

## ESPS PEER-REVIEW REPORT

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

**ESPS manuscript NO:** 19298

**Title:** Colorectal cancer tumour markers and biomarkers – recent therapeutic advances

**Reviewer's code:** 03003422

**Reviewer's country:** Russia

**Science editor:** Ze-Mao Gong

**Date sent for review:** 2015-05-08 19:00

**Date reviewed:** 2015-08-26 05:28

CLASSIFICATION	LANGUAGE EVALUATION	SCIENTIFIC MISCONDUCT	CONCLUSION
<input type="checkbox"/> Grade A: Excellent	<input type="checkbox"/> Grade A: Priority publishing	Google Search:	<input type="checkbox"/> Accept
<input type="checkbox"/> Grade B: Very good	<input checked="" type="checkbox"/> Grade B: Minor language polishing	<input type="checkbox"/> The same title	<input type="checkbox"/> High priority for publication
<input checked="" type="checkbox"/> Grade C: Good		<input type="checkbox"/> Duplicate publication	
<input type="checkbox"/> Grade D: Fair	<input type="checkbox"/> Grade C: A great deal of language polishing	<input type="checkbox"/> Plagiarism	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade E: Poor	<input type="checkbox"/> Grade D: Rejected	<input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Minor revision
		BPG Search:	<input type="checkbox"/> Major revision
		<input type="checkbox"/> The same title	
		<input type="checkbox"/> Duplicate publication	
		<input type="checkbox"/> Plagiarism	
		<input checked="" type="checkbox"/> No	

## COMMENTS TO AUTHORS

This review "The colorectal cancer tumour markers and biomarkers – recent therapeutic advances" by G Lech, R Slotwinski, M Slodkowski, I Krasnodebski is devoted to the current state of clinical knowledge about the role of tumour markers in CRC screening, diagnosis, treatment and follow-up. It is necessary to mention that similar paper has already been published by these authors in Neoplasma 61, 1, 2014 by G Lech, R Slotwinski, M Slodkowski, I Krasnodebski "The role of tumour markers and biomarkers in colorectal cancer" (see reference #6). Both papers have identical text in the sections: Microsatellite instability, Chromosome 18q loss of heterozygosity, Other biomarkers and Conclusions and table 1. The first manuscript has been slightly restructured and new references were added. 2014 review contains 70 references and the second paper 103 references. The reference to the Table 1 is missing in the main text of the last paper. The paper contains the title, abstract, key words, introduction, main body, discussion and references. The acknowledgements and funding information are missing. The title of this paper should be "The colorectal cancer tumour markers – recent therapeutic advances" as the authors discussed only colorectal tumour/cancer markers and not the biomarkers for other diseases. The authors also use the term "molecular markers" in the

section "Blood and stool molecular markers" where they mostly discuss the epigenetic markers and some mutations. The epigenetic changes in the genome of cancer cells do not involve a change in the nucleotide sequence. Epigenetic alterations in cancer cells is a relatively new area of research that include the mechanisms of DNA modifications: epigenetic silencing of tumor suppressor genes and activation of oncogenes by alteration in CpG island methylation patterns, histone modifications, deregulation of DNA binding proteins, epigenetic defects in DNA repair pathways, changes in the miRNA gene silencing and miRNA expression etc. It is beneficial to this paper that the authors mentioned the epigenetic markers and it brings some novelty to this paper. The authors also use the term "protein markers". Proteins are the molecules that are used as molecular bio/markers. The structure of this article is not well organized. In cancer research and medicine, biomarkers are used and classified in three primary ways: as diagnostics for the primary tumor and metastases; to forecast how aggressive a condition is, as in the case of determining a patient's ability to fare in the absence of treatment (prognostic); to predict how well a patient will respond to treatment (predictive). Unfortunately it is not very clear from the structure and the text of this review. However this information is presented in the table 1. The references are relevant and up-to-date. However, there are some excellent reviews on this subject, for example: William M Colin C. & Pritchard, MD, PhD Toxicol Pathol. 2014 January ; 42(1): 124-139. doi:10.1177/0192623313505155. Molecular alterations and biomarkers in colorectal cancer. The conclusions drawn are appropriately supported by the literature and the main output is correct.