

**ESPS Peer-review Report**

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

**ESPS Manuscript NO:** 4606

**Title:** Effects of integrin-targeted photodynamic therapy on pancreatic carcinoma cells

**Reviewer code:** 01557574

**Science editor:** Gou, Su-Xin

**Date sent for review:** 2013-07-10 10:32

**Date reviewed:** 2013-07-14 20:05

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	CONCLUSION
<input checked="" type="checkbox"/> Grade A (Excellent)	<input checked="" type="checkbox"/> Grade A: Priority Publishing	Google Search:	<input checked="" type="checkbox"/> Accept
<input type="checkbox"/> Grade B (Very good)	<input type="checkbox"/> Grade B: minor language polishing	<input type="checkbox"/> Existed	<input type="checkbox"/> High priority for publication
<input type="checkbox"/> Grade C (Good)	<input type="checkbox"/> Grade C: a great deal of	<input type="checkbox"/> No records	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade D (Fair)	language polishing	BPG Search:	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E (Poor)	<input type="checkbox"/> Grade D: rejected	<input type="checkbox"/> Existed	<input type="checkbox"/> Major revision
		<input type="checkbox"/> No records	

**COMMENTS TO AUTHORS**

Dear Editor, The photodynamic therapy very very important for patients with cancer. So, this study is new and very useful research for us. It gives us new informations. Therefore, it should be published without any revision. Sincerely Yours. Prof. Dr. Vedat Goral Izmir University School of Medicine Medical Park Hospital Department of Gastroenterology Izmir/Turkey

## ESPS Peer-review Report

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

**ESPS Manuscript NO:** 4606

**Title:** Effects of integrin-targeted photodynamic therapy on pancreatic carcinoma cells

**Reviewer code:** 00037961

**Science editor:** Gou, Su-Xin

**Date sent for review:** 2013-07-10 10:32

**Date reviewed:** 2013-07-17 04:06

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	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 type="checkbox"/> Grade B: minor language polishing	<input type="checkbox"/> Existed	<input type="checkbox"/> High priority for publication
<input type="checkbox"/> Grade C (Good)	<input type="checkbox"/> Grade C: a great deal of language polishing	<input type="checkbox"/> No records	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade D (Fair)	<input type="checkbox"/> Grade D: rejected	BPG Search:	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E (Poor)		<input type="checkbox"/> Existed	<input type="checkbox"/> Major revision
		<input type="checkbox"/> No records	

## COMMENTS TO AUTHORS

The manuscript investigates the effects of photodynamic therapy (PDT) on the proliferation and apoptosis of pancreatic carcinoma cells (SW1990) by using quantum dots conjugated with an arginine-glycine-aspartic acid (RGD) peptide as a photosensitizer (PS). In addition, the investigators looked at the morphologic changes, cell cycle delay, apoptosis, and the expression of myeloid cell leukemia-1 (Mcl-1), protein kinase B (Akt), and tumor necrosis factor-related apoptosis-inducing ligand (TRAIL) mRNA by reverse-transcription polymerase chain reaction. The amount of reactive oxygen species (ROS) was also determined by fluorescence. Their results show that cell proliferation was significantly inhibited ( $p < 0.01$ ) when PDT was used with a quantum dots-RGD probe as a PS. Changes in apoptotic cells and morphology were observed using optical microscopy. The Flow Cytometry revealed that the cell apoptosis rate, cycle G0/G1, and S delay were significantly increased in the PDT group compared to controls. The expression of Mcl-1 and Akt mRNA was down-regulated, whereas that of TRAIL mRNA was up-regulated after treatment with PDT. The PDT group had significantly more cells producing ROS compared to the control group. The investigators conclude that PDT with a quantum dots-RGD probe, as a PS, significantly inhibits cell proliferation and increases apoptosis in SW1990 cells. Comments: This is an important study in the era of various technologies used to identify the specific biomarkers for pancreatic cancer diagnostics and therapy. PDT is a new type of approach and should be validated in selective patients through clinical trials. This in-vitro approach provides a solid foundation to look into the future aspects of the study. Other Comments: 1) The manuscript needs to be edited for clarity. There are editorial revisions left out in the original manuscript. 2) The results section needs to be organized, completed with adequate description with figures and Tables (where applied) without referring to assay procedures. 3) Please



## **Baishideng Publishing Group Co., Limited**

Flat C, 23/F., Lucky Plaza,  
315-321 Lockhart Road,  
Wan Chai, Hong Kong, China

---

follow the style and format of the journal that is required for references 4) Suggest that the gene expression data by RTPCR should be made more relevant in terms of their importance to the current study.

## ESPS Peer-review Report

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

**ESPS Manuscript NO:** 4606

**Title:** Effects of integrin-targeted photodynamic therapy on pancreatic carcinoma cells

**Reviewer code:** 00043819

**Science editor:** Gou, Su-Xin

**Date sent for review:** 2013-07-10 10:32

**Date reviewed:** 2013-07-20 18:35

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	CONCLUSION
<input type="checkbox"/> Grade A (Excellent)	<input checked="" type="checkbox"/> Grade A: Priority Publishing	Google Search:	<input checked="" type="checkbox"/> Accept
<input checked="" type="checkbox"/> Grade B (Very good)	<input type="checkbox"/> Grade B: minor language polishing	<input type="checkbox"/> Existed	<input type="checkbox"/> High priority for publication
<input type="checkbox"/> Grade C (Good)	<input type="checkbox"/> Grade C: a great deal of	<input type="checkbox"/> No records	
<input type="checkbox"/> Grade D (Fair)	language polishing	BPG Search:	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade E (Poor)	<input type="checkbox"/> Grade D: rejected	<input type="checkbox"/> Existed	<input type="checkbox"/> Minor revision
		<input type="checkbox"/> No records	<input type="checkbox"/> Major revision

## COMMENTS TO AUTHORS

In this study the Authors investigate the effects of photodynamic therapy (PDT) on the proliferation and apoptosis of pancreatic cancer cells by using RGD peptide as a photosensitizer. They conclude that PDT with a quantum dots-RGD probe significantly inhibits cell proliferation and increases apoptosis in SW 1990 cells. The topic is very interesting and the manuscript is well-written, thus encouraging in vivo studies.

## ESPS Peer-review Report

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

**ESPS Manuscript NO:** 4606

**Title:** Effects of integrin-targeted photodynamic therapy on pancreatic carcinoma cells

**Reviewer code:** 00181445

**Science editor:** Gou, Su-Xin

**Date sent for review:** 2013-07-10 10:32

**Date reviewed:** 2013-07-25 14:45

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	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"/> Existed	<input type="checkbox"/> High priority for publication
<input type="checkbox"/> Grade C (Good)	<input type="checkbox"/> Grade C: a great deal of language polishing	<input type="checkbox"/> No records	<input type="checkbox"/> Rejection
<input checked="" type="checkbox"/> Grade D (Fair)		BPG Search:	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E (Poor)	<input type="checkbox"/> Grade D: rejected	<input type="checkbox"/> Existed	<input type="checkbox"/> Major revision
		<input type="checkbox"/> No records	

## COMMENTS TO AUTHORS

The study was aimed to evaluate the effects of PDT on proliferation and apoptosis of pancreatic carcinoma cells in vitro. The work is interesting, however, for better explain the significance of this treatment in clinic, animal experiments are required. Besides, the authors produced ROS in the study as it is useful for treatment. But as we know, ROS can induce oxidative stress damage, and is harmful to cells. Thus, whether the enhanced apoptosis in PDT group cells should be ascribed to oxidative stress rather than integrins? So, the authors should discuss their corresponding considerations in details. Other minor comments: 1. In "method" section, "cells grown on 6--well plates were divided into 4 groups as described above" could be deleted. 2. "Results" section, MTT assay, "...were not significantly different..." should be "...different compared to control group" 3. "Results" section, 4. Cell cycle delay and apoptosis by flow cytometry: "F=130.617, p<0.01", is it the same P value between every two group? and, "S2, 4.41%..." is not as same as the data in table2, please decide which is correct. 4. "Results" section, 6. Relative gene expression by RT-PCR analysis: "The ratio of the PDT..." should be "The ratio of these two mRNA in PDT group were..." 5. Error was found in the number behead the subtitle (methods section). 6. It is unclear about negative and positive controls in the study design. 7. It has been reported that PDT can kill pancreatic tumor cells in vitro. What The innovation of this study?