PEER-REVIEW REPORT

Name of journal: *World Journal of Clinical Cases*

Manuscript NO: 75067

Title: Indocyanine green plasma clearance rate and 99mTc-galactosyl human serum albumin single-photon emission computed tomography evaluated preoperative remnant liver

Provenance and peer review: Unsolicited manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer’s code: 05834960

Position: Peer Reviewer

Academic degree: MD

Professional title: Doctor

Reviewer’s Country/Territory: China

Author’s Country/Territory: Japan

Manuscript submission date: 2022-01-15

Reviewer chosen by: AI Technique

Reviewer accepted review: 2022-01-16 02:59

Reviewer performed review: 2022-01-21 11:42

Review time: 5 Days and 8 Hours

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<th>[Y] Grade B: Very good</th>
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<th>Conclusion</th>
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In combination with the previous method of evaluating liver function by relying on indocyanine green metabolic rate, this manuscript innovatively proposes to evaluate the preoperative residual liver volume according to the combination of indocyanine green plasma clearance and 99mTc GSA SPECT. Compared with the previous methods, this method is more scientific and has clinical significance. This method not only makes liver surgery more convenient, but also can safely prolong the number of cases of hepatectomy. This makes more patients with advanced liver cancer benefit. However, the number of patients in this study is relatively small, and there are no failure cases as a control. And the rICGK $\geq 0.05$ criterion appears to be safe regarding zero mortality. This has not been verified worldwide. More cases are expected to be included in the study.
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Provenance and peer review: Unsolicited manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer’s code: 03294368

Position: Editorial Board

Academic degree: DSc, MD, PhD

Professional title: Dean, Professor

Reviewer’s Country/Territory: Georgia

Author’s Country/Territory: Japan

Manuscript submission date: 2022-01-15

Reviewer chosen by: AI Technique

Reviewer accepted review: 2022-01-29 19:35

Reviewer performed review: 2022-01-29 20:01

Review time: 1 Hour

| Scientific quality |  | Grade A: Excellent | [ ] Grade B: Very good | [ ] Grade C: Good |
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|                    |  | Grade D: Fair      | [ ] Grade E: Do not publish |

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SPECIFIC COMMENTS TO AUTHORS
The paper is very interesting. The method for remnant liver functional evaluation provided by authors is interesting, quite simple, and easily reproducible. It will gain interest among the surgeons performing liver resection/transplantation.
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Provenance and peer review: Unsolicited manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer’s code: 03034605

Position: Editorial Board

Academic degree: MBBS, MCh, MD

Professional title: Assistant Professor, Attending Doctor, Chief Doctor, Consultant Physician-Scientist, Surgeon

Reviewer’s Country/Territory: India

Author’s Country/Territory: Japan

Manuscript submission date: 2022-01-15

Reviewer chosen by: AI Technique

Reviewer accepted review: 2022-01-29 01:53

Reviewer performed review: 2022-01-31 06:59

Review time: 2 Days and 5 Hours

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SPECIFIC COMMENTS TO AUTHORS
The authors have conducted this retrospective study to determine the safety of institutional protocol of using anatomical and functional volume remnant KICG for selecting patients for liver resection. However, the sample size of 6 patients in marginal group is too small to draw any meaningful conclusions. I recommend the authors to continue collecting data, update the results and publish the findings when at least 50 patients are present in the marginal group. Other comments regarding the manuscript are as follows: 1. Why only 23 patients who received PVE were selected from the 150 patients operated during the study period? Other patients without PVE satisfying the criteria of marginal group can also be included in this study. 2. What is the benefit of comparing the outcomes of marginal and non-marginal groups? The aim is to study the outcomes of marginal group.
**PEER-REVIEW REPORT**

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**Provenance and peer review:** Unsolicited manuscript; Externally peer reviewed

**Peer-review model:** Single blind

**Reviewer’s code:** 05908713

**Position:** Peer Reviewer

**Academic degree:** MD

**Professional title:** Academic Fellow, Surgeon

**Reviewer’s Country/Territory:** Italy

**Author’s Country/Territory:** Japan

**Manuscript submission date:** 2022-01-15

**Reviewer chosen by:** AI Technique

**Reviewer accepted review:** 2022-01-31 15:28

**Reviewer performed review:** 2022-02-04 05:31

**Review time:** 3 Days and 14 Hours

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**SPECIFIC COMMENTS TO AUTHORS**

English language needs a wide check. The title does not reflect the main subject/hypothesis of the manuscript, neither the kind of the study. Abstract must be shortened and made more concise, focused on the study. In the background it should be highlighted that the value of indocyanine green clearance of the future liver remnant has not been widely validated. The definition of KICG must be written in the methods section, not in the background. Primary endpoint is not clear. Results are not powerful because of the sample size, study design, lack of clearly defined endpoints.
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Provenance and peer review: Unsolicited manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer’s code: 05562493

Position: Peer Reviewer

Academic degree: MD

Professional title: Director

Reviewer’s Country/Territory: China

Author’s Country/Territory: Japan

Manuscript submission date: 2022-01-15

Reviewer chosen by: AI Technique

Reviewer accepted review: 2022-01-29 14:16

Reviewer performed review: 2022-02-11 13:41

Review time: 12 Days and 23 Hours

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Re-review | [ ] Yes  [ Y] No
---|---
Peer-reviewer statements | Peer-Review: [ Y] Anonymous  [ ] Onymous
Conflicts-of-Interest: [ ] Yes  [ Y] No

**SPECIFIC COMMENTS TO AUTHORS**

Related papers have been published:  small sample size