

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
9 April 2009 (09.04.2009)

PCT

(10) International Publication Number  
**WO 2009/046335 A1**

(51) International Patent Classification:  
**A61K 48/00** (2006.01) **C12N 5/08** (2006.01)

(21) International Application Number:  
PCT/US2008/078800

(22) International Filing Date: 3 October 2008 (03.10.2008)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/977,775 5 October 2007 (05.10.2007) US

(71) Applicant (for all designated States except US):  
**ETHICON, INCORPORATED** [US/US]; Route 22  
West, PO Box 151, Somerville, New Jersey 08876-0151  
(US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **COLTER, David**  
[US/US]; 208 Irvington Place, Hamilton, New Jersey  
08610 (US). **GOSIEWSKA, Anna** [US/US]; 33 Stevens  
Road, Edison, New Jersey 08817 (US).

(74) Agents: **FINAN, Therese** et al.; Patton Boggs LLP, 8484  
Westpark Drive, Suite 900, Mclean, Virginia 22102 (US).

(81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,  
AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA,  
CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE,  
EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID,  
IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK,  
LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW,  
MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT,  
RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ,  
TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM,  
ZW.

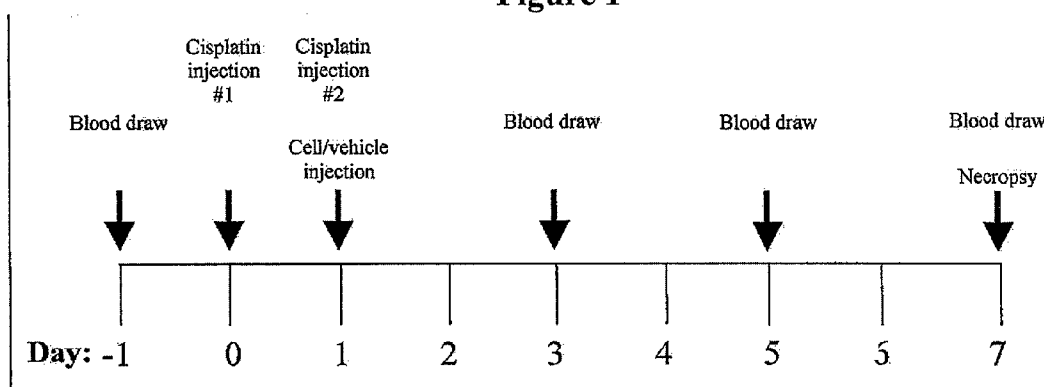
(84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,  
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,  
FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL,  
NO, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG,  
CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

- with international search report
- with sequence listing part of description published separately in electronic form and available upon request from the International Bureau

(54) Title: REPAIR AND REGENERATION OF RENAL TISSUE USING HUMAN UMBILICAL CORD TISSUE-DERIVED CELLS

**Figure 1**



(57) Abstract: Methods for treating a patient having a disease or damage to at least one kidney are provided. The methods comprise administering cells obtained from human umbilical cord tissue, or administering pharmaceutical compositions comprising such cells or prepared from such cells. When administered, the cells promote and support the repair and regeneration of the diseased or damaged kidney tissue in the patient. Pharmaceutical compositions for use in the inventive methods, as well as kits for practicing the methods are also provided.

WO 2009/046335 A1