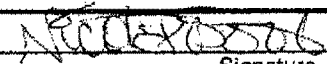


Form PTO-1594 (Rev. 03-11)  
OMB Collection 0851-0027 (exp. 03/31/2012)

U.S. DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office

## RECORDATION FORM COVER SHEET TRADEMARKS ONLY

To the Director of the U. S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

<p><b>1. Name of conveying party(ies):</b></p> <p>OraPharma, Inc.</p> <p><input type="checkbox"/> Individual(s)      <input type="checkbox"/> Association  <input type="checkbox"/> General Partnership      <input type="checkbox"/> Limited Partnership  <input checked="" type="checkbox"/> Corporation- State: <u>Delaware</u>  <input type="checkbox"/> Other _____</p> <p>Citizenship (see guidelines) <u>USA - Delaware</u></p> <p>Additional names of conveying parties attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p><b>2. Name and address of receiving party(ies)</b> <input type="checkbox"/> Yes  <input checked="" type="checkbox"/> No</p> <p>Additional names, addresses, or citizenship attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>Name: <u>Goldman Sachs Lending Partners LLC</u></p> <p>Internal Address: _____</p> <p>Street Address: <u>200 West Street</u></p> <p>City: <u>New York</u></p> <p>State: <u>NY</u></p> <p>Country: <u>USA</u>      Zip: <u>10282</u></p> <p><input type="checkbox"/> Association      Citizenship _____  <input type="checkbox"/> General Partnership      Citizenship _____  <input type="checkbox"/> Limited Partnership      Citizenship _____  <input type="checkbox"/> Corporation      Citizenship _____  <input checked="" type="checkbox"/> Other <u>LLC</u>      Citizenship <u>USA - Delaware</u></p> <p>If assignee is not domiciled in the United States, a domestic representative designation is attached: <input type="checkbox"/> Yes <input type="checkbox"/> No  (Designations must be a separate document from assignment)</p>
<p><b>3. Nature of conveyance /Execution Date(s) :</b></p> <p>Execution Date(s) <u>August 2, 2012</u></p> <p><input type="checkbox"/> Assignment      <input type="checkbox"/> Merger  <input checked="" type="checkbox"/> Security Agreement      <input type="checkbox"/> Change of Name  <input type="checkbox"/> Other _____</p>	<p><b>4. Application number(s) or registration number(s) and identification or description of the Trademark.</b></p> <p>A. Trademark Application No.(s) <u>77/882849</u></p> <p>B. Trademark Registration No.(s) <u>3814408</u></p> <p style="text-align: right;">Additional sheet(s) attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>C. Identification or Description of Trademark(s) (and Filing Date if Application or Registration Number is unknown):</p>
<p><b>5. Name &amp; address of party to whom correspondence concerning document should be mailed:</b></p> <p>Name: <u>Michael Violet</u></p> <p>Internal Address: <u>CT Lien Solutions</u></p> <p>Street Address: <u>4400 Easton Commons Way</u></p> <p>City: <u>Columbus</u></p> <p>State: <u>OH</u>      Zip: <u>43212</u></p> <p>Phone Number: <u>614-280-3303</u></p> <p>Fax Number: <u>800-516-6304</u></p> <p>Email Address: <u>MICHAEL.VIOLET@WOLTERSCLUWER.COM</u></p>	<p><b>6. Total number of applications and registrations involved:</b> <span style="border: 1px solid black; padding: 2px;">18</span></p> <p><b>7. Total fee (37 CFR 2.6(b)(6) &amp; 3.41) \$</b> _____</p> <p><input type="checkbox"/> Authorized to be charged to deposit account  <input type="checkbox"/> Enclosed</p> <p><b>8. Payment Information:</b></p> <p>Deposit Account Number _____</p> <p>Authorized User Name _____</p>
<p><b>9. Signature:</b> <u></u>      <u>8/2/12</u>  Signature      Date</p> <p style="text-align: center;">_____  Nicole Piazza  Name of Person Signing</p> <p style="text-align: right;">Total number of pages including cover sheet, attachments, and document: <span style="border: 1px solid black; padding: 2px;">7</span></p>	

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:  
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O. Box 1450, Alexandria, VA 22313-1450

OP \$290.00 3814408

**SCHEDULE A**  
to  
**TRADEMARK SECURITY AGREEMENT**

**TRADEMARK REGISTRATIONS AND APPLICATIONS**

Country	Trademark	Filing Date	Filing No.	Registration Date	Registration Number	Owner <sup>1</sup>	Status
United States of America	ACE	12/1/2009	77/882849	7/6/2010	3814408	OraPharma, Inc.	Registered
United States of America	ACE (STYLIZED)	12/1/2009	77/883123	7/6/2010	3814410	OraPharma, Inc.	Registered
United States of America	ACE PINWHEEL DESIGN	5/6/2008	77/466453	6/9/2009	3634007	OraPharma, Inc.	Registered
Canada	ADVANCING ORAL HEALTH... IMPROVING OVERALL HEALTH	3/28/2008	1390002			OraPharma, Inc.	Published
United States of America	ADVANCING ORAL HEALTH... IMPROVING OVERALL HEALTH	4/7/2009	77/708615	5/4/2010	3783506	OraPharma, Inc.	Registered
Canada	ARESTIN	6/27/2000	106486200	10/16/2003	592440	OraPharma, Inc.	Registered
United States of America	ARESTIN	12/29/1999	75/883599	7/30/2002	2601899	OraPharma, Inc.	Registered
Canada	ARESTIN & PINWHEEL DESIGN	1/7/2009	1424298	2/12/2010	759410	OraPharma, Inc.	Registered
Canada	ARESTIN PINWHEEL DESIGN	1/7/2009	1424299	2/26/2010	760424	OraPharma, Inc.	Registered
United States of America	ARESTIN PINWHEEL DESIGN	5/19/2008	77/477598	6/23/2009	3642165	OraPharma, Inc.	Registered

<sup>1</sup> Indicates beneficial and/or record ownership.

Country	Trademark	Filing Date	Filing No.	Registration Date	Registration Number	Owner	Status
Canada	FIGHT INFECTION RIGHT WHERE IT STARTS	4/3/2008	1389988	3/15/2011	1389988	OraPharma, Inc.	Registered
Canada	MINOTEK	9/16/2004	1230512			OraPharma, Inc.	
United States of America	MY PERSONAL STANDARD OF CARE	4/7/2008	77/441471	7/20/2010	3822407	OraPharma, Inc.	Registered
United States of America	MY PERSONAL STANDARD OF CARE AND DESIGN	4/7/2008	77/441461	8/3/2010	3828798	OraPharma, Inc.	Registered
United States of America	MYARESTIN.COM	5/27/2008	77/483515	3/30/2010	3768299	OraPharma, Inc.	Registered
United States of America	MYARESTIN.COM (STYLIZED)	5/27/2008	77/483514	3/30/2010	3768298	OraPharma, Inc.	Registered
Canada	ORAPHARMA	12/11/2008	1422768	6/15/2010	769658	OraPharma, Inc.	Registered
United States of America	ORAPHARMA, INC.	12/20/1999	75/878686	6/6/2006	3101024	OraPharma, Inc.	Registered

## **TRADEMARK SECURITY AGREEMENT**

This **TRADEMARK SECURITY AGREEMENT**, dated as of August 2, 2012 (as it may be amended, restated, supplemented or otherwise modified from time to time, this "**Agreement**"), is made by the entity identified as a grantor on the signature pages hereto (the "**Grantor**") in favor of Goldman Sachs Lending Partners LLC, as collateral agent for the Secured Parties (in such capacity, together with its successors and permitted assigns, the "**Collateral Agent**").

**WHEREAS**, the Grantor is party to the Pledge and Security Agreement, dated as of June 29, 2011, as amended by the Amended and Restated Pledge and Security Agreement, dated as of October 20, 2011, and as further amended by the Second Amended and Restated Pledge and Security Agreement, dated as of February 13, 2012 (as it may be amended, restated, amended and restated, supplemented or otherwise modified from time to time, the "**Pledge and Security Agreement**"), between the Grantor and the other grantors party thereto and the Collateral Agent pursuant to which the Grantor granted a security interest to the Collateral Agent in the Trademark Collateral (as defined below) and is required to execute and deliver this Agreement.

**NOW, THEREFORE**, in consideration of the foregoing and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Grantor hereby agrees with the Collateral Agent as follows:

### **SECTION 1. Defined Terms**

Unless otherwise defined herein, terms defined in the Pledge and Security Agreement and used herein have the respective meanings given to them in the Pledge and Security Agreement.

### **SECTION 2. Grant of Security Interest in Trademark Collateral**

**SECTION 2.1 Grant of Security.** The Grantor hereby grants to the Collateral Agent, for the benefit of the Secured Parties, a security interest in and continuing lien on all of the Grantor's right, title and interest in, to and under the following, in each case whether now owned or hereafter acquired by the Grantor or in which the Grantor now has or hereafter acquires any right, title or interest and wherever the same may be located (collectively, the "**Trademark Collateral**"):

all United States and foreign trademarks, trade names, trade dress, corporate names, company names, business names, fictitious business names, Internet domain names, service marks, certification marks, collective marks, logos, other source or business identifiers, designs and general intangibles of a like nature, whether or not registered, and with respect to any and all of the foregoing: (i) all registrations and applications therefor including, without limitation, the registrations and applications listed in Schedule A attached hereto, (ii) all extensions or renewals of any of the foregoing, (iii) all of the goodwill of the business connected with the use of and symbolized by any of the foregoing, (iv) the right to sue or otherwise recover for any past, present and future infringement, dilution or other violation of any of the foregoing or for any injury to the related goodwill, (v) all Proceeds of the foregoing, including, without limitation, license fees, royalties, income, payments, claims, damages and proceeds of suit now or hereafter due and/or payable with respect thereto, and (vi) all other rights of any kind accruing thereunder or pertaining thereto throughout the world.

**SECTION 2.2 Certain Limited Exclusions.** Notwithstanding anything herein to the contrary, in no event shall the Trademark Collateral include or the security interest granted under Section 2.1 hereof attach to any Excluded Assets, including, without limitation, any "intent-to-use" application for registration of a Trademark filed pursuant to Section 1(b) of the Lanham Act, 15 U.S.C. § 1051, prior to the filing of a "Statement of Use" pursuant to Section 1(d) of the Lanham Act or an "Amendment to Allege Use" pursuant to Section 1(c) of the Lanham Act with respect thereto, solely to the extent, if any, that, and solely during the period, if any, in which, the grant of a security interest therein would impair the validity or enforceability of any registration that issues from such intent-to-use application under applicable Federal law.

**SECTION 3. Security Agreement**

The security interest granted pursuant to this Agreement is granted in conjunction with the security interest granted to the Collateral Agent for the Secured Parties pursuant to the Pledge and Security Agreement, and the Grantor hereby acknowledges and affirms that the rights and remedies of the Collateral Agent with respect to the security interest in the Trademark Collateral made and granted hereby are more fully set forth in the Pledge and Security Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein. In the event that any provision of this Agreement is deemed to conflict with the Pledge and Security Agreement, the provisions of the Pledge and Security Agreement shall control.

**SECTION 4. Governing Law**

THIS AGREEMENT AND THE RIGHTS AND OBLIGATIONS OF THE PARTIES HEREUNDER SHALL BE GOVERNED BY, AND SHALL BE CONSTRUED AND ENFORCED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK WITHOUT REGARD TO CONFLICT OF LAWS PRINCIPLES THEREOF.

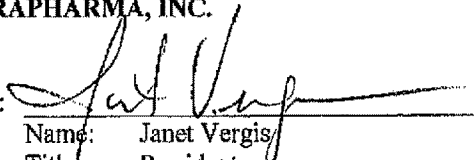
**SECTION 5. Counterparts**

This Agreement may be executed in one or more counterparts and by different parties hereto in separate counterparts, each of which when so executed and delivered shall be deemed an original, but all such counterparts together shall constitute but one and the same instrument. Delivery of an executed counterpart to this Agreement by facsimile transmission or other electronic transmission (such as .pdf or .tif) shall be effective as delivery of a manually signed counterpart of this Agreement.

[Remainder of page intentionally left blank]

IN WITNESS WHEREOF, the Grantor has caused this Agreement to be executed and delivered by its duly authorized officer as of the date first set forth above.

ORAPHARMA, INC.

By:   
Name: Janet Vergis  
Title: President

Accepted and Agreed:

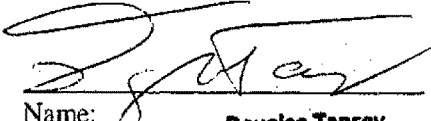
**GOLDMAN SACHS LENDING PARTNERS LLC,**  
as Collateral Agent

By: \_\_\_\_\_  
Name:  
Title:

[Signature Page to Trademark Security Agreement (OraPharma)]

Accepted and Agreed:

**GOLDMAN SACHS LENDING PARTNERS LLC,**  
as Collateral Agent

By:   
Name: **Douglas Tansley**  
Title: **Authorized Signatory**

[Signature Page to Trademark Security Agreement (OraPharma)]