

## PEER-REVIEW REPORT

**Name of journal:** World Journal of Gastroenterology

**Manuscript NO:** 58023

**Title:** Discovery of unique African Helicobacter pylori CagA-multimerization motif in the Dominican Republic

**Reviewer's code:** 03563654

**Position:** Peer Reviewer

**Academic degree:** FACS, FEBS, MD, PhD

**Professional title:** Associate Professor, Professor, Surgeon

**Reviewer's Country/Territory:** United States

**Author's Country/Territory:** Japan

**Manuscript submission date:** 2020-08-01

**Reviewer chosen by:** Jia-Ping Yan

**Reviewer accepted review:** 2020-08-31 05:04

**Reviewer performed review:** 2020-08-31 05:15

**Review time:** 1 Hour

<b>Scientific quality</b>	<input type="checkbox"/> Grade A: Excellent <input checked="" type="checkbox"/> Grade B: Very good <input type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
<b>Language quality</b>	<input type="checkbox"/> Grade A: Priority publishing <input checked="" type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
<b>Conclusion</b>	<input type="checkbox"/> Accept (High priority) <input type="checkbox"/> Accept (General priority) <input checked="" type="checkbox"/> Minor revision <input type="checkbox"/> Major revision <input type="checkbox"/> Rejection
<b>Re-review</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>Peer-reviewer statements</b>	Peer-Review: <input checked="" type="checkbox"/> Anonymous <input type="checkbox"/> Onymous Conflicts-of-Interest: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

#### **SPECIFIC COMMENTS TO AUTHORS**

well written manuscript. i have few suggestions. 1-what is the statistcial method?  
2-( <https://doi.org/10.1111/tbj.13174>) and (Turkiye Klinikleri J Gen Surg-Special Topics.  
2018;11(2):112-4) I suggest both of these uptodate studies for the references

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**Name of journal:** World Journal of Gastroenterology

**Manuscript NO:** 58023

**Title:** Discovery of unique African Helicobacter pylori CagA-multimerization motif in the Dominican Republic

**Reviewer's code:** 00503623

**Position:** Editorial Board

**Academic degree:** MD, PhD

**Professional title:** Professor

**Reviewer's Country/Territory:** United States

**Author's Country/Territory:** Japan

**Manuscript submission date:** 2020-08-01

**Reviewer chosen by:** Jia-Ping Yan

**Reviewer accepted review:** 2020-08-31 14:21

**Reviewer performed review:** 2020-08-31 15:39

**Review time:** 1 Hour

<b>Scientific quality</b>	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Very good <input checked="" type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
<b>Language quality</b>	<input type="checkbox"/> Grade A: Priority publishing <input checked="" type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
<b>Conclusion</b>	<input type="checkbox"/> Accept (High priority) <input type="checkbox"/> Accept (General priority) <input checked="" type="checkbox"/> Minor revision <input type="checkbox"/> Major revision <input type="checkbox"/> Rejection
<b>Re-review</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Peer-reviewer statements</b>	Peer-Review: <input checked="" type="checkbox"/> Anonymous <input type="checkbox"/> Onymous Conflicts-of-Interest: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No



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#### **SPECIFIC COMMENTS TO AUTHORS**

The studies presented in this manuscript, MS No 58023, report on the distribution of EPIYA pattern and CagA-multimerization (CM) motifs associated with carcinogenic potential of Hp in Dominican Republic. Analysis of 120 Hp strains, obtained from gastric mucosal biopsies of 258 patients, revealed the presence of the unique African (hpAfrica1-type) CagA motif in Western-type CagA (Afrca1-CM). However, there was no significant association between the CM motif patterns and histological scores and clinical outcomes. While the presented experimental data clearly support the reached conclusion, the manuscript suffers from the diffused discussion, which requires judicious shortening. The same applies to the abstract.

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**Name of journal:** World Journal of Gastroenterology

**Manuscript NO:** 58023

**Title:** Discovery of unique African Helicobacter pylori CagA-multimerization motif in the Dominican Republic

**Reviewer's code:** 00503773

**Position:** Peer Reviewer

**Academic degree:** MD

**Professional title:** Associate Professor, Doctor

**Reviewer's Country/Territory:** Turkey

**Author's Country/Territory:** Japan

**Manuscript submission date:** 2020-08-01

**Reviewer chosen by:** Jia-Ping Yan

**Reviewer accepted review:** 2020-09-01 07:06

**Reviewer performed review:** 2020-09-03 11:29

**Review time:** 2 Days and 4 Hours

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



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#### **SPECIFIC COMMENTS TO AUTHORS**

I read the manuscript named “ Discovery of unique African *Helicobacter pylori* CagA-multimerization motif in the Dominican Republic ”. ( Manuscript NO: 58023 ) and my recommendations are as follows. Title: It accurately reflects the major topic and contents of the study. Abstract: Adequate, summarizing the topic. Topics has been discussed with all aspects. References: References are appropriate and updated. Figures and tables are reflects the major findings of the study, and they are appropriately. This study is clearly presented . This manuscript gives additional new knowledge to the existing literature. I think that this manuscript is excellent and worthy of publication in the World Journal of Gastroenterology.

## PEER-REVIEW REPORT

**Name of journal:** World Journal of Gastroenterology

**Manuscript NO:** 58023

**Title:** Discovery of unique African Helicobacter pylori CagA-multimerization motif in the Dominican Republic

**Reviewer's code:** 00073640

**Position:** Editorial Board

**Academic degree:** PhD

**Professional title:** Associate Research Scientist

**Reviewer's Country/Territory:** Slovenia

**Author's Country/Territory:** Japan

**Manuscript submission date:** 2020-08-01

**Reviewer chosen by:** Jia-Ping Yan

**Reviewer accepted review:** 2020-08-31 05:07

**Reviewer performed review:** 2020-09-07 09:46

**Review time:** 7 Days and 4 Hours

<b>Scientific quality</b>	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Very good <input type="checkbox"/> Grade C: Good <input checked="" type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
<b>Language quality</b>	<input type="checkbox"/> Grade A: Priority publishing <input checked="" type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
<b>Conclusion</b>	<input type="checkbox"/> Accept (High priority) <input type="checkbox"/> Accept (General priority) <input type="checkbox"/> Minor revision <input checked="" type="checkbox"/> Major revision <input type="checkbox"/> Rejection
<b>Re-review</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>Peer-reviewer statements</b>	Peer-Review: <input checked="" type="checkbox"/> Anonymous <input type="checkbox"/> Onymous Conflicts-of-Interest: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

## **SPECIFIC COMMENTS TO AUTHORS**

*Helicobacter pylori* is an important factor of peptic ulcer disease and gastric cancer. *H. pylori* produces multiple virulence factors, including *cagA* (cytotoxin-associated gene) and *vacA* (vacuolating cytotoxin), both of which are associated with increase in the risk of disease development. Authors explored sequence characteristics of the *cagA*-positive strains of *H. pylori*, according to their EPIYA patterns and CM motifs in the Dominican Republic patients and found unique *cagA* CM motif in Western-type *CagA*. Although the subject of the manuscript is interesting and the manuscript provides detailed explanation about the molecular examination, the manuscript does not provide sufficient information about the patients, samples, groups, histological results to enable the reader critical evaluation of their study and potential value of this discovery. Namely, because only a small proportion of all infected individuals develop gastric cancer and because those with duodenal ulcer seem to be protected, it has been postulated that certain circumstances might modify the relationship between *H. pylori* infection and gastric cancer, including the genetic and phenotypic characteristics of the infecting strain *H. pylori* (*cagA* and *vacA*). To improve the manuscript I strongly suggest - Improvement of introduction section and highlight *H. pylori* infection in association with the disease development and complications - Improvement of the methods section and include briefly all necessary data about the analyses - referring to references are not acceptable - include also how endoscopic sampling for histology analysis was done (antrum, corpus, noncancerous, peptic ulcer etc. In the current version of the manuscript it is very confusing what was actually done. First authors mention that samples were taken from 258 dyspeptic patients during endoscopy (line 206-208) and were then histologically examined and evaluated according to Sydney system (line 211-214). Then authors wrote that peptic ulcer and gastric cancer were identified via endoscopy and that gastritis was



diagnosed in the absence of peptic ulcer or gastric malignancy (line 214-216). What did authors mean by that? - For H.pylori culture, antral biopsy specimens were taken (line216) and 120 H.pylori strains were obtained. Than ethnicity of 120 patients was examined (self-assesment) and included in the manuscript. - Results section have only two sentences about the histological/endoscopical results e.g. “the prevalence of H.pylori infection determined via histological examination was 67,8% (175/258). From 258 dyspeptic patients, a total of 120 strains were isolated (120/258, 46,5%). Of these, 93 stains were isolated from subjects with chronic gastritis, 26 from peptic ulcer subjects, and one from a gastric cancer subject.” (line261-266). - Discussion section again does not include information about the H.pylori involvement into gastric diseases and problems, instead it discusses about the heterogeneity of EPIYA patters and CM motifs in the Dominican Republic patients in regard to their origin and ancestry – very similar what the authors already published recently in the article titled Comparative study between Helicobacter pylori and host human genetics in the Dominican Republic [PMID: 31675915 DOI: 10.1186/s12862-019-1526-9]. Moreover, authors stated in the manuscript that “We have previously reported that all 64 H. pylori strains isolated in 2011 in the Dominican Republic carried the Western cagA specific sequences [13]. However, this report did not mention the CM motif. In the subsequent study in the Dominican Republic, we have already performed a multilocus sequence typing (MLST) analysis of seven housekeeping genes for a total of 119 H. pylori strains, which were collected in 2011 and 2016, followed by population structure analysis using STRUCTURE software[14]” (line 188-194). I find their already published article [PMID: 31675915 DOI: 10.1186/s12862-019-1526-9] very interesting, while this manuscript is much less, specially because the value of the results seem to be very low and it was not discussed by authors nor addressed throughout the whole manuscript.

## RE-REVIEW REPORT OF REVISED MANUSCRIPT

**Name of journal:** World Journal of Gastroenterology

**Manuscript NO:** 58023

**Title:** Discovery of unique African *Helicobacter pylori* CagA-multimerization motif in the Dominican Republic

**Reviewer's code:** 00073640

**Position:** Editorial Board

**Academic degree:** PhD

**Professional title:** Associate Research Scientist

**Reviewer's Country/Territory:** Slovenia

**Author's Country/Territory:** Japan

**Manuscript submission date:** 2020-08-01

**Reviewer chosen by:** Xi-Fang Chen

**Reviewer accepted review:** 2020-10-12 05:31

**Reviewer performed review:** 2020-10-12 07:44

**Review time:** 2 Hours

<b>Scientific quality</b>	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Very good <input checked="" type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
<b>Language quality</b>	<input type="checkbox"/> Grade A: Priority publishing <input checked="" type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
<b>Conclusion</b>	<input type="checkbox"/> Accept (High priority) <input checked="" type="checkbox"/> Accept (General priority) <input type="checkbox"/> Minor revision <input type="checkbox"/> Major revision <input type="checkbox"/> Rejection
<b>Peer-reviewer statements</b>	Peer-Review: <input checked="" type="checkbox"/> Anonymous <input type="checkbox"/> Onymous Conflicts-of-Interest: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

## SPECIFIC COMMENTS TO AUTHORS

Authors did follow suggestions and inserted minimal amount of suggested informations, which improved the manuscript and highlight the potential value of the discovery.

## RE-REVIEW REPORT OF REVISED MANUSCRIPT

**Name of journal:** World Journal of Gastroenterology

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**Professional title:** Associate Professor, Professor, Surgeon

**Reviewer's Country/Territory:** United States

**Author's Country/Territory:** Japan

**Manuscript submission date:** 2020-08-01

**Reviewer chosen by:** Xi-Fang Chen

**Reviewer accepted review:** 2020-10-12 15:30

**Reviewer performed review:** 2020-10-12 15:32

**Review time:** 1 Hour

<b>Scientific quality</b>	[ <input checked="" type="radio"/> ] Grade A: Excellent [ <input type="radio"/> ] Grade B: Very good [ <input type="radio"/> ] Grade C: Good [ <input type="radio"/> ] Grade D: Fair [ <input type="radio"/> ] Grade E: Do not publish
<b>Language quality</b>	[ <input checked="" type="radio"/> ] Grade A: Priority publishing [ <input type="radio"/> ] Grade B: Minor language polishing [ <input type="radio"/> ] Grade C: A great deal of language polishing [ <input type="radio"/> ] Grade D: Rejection
<b>Conclusion</b>	[ <input checked="" type="radio"/> ] Accept (High priority) [ <input type="radio"/> ] Accept (General priority) [ <input type="radio"/> ] Minor revision [ <input type="radio"/> ] Major revision [ <input type="radio"/> ] Rejection
<b>Peer-reviewer statements</b>	Peer-Review: [ <input checked="" type="radio"/> ] Anonymous [ <input type="radio"/> ] Onymous Conflicts-of-Interest: [ <input type="radio"/> ] Yes [ <input checked="" type="radio"/> ] No

## SPECIFIC COMMENTS TO AUTHORS



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**https://**[www.wjgnet.com](http://www.wjgnet.com)

accept