

PATENT ASSIGNMENT

Electronic Version v1.1
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT										
NATURE OF CONVEYANCE:	ASSIGNMENT										
CONVEYING PARTY DATA											
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>JOSEPH COLLARD</td> <td>09/20/2011</td> </tr> <tr> <td>OLGA KHORKOVA SHERMAN</td> <td>11/17/2011</td> </tr> </tbody> </table>		Name	Execution Date	JOSEPH COLLARD	09/20/2011	OLGA KHORKOVA SHERMAN	11/17/2011				
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JOSEPH COLLARD	09/20/2011										
OLGA KHORKOVA SHERMAN	11/17/2011										
RECEIVING PARTY DATA											
<table border="1"> <tr> <td>Name:</td> <td>OPKO CuRNA, LLC</td> </tr> <tr> <td>Street Address:</td> <td>4400 BISCAYNE BOULEVARD</td> </tr> <tr> <td>City:</td> <td>MIAMI</td> </tr> <tr> <td>State/Country:</td> <td>FLORIDA</td> </tr> <tr> <td>Postal Code:</td> <td>33137</td> </tr> </table>		Name:	OPKO CuRNA, LLC	Street Address:	4400 BISCAYNE BOULEVARD	City:	MIAMI	State/Country:	FLORIDA	Postal Code:	33137
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PROPERTY NUMBERS Total: 2											
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13377884</td> </tr> <tr> <td>PCT Number:</td> <td>US1038785</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13377884	PCT Number:	US1038785				
Property Type	Number										
Application Number:	13377884										
PCT Number:	US1038785										
CORRESPONDENCE DATA											
<p>Fax Number: (305)575-4140</p> <p>Email: patents@opko.com</p> <p><i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i></p> <p>Correspondent Name: OPKO CuRNA, LLC</p> <p>Address Line 1: 4400 BISCAYNE BOULEVARD</p> <p>Address Line 4: MIAMI, FLORIDA 33137</p>											
ATTORNEY DOCKET NUMBER:	CURN01030										
NAME OF SUBMITTER:	Letitia Newbold										
<p>Total Attachments: 9</p> <p>source=CURN01030 ASSIGNMENT#page1.tif</p> <p>source=CURN01030 ASSIGNMENT#page2.tif</p>											

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WHEREAS, the undersigned:

1. **COLLARD**, Joseph, 1004 Brooks Lane, Delray Beach, FL 33483
2. **KHORKOVA SHERMAN**, Olga, 18288 SE Heritage Drive, Tequesta, FL 33469

(hereinafter "**Inventor(s)**"), have invented certain new and useful improvements in

**TREATMENT OF PARAOXONASE 1 (PON1) RELATED DISEASES BY INHIBITION OF NATURAL ANTISENSE
TRANSCRIPT TO PON1**

- ☒ for which a United States Patent Application No. 13/377,884 filed on December 13, 2011 ;
- ☒ for which Provisional Application Nos. 61/187,311 filed on June 16, 2009 in the United States Patent Office;
- ☒ for which International Application No. PCT/US2010/038785 filed on June 16, 2010 in the U.S. Receiving Office of the Patent Cooperation Treaty;
- ☐ for which Application No. _____ filed on _____ in the _____ Patent Office; and/or

(hereinafter "**Application(s)**")


WHEREAS, OPKO CuRNA, LLC, a corporation of the State of Delaware, having a place of business at 4400 Biscayne Boulevard, Miami, Florida 33137 (hereinafter "**Assignee**"), is desirous of acquiring the entire right, title and interest in and to said Application(s) and the inventions disclosed therein, and in and to all embodiments of the inventions, heretofore conceived, made or discovered, whether jointly or severally, by said Inventor(s) (hereinafter collectively referred to as "**Inventions**"), and in and to any and all patents, inventor's certificates and other forms of protection (hereinafter "**Patent(s)**") thereon granted in the United States, foreign countries, or under any international convention, agreement, protocol, or treaty.

NOW, THEREFORE, in consideration of good and valuable consideration acknowledged by said Inventor(s) to have been received in full from said Assignee:

1. Said Inventor(s) do hereby sell, assign, transfer and convey unto said Assignee the entire right, title, and interest (a) in and to said Inventions, including the right to claim priority to said Inventions; (b) in and to all rights to all United States and corresponding non-United States patent applications and Patent(s), including those filed under the Paris Convention for the Protection of Industrial Property, The Patent Cooperation Treaty or otherwise; (c) in and to any and all applications filed and any and all Patent(s) granted on said Inventions in the United States, in any foreign country, or under any international convention, agreement, protocol, or treaty, including each and every application filed and any and all Patent(s) granted on any application which is a divisional, substitution, continuation, or continuation-in-part of any of said Application(s); and (d) in and to each and every reissue, reexamination, or extensions of any said Patent(s).

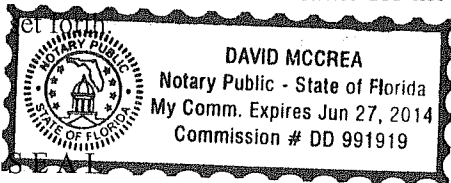
2. Said Inventor(s) hereby covenant and agree to cooperate with said Assignee to enable said Assignee to enjoy to the fullest extent the right, title and interest herein conveyed in the United States, foreign

Date: Nov 17, 2011

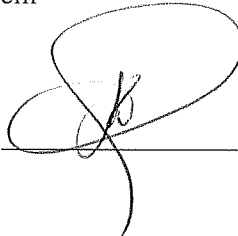

Olga Khorkova Sherman

STATE OF FLORIDA)
COUNTY OF Palm Beach) SS:

On this 17 day of November, 2011, before me personally appeared **Olga Khorkova Sherman**, to me known to be the person named in and who executed the above instrument, and acknowledged to me that he executed the same for the uses and purposes therein



Notary Public



My commission expires 6/27/14

WHEREAS, the undersigned:

1. **COLLARD, Joseph**, 1004 Brooks Lane, Delray Beach, FL 33483

(hereinafter "**Inventor(s)**"), have invented certain new and useful improvements in

SEE EXHIBIT A

- ☒ for which a United States Patent Application No. SEE EXHIBIT A filed on SEE EXHIBIT A ;
- ☒ for which Provisional Application No(s). SEE EXHIBIT A filed on SEE EXHIBIT A in the United States Patent Office;
- ☒ for which International Application No. SEE EXHIBIT A filed on SEE EXHIBIT A in the U.S. Receiving Office of the Patent Cooperation Treaty;
- ☐ for which Application No. _____ filed on _____ in the _____ Patent Office; and/or

(hereinafter "**Application(s)**")

WHEREAS, OPKO CuRNA, LLC, a corporation of the State of Delaware, having a place of business at 4400 Biscayne Boulevard, Miami, Florida 33137 (hereinafter "**Assignee**"), is desirous of acquiring the entire right, title and interest in and to said Application(s) and the inventions disclosed therein, and in and to all embodiments of the inventions, heretofore conceived, made or discovered, whether jointly or severally, by said Inventor(s) (hereinafter collectively referred to as "**Inventions**"), and in and to any and all patents, inventor's certificates and other forms of protection (hereinafter "**Patent(s)**") thereon granted in the United States, foreign countries, or under any international convention, agreement, protocol, or treaty.

NOW, THEREFORE, in consideration of good and valuable consideration acknowledged by said Inventor(s) to have been received in full from said Assignee:

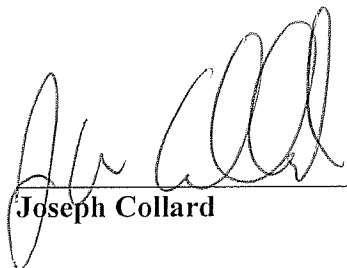
1. Said Inventor(s) do hereby sell, assign, transfer and convey unto said Assignee the entire right, title, and interest (a) in and to said Inventions, including the right to claim priority to said Inventions; (b) in and to all rights to all United States and corresponding non-United States patent applications and Patent(s), including those filed under the Paris Convention for the Protection of Industrial Property, The Patent Cooperation Treaty or otherwise; (c) in and to any and all applications filed and any and all Patent(s) granted on said Inventions in the United States, in any foreign country, or under any international convention, agreement, protocol, or treaty, including each and every application filed and any and all Patent(s) granted on any application which is a divisional, substitution, continuation, or continuation-in-part of any of said Application(s); and (d) in and to each and every reissue, reexamination, or extensions of any said Patent(s).

2. The terms and covenants of this assignment shall inure to the benefit of said Assignee, its successors, assigns and other legal representatives, and shall be binding upon said Inventor(s), their respective heirs, legal representatives and assigns.

3. Said Inventor(s) hereby request that any Patent(s) issuing in the United States, foreign countries, or under any international convention, agreement, protocol, or treaty, be issued in the name of the Assignee, or its successors and assigns, for the sole use of said Assignee, its successors, legal representatives and assigns.

IN WITNESS WHEREOF, said Inventor(s) have executed and delivered this instrument to said Assignee as of the dates written below:

Date: Sept 20, 2011

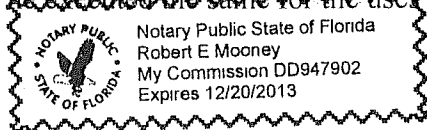


Joseph Collard

STATE OF FLORIDA)
COUNTY OF PALM BEACH)

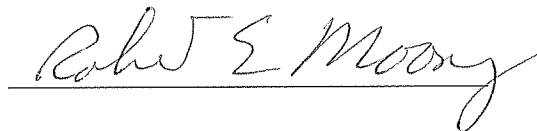
SS:

On this 20 day of SEPTEMBER, 2011, before me personally appeared Joseph Collard, to me known to be the person named in and who executed the above instrument, and acknowledged to me that he executed the same for the uses and purposes therein set forth.



SEAL

Notary Public



My commission expires 12/20/2013

Exhibit A

Target	Application No.:	Filing Date:	Attorney Docket No.:	Title:
APO A1	PCT/US2009/059457	02-Oct-2009	CURN00030	TREATMENT OF APOLIPOPROTEIN-A1 RELATED DISEASES BY ...
APO A1	12/573,083	02-Oct-2009	CURN00030	TREATMENT OF APOLIPOPROTEIN-A1 RELATED DISEASES BY ...
SIRT1	13/132,987	06-Jun-2011	CURN00050	TREATMENT OF SIRTUIN 1 (SIRT1) RELATED DISEASES BY ...
SIRT1 CIP	13/254,600	13-Sep-2011	CURN00060	TREATMENT OF SIRTUIN 1 (SIRT1) RELATED DISEASES BY ...
SIRT3 Prov	61/330,427	03-May-2010	CURN00070	TREATMENT OF SIRTUIN3 (SIRT3) RELATED DISEASES BY ...
SIRT	PCT/US2011/021052	13-Jan-2011	CURN00070	TREATMENT OF SIRTUIN (SIRT) RELATED DISEASES BY ...
VEGF	PCT/US2009/066455	02-Dec-2009	CURN00080	TREATMENT OF VASCULAR ENDOTHELIAL GROWTH FACTOR ...
VEGF	13/132,997	15-Jun-2011	CURN00080	TREATMENT OF VASCULAR ENDOTHELIAL GROWTH FACTOR ...
EPO	PCT/US2009/066659	03-Dec-2009	CURN00090	TREATMENT OF ERYTHROPOIETIN (EPO) RELATED DISEASES BY ...
EPO	13/133,025	15-Jun-2011	CURN00090	TREATMENT OF ERYTHROPOIETIN (EPO) RELATED DISEASES BY ...
TUMOR SUPPRESS	PCT/US2009/066654	03-Dec-2009	CURN00100	TREATMENT OF TUMOR SUPPRESSOR GENE RELATED DISEASES...
TUMOR SUPPRESS	13/133,039	15-Jun-2011	CURN00100	TREATMENT OF TUMOR SUPPRESSOR GENE RELATED DISEASES...
PAR4	61/334,933	14-May-2010	CURN00111	TREATMENT OF PAWR RELATED DISEASES BY INHIBITION OF ...
PCR4	PCT/US2011/036557	14-May-2011	CURN00111	TREATMENT OF PAR4 RELATED DISEASES BY INHIBITION OF ...
NEU4	61/390,216	06-Oct-2010	CURN00112	TREATMENT OF SIALIDASE 4 (NEU4) RELATED DISEASES BY ...
IDUA	61/405,758	22-Oct-2010	CURN00113	TREATMENT OF ALPHA-L-IDURONIDASE (IDUA) RELATED ...
IFRD1	61/407,045	27-Oct-2010	CURN00114	TREATMENT OF INTERFERON-RELATED DEVELOPMENTAL ...
NANOG	61/416,341	23-Nov-2010	CURN00115	TREATMENT OF NANOG RELATED DISEASES BY INHIBITION OF ...
BCL2L11	PCT/US2011/037079	19-May-2011	CURN00121	TREATMENT OF BCL2-LIKE 11 (BCL2L11) RELATED DISEASES BY ...
BCL2L11	61/346,252	19-May-2010	CURN00121	TREATMENT OF BCL2-LIKE 11 (BCL2L11) RELATED DISEASES BY ...
FXN	61/494,928	09-Jun-2011	CURN00125	TREATMENT OF FRATAXIN (FXN) RELATED DISEASES BY ...
RNAse	PCT/US2011/022304	25-Jan-2011	CURN00130	TREATMENT OF RNAse H1 RELATED DISEASES BY INHIBITION...
RNAse	61/297,878	25-Jan-2010	CURN00130	TREATMENT OF RNAse H1 RELATED DISEASES BY INHIBITION...
LHX2	61/346,284	19-May-2010	CURN00131	TREATMENT OF LIM HOMEOBOX 2 (LHX2) RELATED DISEASES BY ...
LHX2	PCT/US2011/037080	19-May-2011	CURN00131	TREATMENT OF LIM HOMEOBOX 2 (LHX2) RELATED DISEASES BY ...
ATOH	61/348,656	26-May-2010	CURN00141	TREATMENT OF ATONAL HOMOLOG 1 (ATOH1) RELATED DISEASES...
ATOH	PCT/US2011/037833	25-May-2011	CURN00141	TREATMENT OF ATONAL HOMOLOG 1 (ATOH1) RELATED

					DISEASES...
ALOX12B	61/302,188		08-Feb-2010	CURN00150	TREATMENT OF ARACHIDONATE 12-LIPOXYGENASE, 12R TYPE ...
ALOX12B	PCT/US2011/023931		07-Feb-2011	CURN00150	TREATMENT OF ARACHIDONATE 12-LIPOXYGENASE, 12R TYPE ...
MSRA	61/348,650		26-May-2010	CURN00151	TREATMENT OF METHIONINE SULFOXIDE REDUCTASE A (MSRA)...
MSRA	PCT/US2011/037835		25-May-2011	CURN00151	TREATMENT OF METHIONINE SULFOXIDE REDUCTASE A (MSRA)...
PYCR1	61/306,748		22-Feb-2010	CURN00160	TREATMENT OF PYRROLINE-5-CARBOXYLATE REDUCTASE 1 (PYCR1)...
PYCR1	PCT/US2011/025582		21-Feb-2011	CURN00160	TREATMENT OF PYRROLINE-5-CARBOXYLATE REDUCTASE 1 (PYCR1)...
SCN1A	61/357,774		23-Jun-2010	CURN00161	TREATMENT OF SODIUM CHANNEL, VOLTAGE-GATED, TYPE I, ALPHA...
SCN1A	PCT/US2011/041664		23-Jun-2011	CURN00161	TREATMENT OF SODIUM CHANNEL, VOLTAGE-GATED, ALPHA SUBUNIT...
CSF3	61/320,414		02-Apr-2010	CURN00170	TREATMENT OF COLONY-STIMULATING FACTOR 3 (CSF 3) RELATED...
CSF3	PCT/US2011/030873		01-Apr-2011	CURN00170	TREATMENT OF COLONY-STIMULATING FACTOR 3 (CSF 3) RELATED...
PUMA	61/363,535		12-Jul-2010	CURN00171	TREATMENT OF BCL2 BINDING COMPONENT 3 (BBC3) RELATED DISEASES...
BBC3	PCT/US2011/043694		12-Jul-2011	CURN00171	TREATMENT OF BCL2 BINDING COMPONENT 3 (BBC3) RELATED ...
FGF21	61/322,352		09-Apr-2010	CURN00180	TREATMENT OF FIBROBLAST GROWTH FACTOR 21 (FGF21) RELATED ...
FGF21	PCT/US2011/031665		08-Apr-2011	CURN00180	TREATMENT OF FIBROBLAST GROWTH FACTOR 21 (FGF21) RELATED...
DLG1 Prov	61/364,211		14-Jul-2010	CURN00181	TREATMENT OF DISCS LARGE HOMOLOG 1 (DLG1) RELATED DISEASES...
DLG	PCT/US2011/043804		13-Jul-2011	CURN00181	TREATMENT OF DISCS LARGE HOMOLOG (DLG) RELATED DISEASES...
NKX6-1 Prov	61/323,027		12-Apr-2010	CURN00190	TREATMENT OF NK6 HOMEOBOX 1 (NKX6-1) RELATED DISEASES...
NAMPT	61/375,126		19-Aug-2010	CURN00191	TREATMENT OF NICOTINAMIDE PHOSPHORIBOSYLTRANSFERASE...
PDX1	61/297,863		25-Jan-2010	CURN00120	TREATMENT OF PANCREATIC AND DUODENAL HOMEOBOX 1 (PDX1)...
MAFA	61/297,847		25-Jan-2010	CURN00110	TREATMENT OF V-MAF MUSCULOAPONEUROTIC FIBROSARCOMA ...
BDNF	PCT/US2010/024075		12-Feb-2010	CURN00200	TREATMENT OF BRAIN DERIVED NEUROTROPHIC FACTOR (BDNF)...
BDNF	13/201,254		13-Sep-2011	CURN00200	TREATMENT OF BRAIN DERIVED NEUROTROPHIC FACTOR (BDNF)...
GDNF	PCT/US2010/024079		12-Feb-2010	CURN00300	TREATMENT OF GLIAL CELL DERIVED NEUROTROPHIC FACTOR...
GDNF	13/201,260		13-Sep-2011	CURN00300	TREATMENT OF GLIAL CELL DERIVED NEUROTROPHIC FACTOR...
DLK1	13/256,710		PENDING	CURN00400	TREATMENT OF DELTA-LIKE 1 HOMOLOG (DLK1) RELATED...
NRF2	13/256,720		PENDING	CURN00500	TREATMENT OF NUCLEAR FACTOR (ERYTHROID-DERIVED 2)-LIKE...
	61/415,307		18-Nov-2010	CURN00600	ANTAGONAT COMPOSITIONS AND METHODS OF USE
HNF4A	61/294,129		12-Jan-2010	CURN01032	TREATMENT OF HEPATOCYTE NUCLEAR FACTOR 4, ALPHA (HNF4A)...
SHBG	61/293,739		11-Jan-2010	CURN01022	TREATMENT OF SEX HORMONE BINDING GLOBULIN (SHBG)...
SHBG	PCT/US2011/020768		11-Jan-2011	CURN01022	TREATMENT OF SEX HORMONE BINDING GLOBULIN (SHBG)...
NEUROD1	61/292,508		06-Jan-2010	CURN01092	TREATMENT OF NEUROGENIC DIFFERENTIATION FACTOR 1 (NEUROD1) ...

NEUROD1	PCT/US2011/020321	06-Jan-2011	CURN01092	TREATMENT OF NEUROGENIC DIFFERENTIATION FACTOR 1 (NEUROD1) ...
IRF8	61/291,946	04-Jan-2010	CURN01091	TREATMENT OF INTERFERON REGULATORY FACTOR 8 (IRF8)...
IFF8	PCT/US2011/020069	04-Jan-2011	CURN01091	TREATMENT OF INTERFERON REGULATORY FACTOR 8 (IRF8)...
IRS2	61/291,419	31-Dec-2009	CURN01090	TREATMENT OF INSULIN RECEPTOR SUBSTRATE 2 (IRS2)...
IRS2	PCT/US2010/062463	30-Dec-2010	CURN01090	TREATMENT OF INSULIN RECEPTOR SUBSTRATE 2 (IRS2) RELATED..
NRF1	61/290,549	29-Dec-2009	CURN01081	TREATMENT OF NUCLEAR RESPIRATORY FACTOR 1 (NRF1) RELATED...
NRF1	PCT/US2010/062323	29-Dec-2010	CURN01081	TREATMENT OF NUCLEAR RESPIRATORY FACTOR 1 (NRF1) RELATED...
p63	61/290,540	29-Dec-2009	CURN01082	TREATMENT OF TUMOR PROTEIN 63 (p63) RELATED DISEASES ...
P63	PCT/US2010/062326	29-Dec-2010	CURN01082	TREATMENT OF TUMOR PROTEIN 63 (p63) RELATED DISEASES ...
HGF	61/289,647	23-Dec-2009	CURN01072	TREATMENT OF HEPATOCYTE GROWTH FACTOR (HGF) RELATED ...
HGF	PCT/US2010/061996	23-Dec-2010	CURN01072	TREATMENT OF HEPATOCYTE GROWTH FACTOR (HGF) RELATED ...
UCP2	61/289,538	23-Dec-2009	CURN01080	TREATMENT OF UNCOUPLING PROTEIN 2 (UCP2) RELATED DISEASES ...
UCP2	PCT/US2010/062001	23-Dec-2010	CURN01080	TREATMENT OF UNCOUPLING PROTEIN 2 (UCP2) RELATED DISEASES...
MBTPS1	61/286,924	16-Dec-2009	CURN01071	TREATMENT OF MEMBRANE BOUND TRANSCRIPTION FACTOR ...
MBTPS1	PCT/US2010/060452	15-Dec-2010	CURN01071	TREATMENT OF MEMBRANE BOUND TRANSCRIPTION FACTOR ...
HBf US	12/770,847	30-Apr-2010	CURN00700	TREATMENT OF HEMOGLOBIN (HBf/HBG) RELATED DISEASES BY...
HBf	PCT/US2010/033078	30-Apr-2010	CURN00700	TREATMENT OF HEMOGLOBIN (HBf/HBG) RELATED DISEASES BY ...
TTP	PCT/US2010/033836	06-May-2010	CURN00800	TREATMENT OF TRISTETRAPROLINE (TTP) RELATED DISEASES BY ...
LTMG	PCT/US2010/033908	06-May-2010	CURN00900	TREATMENT OF LIPID TRANSPORT AND METABOLISM GENE...
UTRN	61/317,350	25-Mar-2010	CURN00005	TREATMENT OF UTROPHIN (UTRN) RELATED DISEASES BY INHIBITION...
FLG	61/307,654	24-Feb-2010	CURN00006	TREATMENT OF FILAGGRIN (FLG) RELATED DISEASES BY INHIBITION ...
COL1A1	61/286,965	16-Dec-2009	CURN00007	TREATMENT OF COLLAGEN ALPHA-1(I) (COL1A1) RELATED DISEASES...
COL1A2 Prov	61/286,939	16-Dec-2009	CURN00008	TREATMENT OF COLLAGEN ALPHA-2(I) (COL1A2) RELATED DISEASES...
POU5F1 Prov	61/286,852	16-Dec-2009	CURN00009	TREATMENT OF POU5F1 RELATED DISEASES BY INHIBITION OF ...
antagoNAT	61/415,858	21-Nov-2010	CURN01000	ANTAGONAT COMPOSITIONS
DMDFAMILY	PCT/US2010/034026	07-May-2010	CURN01010	TREATMENT OF DYSTROPHIN FAMILY RELATED DISEASES BY ...
ReprogFAC	PCT/US2010/035264	18-May-2010	CURN01011	TREATMENT OF REPROGRAMMING FACTOR RELATED DISEASES BY...
TFE3	PCT/US2010/035842	21-May-2010	CURN01020	TREATMENT OF TRANSCRIPTION FACTOR E3 (TFE3) AND INSULIN...
ANTIVIRAL	PCT/US2010/036558	28-May-2010	CURN01021	TREATMENT OF ANTIVIRAL GENE RELATED DISEASES BY INHIBITION...
PON1	PCT/US2010/038785	16-Jun-2010	CURN01030	TREATMENT OF PARAOXONASE 1 (PON1) RELATED DISEASES BY ...
COLLAGEN	PCT/US2010/038761	16-Jun-2010	CURN01031	TREATMENT OF COLLAGEN GENE RELATED DISEASES BY INHIBITION...
TNFR2	PCT/US2010/039824	24-Jun-2010	CURN01040	TREATMENT OF TUMOR NECROSIS FACTOR RECEPTOR 2 (TNFR2) ...

