

## TRADEMARK ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

ETAS ID: TM441955

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT		
<b>NATURE OF CONVEYANCE:</b>	SECURITY INTEREST		
<b>CONVEYING PARTY DATA</b>			
<b>Name</b>	<b>Formerly</b>	<b>Execution Date</b>	<b>Entity Type</b>
Synergy Pharmaceuticals Inc.		09/01/2017	Corporation: DELAWARE
<b>RECEIVING PARTY DATA</b>			
<b>Name:</b>	CRG Servicing LLC, As Agent		
<b>Street Address:</b>	1000 Main Street, Suite 2500		
<b>City:</b>	Houston		
<b>State/Country:</b>	TEXAS		
<b>Postal Code:</b>	77002		
<b>Entity Type:</b>	Limited Liability Company: DELAWARE		
<b>PROPERTY NUMBERS Total: 5</b>			
<b>Property Type</b>	<b>Number</b>	<b>Word Mark</b>	
<b>Serial Number:</b>	87167674	KOMFIENCE	
<b>Serial Number:</b>	87532128	POOP TROOP	
<b>Registration Number:</b>	5073973	SYNERGY PHARMACEUTICALS	
<b>Registration Number:</b>	5242709	TRULANCE	
<b>Serial Number:</b>	87392678	TRULANCE	
<b>CORRESPONDENCE DATA</b>			
<b>Fax Number:</b>	2158511420		
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>			
<b>Phone:</b>	215-851-8100		
<b>Email:</b>	phlipdocketing@reedsmith.com		
<b>Correspondent Name:</b>	Matthew P. Frederick, Reed Smith LLP		
<b>Address Line 1:</b>	1717 Arch Street, Three Logan Square		
<b>Address Line 2:</b>	Suite 3100		
<b>Address Line 4:</b>	Philadelphia, PENNSYLVANIA 19103		
<b>NAME OF SUBMITTER:</b>	Matthew P. Frederick		
<b>SIGNATURE:</b>	/Matthew P. Frederick/		
<b>DATE SIGNED:</b>	09/05/2017		
<b>Total Attachments: 13</b>			

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**PATENT AND TRADEMARK SECURITY AGREEMENT**

WHEREAS, SYNERGY PHARMACEUTICALS INC., a Delaware corporation (“**Grantor**”), is party to that certain Security Agreement, dated as of September 1, 2017 (as amended, restated, supplemented or otherwise modified from time to time, the “**Security Agreement**”; capitalized terms used herein without definition shall have the meanings set forth in the Security Agreement), among Grantor, the Subsidiary Guarantors party thereto, and CRG SERVICING LLC, a Delaware limited liability company, as administrative agent and collateral agent for the Lenders (in such capacities, together with its successors and assigns, “**Administrative Agent**”) together with the Lenders, the “**Secured Parties**” and each, a “**Secured Party**”), pursuant to which Grantor has granted in favor of Secured Parties a lien on all of its personal property, including without limitation the patents and patent applications listed on **Schedule A** hereto, and the trademarks and trademark applications listed on the **Schedule B** hereto; and

WHEREAS, it is a condition to the advance of the loans and other obligations secured by the Security Agreement, that Grantor execute and deliver, and cause to be filed in the U.S. Patent and Trademark Office, this Patent and Trademark Security Agreement;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged:

As collateral security for the payment in full when due (whether at stated maturity, by acceleration or otherwise) of the Secured Obligations, Grantor hereby pledges and grants to the Secured Parties a security interest in all of Grantor’s right, title and interest in, to and under all of the following, as collateral security for the prompt and complete payment and performance when due of all the Secured Obligations (as defined in the Security Agreement):

(i) all patents and patent applications, in each case whether now owned by Grantor or hereafter acquired and whether now existing or hereafter coming into existence, including without limitation those listed on **Schedule A** hereto, and all related patents and applications thereto, including all reissuances, continuations, continuations-in-part, revisions, extensions, re-examinations thereof, any patents and patent applications claiming priority to said patents and patent applications or from which said patents and patent applications claim priority, and pending applications associated therewith; and

(ii) all of the trademarks, whether now owned or at any time hereafter acquired, of Grantor that are registered with, or for which applications for registration have been filed with, the United States Patent and Trademark Office, including the trademarks listed on **Schedule B** hereto, and all registrations and pending applications associated therewith (excluding any application for registration of a trademark filed on an intent-to-use basis solely to the extent that the grant of a security interest in any such trademark application would materially adversely affect the validity or enforceability of the resulting trademark registration or result in cancellation of such trademark application).


Notwithstanding the foregoing, in the event of any conflict between this Patent and Trademark Security Agreement and the Security Agreement, the Security Agreement shall control.

This Patent and Trademark Security Agreement and the rights and obligations of the parties hereunder shall be governed by, and construed in accordance with, the law of the State of New York, without regard to principles of conflicts of laws that would result in the application of the laws of any other jurisdiction; provided that Section 5-1401 of the New York General Obligations Law shall apply.

[signature to follow]

IN WITNESS WHEREOF, the undersigned have caused this Patent and Trademark Security Agreement to be duly executed and delivered as of the day and year first above written.

SYNERGY PHARMACEUTICALS INC., as  
Grantor

By  \_\_\_\_\_  
Name: Gary Demignani  
Title: Executive Vice President and Chief  
Financial Officer

**Schedule A**  
**to Patent and Trademark Security Agreement**

PATENTS AND PATENT APPLICATIONS

Owner	Title/Mark	Application No.	Application Date	Registration No.	Registration Date
Synergy Pharmaceuticals Inc.	GUANYLATE CYCLASE RECEPTOR AGONISTS FOR THE TREATMENT OF TISSUE INFLAMMATION AND CARCINOGENESIS	10/107,814	3/28/2002	7,041,786	5/9/2006
Synergy Pharmaceuticals Inc.	GUANYLATE CYCLASE RECEPTOR AGONISTS FOR THE TREATMENT OF TISSUE INFLAMMATION AND CARCINOGENESIS	11/347,115	2/2/2006	7,799,897	9/21/2010
Synergy Pharmaceuticals Inc.	GUANYLATE CYCLASE RECEPTOR AGONISTS FOR THE TREATMENT OF TISSUE INFLAMMATION AND CARCINOGENESIS	12/763,707	4/20/2010	8,114,831	2/14/2012
Synergy Pharmaceuticals Inc.	GUANYLATE CYCLASE RECEPTOR AGONISTS FOR THE TREATMENT OF TISSUE INFLAMMATION AND CARCINOGENESIS	13/339,785	12/29/2011	8,637,451	1/28/2014
Synergy Pharmaceuticals Inc.	GUANYLATE CYCLASE RECEPTOR AGONISTS FOR THE TREATMENT OF TISSUE INFLAMMATION AND CARCINOGENESIS	14/137,256	12/20/2013		

Owner	Title/Mark	Application No.	Application Date	Registration No.	Registration Date
Synergy Pharmaceuticals Inc.	AGONISTS OF GUANYLATE CYCLASE USEFUL FOR THE TREATMENT OF GASTROINTESTINAL DISORDERS, INFLAMMATION, CANCER AND OTHER DISORDERS	12/133,344	6/4/2008	7,879,802	2/1/2011
Synergy Pharmaceuticals Inc.	AGONISTS OF GUANYLATE CYCLASE USEFUL FOR THE TREATMENT OF HYPERCHOLESTEROL EMIA, ATHEROSCLEROSIS, CORONARY HEART DISEASE, GALLSTONE, OBESITY AND OTHER CARDIOVASCULAR DISEASES	12/630,654	12/3/2009	8,969,514	3/3/2015
Synergy Pharmaceuticals Inc.	AGONISTS OF GUANYLATE CYCLASE USEFUL FOR THE TREATMENT OF GASTROINTESTINAL DISORDERS, INFLAMMATION, CANCER AND OTHER DISORDERS	13/010,267	1/20/2011	8,716,224	5/6/2014
Synergy Pharmaceuticals Inc.	AGONISTS OF GUANYLATE CYCLASE USEFUL FOR THE TREATMENT OF GASTROINTESTINAL DISORDERS, INFLAMMATION, CANCER AND OTHER DISORDERS	13/857,283	4/5/2013	8,901,075	12/2/2014

Owner	Title/Mark	Application No.	Application Date	Registration No.	Registration Date
Synergy Pharmaceuticals Inc.	AGONISTS OF GUANYLATE CYCLASE USEFUL FOR THE TREATMENT OF GASTROINTESTINAL DISORDERS, INFLAMMATION, CANCER AND OTHER DISORDERS	14/528,257	10/30/2014	9,266,926	2/23/2016
Synergy Pharmaceuticals Inc.	AGONISTS OF GUANYLATE CYCLASE USEFUL FOR THE TREATMENT OF HYPERCHOLESTEROL EMIA, ATHEROSCLEROSIS, CORONARY HEART DISEASE, GALLSTONE, OBESITY AND OTHER CARDIOVASCULAR DISEASES	14/742,456	6/17/2015		
Synergy Pharmaceuticals Inc.	AGONISTS OF GUANYLATE CYCLASE USEFUL FOR THE TREATMENT OF GASTROINTESTINAL DISORDERS, INFLAMMATION, CANCER AND OTHER DISORDERS	15/049,740	2/22/2016		
Synergy Pharmaceuticals Inc.	AGONISTS OF GUANYLATE CYCLASE USEFUL FOR THE TREATMENT OF GASTROINTESTINAL DISORDERS, INFLAMMATION, CANCER AND OTHER DISORDERS	15/471,462	3/28/2017		



Owner	Title/Mark	Application No.	Application Date	Registration No.	Registration Date
Synergy Pharmaceuticals Inc.	AGONISTS OF GUANYLATE CYCLASE USEFUL FOR THE TREATMENT OF GASTROINTESTINAL DISORDERS, INFLAMMATION, CANCER AND OTHER DISORDERS	14/228,843	3/28/2014	9,238,677	1/19/2016
Synergy Pharmaceuticals Inc.	METHOD OF INHIBITING BILE ACID ABSORPTION BY ADMINISTERING AN AGONIST OF A GUANYLATE CYCLASE RECEPTOR	13/513,224	12/3/2010	9,089,612	7/28/2015
Synergy Pharmaceuticals Inc.	AGONISTS OF GUANYLATE CYCLASE USEFUL FOR THE TREATMENT OF GASTROINTESTINAL DISORDERS, INFLAMMATION, CANCER AND OTHER DISORDERS	12/478,505	6/4/2009	8,207,295	6/26/2012
Synergy Pharmaceuticals Inc.	AGONISTS OF GUANYLATE CYCLASE USEFUL FOR THE TREATMENT OF GASTROINTESTINAL DISORDERS, INFLAMMATION, CANCER AND OTHER DISORDERS	13/467,703	5/9/2012	8,357,775	1/22/2013
Synergy Pharmaceuticals Inc.	AGONISTS OF GUANYLATE CYCLASE USEFUL FOR THE TREATMENT OF GASTROINTESTINAL DISORDERS, INFLAMMATION, CANCER AND OTHER DISORDERS	13/716,874	12/17/2012	8,497,348	7/30/2013

Owner	Title/Mark	Application No.	Application Date	Registration No.	Registration Date
Synergy Pharmaceuticals Inc.	AGONISTS OF GUANYLATE CYCLASE USEFUL FOR THE TREATMENT OF GASTROINTESTINAL DISORDERS, INFLAMMATION, CANCER AND OTHER DISORDERS	14/831,293	8/20/2015		
Synergy Pharmaceuticals Inc.	AGONISTS OF GUANYLATE CYCLASE USEFUL FOR THE TREATMENT OF GASTROINTESTINAL DISORDERS, INFLAMMATION, CANCER AND OTHER DISORDERS	12/504,288	7/16/2009	8,034,782	10/11/2011
Synergy Pharmaceuticals Inc.	AGONISTS OF GUANYLATE CYCLASE USEFUL FOR THE TREATMENT OF GASTROINTESTINAL DISORDERS, INFLAMMATION, CANCER AND OTHER DISORDERS	14/632,314	2/26/2015	9,505,805	11/29/2016
Synergy Pharmaceuticals Inc.	AGONISTS OF GUANYLATE CYCLASE USEFUL FOR THE TREATMENT OF GASTROINTESTINAL DISORDERS, INFLAMMATION, CANCER AND OTHER DISORDERS	15/297,688	10/19/2016		

Owner	Title/Mark	Application No.	Application Date	Registration No.	Registration Date
Synergy Pharmaceuticals Inc.	AGONISTS OF GUANYLATE CYCLASE USEFUL FOR THE TREATMENT OF GASTROINTESTINAL DISORDERS, INFLAMMATION, CANCER AND OTHER DISORDERS	13/226,300	9/6/2011	8,367,800	2/5/2013
Synergy Pharmaceuticals Inc.	AGONISTS OF GUANYLATE CYCLASE USEFUL FOR THE TREATMENT OF GASTROINTESTINAL DISORDERS, INFLAMMATION, CANCER AND OTHER DISORDERS	13/731,483	12/31/2012	8,569,246	10/29/2013
Synergy Pharmaceuticals Inc.	AGONISTS OF GUANYLATE CYCLASE USEFUL FOR THE TREATMENT OF GASTROINTESTINAL DISORDERS, INFLAMMATION, CANCER AND OTHER DISORDERS	13/955,710	7/31/2013	8,664,354	3/4/2014
Synergy Pharmaceuticals Inc.	FORMULATIONS OF GUANYLATE CYCLASE C AGONISTS AND METHODS OF USE	14/301,812	6/11/2014		
Synergy Pharmaceuticals Inc.	FORMULATIONS OF GUANYLATE CYCLASE C AGONISTS AND METHODS OF USE				
Synergy Pharmaceuticals Inc.	PROCESS OF PREPARING GUANYLATE CYCLASE C AGONIST	15/405,787	1/13/2017		

Owner	Title/Mark	Application No.	Application Date	Registration No.	Registration Date
Synergy Pharmaceuticals Inc.	PROCESS OF PREPARING GUANYLATE CYCLASE C AGONIST	14/001,638	3/1/2012	9,580,471	2/28/2017
Synergy Pharmaceuticals Inc.	FORMULATIONS OF GUANYLATE CYCLASE C AGONISTS AND METHODS OF USE	14/845,644	9/4/2015	9,610,321	4/4/2017
Synergy Pharmaceuticals Inc.	FORMULATIONS OF GUANYLATE CYCLASE C AGONISTS AND METHODS OF USE	15/467,631	3/23/2017		
Synergy Pharmaceuticals Inc.	FORMULATIONS OF GUANYLATE CYCLASE C AGONISTS AND METHODS OF USE	15/467,648	3/23/2017		
Synergy Pharmaceuticals Inc.	FORMULATIONS OF GUANYLATE CYCLASE C AGONISTS AND METHODS OF USE	13/421,769	3/15/2012	9,616,097	4/11/2017
Synergy Pharmaceuticals Inc.	AGONISTS OF GUANYLATE CYCLASE USEFUL FOR DOWNREGULATION OF PRO-INFLAMMATORY CYTOKINES	15/026,560	10/9/2014		
Synergy Pharmaceuticals Inc.	AGONISTS OF GUANYLATE CYCLASE USEFUL FOR DOWNREGULATION OF PRO-INFLAMMATORY CYTOKINES				
Synergy Pharmaceuticals Inc.	COMPOSITIONS USEFUL FOR THE TREATMENT OF GASTROINTESTINAL	14/207,749	3/13/2014	9,486,494	11/8/2016

Owner	Title/Mark	Application No.	Application Date	Registration No.	Registration Date
	DISORDERS				
Synergy Pharmaceuticals Inc.	COMPOSITIONS USEFUL FOR THE TREATMENT OF GASTROINTESTINAL DISORDERS	15/272,873	9/22/2016		
Synergy Pharmaceuticals Inc.	AGONISTS OF GUANYLATE CYCLASE AND THEIR USES	14/189,645	2/25/2014	9,545,446	1/17/2017
Synergy Pharmaceuticals Inc.	AGONISTS OF GUANYLATE CYCLASE AND THEIR USES	15/381,680	12/16/2016		
Synergy Pharmaceuticals Inc.	AGONISTS OF GUANYLATE CYCLASE AND THEIR USES	14/207,753	3/13/2014	9,708,367	7/18/2017
Synergy Pharmaceuticals Inc.	AGONISTS OF GUANYLATE CYCLASE AND THEIR USES	15/622,526	6/14/2017		
Synergy Pharmaceuticals Inc.	FORMULATIONS AND METHODS FOR TREATING ULCERATIVE COLITIS	PCT/US2017/013017	1/11/2017		
Synergy Pharmaceuticals Inc.	COMPOSITIONS AND METHOD FOR THE TREATMENT AND DETECTION OF COLON CANCER	PCT/US2016/062902	11/18/2016		
Synergy Pharmaceuticals Inc.	AGONISTS OF GUANYLATE CYCLASE USEFUL FOR THE TREATMENT OF OPIOID INDUCED DYSFUNCTIONS	15/026,563	10/10/2014		

Owner	Title/Mark	Application No.	Application Date	Registration No.	Registration Date
Synergy Pharmaceuticals Inc.	AGONISTS OF GUANYLATE CYCLASE USEFUL FOR THE TREATMENT OF OPIOID INDUCED DYSFUNCTIONS	14/944,499	11/18/2015		
Synergy Pharmaceuticals Inc.	ULTRA-PURE AGONISTS OF GUANYLATE CYCLASE C, METHOD OF MAKING AND USING SAME	14/896,019	6/5/2014		
Synergy Pharmaceuticals Inc.	SUSTAINED AND IMMEDIATE RELEASE FORMULATIONS OF GUANYLATE				
Synergy Pharmaceuticals Inc.	AGONISTS OF GUANYLATE CYCLASE USEFUL FOR THE TREATMENT OF GASTROINTESTINAL DISORDERS, INFLAMMATION, CANCER AND OTHER DISORDERS	15/184,574	6/16/2016		

**Schedule B**  
**to Patent and Trademark Security Agreement**

## TRADEMARKS AND TRADEMARK APPLICATIONS

<b>Owner</b>	<b>Trademark</b>	<b>Registration Number (if registered) Serial Number (if applied for only)</b>	<b>Registration Date (if Registered) or Filing Date (if applied for only)</b>
Synergy Pharmaceuticals Inc.	<b>KOMFIENCE</b>	Serial Number: 87167674	9/12/2016
Synergy Pharmaceuticals Inc.	<b>POOP TROOP</b>	Serial Number: 87532128	7/18/2017
Synergy Pharmaceuticals Inc.	<b>SYNERGY PHARMACEUTICALS</b>	Registration Number: 5073973	11/1/2016
Synergy Pharmaceuticals Inc.	<b>TRULANCE</b>	Registration Number: 5242709	7/11/2017
Synergy Pharmaceuticals Inc.	TRULANCE and Design ***** <b>Trulance</b>	Serial Number: 87392678	3/30/2017