

PCTWORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶: A01N 63/00, 65/00, A61K 48/00, A61F 13/00, C12N 5/16, 15/16, 15/85, B01D 63/00	A1	(11) International Publication Number: WO 97/15195 (43) International Publication Date: 1 May 1997 (01.05.97)
(21) International Application Number: PCT/US96/17114 (22) International Filing Date: 25 October 1996 (25.10.96) (30) Priority Data: 08/548,002 25 October 1995 (25.10.95) US (71) Applicant: TRANSKARYOTIC THERAPIES, INC. [US/US]; 195 Albany Street, Cambridge, MA 02139 (US). (72) Inventor: MINEAU-HANSCHKE, Rochelle; 22 Circle Drive, Waltham, MA 02154 (US). (73) Agent: FRASER, Janis, K.; Fish & Richardson P.C., 225 Franklin Street, Boston, MA 02110-2804 (US).	(81) Designated States: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, ARIPO patent (KE, LS, MW, SD, SZ, UG), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i>	
(54) Title: HYBRID MATRIX IMPLANTS AND EXPLANTS		
(57) Abstract An implantable device having a body of matrix material made up of insoluble collagen fibrils, and disposed therewithin: (a) a plurality of vertebrate cells; and (b) a plurality of microspheres each of which consists primarily of one or more of the following materials: collagen, polystyrene, dextran, polyacrylamide, cellulose, calcium alginate, latex, polysulfone, or glass.		