Reviewer's report

Title: Elevated IGFIR expression regulating VEGF and VEGF-C predicts lymph node metastasis in human colorectal cancer

Version: 1  Date: 28 October 2009

Reviewer: Yajun Guo

Reviewer's report:

Comments:

In this report by Zhang and colleagues, the authors evaluated the association of IGF-IR with lymph node metastasis in human colorectal cancer samples and preliminarily explored the underlying mechanisms using human colorectal cancer cell lines. They found higher expressions of IGF-IR, VEGF and VEGF-C in colorectal cancer than in normal and adenoma tissues, and importantly, concomitant high expressions of IGF-IR/VEGF and IGF-IR/VEGF-C have a strong correlation with lymph node metastasis in these patients from which the samples were obtained. Furthermore, IGF-I added to the medium could induce the expression of VEGF and VEGF-C in human colorectal cancer cell lines expressing IGF-IR. Generally, this study is well designed and the data support the conclusions they draw.

Minor Essential Revisions:

a) the authors should specify the histological grade standard used in this report. Whether Grade I, II and III correspond to poorly, moderately and well differentiated?

b) the authors should provide a WB image about the expression of IGF-IR in COLO-205 cells.

c) what’s source of IGF-I in tumor tissue or cancer cell lines? Whether the COLO-205 cell itself produces IGF-I therefore form a positive feedback for supporting cancer cell growth. They need add some discussions about the possible mechanisms underlying induction of VEGF and VEGF-C by IGF-I in human colorectal cancer cell lines or tumor samples.

d) in the sentence “IGF-I could effectively induce the VEGF and VEGF-C mRNA expression and protein secretion in colorectal cancer cells expressed IGFIR molecules.” in Abstract, the word “expressed” should be “expressing”, and so dose elsewhere in text.

The suggestion by review:

Accept after minor essential revisions