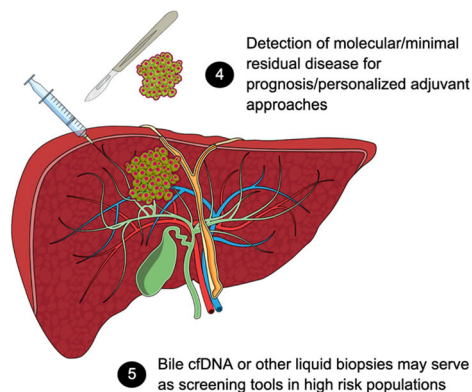
Liquid biopsies or ctDNA may be utilized to:

1. Determine the molecular profile of the tumour and therefore guide the selection of molecular targeted therapy in the neoadjuvant setting.
2. Form a surveillance tool for the detection of minimal residual disease or cancer recurrence after surgery.
3. Diagnose and screen for early iCCA detection in high-risk populations.

The potential for ctDNA can be tumour informed or uninformed depending on the goals of its use.



- 1 Diagnosis
- 2 Neoadjuvant or downstaging approaches
- 3 Monitoring response



Choi WJ, et al. *Ann Surg Oncol*.

Visual Abstract by @WJChoiMD for @AnnSurgOncol

ANNALS OF
SURGICAL
ONCOLOGY

AUTHOR CONTRIBUTIONS WJC: conception of project, literature search, manuscript write-up; TI: conception of project, manuscript write-up; AG: conception of project, manuscript write-up, figure creation; SG: conception of project, manuscript write-up; GS: conception of project, manuscript write-up; GO: conception of project, literature search, manuscript write-up

DISCLOSURE Grainne O’Kane discloses - Honoraria: Eisai, Roche, AstraZeneca; Consulting or Advisory Role: Eisai, Roche, AstraZeneca Canada, Incyte; Travel, Accommodations, Expenses: AstraZeneca/MedImmune. Gonzalo Sapisochin discloses consultancy

for Astra-Zeneca, Roche, Novartis, Evidera, and Integra. Gonzalo Sapisochin has received financial compensation for talks for Roche, Astrazeneca, Chiesi, and Integra. Gonzalo Sapisochin has received a grant from Roche. None of the other authors have any conflicts of interest to declare.

Publisher’s Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.