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(54) **Title:** METHODS FOR TREATING CANCER TARGETING TRANSGLUTAMINASE

(57) **Abstract:** A method for treating cancer comprising inhibiting transglutaminase activity is provided. Suitable cancer types for which the methods of the present disclosure can be used to treat include, but are not limited to, pancreatic, breast, and ovarian cancers and melanoma. The inhibition of transglutaminase activity may be performed by one or more techniques, including, but not limited to, downregulating transglutaminase expression, inhibiting TG2 translation, or blocking TG2 enzymatic activity, such as with a small molecule inhibitor or intracellular antibody (intrabody).

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US07/80521

A. CLASSIFICATION OF SUBJECT MATTER
 IPC: C07H 21/02(2006.01);21/04(2006.01);A61K 31/70(2006.01);C12N 5/00(2006.01)
 C12Q 1/68(2006.01)
 USPC: 514/44,536/24.1,24.5;435/6,375,377
 According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED
 Minimum documentation searched (classification system followed by classification symbols)
 U.S. : 514/44, 536/24.1, 24.5; 435/6, 375, 377

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

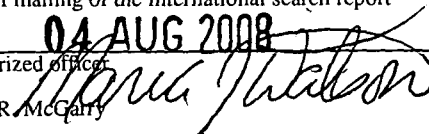
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
 WEST, MEDLINE, CAPLUS, EMBASE, BIOTECHNO

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 20050245473 (SAUNDERS) 03 November 2005 (03.11.2005), see entire document.	1-17
Y	BAE et al Down-Regulation of Transglutaminase II Leads to Impaired Motility of Cancer Cells by Inactivation of the Protein Kinase Akt, and Decrease of Reactive Oxygen Species. Biotechnol. Letters, 29 June 2006, Vol. 28, pages 1151-1158, see entire document.	1-17
Y	HERMAN et al. Implications of Increased Tissue Transglutaminase (TG2) Expression in Drug-Resistant Breast Cancer Cells. Oncogene, 30 January 2006, Vol. 25, pages 3049-3058, see entire document.	1-17
Y	FOK et al. Implications of Tissue Transglutaminase Expression in Malignant Melanoma. Mol. Cancer Ther. June 2006, Vol. 5, No. 6, pages 1493-1503, see entire document.	1-17

Further documents are listed in the continuation of Box C. See patent family annex.

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