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(54) **Title:** SYSTEMIC INSULIN-LIKE GROWTH FACTOR-I THERAPY REDUCES DIABETIC PERIPHERAL NEUROPATHY AND IMPROVES RENAL FUNCTION IN DIABETIC NEPHROPATHY

(57) **Abstract:** The present invention provides methods of treatment of patients suffering from the complication of blood sugar disorders diabetic peripheral neuropathy and diabetic nephropathy by administration of IGF-I via protein therapy or gene therapy. It relates to methods of treating an individual having a diabetic disorder or a hyperglycemic disorder, comprising administering to the individual an effective amount of a DNA vector expressing IGF-IEb or IGF-IEc in vivo or an effective amount of the IGF-IEb or IGF-IEc protein in the early hyperalgesia stage or in patient that have advanced to the hyposensitivity stage.



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## INTERNATIONAL SEARCH REPORT

International application No

PCT/US 08/62129

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - A61 K 31/426, 31/522 (2008.04)

USPC - 514/43, 514/114

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)

IPC(8) - A61K 31/426, 31/522 (2008.04)

USPC - 514/43, 514/1 14

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

USPC - 514/43, 514/1 14, 514/263.32, 514/342, 514/369, 514/423, 514/47, 514/92

(Text Search)

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

PubWEST (PGPB, USPT, USOC, EPAB, JPAB); DialogPRO (Engineering); PubMed and Google Scholar

Search Terms: insulin like growth factor-1, IGF-1, IGF-I Eb, IGF-IEc, IGF-I(Eb), IGF-I(Ec), diabetic, neuropathy, insulin-like growth factor-1, insulin-like growth factor-1 Eb, insulin-like growth factor-1 Ec, peripheral, infusion

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	ISHII, D.N. et al Insulin-Like Growth Factors Protects Against Diabetic Neuropathy: Effects on Sensory Nerve Regeneration in Rats. J. Neurosci Res. January 1995, Vol 40(1), pages 138-144 abstract.	1, 2 and 11
Y	YANG, S et al. Cloning and Characterization of an IGF-1 Isoform Expressed in Skeletal Muscle Subjected to Stretch Journal of Muscle Research and Cell Motility August 1996, Vol 17(4), pages 487-495: abstract; pg 490, right col., para 2	1-10
Y	US 5,948,757 A (SOMMER et al ) 07 September 1999 (07.09.1999) claim 5; col 5, ln 3-7; col 6, ln 38-50; col 7, ln 4-10, 35-47.	3-10 and 12
Y	US 2006/0058239 A1 (JOHNSON et al.) 16 March 2006 (16.03 2006) para [0001], [001 1], [0024], [0164].	6 and 9
Y	US 2007/0003524 A1 (KASPAR et al ) 04 January 2007 (04.01 .2007) para [0009], [0024].	7 and 10
Y	US 2003/0077761 A1 (PARROW et al ) 24 April 2003 (24.04 2003) SEQ ID NO: 2; para [0046]	11 and 12

 Further documents are listed in the continuation of Box C

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"A" document defining the general state of the art which is not considered to be of particular relevance

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