

## TRADEMARK ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

ETAS ID: TM504546

<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>
PAVmed Inc.		12/27/2018	Corporation: DELAWARE
<b>RECEIVING PARTY DATA</b>			
<b>Name:</b>	Alto Opportunity Master Fund, SPC - Segregated Master Portfolio B		
<b>Street Address:</b>	222 Broadway		
<b>Internal Address:</b>	c/o Ayrton Capital LLC, 19th Floor		
<b>City:</b>	New York		
<b>State/Country:</b>	NEW YORK		
<b>Postal Code:</b>	10038		
<b>Entity Type:</b>	Corporation: DELAWARE		
<b>PROPERTY NUMBERS Total: 9</b>			
<b>Property Type</b>	<b>Number</b>	<b>Word Mark</b>	
<b>Serial Number:</b>	86464855	PORTIO	
<b>Serial Number:</b>	86603808	PAVMED	
<b>Serial Number:</b>	86603802	PAVILION	
<b>Serial Number:</b>	86603804	PAVILION MEDICAL	
<b>Serial Number:</b>	86603807	PAVMED	
<b>Serial Number:</b>	86603810	PPPP	
<b>Serial Number:</b>	86641166	INNOVATING AT THE SPEED OF LIFE	
<b>Serial Number:</b>	87828085	CARPX	
<b>Serial Number:</b>	87828080	CARPEX	
<b>CORRESPONDENCE DATA</b>			
<b>Fax Number:</b>			
<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>Email:</b>	njpatentgroup@kelleydrye.com		
<b>Correspondent Name:</b>	Kelley Drye & Warren LLP		
<b>Address Line 1:</b>	One Jefferson Road		
<b>Address Line 4:</b>	Parsippany, NEW JERSEY 07054		
<b>NAME OF SUBMITTER:</b>	Michael J. Zinna		

OP \$240.00 86464855

<b>SIGNATURE:</b>	/Michael J. Zinna/
<b>DATE SIGNED:</b>	01/04/2019
<b>Total Attachments: 14</b> source=Fully Executed IP Security Agreement#page1.tif source=Fully Executed IP Security Agreement#page2.tif source=Fully Executed IP Security Agreement#page3.tif source=Fully Executed IP Security Agreement#page4.tif source=Fully Executed IP Security Agreement#page5.tif source=Fully Executed IP Security Agreement#page6.tif source=Fully Executed IP Security Agreement#page7.tif source=Fully Executed IP Security Agreement#page8.tif source=Fully Executed IP Security Agreement#page9.tif source=Fully Executed IP Security Agreement#page10.tif source=Fully Executed IP Security Agreement#page11.tif source=Fully Executed IP Security Agreement#page12.tif source=Fully Executed IP Security Agreement#page13.tif source=Fully Executed IP Security Agreement#page14.tif	

## INTELLECTUAL PROPERTY SECURITY AGREEMENT

This INTELLECTUAL PROPERTY SECURITY AGREEMENT (as amended, modified, supplemented, renewed, restated or replaced from time to time, this “**IP Security Agreement**”), dated December 27, 2018, is made by the Persons listed on the signature pages hereof (collectively, the “**Grantors**”) in favor of Alto Opportunity Master Fund, SPC - Segregated Master Portfolio B, in its capacity as collateral agent (the “**Collateral Agent**”) for the Noteholders. All capitalized terms not otherwise defined herein shall have the meanings respectively ascribed thereto in the Security Agreement (as defined below).

WHEREAS, PAVmed Inc., a Delaware corporation with offices located at One Grand Central Place, Suite 4600, New York, NY 10165 (the “**Company**”), and each party listed as a “Buyer” therein (collectively, the “**Buyers**”) are parties to that certain Securities Purchase Agreement, dated December 27, 2018, pursuant to which the Company shall be required to sell, and the Buyers shall purchase or have the right to purchase, the “Notes” (as defined therein) issued pursuant thereto (as such Notes may be amended, modified, supplemented, renewed, restated or replaced from time to time in accordance with the terms thereof, collectively, the “**Notes**”);

WHEREAS, it is a condition precedent to the purchase of the Notes under the Securities Purchase Agreement that each Grantor has executed and delivered that certain Security and Pledge Agreement, dated December 27, 2018, made by the Grantors to the Collateral Agent (as amended, modified, supplemented, renewed, restated or replaced from time to time, the “**Security Agreement**”); and

WHEREAS, under the terms of the Security Agreement, the Grantors have granted to the Collateral Agent, for the ratable benefit of the Collateral Agent and the Noteholders, a security interest in, among other property, certain intellectual property of the Grantors, and have agreed as a condition thereof to execute this IP Security Agreement for recording with the U.S. Patent and Trademark Office, the United States Copyright Office and other governmental authorities.

WHEREAS, the Grantors have determined that the execution, delivery and performance of this IP Security Agreement directly benefits, and is in the best interest of, the Grantors.

NOW, THEREFORE, in consideration of the premises and the agreements herein and in order to induce the Buyers to perform under the Securities Purchase Agreement, each Grantor agrees with the Collateral Agent, for the benefit of the Noteholders, as follows

SECTION 1. Grant of Security. Each Grantor hereby grants to the Collateral Agent for the ratable benefit of the Collateral Agent and the Noteholders a security interest in all of such Grantor’s right, title and interest in and to the following (the “**Collateral**”):

- (i) the Patents and Patent applications set forth in Schedule A hereto;

(ii) the Trademark and service mark registrations and applications set forth in Schedule B hereto (provided that no security interest shall be granted in United States intent-to-use trademark applications to the extent that, and solely during the period in which, the grant of a security interest therein would impair the validity or enforceability of such intent-to-use trademark applications under applicable federal law), together with the goodwill symbolized thereby;

(iii) all Copyrights, whether registered or unregistered, now owned or hereafter acquired by such Grantor, including, without limitation, the copyright registrations and applications and exclusive copyright licenses set forth in Schedule C hereto;

(iv) all reissues, divisions, continuations, continuations-in-part, extensions, renewals and reexaminations of any of the foregoing, all rights in the foregoing provided by international treaties or conventions, all rights corresponding thereto throughout the world and all other rights of any kind whatsoever of such Grantor accruing thereunder or pertaining thereto;

(v) any and all claims for damages and injunctive relief for past, present and future infringement, dilution, misappropriation, violation, misuse or breach with respect to any of the foregoing, with the right, but not the obligation, to sue for and collect, or otherwise recover, such damages; and

(vi) any and all proceeds of, collateral for, income, royalties and other payments now or hereafter due and payable with respect to, and supporting obligations relating to, any and all of the Collateral of or arising from any of the foregoing.

SECTION 2. Security for Obligations. The grant of a security interest in, the Collateral by each Grantor under this IP Security Agreement secures the payment of all Obligations of such Grantor now or hereafter existing under or in respect of the Notes and the Transaction Documents, whether direct or indirect, absolute or contingent, and whether for principal, reimbursement obligations, interest, premiums, penalties, fees, indemnifications, contract causes of action, costs, expenses or otherwise.

SECTION 3. Recordation. Each Grantor authorizes and requests that the Register of Copyrights, the Commissioner for Patents and the Commissioner for Trademarks and any other applicable government officer record this IP Security Agreement.

SECTION 4. Execution in Counterparts. This IP Security Agreement may be executed in any number of counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same agreement.

SECTION 5. Grants, Rights and Remedies. This IP Security Agreement has been entered into in conjunction with the provisions of the Security Agreement. Each Grantor does hereby acknowledge and confirm that the grant of the security interest hereunder to, and the rights and remedies of, the Collateral Agent with respect to the Collateral are more fully set forth in the

Security Agreement, the terms and provisions of which are incorporated herein by reference as if fully set forth herein.

SECTION 6. Governing Law; Jurisdiction; Jury Trial.

(i) All questions concerning the construction, validity, enforcement and interpretation of this Agreement shall be governed by the internal laws of the State of New York, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of New York or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of New York.

(ii) Each Party hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in The City of New York, Borough of Manhattan, for the adjudication of any dispute hereunder or in connection herewith or under any of the other Transaction Documents or with any transaction contemplated hereby or thereby, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim, defense or objection that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. Each party hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof to such party at the address for such notices to it under Section 9(f) of the Securities Purchase Agreement and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. Nothing contained herein shall be deemed or operate to preclude the Collateral Agent or the Noteholders from bringing suit or taking other legal action against any Grantor in any other jurisdiction to collect on a Grantor's obligations or to enforce a judgment or other court ruling in favor of the Collateral Agent or a Noteholder.

(iii) WAIVER OF JURY TRIAL, ETC. EACH PARTY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE TO, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR UNDER ANY OTHER TRANSACTION DOCUMENT OR IN CONNECTION WITH OR ARISING OUT OF THIS AGREEMENT, ANY OTHER TRANSACTION DOCUMENT OR ANY TRANSACTION CONTEMPLATED HEREBY OR THEREBY.

(iv) Each Party irrevocably and unconditionally waives any right it may have to claim or recover in any legal action, suit or proceeding referred to in this Section any special, exemplary, indirect, incidental, punitive or consequential damages.

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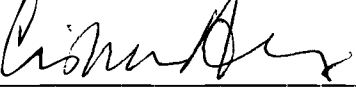
IN WITNESS WHEREOF, each Grantor has caused this Agreement to be duly executed and delivered by its officer thereunto duly authorized as of the date first above written.

PAVMED INC.

By 

Name: Lishan Aklog  
Title: Chief Executive Officer

LUCID DIAGNOSTICS, INC.

By 

Name: Lishan Aklog  
Title: Executive Chairman

Address for Notices:

One Grand Central Place  
Suite 4600  
New York, New York 10165

*[Signature Page to Intellectual Property Security Agreement]*

TRADEMARK  
REEL: 006517 FRAME: 0593

Schedule A

Patents

Grantor	PAVmed Code	Matter #	Country	Title	Application No. Application Date	Publication No. Publication	Patent No. Issue Date	Status
PAVmed Inc.	Port IO	010100/PRO	US	Long-Term Intravenous Infusion Ports	62/079,266 11/13/2014			Expired
PAVmed Inc.	Port IO	010101/US	US	Intravenous Infusion Ports	14/940,889 11/13/2015	2016-0136410 A1 5/19/2016		Pending
PAVmed Inc.	Port IO	010102/PCT	PCT	Long-Term Intravenous Infusion Ports	PCT/US15/060669 11/13/2015	WO 2016/077748 5/19/2016		Nationalized
PAVmed Inc.	Port IO	010103/AU	Australia	Intravenous Infusion Ports	2015346130 11/13/2015			Pending
PAVmed Inc.	Port IO	010104/CA	Canada	Intravenous Infusion Ports	2967759 11/13/2015			Pending

PAVmed Inc.	Port IO	010105/CN	China	Intraosseous Infusion Ports	201580061766.3 11/13/2015	106999646A 8/1/2017	Pending
PAVmed Inc.	Port IO	010106/EP	Europe	Intraosseous Infusion Ports	15859903.5 11/13/2015	3218026 9/20/2017	Pending
PAVmed Inc.	Port IO	010107/JP	Japan	Intraosseous Infusion Ports	2017-544850 11/13/2015	2018-500145 1/11/2018	Pending
PAVmed Inc.	Port IO	010108/US/DIV	US	Intraosseous Infusion Ports	15/964,292 4/27/2018	2018-0256869 9/13/2018	Pending
PAVmed Inc.	NextCath	010200/PRO	US	Self-Anchoring Catheters and Methods of Use	62/085,838 12/1/2014		Expired
PAVmed Inc.	NextCath	010201/US	US	Self-Anchoring Catheters and Methods of Use	14/956,141 12/1/2015	2016-0151608 A1 6/2/2016	Pending
PAVmed Inc.	NextCath	010202/PCT	PCT	Self-Anchoring Catheters and Methods of Use	PCT/US15/063221 12/1/2015	WO 2016/089894 6/9/2016	Nationalized
PAVmed Inc.	NextCath	010203/US	US	Self-Anchoring Catheters and Methods of Use	TBD		To be filed



PAVmed Inc.	NextCath	010204/AU	Australia	Self-Anchoring Catheters and Methods of Use	2015355062 12/1/2015			Pending
PAVmed Inc.	NextCath	010205/CA	Canada	Self-Anchoring Catheters and Methods of Use	2,969,448 12/1/2015			Pending
PAVmed Inc.	NextCath	010206/CN	China	Self-Anchoring Catheters and Methods of Use	201580065441.2 12/1/2015	107106813A 8/29/2017		Pending
PAVmed Inc.	NextCath	010207/EP	Europe	Self-Anchoring Catheters and Methods of Use	15865776.7 12/1/2015	3226955 10/11/2017		Pending
PAVmed Inc.	NextCath	010208/JP	Japan	Self-Anchoring Catheters and Methods of Use	2017-530180 12/1/2015			Pending
PAVmed Inc.	NextCath	010209/US/CON	US	Self-Anchoring Catheters and Methods of Use	TBD			To be filed
PAVmed Inc.	Carpx	010300/PRO	US	Systems and Methods for Percutaneous Division of Fibrous Structures	62/086,950 12/3/2014			Expired
PAVmed Inc.	Carpx	010301/US	US	Systems and Methods for Percutaneous Division of Fibrous Structures	14/958,003 12/3/2015	2016-015780 A1 6/9/2016		Pending


PAVmed Inc.	CarpX	010302/PCT	PCT	Systems and Methods for Percutaneous Division of Fibrous Structures	PCT/US15/063703	WO 2016/090122	6/9/2016	Nationalized
PAVmed Inc.	CarpX	010303/US	US	Enhanced CarpX	TBD			To be filed
PAVmed Inc.	CarpX	010304/AU	Australia	Systems and Methods for Percutaneous Division of Fibrous Structures	2015358424			Pending
PAVmed Inc.	CarpX	010305/CA	Canada	Systems and Methods for Percutaneous Division of Fibrous Structures	2,969,579			Pending
PAVmed Inc.	CarpX	010306/CN	China	Systems and Methods for Percutaneous Division of Fibrous Structures	201580072247.7	107106200A	8/29/2017	Pending
PAVmed Inc.	CarpX	010307/EP	Europe	Systems and Methods for Percutaneous Division of Fibrous Structures	15865054.9		3226783	Pending
PAVmed Inc.	CarpX	010308/JP	Japan	Systems and Methods for Percutaneous Division of Fibrous Structures	2017-530119		2018-501847	Pending
PAVmed Inc.	CarpX	010309-US/DIV	US	Systems and Methods for Fibrous Structures	15/964,531		2018-0242995	Pending
					4/27/2018		8/30/2018	

					Percutaneous Division of Fibrous Structures				
PAVmed Inc.	CarpX	010310/US/DIV	US	Systems and Methods for Percutaneous Division of Fibrous Structures	15/964,550 4/27/2018	2018-0271552 9/27/2018			Pending
PAVmed Inc.	Caldus	010400/PRO	US	Continuous Flow Balloon Catheter Systems and Methods of Use	62/131,214 3/10/2015				Expired
PAVmed Inc.	Caldus	010401/PRO	US	Continuous Flow Thermal Ablation Balloon Catheter Systems and Methods of Use	62/131,217 3/10/2015				Expired
PAVmed Inc.	Caldus	010403/US	US	Continuous Flow Balloon Catheter Systems and Methods of Use	15/067,148 3/10/2016	2016-0262823 A1 9/15/2016			Pending
PAVmed Inc.	Caldus	010404/PCT	PCT	Continuous Flow Balloon Catheter Systems and Methods of Use	PCT/US16/021804 3/10/2016	WO 2016/145214 9/15/2016			Nationalized
PAVmed Inc.	Caldus	010405/EP	EP	Continuous Flow Balloon Catheter Systems and Methods of Use	16762527.6 3/10/2016	3267955 1/17/2018			Pending

PAVmed Inc.	Caldus	010406/DIV1	US	Continuous Flow Balloon Catheter Systems and Methods of Use	15/923,140 3/16/2018	2018-0199983 7/19/2018		Pending
PAVmed Inc.	Caldus	010407/DIV2	US	Continuous Flow Balloon Catheter Systems and Methods of Use	15/923,224 3/16/2018	2018-0199984 7/19/2018		Pending
PAVmed Inc.	NextFlo	010501/US (previously Pavillon Holdings 010301)	US	System and Methods for Infusion of Fluids Using Stored Potential Energy and A Variable Flow Resistor	13/041,296 3/4/2011	2011-0251579 10/13/2011	8,622,976 1/7/2014	Granted
PAVmed Inc.	NextFlo	010504/EP (previously Pavillon Holdings 010304)	EP	System and Methods for Infusion of Fluids Using Stored Potential Energy and A Variable Flow Resistor	11751472.9 3/4/2011	2542297 1/9/2013		Pending
PAVmed Inc.	NextFlo	010505/EP/DIV	EP	System and Methods for Infusion of Fluids Using Stored Potential Energy and A Variable Flow Resistor	TBD			To be filed

PAVmed Inc.	NextFlo	010506/DIV (previously Pavilion Holdings 010306)	US	System and Methods for Infusion of Fluids Using Stored Potential Energy and A Variable Flow Resistor	14/094,046 12/2/2013	2014- 0083529 A1 3/27/2017	9,155,834 10/13/2015	Granted
PAVmed Inc.		010700/US	US	Deflected Needle for Delivery of Local Anesthetic to Vessel Sheath	TBD			To be filed
PAVmed Inc.	NextFlo	010800/US	US	Variable Flow Resistor	TBD			To be filed
PAVmed Inc.		010900/US	US	With Various Surgical	TBD			To be filed

**Schedule B**  
**Trademarks**

Grantor	PAVmed Code	Matter #	Country	Title	Application No. Application Date	Registration No. Issue Date	Status
PAVmed Inc.		030100/TM	US	PORTIO	86/464,855 11/25/2014		Abandoned
PAVmed Inc.		030200/TM	US	PAVMED	86/603,808 4/20/2015		Pending
PAVmed Inc.		030300/TM	US	PAVILLION	86/603,802 4/20/2015		Pending
PAVmed Inc.		030400/TM	US	PAVILLION MEDICAL	86/603,804 4/20/2015		Pending
PAVmed Inc.		030500/TM	US	PAVMED	86/603,807 4/20/2015		Pending
PAVmed Inc.		030600/TM	US	PAVmed	TBD		
PAVmed Inc.		030700/TM	US	PAVMED LOGO 	86/603,810 4/20/2015		Pending
PAVmed Inc.		030800/TM	US	INNOVATING AT THE SPEED OF LIFE	86/641,166 5/26/2015		Pending
PAVmed Inc.		030900/TM	US	CARPX	87/828,085 3/9/2018		Pending
PAVmed Inc.		030901/TM	EU	CARPX	17885979 4/10/2018	017885978 8/20/2018	Registered
PAVmed Inc.		030902/TM	UK	CARPX	UK00003302860 4/10/2018	UK00003302860 7/13/2018	Registered

PA Vmed Inc.		030903/TM	Brazil	CARPX	915801930 9/4/2018			Pending
PA Vmed Inc.		030904/TM	Japan	CARPX	2018-95208 7/25/2018			Pending
PA Vmed Inc.		030905/TM	Canada	CARPX	TBD			To be filed
PA Vmed Inc.		031000/TM	US	CARPEX	87/828,080 3/9/2018			Pending
Lucid Diagnostics Inc.	Transferred to Lucid Diagnostics	031100/TM	US	ESOCHECK	88/090,111 8/23/2018			Pending
Lucid Diagnostics Inc.	Transferred to Lucid Diagnostics	031101/TM	US	ESOCHEK	88/090,114 8/23/2018			Pending

Schedule C

Copyrights

None.