PEER-REVIEW REPORT

Name of journal: World Journal of Clinical Cases

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Title: Clinical application of combined detection of SARS-CoV-2-specific antibody and nucleic acid

Reviewer's code: 03259512

Position: Peer Reviewer

Academic degree: MSc, PhD

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Reviewer chosen by: Jia-Ping Yan

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Scientific quality	[ ] Grade A: Excellent [Y] Grade B: Very good [ ] Grade C: Good [ ] Grade D: Fair [ ] Grade E: Do not publish
Language quality	[ ] Grade A: Priority publishing [Y] Grade B: Minor language polishing [ ] Grade C: A great deal of language polishing [ ] Grade D: Rejection
Conclusion	[ ] Accept (High priority) [ ] Accept (General priority) [Y] Minor revision [ ] Major revision [ ] Rejection
Re-review	[Y] Yes [ ] No
Peer-reviewer statements	Peer-Review: [Y] Anonymous [ ] Onymous Conflicts-of-Interest: [ ] Yes [Y] No

SPECIFIC COMMENTS TO AUTHORS

The current study is a retrospective analysis of diagnostic COVID tests for specificity and sensitivity in China (Wuhan). The study includes 652 suspected coronavirus disease 2019 (COVID-19) patients and 206 non-COVID-19 patients. Authors tested the diagnostic value of SARS-CoV-2 IgM/IgG and nucleic acid detection assays. The study is very important considering current situation with ongoing situation worldwide. There are few issues to amend. 1. Core tips; replace " … specificity and accuracy of IgM/IgG combined tests" with "… specificity, sensitivity, and accuracy of IgM/IgG combined tests". 2. Core tips last sentence add "Our data indicates that serological IgM/IgG combined test can be used in combination with RT-PCR for diagnosis of SARS-CoV-2 infection" 3. Abstract; replace " (SARS-CoV)-2 infections has highlighted the necessity for readily…" with this "…(SARS-CoV)-2 infections represents an urgent need for readily available…". 4. It is essential to report all catalog numbers for the used antibodies/detection kits described in this study. The tests may be requested and repeated by other scientists worldwide. Therefore, catalog number for the used reagents is essential to report. Authors should add catalog number in this section : "The SARS-CoV-2 Antibody Test Kit (catalog #??? colloidal gold) was obtained from Innovita (Tangshan) Biotechnology Co. Ltd. (Tangshan, China), with two antigens (spike and nucleocapsid proteins, cat#???) of SARS-CoV-2 coated on the surface of the colloid gold particles. The SARS-CoV-2 nucleic acid detection kit (cat #???fluorescent PCR) was purchased from Shanghai Zhijiang Biotechnology Co. Ltd. (Shanghai, China)… 5. Summary; replace " It can be used as a detection tool in combination with RT-PCR in the diagnosis of SARS-CoV-2 infection in epidemic areas." With this " Our data indicates that the antibody-based test can be used as a detection tool in combination with RT-PCR in the diagnosis of SARS-CoV-2 infection in epidemic areas.