# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5157668

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST

### **CONVEYING PARTY DATA**

Name	Execution Date
CARIS SCIENCE, INC.	09/21/2018
CARIS MPI, INC.	09/21/2018

### **RECEIVING PARTY DATA**

Name:	TPG SPECIALTY LENDING, INC.
Street Address:	888 7TH AVE
Internal Address:	30TH FLOOR
City:	NEW YORK
State/Country:	NEW YORK
Postal Code:	10106

### **PROPERTY NUMBERS Total: 77**

Patent Number:         8700335           Patent Number:         8831890           Patent Number:         8914239           Patent Number:         8880350           Patent Number:         9383365           Patent Number:         8768629           Patent Number:         9053224           Patent Number:         9092392           Patent Number:         9064045           Patent Number:         9058418           Patent Number:         9322067           Patent Number:         9389234           Application Number:         15093634           Application Number:         15093653           Application Number:         15093668	Property Type	Number
Patent Number:       8914239         Patent Number:       8880350         Patent Number:       9383365         Patent Number:       9372193         Patent Number:       8768629         Patent Number:       9053224         Patent Number:       9092392         Patent Number:       9058418         Patent Number:       9292660         Patent Number:       9322067         Patent Number:       9389234         Application Number:       15093634         Application Number:       15093653	Patent Number:	8700335
Patent Number:       8880350         Patent Number:       9383365         Patent Number:       9372193         Patent Number:       8768629         Patent Number:       9053224         Patent Number:       9092392         Patent Number:       9064045         Patent Number:       9058418         Patent Number:       9322067         Patent Number:       9389234         Application Number:       14687831         Application Number:       15093634         Application Number:       15093653	Patent Number:	8831890
Patent Number:         9383365           Patent Number:         9372193           Patent Number:         8768629           Patent Number:         9053224           Patent Number:         9092392           Patent Number:         9064045           Patent Number:         9058418           Patent Number:         9292660           Patent Number:         9322067           Patent Number:         9389234           Application Number:         14687831           Application Number:         15093634           Application Number:         15093653	Patent Number:	8914239
Patent Number:       9372193         Patent Number:       8768629         Patent Number:       9053224         Patent Number:       9092392         Patent Number:       9064045         Patent Number:       9058418         Patent Number:       9292660         Patent Number:       9322067         Patent Number:       9389234         Application Number:       14687831         Application Number:       15093634         Application Number:       15093653	Patent Number:	8880350
Patent Number:       8768629         Patent Number:       9053224         Patent Number:       9092392         Patent Number:       9064045         Patent Number:       9058418         Patent Number:       9292660         Patent Number:       9322067         Patent Number:       9389234         Application Number:       14687831         Application Number:       15093634         Application Number:       15093653	Patent Number:	9383365
Patent Number:       9053224         Patent Number:       9092392         Patent Number:       9064045         Patent Number:       9058418         Patent Number:       9292660         Patent Number:       9322067         Patent Number:       9389234         Application Number:       14687831         Application Number:       15093634         Application Number:       15093653	Patent Number:	9372193
Patent Number:       9092392         Patent Number:       9064045         Patent Number:       9058418         Patent Number:       9292660         Patent Number:       9322067         Patent Number:       9389234         Application Number:       14687831         Application Number:       15093634         Application Number:       15093653	Patent Number:	8768629
Patent Number:       9064045         Patent Number:       9058418         Patent Number:       9292660         Patent Number:       9322067         Patent Number:       9389234         Application Number:       14687831         Application Number:       15093634         Application Number:       15093653	Patent Number:	9053224
Patent Number:       9058418         Patent Number:       9292660         Patent Number:       9322067         Patent Number:       9389234         Application Number:       14687831         Application Number:       15093634         Application Number:       15093653	Patent Number:	9092392
Patent Number:         9292660           Patent Number:         9322067           Patent Number:         9389234           Application Number:         14687831           Application Number:         15093634           Application Number:         15093653	Patent Number:	9064045
Patent Number:         9322067           Patent Number:         9389234           Application Number:         14687831           Application Number:         15093634           Application Number:         15093653	Patent Number:	9058418
Patent Number: 9389234  Application Number: 14687831  Application Number: 15093634  Application Number: 15093653	Patent Number:	9292660
Application Number: 14687831 Application Number: 15093634 Application Number: 15093653	Patent Number:	9322067
Application Number: 15093634 Application Number: 15093653	Patent Number:	9389234
Application Number: 15093653	Application Number:	14687831
	Application Number:	15093634
Application Number: 15093668	Application Number:	15093653
Application Humber.	Application Number:	15093668

PATENT REEL: 047142 FRAME: 0780

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Property Type	Number
Application Number:	15094434
Application Number:	15094457
Application Number:	15094470
Application Number:	15094486
Application Number:	15094507
Application Number:	15094520
Application Number:	15099422
Application Number:	15099442
Application Number:	15099454
Application Number:	15099466
Application Number:	15099512
Application Number:	15099517
Application Number:	15099530
Application Number:	15192792
Application Number:	15494018
Application Number:	15294493
Application Number:	15115617
Application Number:	15762932
Application Number:	15555378
Application Number:	62622679
Application Number:	62631381
Application Number:	62682444
Application Number:	12524462
Application Number:	12711499
Application Number:	14477907
Application Number:	12739087
Application Number:	15381668
Application Number:	14438172
Application Number:	15913772
Application Number:	14652728
Application Number:	15913415
Application Number:	14915249
Application Number:	15528417
Application Number:	15258962
Application Number:	15871313
Application Number:	15669782
Application Number:	15738564
Application Number:	62595954

Property Type	Number
Application Number:	15745407
Application Number:	15557010
Application Number:	62559238
Application Number:	62561145
Application Number:	62640503
Application Number:	62665361
Application Number:	62700696
Application Number:	62571188
Application Number:	62650522
Application Number:	62682018
Application Number:	62725876
Application Number:	62653445
Application Number:	12591226
Application Number:	12609847
Application Number:	12963468
Application Number:	13009285
Application Number:	13009393
Application Number:	13581795
Application Number:	13639756
Application Number:	15905247
Application Number:	15905285

### **CORRESPONDENCE DATA**

Fax Number:

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.

Email: JLDereka@mintz.com
Correspondent Name: JENNIFER DEREKA
Address Line 1: 666 THIRD AVENUE

Address Line 2: MINTZ LEVIN

Address Line 4: NEW YORK, NEW YORK 10017

ATTORNEY DOCKET NUMBER:	048697-917
NAME OF SUBMITTER:	ROBERT SWEENEY
SIGNATURE:	/robert sweeney/
DATE SIGNED:	09/25/2018

### **Total Attachments: 11**

source=23 - Patent Security Agreement [Executed]#page1.tif source=23 - Patent Security Agreement [Executed]#page2.tif source=23 - Patent Security Agreement [Executed]#page3.tif source=23 - Patent Security Agreement [Executed]#page4.tif

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source=23 - Patent Security Agreement [Executed]#page11.tif	

### PATENT SECURITY AGREEMENT

This PATENT SECURITY AGREEMENT (this "Agreement"), dated as of September 21, 2018 is entered into by and among CARIS SCIENCE, INC., a Texas corporation ("CSI") and CARIS MPI, INC., a Texas corporation (together with CSI, the "Grantors") and TPG SPECIALTY LENDING, INC. (the "Assignee"), as Administrative Agent pursuant to (i) that certain Pledge and Security Agreement, dated as of the date hereof, among the Assignee, the Grantor and the other Grantors party thereto (as amended, restated, supplemented or otherwise modified from time to time, the "Security Agreement"), and (ii) that certain Financing Agreement, dated as of the date hereof (as amended, restated, supplemented or otherwise modified from time to time, the "Financing Agreement"), between, among others, CSI, certain of the Grantors' affiliates, the Assignee, and certain Lenders party thereto.

Capitalized terms not otherwise defined herein have the respective meanings ascribed to them in the Security Agreement or the Financing Agreement, as applicable. For purposes of this Agreement, "Patents" shall mean all of the following now owned or hereafter acquired by each Grantor: (a) all United States and foreign patents and certificates of invention, or similar industrial property rights, and applications for any of the foregoing, including, without limitation, the applications and registrations listed on Schedule A hereto and (b) with respect to any and all of the foregoing: (i) all reissues, divisions, continuations, continuations-in-part, extensions, renewals, and reexaminations thereof, (ii) all rights corresponding thereto throughout the world, (iii) all inventions and improvements described therein, (iv) all rights to sue for past, present and future infringements thereof, (v) all licenses, claims, damages, and proceeds of suit arising therefrom, and (vi) all Proceeds of the foregoing, including, without limitation, licenses, royalties, income, payments, claims, damages, and proceeds of suit.

WHEREAS, pursuant to the Security Agreement, each Grantor has granted in favor of the Assignee a security interest in certain Collateral of such Grantor, including such Grantor's Patents.

NOW, THEREFORE, in consideration of the foregoing and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, each Grantor and the Assignee hereby agree as follows:

### 1. Grant of Security Interest

- (a) Subject to the terms and conditions of the Security Agreement, to evidence further the security interest granted by such Grantor to the Assignee pursuant to the Security Agreement, as collateral security for the prompt and complete payment or performance in full when due, whether at stated maturity, by required prepayment, declaration, acceleration, demand or otherwise, of such Grantor's Secured Obligations, such Grantor hereby grants to the Assignee a security interest in and continuing Lien on all of such Grantor's right, title and interest in, to and under the Patents, whether now owned or existing or hereafter acquired or arising and wherever located.
- (b) Notwithstanding anything to the contrary contained in clause (a), the security interest created by this Agreement shall not extend to any Excluded Assets.

(c) The security interest granted hereby is granted concurrently and in conjunction with the security interest granted to the Assignee under the Security Agreement. In the event that any of the provisions of this Agreement are in conflict with the Security Agreement, the provisions of the Security Agreement shall govern. This Agreement shall be coterminous with the term of the Security Agreement.

### 2. <u>Modifications</u>

This Agreement or any provision hereof may not be changed, waived, or terminated except in accordance with the amendment provisions of the Financing Agreement.

# 3. <u>Applicable Law</u>

THIS AGREEMENT AND THE RIGHTS AND OBLIGATIONS OF THE PARTIES HEREUNDER SHALL BE GOVERNED BY, AND SHALL BE CONSTRUED AND INTERPRETED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK.

### 4. Counterparts

This Agreement may be executed by one or more of the parties to this Agreement on any number of separate counterparts (including by telecopy), and all of said counterparts taken together shall be deemed to constitute one and the same instrument.

1653797.02-NYCSR03A - MSW

## ASSIGNEE:

TPG SPECIALTY LENDING, INC.,

as Administrative Agent

Manager & Seast St.

Name: Robert Staning Title: Projection

Address of Assignee:

866 7" Armue, 35" Abor 864 7014, NY 101010

[Signature Page to Patent Security Agreement]

### **GRANTORS:**

CARIS SCIENCE, INC.

Ву:

Name: Russ Farr

Title: Secretary and Treasurer

Address of Grantor:

750 West John Carpenter Freeway, Suite 800

Irving, Texas 75039

CARIS MPI, INC.

By:

Name: Russ Farr

Title: Secretary and Treasurer

Address of Grantor:

750 West John Carpenter Freeway, Suite 800

Irving, Texas 75039

REEL: 047142 FRAME: 0787

SCHEDULE A TO PATENT SECURITY AGREEMENT

# Schedule A to PATENT SECURITY AGREEMENT

U.S. Registered Patents

DETERMINING INDIVIDUALIZED MEDICAL INTERVENTION FOR A DISEASE STATE  Caris MPI, Inc.  SYSTEM AND METHOD FOR DETERMINING INDIVIDUALIZED MEDICAL INTERVENTION FOR A DISEASE STATE  SYSTEM AND METHOD FOR DETERMINING INDIVIDUALIZED METHOD FOR DETERMINING INDIVIDUALIZED METHOD FOR DETERMINING INDIVIDUALIZED MEDICAL INTERVENTION FOR A DISEASE STATE  DISEASE STATE	Grantor Caris MPI, Inc.	Title SYSTEM AND METHOD FOR	Application Number 11/750,721	Filing Date 5/18/2007	Status Issued	Patent Number US 8,700,335
SYSTEM AND  METHOD FOR  DETERMINING INDIVIDUALIZED  MEDICAL INTERVENTION FOR A DISEASE STATE  SYSTEM AND METHOD FOR DETERMINING INDIVIDUALIZED MEDICAL INTERVENTION FOR A DISEASE STATE		METHOD FOR DETERMINING INDIVIDUALIZED MEDICAL INTERVENTION FOR A DISEASE STATE				
INTERVENTION FOR A DISEASE STATE SYSTEM AND METHOD FOR DETERMINING INDIVIDUALIZED MEDICAL INTERVENTION FOR A DISEASE STATE	Caris MPI, Inc.	SYSTEM AND METHOD FOR DETERMINING INDIVIDUALIZED MEDICAL	14052503	10/11/2013	Issu	ued
SYSTEM AND  METHOD FOR  DETERMINING INDIVIDUALIZED  MEDICAL INTERVENTION FOR A DISEASE STATE		INTERVENTION FOR A DISEASE STATE				
INDIVIDUALIZED  MEDICAL  INTERVENTION FOR A  DISFASE STATE	Caris MPI, Inc.	SYSTEM AND METHOD FOR DETERMINING	14143959	12/30/2013	Issi	ued
		INDIVIDUALIZED MEDICAL INTERVENTION FOR A DISEASE STATE				

1/31/2014 Issued US 9,880,350  8/29/2014 Issued US 9,383,365  8/29/2014 Issued US 9,372,193  8/29/2010 Issued US 9,372,193  2/12/2010 Issued US 9,053,224  2/7/2014 Issued US 9,092,392	Grantor	Title	Application Number	Filing Date	Status	Patent Number	Registration Date
METHOD FOR A   DETERMINING   NDIVIDUALIZED   MEDICAL   NATERVENTION FOR A DISEASE STATE   SYSTEM AND   14473871   8/29/2014   Issued   US 9,383,365   METHOD FOR A DISEASE STATE   NTERVENTION FOR A DISEASE STATE   NTERVENTION FOR A DISEASE STATE   SYSTEM AND   14473881   8/29/2014   Issued   US 9,372,193   MEDICAL   NTERVENTION FOR A DISEASE STATE   NDIVIDUALIZED   MEDICAL   NTERVENTION FOR A DISEASE STATE   NOLECULAR   12/658,770   2/12/2010   Issued   US 9,372,193   MOLECULAR   12/658,770   2/12/2014   Issued   US 9,093,224   PROFILING FOR   NOLECULAR   14175728   2/7/2014   Issued   US 9,093,224   PROFILING FOR   CANCER   14175781   2/7/2014   Issued   US 9,093,292   PROFILING FOR   CANCER   14175781   2/7/2014   Issued   US 9,092,392   DETERMINING   DETERMI	Caris MPI, Inc.	SYSTEM AND	14170466	1/31/2014	Issued	US 8,880,350	11/4/2014
INDIVIDUALIZED   MEDICAL   MEDICAL   MEDICAL   MEDICAL   MEDICAL   MEDICAL   METREVENTION FOR A   DISEASE STATE   METHOD FOR METHOD FOR DETERMINING   MEDICAL   MOLECULAR   MOLECULAR   12/658,770   2/12/2010   Issued   US 9,372,193   MOLECULAR   MOLECUL		DETERMINING					
MEDICAL   INTERVENTION FOR A   DISEASE STATE   14473871   8/29/2014   Issued   US 9,383,365   METHOD FOR METHOD FOR A   INDIVIDUALIZED   INTERVENTION FOR A   DISEASE STATE   SYSTEM AND   MEDICAL   INTERVENTION FOR A   DISEASE STATE   SYSTEM AND   METHOD FOR MEDICAL   INTERVENTION FOR A   DISEASE STATE   MOLECULAR   INTERVENTION FOR A   DISEASE STATE   INTERVENTION FOR A   DISEASE STATE   INTERVENTION FOR A   INTERVENTION FO		INDIVIDUALIZED					
INTERVENTION FOR A DISEASE STATE		MEDICAL					
SYSTEM AND   14473871   8/29/2014   Issued   US 9,383,365     METHOD FOR   DETERMINING   INDIVIDUALIZED   MEDICAL   INTERVENTION FOR A     DISEASE STATE   SYSTEM AND   14473881   8/29/2014   Issued   US 9,372,193     METHOD FOR   DETERMINING   INDIVIDUALIZED   MEDICAL   INTERVENTION FOR A     DISEASE STATE   DISEASE STATE   INTERVENTION FOR A     DISEASE STATE   DISEASE STATE   INTERVENTION FOR A     DISEASE STATE   DISEASE STATE   12/658,770   2/12/2010   Issued   US 9,072,193     MOLECULAR   14175728   2/7/2014   Issued   US 9,053,224     PROFILING FOR   CANCER   14175781   2/7/2014   Issued   US 9,092,392     PROFILING FOR   CANCER   14175781   2/7/2014   Issued   US 9,092,392     PROFILING FOR   14175781   2/7/2014   Issued   US 9,092,392     PROFILI		INTERVENTION FOR A					
METHOD FOR   DETERMINING   NDIVIDUALIZED   MEDICAL   INTERVENTION FOR A   DISEASE STATIE   SYSTEM AND   SYSTEM AND   SYSTEM AND   STERMINING   INTERVENTION FOR A   DISEASE STATE   INTERVENTION FOR A   DISEASE STATE   INTERVENTION FOR A   DISEASE STATE   DISEASE STATE   DISEASE STATE   STERMINING   STE	Caris MPI, Inc.	SYSTEM AND	14473871	8/29/2014	Issued	US 9,383,365	7/5/2016
DETERMINING   INDIVIDUALIZED   MEDICAL   INTERVENTION FOR A   DISEASE STATE   14473881   8/29/2014   Issued   US 9,372,193		METHOD FOR					
MEDICAL  MEDICAL  MEDICAL  INTERVENTION FOR A  DISEASE STATE  SYSTEM AND  METHOD FOR  DETERMINING  INDIVIDUALIZED  MEDICAL  INTERVENTION FOR A  DISEASE STATE  MOLECULAR  PROFILING OF  TUMORS  CANCER  MOLECULAR  14175728  14175728  14175781  277/2014  Issued  US 9,372,193		DETERMINING					
INTERVENTION FOR A   DISEASE STATE   DISEASE STATE   SYSTEM AND   14473881   8/29/2014   Issued   US 9,372,193     METHOD FOR		MEDICAL					
SYSTEM AND METHOD FOR METHOD FOR DETERMINING INDIVIDUALIZED MEDICAL INTERVENTION FOR A DISEASE STATE  MOLECULAR PROFILING OF TUMORS  MOLECULAR PROFILING FOR CANCER		INTERVENTION FOR A DISEASE STATE					
METHOD FOR   DETERMINING   DETERMINING   NDIVIDUALIZED   MEDICAL   INTERVENTION FOR A   DISEASE STATE   12/658,770   2/12/2010   Issued   US 8,768,629   PROFILING OF   TUMORS   14175728   2/7/2014   Issued   US 9,053,224   PROFILING FOR   CANCER   14175781   2/7/2014   Issued   US 9,092,392   PROFILING FOR   CANCER   14175781   2/7/2014   Issued   US 9,092,392   DETERMINING FOR   CANCER   14175781   2/7/2014   Issued   US 9,092,392   DETERMINING FOR   CANCER   14175781   2/7/2014   Issued   US 9,092,392   DETERMINING FOR   DET	Caris MPI, Inc.	SYSTEM AND	14473881	8/29/2014	Issued	US 9,372,193	6/21/2016
INDIVIDUALIZED   MEDICAL   MEDICAL   INTERVENTION FOR A   DISEASE STATE   12/658,770   2/12/2010   Issued   US 8,768,629   PROFILING OF   TUMORS   14175728   2/7/2014   Issued   US 9,053,224   PROFILING FOR   CANCER   14175781   2/7/2014   Issued   US 9,092,392   CANCER   14175781   2/7/2014   Issued   US 9,092,392		METHOD FOR DETERMINING					
MEDICAL INTERVENTION FOR A DISEASE STATE         MEDICAL INTERVENTION FOR A DISEASE STATE         MEDICAL		INDIVIDUALIZED					
INTERVENTION FOR A   DISEASE STATE   DISEASE		MEDICAL					
MOLECULAR PROFILING OF TUMORS       12/658,770       2/12/2010       Issued       US 8,768,629          MOLECULAR PROFILING FOR CANCER       14175728       2/7/2014       Issued       US 9,053,224          MOLECULAR PROFILING FOR CANCER       14175781       2/7/2014       Issued       US 9,092,392          PROFILING FOR CANCER       14175781       2/7/2014       Issued       US 9,092,392		INTERVENTION FOR A DISEASE STATE					
PROFILING OF TUMORS         PROFILING OF TUMORS         Identification         <	Caris MPI, Inc.	MOLECULAR	12/658,770	2/12/2010	Issued	US 8,768,629	7/1/2014
. MOLECULAR 14175728 2/7/2014 Issued US 9,053,224 PROFILING FOR CANCER 14175781 2/7/2014 Issued US 9,092,392 PROFILING FOR CANCER 14175781 2/7/2014 Issued US 9,092,392 CANCER		PROFILING OF					
PROFILING FOR CANCER  MOLECULAR PROFILING FOR CANCER  14175781 2/7/2014 Issued US 9,092,392 CANCER	Caris MPI, Inc.	MOLECULAR	14175728	2/7/2014	Issued	US 9,053,224	6/9/2015
CANCER 14175781 2/7/2014 Issued US 9,092,392 PROFILING FOR CANCER		PROFILING FOR					
. MOLECULAR 14175781 2/7/2014 Issued US 9,092,392 PROFILING FOR CANCER		CANCER					
PROFILING FOR  CANCER	Caris MPI, Inc.	MOLECULAR	14175781	2/7/2014	Issued	US 9,092,392	7/28/2015
CANCER		PROFILING FOR					
		CANCER					

Grantor	Title	Application Number	Filing Date	Status	Patent Number	Registration Date
Caris MPI, Inc.	MOLECULAR	14175800	2/7/2014	Issued	US 9,064,045	6/3/2015
	PROFILING FOR					
Caris MPI, Inc.	MOLECULAR	14187008	2/21/2014	Issued	US 9.058.418	6/16/2015
	PROFILING OF					
	TUMORS					
Caris MPI, Inc.	MOLECULAR	14187015	2/21/2014	Issued	US 9,292,660	3/22/2016
	PROFILING OF					
	TUMORS					
Caris MPI, Inc.	MOLECULAR	14249261	4/9/2014	Issued	US 9,322,067	4/26/2016
	PROFILING OF					
	TUMORS					
Caris MPI, Inc.	MOLECULAR	14551364	11/24/2014	Issued	US 9,389,234	7/12/2016
	PROFILING OF					
	TUMORS					
Caris MPI, Inc.	MOLECULAR	14687831	4/15/2015	Pending		
	PROFILING OF					
	TUMORS					
Caris MPI, Inc.	MOLECULAR	15093634	4/7/2016	Pending		
	PROFILING OF					
	TUMORS					
Caris MPI, Inc.	MOLECULAR	15093653	4/7/2016	Pending		
	PROFILING OF					
	TUMORS					
Caris MPI, Inc.	MOLECULAR	15093668	4/7/2016	Pending		
	PROFILING OF					
	TUMORS					
Caris MPI, Inc.	MOLECULAR	15094434	4/8/2016	Pending		
	PROFILING OF					
	TUMORS					

Grantor	Title	Application Number	Filing Date	Status	Patent Number	Registration Date
Caris MPI, Inc.	MOLECULAR	15094457	4/8/2016	Pending		,
	PROFILING OF TUMORS					
Caris MPI, Inc.	MOLECULAR	15094470	4/8/2016	Pending		
	TUMORS					
Caris MPI, Inc.	MOLECULAR	15094486	4/8/2016	Pending		
	PROFILING OF					
	TUMORS					
Caris MPI, Inc.	MOLECULAR PROFILING OF	15094507	4/8/2016	Pending		
	TUMORS					
Caris MPI, Inc.	MOLECULAR	15094520	4/8/2016	Pending		
	TUMORS					
Caris MPI, Inc.	MOLECULAR	15099422	4/14/2016	Pending		
	TUMORS					
Caris MPI, Inc.	MOLECULAR	15099442	4/14/2016	Pending		
	TUMORS					
Caris MPI, Inc.	MOLECULAR	15099454	4/14/2016	Pending		
	PROFILING OF TUMORS					
Caris MPI, Inc.	MOLECULAR PROFILING OF	15099466	4/14/2016	Pending		
	TUMORS					
Caris MPI, Inc.	MOLECULAR PROFILING OF	15099512	4/14/2016	Pending		
	TUMORS					

Grantor	Title	Application Number	Filing Date	Status	Patent Number	Registration Date
Caris MPI, Inc.	MOLECULAR	15099517	4/14/2016	Pending		
	TUMORS					
Caris MPI, Inc.	MOLECULAR	08566051	4/14/2016	Pending		
	TUMORS					
Caris MPI, Inc.	MOLECULAR	15192792	6/24/2016	Pending		
	PROFILING OF			,		
	TUMORS					
Caris MPI, Inc.	MOLECULAR PROFILING OF	15494018	4/21/2017	Pending		
	TUMORS					
Caris MPI, Inc.	MOLECULAR	15294493	10/14/2016	Pending		
	CANCER					
Caris MPI, Inc.	MOLECULAR	15115617	7/29/2016	Pending		
	PROFILING OF					
	IMMUNE					
	MODULATORS					
Caris Science, Inc.	METHOD,	15762932	3/23/2018	Pending		
	APPARATUS, AND COMPUTER PROGRAM					
	PRODUCT FOR					
	ANALYZING BIOLOGICAL DATA					
Caris MPI, Inc.	MOLECULAR	15555378	9/1/2017	Pending		
	PROFILING FOR					
Caris MPI, Inc.	TUMOR MUTATION	62622679	1/26/2018	Pending		
	PROFILING					

Grantor	Title	Application Number	Filing Date	Status	Patent Number	Registration Date
Caris MPI, Inc.	TUMOR MUTATION PROFILING	62631381	2/15/2018	Pending		
Caris MPI, Inc.	MOLECULAR PROFILING	62682444	6/8/2018	Pending		
Caris Science, Inc.		12/524,462	7/25/2008	Issued	8,216,784	7/10/2012
Caris Science, Inc.		12/711,499	2/24/2010	Issued	8,637,254	1/28/2014
Caris Science, Inc.		14/477,907	10/10/2008	Issued	9758811	9/12/2017
Caris Science, Inc.		12/739,087	10/22/2008	Issued	US 9,315,804	4/19/2016
Caris Science, Inc.		15/381,668	12/16/2016	Pending		
Caris Science, Inc.		14438172	10/23/2013	Allowed	9,958,448	5/1/2018
Caris Science, Inc.		15913772	3/6/2018	Pending		
Caris Science, Inc.		14652728	6/16/2015	Allowed	9939443	4/10/2018
Caris Science, Inc.		15913415	3/6/2018	Pending		
Caris Science, Inc.		14915249	8/28/2014	Pending		
Caris Science, Inc.		15528417	11/23/2015	Pending		
Caris Science, Inc.		15258962	9/7/2016	Allowed	9910045	3/6/2018
Caris Science, Inc.		15871313	1/15/2018	Pending		
Caris Science, Inc.		15669782	10/10/2008	Pending		
Caris Science, Inc.		15738564	12/20/2017	Pending		
Caris Science, Inc.		62595954	12/7/2017	Pending		
Caris Science, Inc.		15745407	1/16/2018	Pending		
Caris Science, Inc.		15557010	9/8/2017	Pending		
Caris Science, Inc.		62559238	9/15/2017	Pending		
Caris Science, Inc.		62561145	9/20/2017	Pending		
Caris Science, Inc.		62640503	3/8/2018	Pending		
Caris Science, Inc.		62665361	5/1/2018	Pending		
Caris Science, Inc.		62700696	7/19/2018	Pending		
Caris Science, Inc.		62571188	10/11/2017	Pending		
Caris Science, Inc.		62650522	3/30/2018	Pending		
Caris Science, Inc.		62682018	6/7/2018	Pending		
Caris Science, Inc.		62725876	8/31/2018	Pending		

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Grantor	Title	Application Number	Filing Date	Status	Patent Number	Registration Date
Caris Science, Inc.		62653445	4/5/2018	Pending		
Caris Science, Inc.	Methods and systems of	12591226	11/12/2009	Issued	7897356	3/1/2011
	using exosomes for					
	determining phenotypes					
Caris Science, Inc.	Methods for assessing	12609847	10/30/2009	Issued	7888035	2/15/2011
	RNA patterns					
Caris Science, Inc.	Methods for assessing	12963468	12/8/2010	Issued	8192954	6/5/2012
	RNA patterns					
Caris Science, Inc.	Methods and systems of	13009285	1/19/2011	Issued	8211653	7/3/2012
	using exosomes for					
	determining phenotypes					
Caris Science, Inc.	METHODS AND	13009393	1/19/2011	Issued	8278059	10/2/2012
	SYSTEMS OF USING					
	EXOSOMES FOR					
	DETERMINING					
	PHENOTYPES					
Caris Science, Inc.	Biomarkers for	13581795	3/1/2011	Issued	9128101	9/8/2015
	theranostics					
Caris Science, Inc.	CIRCULATING	13639756	4/24/2013	Issued	9469876	10/18/2016
	BIOMARKERS FOR					
	METASTATIC					
	PROSTATE CANCER					
Caris Science, Inc.	APTAMERS AND USES	15905247	2/26/2018	Pending		
	THEREOF					
Caris Science, Inc.	COMPOSITIONS AND	15905285	2/26/2018	Pending		
	METHODS FOR					
	APTAMER SCREENING					