FORM PTO-1619A	U.S. Department of Commerce
Expires 06/30/99 OMB 0651-0027	08-09-1999
	AUG 4
REC	101112227
TO: The Commissioner of Patents and Trac	demarks: Please record the attached original document(s) or copy(ies).
Submission Type	Conveyance Type
New Resubmission (Non-Recordation)	Assignment X Security Agreement
Document ID#	License Change of Name
Correction of PTO Error Reel # Frame #	Merger Other U.S. Government
Corrective Document Reel # Frame #	(For Use ONLY by U.S. Government Agencies)  Departmental File Secret File
Conveying Party(ies)	Mark if additional names of conveying parties attached Execution Date
Name (line 1) Cytokine Pharmas	sciences, Inc.  Month Day Year  06/30/99
Name(line 2) Four Tower Bridg	ge
Second Party	Execution Date Month Day Year
Receiving Party	Mark if additional names of receiving parties attached
	usiness Financial Services Inc. If document to be recorded
	is an assignment and the receiving party is not domiciled in the United
	of a domestic
	(Designation must be a separate document from
Address (line 2)	Assignment.)
Address (line 3)	State/Country Zip Code
Domestic Representative Name a	nd Address  Enter for the first Receiving Party only.
Name	
Address (line 1)	
Address (line 2)	
Address (line 3)	
Address (line 4)	
7/1999 NTHAI1 00000178 4931288	FOR OFFICE USE ONLY
1581 2200.00 GP	
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Public burden reporting for this collection of information is estimated to average approximately 30 minutes per Cover Sheet to be recorded, including time for reviewing the document and gathering the data needed to complete the Cover Sheet. Send comments regarding this burden estimate to the U.S. Patent and Trademark Office, Chief information Officer, Washington, D.C. 20231 and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Paperwork Reduction Project (0651-0027), Washington, D.C. 20503. See OMB Information Collection Budget Package 0651-0027, Patent and Trademark Assignment Practice. DO NOT SEND REQUESTS TO RECORD ASSIGNMENT DOCUMENTS TO THIS ADDRESS.

Mail documents to be recorded with required cover sheet(s) information to: Commissioner of Patents and Trademarks, Box Assignments, Washington, D.C. 20231

REEL: 010164 FRAME: 0083
REEL: 010164 FRAME: 0083

FORM PTO-1619B Page 2 AUG OMB 0651-0027	U.S. Department of Commerce 4 Patent and Trademark Office PATENT
Correspondent Name and Address  Area Code and Telephone Number	(212) 309-6870
Name Richard S. Petretti. Esq.	
Address(line 1) Morgan, Lewis & Bockius LLP	
Address (line 2) 101 Park Avenue	
Address (line 3) New York, NY 10178	
Address (line 4)	
Pages Enter the total number of pages of the attached conveyance docume including any attachments.	ent # 21
Application Number(s) or Patent Number(s) Please see   Schedule I at tached Number (DO NOT ENTER BOTH numbers for the Patent Number (DO NOT ENTER BOTH numbers for the Patent Number (DO NOT ENTER BOTH numbers for the Patent Number (DO NOT ENTER BOTH numbers for the Patent Number (DO NOT ENTER BOTH numbers for the Patent Number (DO NOT ENTER BOTH numbers for the Patent Number (DO NOT ENTER BOTH numbers for the Patent Number (DO NOT ENTER BOTH numbers for the Patent Number (DO NOT ENTER BOTH numbers for the Patent Number (DO NOT ENTER BOTH numbers for the Patent Number (DO NOT ENTER BOTH numbers for the Patent Number (DO NOT ENTER BOTH numbers for the Patent Number (DO NOT ENTER BOTH numbers for the Patent Number (DO NOT ENTER BOTH numbers for the Patent Number (DO NOT ENTER BOTH numbers for the Patent Number (DO NOT ENTER BOTH numbers for the Patent Number (DO NOT ENTER BOTH numbers for the Patent Number (DO NOT ENTER BOTH numbers for the Patent Number (DO NOT ENTER BOTH numbers for the Patent Number (DO NOT ENTER BOTH numbers for the Patent Number (DO NOT ENTER BOTH numbers for the Patent Number (DO NOT ENTER BOTH numbers for the Patent Number (DO NOT ENTER BOTH number (	ditional numbers attached
	r the same property). Number(s)
Patent Application Number(s) Patent I	Aumber(s)
If this document is being filed together with a <u>new</u> Patent Application, enter the date the patent application signed by the first named executing inventor.	was Month Day Year
Patent Cooperation Treaty (PCT)	
Enter PCT application number PCT PCT PCT	PCT
only if a U.S. Application Number PCT PCT PCT has not been assigned.	PCT
Number of Properties  Enter the total number of properties involved. #	55
Fee Amount for Properties Listed (37 CFR 3.41): \$	
Method of Payment: Enclosed  Deposit Account Deposit Account	
(Enter for payment by deposit account or if additional fees can be charged to the account.)  Deposit Account Number: #[	13-4520
Authorization to charge additional fees:	Yes X No
Statement and Signature	
To the best of my knowledge and belief, the foregoing information is true an attached copy is a true copy of the original document. Charges to deposit a indicated herein.	-
Richard S. Petretti	June 27, 1999
Name of Person Signing Signature	Date

REEL: 010164 FRAME: 0084
REEL: 010164 FRAME: 0084

## BTG Licence Agreement Dated October 1, 1992 (PGE2 Pessary)

## Process for Hydrogel - Invention 1118472 (II)

<u>Country</u> <u>Patent Number</u> <u>Expiry Date</u>

 United States
 4931288
 6/5/07

 United States
 5017382
 5/21/08

## Preparation of Particulate Gel - Invention 1121960

Country Patent Number Expiry Date

United States 4542176 9/17/02

#### Retrievable Device - Invention 1136216

<u>Country</u> <u>Patent Number</u> <u>Expiry Date</u>

United States 5269321 12/14/10

### BTG Option Agreement dated March 31, 1997 (Oromucosal Products)

### Polyethylene Oxide Composition (I)

Country Patent Number Expiry Date

 United States
 4894238
 1/16/90

 United States
 5079009
 1/7/92

## Polyethylene Oxide Composition (II)

<u>Country</u> <u>Patent Number</u> <u>Expiry Date</u>

United States 4931288 6/5/90

1-NY/1007065.1

5017382

5/21/91

## BTG Option Agreement dated March 31, 1997 (Oromucosal Products)

## **Release Composition Structure**

<u>Country</u> <u>Patent Number</u> <u>Grant Date</u>

United States 4814182 3/21/89

AndroSolutions Development and License Agreement

Country Patent Number Grant Date

United States ASI 60/068,294 Pending

[continue on next page]

1-NY/1007065.1

Multivalent	guanylhydrazone-related cases	(US docket)
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0102	08/315,170	Guanylhydrazones and their use to treat inflammatory conditions	# 5,599,984
	29SEP1994		04FEB1997
0103	08/403,568	Guanylhydrazones and their use to treat inflammatory	# 5,750,573
	05JUN1995	conditions ,	12MAY1998
0103 <sup>*</sup> A	08/472,003	Guanylhydrazones and their use to treat inflammatory	pending
	06JUN1995	conditions	
0103 <sub>.</sub> B	08/472,919	Guanylhydrazones and their use to treat inflammatory conditions	pending
	06JUN1995		
0103 C	08/471,696	Guanylhydrazones and their use to treat inflammatory conditions	# 5,753,684
	06JUN1995		19 MAY1998
0103 D	08/471,305	Guanylhydrazones and their use to treat inflammatory conditions	pending
	06JUN1995		
0103 E	08/471,124	Guanylhydrazones and their use to treat inflammatory	# 5,859,062
	06JUN1995	conditions	12JAN1999

<del></del>	<del></del>	
08/472,004	Guanylhydrazones and their use to treat inflammatory	# 5,849,794
06JUN1995	Conditions	15DEC1998
H 08/479,050 Guanylhydrazones and their use to treat inflammatory	pending	
06JUN1995	Conditions	
	06JUN1995 08/479,050	06JUN1995 conditions  08/479,050 Guanylhydrazones and their use to treat inflammatory conditions

0104	08/632,305	Guanylhydrazones and their use to treat inflammatory	# 5,854,289
	15APR1996	conditions	29DEC1998
			12020.000

0105	08/970,973	Guanylhydrazones useful for treating diseases	pending
	14NOV1997	associated with T cell activation	
0106	08/780,311	Complexes and combinations of fetuin with therapeutic	pending
	08JAN1997	agents	Powers

## Macrophage Migration Inhibitory Factor-related cases (US docket) -

0202	08/243,342	Inhibition of migration inhibitory factor in the treatment of	pending
	16MAY1994	diseases involving cytokine-mediated toxicity	
0203	08/462,350	Inhibition of migration inhibitory factor in the treatment of	pending
diseases involving cytokine-mediated toxicity - 05JUN1995			
0203 A	08/470,901		pending
diseases involving cytokine-mediated toxicity 06JUN1995			
0203 B		pending	
06JUN1995 diseases involving cytokine-mediate	diseases involving cytokine-mediated toxicity		
0203 C	08/479,090	Inhibition of migration inhibitory factor in the treatment of	pending
diseases involving cytokine-mediated toxicity using soluble MIF receptor	diseases involving cytokine-mediated toxicity using soluble MIF receptor		
0203 D	08/471,705	Inhibition of migration inhibitory factor in the treatment of	pending
06JUN1995 diseas	diseases involving cytokine-mediated toxicity		

0203 F	08/471,546	Combination method for treating diseases caused by	pending
	06JUN1995	cytokine-mediated toxicity	
0203 G	08/471,586	Inhibition of migration inhibitory factor in the treatment of	pending
	06JUN1995	diseases involving cytokine-mediated toxicity	
0204	08/602,929	Screening assay for the identification of inhibitors of macrophage migration inhibitory factor	pending
	16FEB1996		
0205	08/738,947	Therapeutic uses of factors which inhibit or neutralize MIF activity	pending
	240CT1996		

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REEL: 010164 FRAME: 0088

REEL: 010164 FRAME: 0088

## Schedule I Continued

NLS-base	ed HIV inhibitor-r	related cases (US docket)	T
0301	08/369,830	Pyrimidine compounds and methods of use to derivatize	# 5,574,040
	06JAN1995	neighboring lysine residues in proteins under physiological conditions	12 NOV1996
0302	08/463,405	Compounds and methods of use to derivatize	# 5,733,932
	5JUN1995	neighboring lysine residues in proteins under physiological conditions	31MAR1998
0302 A	0302 A 08/471,797 Compounds and methods of use to derivatize	#5,703,086	
	6JUN1995	neighboring lysine residues in proteins under physiological conditions	30DEC1997
0302 B	08/470,103	Compounds and methods of use to derivatize neighboring lysine residues in proteins under physiological conditions	# 5,620,983
	6JUN1995		15APR1997
0303	08/584,857	Compounds for treating infectious diseases	# 5,840,893
	5JAN1996	•	24NOV 1998
0304	08/732,653	Compounds and methods of use to treat infectious	pending
u*	150CT1996	diseases	
0305	08/912,076	HIV nuclear localization inhibitors	# 5,808,058
	15AUG1997		15SEP1993
0306	08/911,883	HIV matrix protein tyrosine position 29 pocket binders	# 5,849,793
	15AUG1997		15DEC1998

REEL: 010164 FRAME: 0089

REEL: 010164 FRAME: 0089

## Schedule I continued

Fibrocyt	e-related_cases	(US docket)	
0401	08/023.290	Blood-borne mesenchymal cells	# 5,654,186
	26FEB1993		05AUG1997
0401 A	08/487,116	Blood-borne mesenchymal cells	pending
	07JUN1995	,	
0401 B 08/488,241 Blood-borne mesenchymal cells '	# 5,846,796		
	07JUN1995		8DEC1998
, -	08/488.111	Blood-borne mesenchymai cells	# 5,804,446
	07JUN1995		8SEP1998
0402 A	08/488,112	Blood-borne mesenchymal cells	pending
. [	07JUN1995		, , , , , , , , , , , , , , , , , , , ,
	7		
0403	08/970,971	Process for isolating blood-borne fibrocytes	pending
	14NOV1997		
0404	08/828,415	Fibrocyte-based vaccine formulations	pending
0404		·	1 perionic

## Cyclophilin receptor-related HIV inhibition-related cases

0501	08/615,933		# 5,840,305
	14MAR1996	cyclophilin receptor activity	24NOV1998

Spermine	antagonists-re	lated cases )	
0601	08/874,681	Immunotherapeutic anti-cancer pharmaceutical	pending
	13JUN1997	Compositions	
0602	08/932,871	Prevention of pregnancy miscarriages	pending
	18SEP1997		
0803	09/096,761	Immunotherapeutic anti-cancer pharmaceutical	pending
	12JUN1998	compositions	

## iPFK2 and the Warburg effect-related cases

0901	08/961,578	Inducible phosphofructokinase and the Warburg effect	pending
	310CT1997		
0902	09/183.846	Inducible phosphofructokinase and the Warburg effect	pendina
	300CT1998		759
0903 P	60/130,049	Synthetic process for five-membered polyols and	pending
	19APR1999	substituted sugar analogs	Perioning

1201	09/248,574	Antagonists of HMG1 for treating inflammatory conditions	T
	11FE81999	a security inharmatory conditions	pending

#### PATENT SECURITY AGREEMENT

THIS PATENT SECURITY AGREEMENT dated as of June 29, 1999 (as amended, modified or supplemented from time to time, this "<u>Patent Security Agreement</u>"), is made by and between Cytokine PharmaSciences, Inc. a Delaware corporation (the "<u>Pledgor</u>"), and Merrill Lynch Business Financial Services Inc., a Delaware corporation (the "<u>Secured Party</u>").

### RECITALS:

WHEREAS, the Pledgor, now owns or holds and may hereafter acquire or hold, as owner, licensee or sublicensee, Patents (defined as all of the following: all United States and foreign patents and patent applications, whether now existing or hereafter arising or acquired and all reissues, continuations, continuations-in-part or extensions thereof) including, without limitation, the Patents listed on Schedule A annexed hereto, as such Schedule may be amended from time to time by the addition of Patents subsequently arising or acquired;

WHEREAS, the Pledgor was formerly known as Cytokine Networks, Inc. and is the successor-by-merger to PharmaSciences, Inc., a Delaware corporation ("Old PharmaSciences");

WHEREAS, the Pledgor is a party to the WCMA Reducing Revolver Loan and Security Agreement No. 871-07R72 dated as of June 20, 1999 (as the same may be amended, supplemented or otherwise modified, renewed or replaced from time to time, the "Loan Agreement") originally entered into by Old PharmaSciences and the Secured Party, to which reference is made for definitions of capitalized terms used and not otherwise defined herein; and

WHEREAS, pursuant to the terms of the Loan Agreement, the Pledgor has granted the Secured Party a security interest in all of the Pledgor's right, title and interest in and to certain Collateral including certain Patent Collateral (as hereinafter defined), to secure the due and punctual payment and performance of the Obligations.

NOW THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Pledgor does, as security for the due and punctual payment and performance of the Obligations, hereby grant to the Secured Party a continuing security interest in all of the Pledgor's right, title and interest in, to and under the following (all of the following items or types of property being collectively referred to herein as the "Patent Collateral"), whether presently existing or hereafter arising or acquired:

1-NY/857151.5

- (i) each Patent, including, without limitation, each Patent and Patent application referred to in Schedule A annexed hereto (which Schedule includes Patents Licensed to Pledgor pursuant to licenses listed on Schedule B hereto);
- (ii) each Patent license, including, without limitation, each Patent license referred to in Schedule B annexed hereto, to the extent such Patent license does not prohibit the licensee from assigning or granting a security interest in its rights thereunder; and
- (iii) all products and proceeds of, and income from, any of the foregoing, including, without limitation, and subject to the provisions hereinafter set forth, any claim by the Pledgor against third parties for past, present or future infringement or dilution of any Patent or any Patent licensed under any Patent license.

but, subject to Pledgor's obligations under Section 4.4(l) of the Loan Agreement, excluding any rights under any license or other agreement relating to Patent Collateral which by its terms prohibits the creation or enforcement of a lien or security interest in Pledgor's rights thereunder, provided, further that any proceeds of or income derived from any such excluded rights shall nevertheless be included in the Patent Collateral.

The Pledgor agrees to deliver updated copies of Schedule A and Schedule B to the Secured Party at the end of any quarter in which the Pledgor applies for the registration of, registers or otherwise acquires (or Pledgor first becomes aware that any licensor required to be listed on Schedule B hereto has applied for the registration of, registered or otherwise acquired) any Patent not listed on Schedule A hereto (and required to be listed thereon) or enters into any Patent license not listed on Schedule B hereto, and to duly and promptly execute and deliver, or have duly and promptly executed and delivered, at the cost and expense of the Pledgor, such further instruments or documents (in form and substance satisfactory to the Secured Party) and promptly perform, or cause to be promptly performed, any and all acts, in all cases, as may be necessary, proper or advisable from time to time, in the reasonable judgment of the Secured Party, to carry out the provisions and purposes of the Loan Agreement and this Patent Security Agreement, and to provide, perfect and preserve the Liens of the Secured Party under the Loan Agreement and this Patent Security Agreement, in the right, title and interest of Pledgor in the Patent Collateral or any portion thereof.

The Pledgor agrees that if any Person, firm, corporation or other entity shall do or perform any acts which the Secured Party believes constitute an infringement of any Patent which is the subject of this Patent Security Agreement, or violate or infringe any right of the Pledgor or the Secured Party therein or if any Person, firm, corporation or other entity shall do or perform any acts which the Secured Party believes constitutes an unauthorized or unlawful use thereof, then and in any such event, upon 30 days' prior written notice to Pledgor (or if an Event of Default is continuing, then without such notice), the Secured Party, subject to the rights of any licensor under a license listed on Schedule B hereto or any provision to the contrary in any

1-NY/857151.5 - 2 -

applicable license or sublicense agreement covering the applicable Patent Collateral, may take such steps and institute such suits or proceedings as the Secured Party may deem advisable or necessary to prevent such acts and conduct and to secure damages and other relief by reason thereof, and to generally take such steps as may be advisable or necessary or proper for the full protection of the rights of the parties. Subject to the rights of any licensor under a license listed on Schedule B hereto or any provision to the contrary in any applicable license or sublicense agreement covering the applicable Patent Collateral, the Secured Party may take such steps or institute such suits or proceedings in its own name or in the name of the Pledgor or in the names of the parties jointly. The Secured Party hereby agrees to give the Pledgor notice of any steps taken, or any suits or proceedings instituted, by the Secured Party pursuant to this paragraph.

This security interest is granted in conjunction with the security interests granted to the Secured Party pursuant to the Loan Agreement. The Pledgor does hereby further acknowledge and affirm that the rights and remedies of the Secured Party with respect to the security interest in the Patent Collateral made and granted hereby are subject to, and are more fully set forth in, the Loan Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein.

This Patent Security Agreement is made for collateral purposes only. At such time as all of the Obligations shall have been fully and indefeasibly paid and performed and the commitments of the Secured Party to make advances under the Loan Agreement shall have terminated, the Secured Party shall execute and deliver to the Pledgor, at the Pledgor's expense, without representation, warranty or recourse, all releases and reassignments, termination statements and other instruments as may reasonably be requested in order to terminate the security interest of the Secured Party in the Patent Collateral, subject to any disposition thereof which may have been made by the Secured Party pursuant to the terms hereof or of the Loan Agreement.

So long as no Event of Default shall have occurred and be continuing, and subject to the various provisions of the Loan Agreement and the Additional Agreements to which it is a party, the Pledgor may use the Patent Collateral in any lawful manner.

THIS PATENT SECURITY AGREEMENT SHALL IN ALL RESPECTS BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF ILLINOIS WHICH ARE APPLICABLE TO CONTRACTS MADE AND TO BE PERFORMED WHOLLY WITHIN SUCH STATE.

[Signature Page Follows]

1-NY/857151.5 - 3 -

IN WITNESS WHEREOF, the Pledgor has caused this Patent Security Agreement to be duly executed as of <u>Time 30</u>, 1999.

#### **PLEDGOR:**

CYTOKINE PHARMASCIENCES, INC.

By:

Name: Garge J Todaro Title: Vice President

Four Tower Bridge

200 Barr Harbour Drive, Suite 400 West Conshohocken, PA 19428-2978

Attention: QUANTS F. WILLSON Telephone No. 610 - 941 - 2747 Telecopy No. 610-940-0453

#### **SECURED PARTY:**

MERRILL LYNCH BUSINESS FINANCIAL SERVICES, INC.

By: <u>Frank</u>. Commerce Name: Briank. Connerce Title: Assistant Vice President

222 North LaSalle Street, 17th Floor

Chicago, IL (ocuso)

Attention: Dan Maldug

Telephone No. (312) 269-4483 Telecopy No. (312) 268-1378

-4-

1-NY/857151.5

Exhibit A
List of Patents

Phumi Stierres

# BTG License Agreement Dated October 1, 1992 (PGF2 Pessary).

## Process for Hydrogel - Invention 1118472 (II)

Country United Kingdom Australia Austria Belgium France Germany Hong Kong Italy Japan Luxembourg Netherlands New Zealand Singapore South Africa Sweden	Patent Number 2047094 537741 EPO016654 EPO016654 EPO016654 85/798 EPO016654 1668238 EPO016654 193221 85/558 80/1659 EPO016654	Expiry Date 3/21/00 3/21/00 3/20/00 3/20/00 3/20/00 3/20/00 3/20/00 3/20/00 3/20/00 3/21/00 3/21/00 3/21/00 3/21/00 3/21/00
Sweden	EPO016654	3/20/00
United States	4931288	6/5/07
United States	5017382	5/21/08

## Preparation of Particulate Gel - Invention 1121960

Country.	<u>Patent Number</u>	Expiry_Date
United Kingdom	2100269	6/10/02
Belgium	EPO068684	6/10/02
Canada	1239724	7/25/05
France	EPO068684	7/10/02
Germany	EPO068684	7/10/02
Italy	EPO068684	7/10/02
Japan	1840054	6/12/02
Netherlands	EPO068684	6/10/02
Sweden	EPO068684	6/10/02
Switzerland	EPO068684	6/10/02
United States	4542176	9/17/02

### Retrievable Device - Invention Number 1136216

Country	Patent Number	Expiry Date
United Kingdom	2254002	1/16/11
EPC*	92306296,2	7/9/12
Japan	2909477	7/9/12
Singapore	9691669-7	Unknown
United States	5269321	12/14/10

<sup>\*</sup> EP allowed 28 November 1997

## List of Patents (Continued)

## BTG Option Agreement dated March 31, 1997 (Oromucosal Products)

## Polyethylene Oxide Composition (I)

Country	Patent Number	Grant Date
United Kingdom	2047093	12/7/83
Australia	537740	10/25/84
Austria	EPO016652	8/21/85
Belgium	EPO016652	8/21/85
France	EPO016652	8/21/85
Germany	EPO016652	8/21/85
Hong Kong	85/797	10/17/85
ltaly	EPO016652	8/21/85
Japan	1667319	5/29/92
Luxembourg	EPO016652	8/21/85
Netherlands	EPO016652	8/21/85
New Zealand	193222	Unknown
Singapore	85/559	1/15/86
South Africa	80/1654	10/28/81
Sweden	EPO016652	8/21/85
Switzerland	EPO016652	8/21/85
United States	4894238	1/16/90
United States	5079009	1/7/92

## Polyethylene Oxide Composition (II)

Country	Patent Number	Grant Date
Australia	537741	10/25/84
Austria	EPO016654	9/11/85
Belgium	EPO016654	9/11/85
France	EPO016654	9/11/85
Germany	EPO016654	9/11/85
Hong Kong	85/798	10/19/85
Italy	EPO016654	9/11/85
Japan	1668238	5/29/92
Luxembourg	EPO016654	9/11/85
Netherlands	EPO016654	9/11/85
New Zealand	193221	2/7/85
Singapore	85/558	
South Africa	80/1659	1/15/86
Sweden	EPO016654	10/28/81
Switzerland	EPO016654	9/11/85
United States	4931288	9/11/85
United States	5017382	6/5/90
	3017362	5/21/91

## List of Patents (Continued)

## BTG Option Agreement dated March 31, 1997 (Oromucosal Products)

## Release Composition Structure

Country	Patent Number	Grant Date
United Kingdom	2143733	5/28/87
Canada	1242394	9/27/88
France	EPO132384	9/26/90
Germany	EPO132384	9/26/90
Italy	EPO132384	9/26/90
Japan	1931037	5/12/95
Sweden	EPO132384	9/26/90
United States	4814182	3/21/89

## AndroSolutions Development and License Agreement

Country Patent Application Number Grant Date

United States ASI 60/068,294 Pending

Exhibit B

Phurmi Sciences

## Patent License Agreements

- 1. Agreement dated October 1, 1992 with BTG plc (f/k/a British Technology Group Limited) for license to vaginal use of hydrogel technology (Note: This is the underlying license for the PGE2 pessary).
- 2. Option Agreement dated March 31, 1997 with BTG plc (f/k/a British Technology Group Limited) for license to oromucosal use of the hydrogel technology.
- 3. Development and License Agreement dated July 9, 1998 with AndroSolutions, Inc. for license to the AndroSolutions erectile dysfunction product.

REEL: 0099

CNI

Exhibit A:

Rights under the following Patents and Patent Applications have been licensed PIMR to CNI under the Amended and Restated Research and License Agreement of December 1, 1996.

Format of information supplied for each patent or patent application listed in Exhibit A:

PIMR docket	Application #	Title of application or patent	Status or patent #
number	Filing date		Issue date

0101	08/164,540	Guanythydrazones and their use to treat cachexia and	abandoned
0101	21JAN1994	related conditions	<del></del>
0102	08/315,170	Guanylhydrazones and their use to treat inflammatory	# 5.599.984
0.102	29SEP1994	conditions	04FEB1997
0103	08/403,568	Guanylhydrazones and their use to treat inflammatory	# 5,750,573
	05JUN1995	conditions	12MAY1998
0103 A	08/472,003	Guanylhydrazones and their use to treat inflammatory	pending
	06JUN1995	conditions	_
0103 B	08/472,919	Guanylhydrazones and their use to treat inflammatory	pending
	06JUN1995	conditions	
0103 C	08/471,696	Guanylhydrazones and their use to treat inflammatory	# 5,753,684
	06JUN1995	conditions	19 MAY1998
0103 D	08/471,305	Guanylhydrazones and their use to treat inflammatory conditions	pending
	06JUN1995		
0103 E	08/471,124	Guanylhydrazones and their use to treat inflammatory conditions	# 5,859,062
	06JUN1995		12JA <b>N1</b> 999
0103 F	08/470.076	Guanylhydrazones and their use for treating inflammatory conditions	abandoned
	06JUN1995	conditions	
0103 G	08/472,004	Guanylhydrazones and their use to treat inflammatory conditions	# 5,849,794
	06JUN1995	conditions	15DEC1998
0103 H	08/479,050	Guanylhydrazones and their use to treat inflammatory conditions	pending
	06JUN1995	CONGRECIS	
0103	08/471,711	Guanylhydrazones and their use to treat inflammatory conditions	abandoned
	06JUN1995	Continuons	
0104	08/632,305	Guanylhydrazones and their use to treat inflammatory conditions	# 5,854,289
	15APR1996	Conditions	29DEC1998
0105 P	60/031,061	Treatment of disorders related to T cell activation by	converted
	15NOV1996	interfering with p38 MAP kinase pathway	
0105	08/970,973	Guanylhydrazones useful for treating diseases	pending
	14NOV1997	associated with T cell activation	
0106	08/780,311	Complexes and combinations of fetuin with therapeutic	pending
	08JAN1997	agents	

0102WO	US95/00828	Guanylhydrazones for treating inflammatory conditions	filed national
	19JAN1995		
0102 AU	18350/95	Guanylhydrazones for treating inflammatory conditions	# 683,999
	19JAN1995		19JAN1998
0102 CA	2,181,689	Guanylhydrazones for treating inflammatory conditions	pending
	19JAN1995		
0102 CN	95192171.1 Guanylhydrazones for treating inflammatory condition		pending
	20SEP1996		
0102 EP	95910110.6	Guanylhydrazones for treating inflammatory conditions	pending
	19JAN1995		
0102 JP	07-519690	Guanylhydrazones for treating inflammatory conditions	pending
	22JUL1996		
0102 MX	96 02874	Guanylhydrazones and their use for treating inflammatory conditions	pending
	19JUL1996		
0102 NZ	281400	Guanylhydrazones and their use for treating inflammatory conditions	# 281400
	19JAN1995	conditions	19JAN1998
0105WO	US97/20670	Guanylhydrazones useful for treating diseases	filed national
	14NOV1997	associated with T-cell activation	
0105 EP	97948263.5	Guanylhydrazones useful for treating diseases	pending
		associated with T-cell activation	
01 <b>0</b> 6WO	US98/00390	Complexes and combinations of fetuin with therapeutic	pending
	08JAN1998	agents	

0201	08/063,399	Inhibition of migration inhibitory factor in the treatment of diseases involving cytokine-mediated toxicity	abandoned
	17MAY1993		
0202	08/243,342	Inhibition of migration inhibitory factor in the treatment of	pending
	16MAY1994	diseases involving cytokine-mediated toxicity	
0203	08/462,350	Inhibition of migration inhibitory factor in the treatment of	pending
	05JUN1995	diseases involving cytokine-mediated toxicity	
0203 A	08/470,901	Inhibition of migration inhibitory factor in the treatment of	pending
	06JUN1995	diseases involving cytokine-mediated toxicity	
0203 B	08/479,901	Inhibition of migration inhibitory factor in the treatment of diseases involving cytokine-mediated toxicity	pending
	06JUN1995		
0203 C	08/479,090	Inhibition of migration inhibitory factor in the treatment of diseases involving cytokine-mediated toxicity using soluble MIF receptor	pending
	06JUN1995		
0203 D	08/471,705	Inhibition of migration inhibitory factor in the treatment of diseases involving cytokine-mediated toxicity	pending
	06JUN1995		
0203 E	08/479,092	Inhibition of migration inhibitory factor in the treatment of diseases involving cytokine-mediated toxicity	abandoned
	06JUN1995		
0203 F	08/471,546	Combination method for treating diseases caused by cytokine-mediated toxicity	pending
	06JUN1995		
0203 G	08/471,586	Inhibition of migration inhibitory factor in the treatment of	pending
	06JUN 1995	diseases involving cytokine-mediated toxicity	
0204	08/602,929	Screening assay for the identification of inhibitors of	pending
	16FEB1996	macrophage migration inhibitory factor	
0205	08/738,947	Therapeutic uses of factors which inhibit or neutralize	pending
	240CT1996	MIF activity	

Macropha	ge Migration In	hibitory Factor-related cases (Foreign docket)	
0202WO	US94/05433		filed national
	16MAY1994	diseases Involving cytokine-mediated toxicity	
0202 AU	68345/94	Inhibition of migration inhibitory factor in the treatment of	# 692159
	5SEP1998	diseases involving cytokine-mediated toxicity	5SEP1998
0202 CA	2,163,211	Inhibition of migration inhibitory factor in the treatment of	pending
	16MAY1994	diseases involving cytokine-mediated toxicity	
0202 EP	94916785.2	Inhibition of migration inhibitory factor in the treatment of	pending
	16MAY1994	diseases involving cytokine-mediated toxicity	
0202 JP	6-525764	Inhibition of migration inhibitory factor in the treatment of diseases involving cytokine-mediated toxicity	pending
	16MAY1994		
0209WO	US97/02448	Screening assay for the identification of inhibitors of macrophage migration inhibitory factor	filed national
	14FEB1997		
0204 CA	CA2218364	Screening assay for the identification of inhibitors of macrophage migration inhibitory factor	pending
	14FEB1997		
0204 EP	97905997.9	Screening assay for the identification of inhibitors of macrophage migration inhibitory factor	pending
	240CT1997		
0204 JP	9-529544	Screening assay for the identification of inhibitors of	pending
<del></del>	14FEB1997	macrophage migration inhibitory factor	
0205WO	US97/19924	Use of macrophage migration inhibitory factor	filed national
	240CT1997	antagonists for anti-cancer therapy	
end of sec	tion		

NLS-base	ed HIV inhibitor-	related cases (US docket)	
0301	08/369,830	Pyrimidine compounds and methods of use to derivatize	# 5,574,040
	06JAN1995	neighboring lysine residues in proteins under physiological conditions	12 NOV1996
0302	08/463,405	Compounds and methods of use to derivatize neighboring lysine residues in proteins under physiological conditions	# 5,733,932
	5JUN1995		31MAR1998
0302 A	08/471,797	Compounds and methods of use to derivatize	#5,703,086
	6JUN1995	neighboring lysine residues in proteins under physiological conditions	30DEC1997
0302 B	08/470,103	Compounds and methods of use to derivatize neighboring lysine residues in proteins under physiological conditions	# 5,620,983
	6JUN1995		15APR1997
0303	08/584,857	Compounds for treating infectious diseases	# 5,840,893
	5JAN1996		24NOV 1998
0304	08/732,653	Compounds and methods of use to treat infectious	pending
	15OCT1996	diseases	
0305	08/912,076	HIV nuclear localization inhibitors	# 5,806,058
	15AUG1997		15SEP1993
0306	08/911,883	HIV matrix protein tyrosine position 29 pocket binders	# 5,849,793
·	15AUG1997		15DEC1998

0303WO	US96/00486	Compounds and methods of use to treat infectious	filed national
	05JAN1996	diseases	
0303 AU	47559/96	Compounds and methods of use to treat infectious diseases	pending
	130CT1997		
0303 CA	2,218,561	Compounds and methods of use to treat infectious diseases	pending
	130CT1997		
0303 EP	96903481.8	Compounds and methods of use to treat infectious diseases	pending
	08OCT1997		
0304 JP		Compounds and methods of use to treat infectious diseases	pending
0304WO	97/19071	Compounds and methods of use to treat infectious diseases	filed national
	15OCT1997		
0305WO	US98/16814	HIV nuclear localization inhibitors	pending
	13AUG1998		
0306WO	US98/16923	HIV matrix protein tyrosine position 29 pocket binders	pending
	14AUG1998		

Fibrocyte	e-related cases	(US docket)	
0401	08/023.290	Blood-borne mesenchymal cells	<b>#5,654,18</b> 6
	26FEB1993		05AUG1997
0401 A	08/487,116	Blood-borne mesenchymal cells	pending
	07JUN1995		
0401 B	08/488,241	Blood-borne mesenchymal cells	# 5,846,796
	07JUN1995		8DEC1998
0402	08/488,111	Blood-borne mesenchymal ceils	# 5,804,446
	07JUN1995		8SEP1998
0402 A	08/488,112	Blood-borne mesenchymal cells	pending
	07JUN1995		
0403 P	60/031,259	Process for isolating blood-borne fibrocytes	converted
	15NOV1996		
0403	08/970,971	Process for isolating blood-borne fibrocytes	pending
	14NOV1997		
0404	08/828,415	Fibrocyte-based vaccine formulations	pending
	28MAR1997	]	

Fibrocyte-	related cases	(Foreign docket)	
0401WO	US94/02850	Blood-borne mesenchymal cells	filed national
	16MAR1994		
0401 AU	65884/94	Blood-borne mesenchymal celis	# 6,934,41
	16MAR1994		05NOV1998
0401 CA	2185539	Blood-borne mesenchymal cells	pending
	16MAR1994		
0401 CN	94195107.3	Blood-borne mesenchymal cells	pending
	16MAR1994		
0401 EP	94913910.9	Blood-bome mesenchymal cells	pending
	2AUG1995		
0401 JP	7-523995	Blood-borne mesenchymal cells	pending
	15MAR1994		
0401 KP	7051171996	Blood-borna mesenchymal cells	pending
	19SEP1996		
0401 NZ	265435	Blood-borne mesenchymal cells	# 26435
	16MAR1994		08JAN1998
0404WO	US98/06094	Fibrocyte-based cellular therapy formulations	pending
	27MAR1998		
and of sec	tion		·

FIME INDI PROGRAMS

Cyclophili	n receptor-relat	ed HIV inhibition-related cases (US and foreign docke	ets)
0501 P	60/013,185	Treatment of HIV infection by Interfering with host cell	converted
	12MAR1996	cyclophilin receptor activity	
0501	08/615,933	Treatment of HIV infection by interfering with host cell cyclophilin receptor activity	# 5,840,305
	14MAR1996		24NOV1998
0501WO	US97/03819	Treatment of HIV infection by interfering with host cell	filed national
	12MAR1997	cyclophilin receptor activity	
0501 AU	25811/97	Treatment of HIV infection by interfering with host cell cyclophilin receptor activity	pending
	12MAR1997		
0501 CA	2,248,192	Treatment of HIV infection by Interfering with host cell cyclophilin receptor activity	pending
	12MAR1997		
0501 EP	97917517.1	Treatment of HIV infection by interfering with host cell cyclophilin receptor activity	pending
	100CT1997		
0501 JP	9-532773	Treatment of HIV infection by interfering with host cell	pending
	12MAR1997	cyclophilln receptor activity	
end of sec	ction		

permine	antagonists-re	lated cases (US and foreign dockets)	
601	08/874,681	Immunotherapeutic anti-cancer pharmaceutical compositions	pending
	13JUN1997		
502	08/932,871	Prevention of pregnancy miscarriages	pending
	18SEP1997		
303	09/096,761	Immunotherapeutic anti-cancer pharmaceutical compositions	pending
	12JUN1998		
304 P		Prevention of brain damage in stroke	pending
	13APR1999		
02WO	US98/19579	Prevention of pregnancy miscarriages	pending
	18SEP1998		
OWEC	US98/12198	Immunotherapeutic anti-cancer pharmaceutical	pending
	30JUL1998	compositions	
f of sec	tion		

0901	08/961,578	Inducible phosphofructokinase and the Warburg effect	pending
	310CT1997		
0902	09/183,846	Inducible phosphofructokinase and the Warburg effect	pending
	300CT1998		
0903 P	60/130,049	Synthetic process for five-membered polyols and	pending
	19APR1999	substituted sugar analogs	
0902WO	US98/23155	Inducible phosphofructokinase and the Warburg effect	pending
	300CT1998		

201	09/248,574	Antagonists of HMG1 for treating inflammatory conditions	pending
	11FEB1999		

REEL: 010164 FRAME: 0110

REEL: 010164 FRAME: 0110

Exhibit B: Cytokine Networks, Inc. -- List of Licenses

all of the patent rights listed on Exhibit A are licensed to Cytokine Networks, Inc. ("CNI") ursuant to an Amended and Restated Research and License Agreement, dated as of December 1, 996, between CNI and The Picower Institute for Medical Research.

TOTAL P.17

REEL: 010164 FRAME: 0111

STATE OF New York	)
COUNTY OF New York	: ss.:
COUNTY OF TOTAL TOTAL.	<i>)</i>
On the 20th day of	June, in the year 1999 before me personally came
	o me known, who, being by me sworn, did say that he or she is the
Cory J Todoro, to	of Cytokine PharmaSciences, Inc., which corporation is

described in, and executed, the above instrument, and that he or she signed his or her name by

order of the Board of Directors of said corporation.

Notary Public

SOUMALY MITSRI

States of New York
No. 01 MI6012767
Qualified in Queens County
Contribute Filed in New York County
Commission Expires 08/31/2022

1-NY/857151.5