



## Detection of telomerase activity in malignant neoplasms and nonmalignant epithelial tissues of human esophagus

Shan-Min Yang, Tian-Jiao Wang, Bao-Yu Li, Yuan-Huan Wu, Zhen-Shi Ye

Shan-Min Yang, Tian-Jiao Wang, Department of Cell Biology, Cancer Research Center, School of Life Science, Xiamen University, Xiamen 361003, Fujian Province, China

Bao-Yu Li, Department of Gastroendoscope, No.1 Hospital, Zhongshan Hospital, Xiamen 361003, Fujian Province, China

Yuan-Huan Wu, Zhen-Shi Ye, Department of Gastroendoscope, Zhongshan Hospital, Xiamen 361003, Fujian Province, China

Author contributions: All authors contributed equally to the work.

Supported by The Science Council Grant of Department of the Public Health of Fujian.

Correspondence to: Dr. Shan-Min Yang, Department of Cell Biology, Cancer Research Center, School of Life Science, Xiamen University, 182 University Road, Xiamen 361005, Fujian Province, China. [xmucre@jingxian.xmu.edu.cn](mailto:xmucre@jingxian.xmu.edu.cn)  
Telephone: +86-592-2186390

Received: March 5, 1999  
Revised: January 10, 2000  
Accepted: July 10, 2000  
Published online: September 15, 2000

### Abstract

**AIM:** To study the expression of telomerase activity in malignant esophageal neoplasms and normal human esophageal epithelia.

**METHODS:** Telomerase activity was assayed by the telomere repeat amplification protocol (TRAP) method. All the neoplasms and epithelia of esophagus were confirmed by routine pathological diagnosis.

**RESULTS:** Telomerase activity was assayed in 18 normal esophageal epithelial tissues and in 35 malignant neoplasms of esophagus, including 27 cases of esophageal carcinoma and 8 cases of cardiac carcinoma. Telomerase activity was detected in most of malignant neoplasms of esophagus (91.4%, 32/35) and in all the normal esophageal epithelial tissues except one (18/19).

**CONCLUSION:** The results suggest that in addition to contributing to proliferation of immortal blast cells and neoplastic cells, telomerase activity may also play a similar role in regeneration of normal epithelia of human esophagus. The potential use of telomerase activity as a diagnostic marker in human esophageal neoplasm might not be suitable.

**Key words:** Telomerase; Telomerase repeat amplification protocol; Esophagus neoplasms/diagnosis; Esophagus epithelia

© The Author(s) 2000. Published by Baishideng Publishing Group Inc. All rights reserved.

Yang SM, Wang TJ, Li BY, Wu YH, Ye ZS. Detection of telomerase activity in malignant neoplasms and nonmalignant epithelial tissues of human esophagus. *World J Gastroenterol* 2000; 6(Suppl3): 77 Available from: URL: <http://www.wjgnet.com/1007-9327/full/v6/iSuppl3/77.htm> DOI: <http://dx.doi.org/10.3748/wjg.v6.iSuppl3.77>

E- Editor: Zhang FF



Published by **Baishideng Publishing Group Inc**

8226 Regency Drive, Pleasanton, CA 94588, USA

Telephone: +1-925-223-8242

Fax: +1-925-223-8243

E-mail: [bpgoffice@wjgnet.com](mailto:bpgoffice@wjgnet.com)

Help Desk: <http://www.wjgnet.com/esps/helpdesk.aspx>

<http://www.wjgnet.com>

