

Accepted Manuscript

Glucose-derived AGEs promote migration and invasion of colorectal cancer by up-regulating Sp1 expression

Ruyuan Deng, Huo Wu, Hui Ran, Xiang Kong, Lei Hu, Xiao Wang, Qing Su

PII: S0304-4165(17)30078-8
DOI: doi:[10.1016/j.bbagen.2017.02.024](https://doi.org/10.1016/j.bbagen.2017.02.024)
Reference: BBAGEN 28786

To appear in: *BBA - General Subjects*

Received date: 30 October 2016
Revised date: 29 January 2017
Accepted date: 21 February 2017



Please cite this article as: Ruyuan Deng, Huo Wu, Hui Ran, Xiang Kong, Lei Hu, Xiao Wang, Qing Su, Glucose-derived AGEs promote migration and invasion of colorectal cancer by up-regulating Sp1 expression, *BBA - General Subjects* (2017), doi:[10.1016/j.bbagen.2017.02.024](https://doi.org/10.1016/j.bbagen.2017.02.024)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Glucose-derived AGEs promote migration and invasion of colorectal cancer by up-regulating Sp1 expression

Ruyuan Deng^{a,1}, Huo Wu^{b,1}, Hui Ran^{a,1}, Xiang Kong^a, Lei Hu^c, Xiao Wang^{d,*}, Qing Su^{a,**}

^a Department of Endocrinology, Xinhua Hospital, Shanghai Jiaotong University School of Medicine, 1665, Kong Jiang Road, Shanghai, 200092, China

^b Department of General Surgery, Shanghai Institute of Digestive Surgery, Ruijin Hospital, Shanghai Jiaotong University School of Medicine, Shanghai, China.

^c Shanghai Key Laboratory of Gastric Neoplasms, Shanghai Institute of Digestive Surgery, Ruijin Hospital, Shanghai Jiaotong University School of Medicine, Shanghai, China.

^d Shanghai Clinical Center for Endocrine and Metabolic Diseases, Shanghai Institute of Endocrine and Metabolic Diseases, Department of Endocrine and Metabolic Diseases, Ruijin Hospital, Shanghai Jiaotong University School of Medicine, Shanghai 200025, China.

* Corresponding authors at: Shanghai Institute of Endocrine and Metabolic Diseases, Department of Endocrine and Metabolic Diseases, Shanghai Clinical Center for Endocrine and Metabolic Diseases, Ruijin Hospital, Shanghai Jiaotong University School of Medicine, 197 Ruijin Road II, Shanghai 200025, China. Tel.: +86 21 64315587; fax: +86 21 64673639.

E-mail address: wangxiao1976@hotmail.com (X. Wang)

** Corresponding Author at: Department of Endocrinology, Xinhua Hospital, Shanghai Jiaotong University School of Medicine, 1665, Kong Jiang Road, Shanghai, 200092, China. Tel.: +86 21 25077530; Fax: +86 21 25077532.

E-mail address: suqingxinhua@163.com (Q. Su).

¹ These authors contributed equally to this work

Abstract

It is well established that the risk of colorectal cancer (CRC) is significantly increased in diabetic patients. As one of main forms of the advanced glycation end products (AGEs) that accumulate in vivo, glucose-derived AGEs play an important role in the pathogenesis of diabetic complications and may contribute to CRC progression. However, to date, both the contribution of glucose-derived AGEs to the course of CRC and the underlying mechanism are unclear. In the present study, the concentration of glucose-derived AGEs in the serum and tumor tissue of patients with CRC increased. A clinical data analysis demonstrated that the expression of the receptor for AGEs (RAGE), Specificity Protein 1 (Sp1), and matrix metalloproteinase -2 (MMP2) was significantly higher in cancerous tissues compared with non-tumor

Abbreviations: CRC, Colorectal cancer; AGEs, advanced glycation end products; RAGE, receptor for advanced glycation end products; Sp1, specificity protein 1; MMP2, matrix metalloproteinase

Download English Version:

<https://daneshyari.com/en/article/5508108>

Download Persian Version:

<https://daneshyari.com/article/5508108>

[Daneshyari.com](https://daneshyari.com)