

Transcript of Troy L. Thornton, Volume 2
Conducted on February 19, 2026

1 (147 to 150)

147 1 UNITED STATES PATENT AND TRADEMARK OFFICE 2 BEFORE THE PATENT TRIAL AND APPEAL BOARD 3 4 IMPERATIVE CARE, INC.,) 5 Petitioner,) 6 VS.) Case No. IPR2025-01021 7 INARI MEDICAL, INC.,) IPR2025-01025 8 Patent Owner.) IPR2025-01264 9 -----) 10 11 12 13 14 15 16 VOLUME II 17 IN-PERSON VIDEOTAPED DEPOSITION OF 18 TROY L. THORNTON 19 THURSDAY, FEBRUARY 19, 2026 20 21 22 23 STENOGRAPHIC REPORTER: CHRISTA YAN, CSR NO. 14316, RPR 24 ----- 25	149 1 INDEX OF EXAMINATIONS 2 PAGE 3 BY MR. HAMILTON 151 4 5 6 --oOo-- 7 8 9 Witness's Changes or Corrections 183 10 Reporter's Certificate 184 11 12 13 14 15 --oOo-- 16 17 E X H I B I T S 18 EXHIBIT MARKED FOR IDENTIFICATION PAGE 19 No Exhibits Marked. 20 21 22 --oOo-- 23 24 25
148 1 PERSONAL APPEARANCES: 2 FOR PETITIONER: 3 KNOBBE MARTENS OLSON & BEAR LLP 4 BY: BRIAN BARNES, ATTORNEY-AT-LAW 5 333 Bush Street, 21st Floor 6 San Francisco, California 94104 7 (415) 954-4114 8 joshua.stowell@knobbe.com 9 10 11 12 FOR PATENT OWNER: 13 PERKINS COIE LLP 14 BY: JOSEPH HAMILTON, ATTORNEY-AT-LAW 15 1888 Century Park East, Suite 1700 16 Los Angeles, California 90067 17 (310) 788-3271 18 hamilton-ptab@perkinscoie.com 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 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1 THE VIDEOGRAPHER: Here begins Media Number 1 in
2 Part 2 of the videotaped deposition of Troy L. Thornton in
3 the matter of Imperative Care, Inc., versus Inari Medical,
4 Inc., PTAB in the United States Patent and Trademark
5 Office before the Patent Trial and Appeal Board. Case
6 Numbers IPR2025-01021 and 01025 and 01264.
7 Today's date is February 19, 2026. The time on
8 the video monitor is 9:04. The videographer today is
9 Philip Astor representing Planet Depos. This video
10 deposition is taking place at 333 Bush Street, San
11 Francisco, California.
12 Would counsel please voice identify themselves
13 and state whom they represent.
14 MR. HAMILTON: Again, this is Joe, Joseph Hamilton
15 from Perkins Coie representing Patent Owner.
16 MR. BARNES: This is Brian Barnes of Knobbe Martens,
17 and I represent the Petitioner, Imperative Care.
18 THE VIDEOGRAPHER: The court reporter today is Christa
19 Yan representing Planet Depos. The witness will now be
20 sworn.
21 TROY L. THORNTON,
22 the Witness, called on behalf of Patent Owner, being duly
23 sworn to state the truth, the whole truth, and nothing but
24 the truth, testified on oath as follows:
25 EXAMINATION

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1 BY MR. HAMILTON:
2 Q Good morning, Mr. Thornton. Thank you for coming
3 back.
4 Do you understand you're under oath?
5 A Yes.
6 Q Is there any reason you can't give your full,
7 complete, and truthful testimony today?
8 A No.
9 Q Are you on any medications or have any medical
10 conditions that might prevent you from giving your full,
11 complete, and truthful testimony today?
12 A No.
13 Q Did you communicate with anyone in any way
14 regarding the substance of these matters since yesterday
15 when the depo -- first day of the depo ended?
16 A No.
17 Q Have you reviewed any documents or materials
18 related to these matters since yesterday?
19 A Yes.
20 Q What did you review?
21 A I think a couple of the declarations in question
22 here.
23 Q Do you recall which declarations?
24 A I don't.
25 Q And why did you review those declarations?

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1 A To help prepare for the deposition.
2 Q Other than a couple of the declarations, did you
3 review any other documents?
4 A No.
5 Q And about how long did you spend reviewing those
6 couple of declarations?
7 A Maybe an hour.
8 Q Did your review of your declarations refresh your
9 recollection of any issue in these matters?
10 A I'm not sure.
11 Q Did you remember anything that you hadn't
12 remembered before reading those declarations last night?
13 A I don't think so.
14 Q Did you review the declarations for any specific
15 issues related to these IPRs?
16 A Not really.
17 Q What do you mean by not really?
18 A No.
19 Q Were there any issues you looked for in
20 particular in the declarations as you reviewed them since
21 our depo yesterday?
22 A I don't think so.
23 Q If a -- if something has a diameter of 5
24 millimeters, are you able to convert that to French size?
25 A Yes.

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1 Q And what's the equivalent French size of 5
2 millimeters diameter?
3 A 15.
4 Q If you could pick up the '580 patent. And just
5 for clarification, this patent is marked Exhibit 1001 in
6 IPR2025-01264. Did you review a declaration related to
7 this patent last night?
8 A I don't remember.
9 Q If you could turn to the second to last page, 43.
10 Specifically, Column 25, line 7. Do you see Claim 1?
11 A Yes.
12 Q Do you know what is meant by clot material within
13 the blood vessel?
14 A Yes.
15 Q And what does that phrase mean?
16 A I think it means the thrombus and the embolus
17 that we've been talking about that relate to these
18 patents.
19 Q You said thrombus and embolus. If the blood
20 vessel is a pulmonary blood vessel, is that a pulmonary
21 embolism?
22 A That's my understanding.
23 Q Does Claim 1 claim a method for intravascular
24 treatment of clot material within a blood vessel?
25 A That's what those lines 7, 8 read, yes.

155 1 Q And do you understand the method disclosed in 2 Claim 1? 3 A Yes. 4 Q To perform this method, what's the first step? 5 A Positioning a distal portion of an elongated 6 shaft proximate to the clot material within the blood 7 vessel. 8 Q What does that mean, proximate to the clot 9 material within the blood vessel? 10 A I think the term proximate means nearby. 11 Q And is the clot material within the blood vessel, 12 is that the clot material referred to in line 7, from 7 to 13 8? 14 A Yes. 15 Q Then what would be the next step in performing 16 this method? 17 A Precharging a vacuum in a pressure source. 18 Q What does precharging mean? 19 A Creating a vacuum. 20 Q What's the pre in precharging? 21 A I'm not sure. I think it just means to create a 22 vacuum. 23 Q Does the vacuum have to be created before 24 something else happens in this claim? 25 MR. BARNES: Object to the form.	157 1 opening a stopcock? 2 MR. BARNES: Object to the form. 3 THE WITNESS: Well, with regard to this patent, this 4 is how they disclose in the specification fluidly 5 connecting those components by opening the -- let's see 6 what term they use. 7 Looking for the name that they use for Item 310. 8 It appears to be a stopcock in the figures. Figures... 9 1A, 1B. 10 BY MR. HAMILTON: 11 Q And does that stopcock in the figures allow one 12 to fluidly connect the pressure source to the elongated 13 shaft? 14 A Yes. When the stopcock is open position, it 15 would connect those two components. 16 Q Is Claim 1 limited to a stopcock for fluidly 17 connecting the pressure source to the elongated shaft? 18 A Well, this is a method claim, so they're not 19 necessarily talking about the components. They're talking 20 about the method. 21 Q So does that mean Claim 1 is not limited to using 22 a stopcock for fluidly connecting the pressure source to 23 the elongated shaft? 24 A I'm just saying the specification discusses and 25 shows the stopcocks for that purpose.
156 1 THE WITNESS: Well, the method has a next step of 2 fluidly connecting the pressure source to the elongated 3 shaft, et cetera. So in a method claim, I believe that 4 shows the order. 5 BY MR. HAMILTON: 6 Q So you understand the vacuum must be precharged 7 before fluidly connecting the pressure source to the 8 elongated shaft; is that right? 9 A Yeah, I think as it says, precharging a vacuum in 10 a pressure source, the next step. 11 THE STENOGRAPHIC REPORTER: I'm sorry, you said fluid 12 lead? 13 THE WITNESS: Fluidly, I-y. 14 THE STENOGRAPHIC REPORTER: Fluidly, thank you. 15 THE WITNESS: Fluidly connecting the pressure source 16 to the elongated shaft to apply the precharged vacuum to 17 the elongated shaft to aspirate the first portion of the 18 clot material into the elongated shaft. 19 BY MR. HAMILTON: 20 Q What does that mean, apply the precharged vacuum 21 to the elongated shaft? 22 A Based on the specification, it means to open a 23 stopcock. 24 Q Is there any other way that you can think of to 25 apply the precharged vacuum to the elongated shaft besides	158 1 Q So is it fair to say the stopcock is one example 2 of a component capable of fluidly connecting the pressure 3 source to the elongated shaft? 4 A Sure. 5 Q What does fluidly connecting mean? 6 A In this case, it means connecting to components 7 or tubes that will allow fluid to transfer between the 8 two. 9 Q And by connecting, do you mean physically 10 connecting? 11 A I'm not sure how else it would be connected. 12 Q If you look in the next column, Claim 18, third 13 line, you see the term, Fluidly coupled? 14 A Yes. 15 Q Does that mean the same thing as fluidly 16 connected? 17 A I interpret them as the same thing, yes. 18 Q Is there any difference between fluidly connected 19 and fluidly coupled? 20 A Not that I'm aware of within these patents. I 21 think they use them somewhat interchangeably. 22 Q Going back to Claim 1, the next limitation -- 23 well, let me withdraw that. 24 So after fluidly connecting the pressure source 25 to the elongated shaft, what's the next thing that happens

159 1 to the method? 2 A Well, within that same segment, it says, To apply 3 a precharged vacuum to the elongated shaft to aspirate a 4 first portion of the clot material into the elongated 5 shaft. 6 Q And then after aspirating a first portion of the 7 clot material into the elongated shaft, what's the next 8 step? 9 A Unsealing an attachment member coupled to a 10 proximal portion of the elongated shaft. 11 Q What does that mean, Unsealing an attachment 12 member? 13 A In this patent, it means opening the hemostatic 14 valve. 15 Q And when you say it means opening the hemostatic 16 valve, you mean opening the hemostatic valve is one 17 example of unsealing the attachment member? 18 MR. BARNES: Objection; mischaracterizes testimony. 19 THE WITNESS: I interpret this to mean unsealing or 20 opening the valve. 21 BY MR. HAMILTON: 22 Q Okay. So unsealing an attachment member in this 23 method happens after aspirating a first portion of the 24 clot material, correct? 25 A Yes.	161 1 me, interventional device distally through the attachment 2 member means putting the interventional device through the 3 attachment member; is that right? 4 A You're inserting the device through the valve of 5 the proximal end of the first catheter that's in place. 6 Q And then do you see the next phrase, Engaging 7 the -- withdraw the question. 8 So after advancing an interventional device 9 distally through the attachment member and the elongated 10 shaft, what's the next step that's performed in this 11 method? 12 A And engaging the interventional device with a 13 second portion of the clot material remaining within the 14 blood vessel. 15 Q Does the method require advancing an 16 interventional device prior to engaging the interventional 17 device with a second portion of the clot material? 18 A Certainly, the user would be advancing the 19 interventional device through the attachment member as it 20 says, or hemostasis valve through the elongated shaft in 21 order to reach the distal end of the elongated shaft that 22 was in place. 23 Q And one would have to do that prior to engaging 24 the interventional device with a second portion of the 25 clot material as set forth in that claim, correct?
160 1 Q And then what's the next step? 2 A Advancing an interventional device distally 3 through the attachment member and the elongated shaft. 4 Q What does advancing mean in that sentence? 5 A Pushing forward. 6 Q And what is an interventional device in that 7 sentence? 8 A Well, in this patent, the first reference I see 9 to interventional device is on page 32 -- I'm sorry, line, 10 Column 3, line 51 where it says, The interventional device 11 can subsequently be withdrawn from the patient through the 12 guide catheter to move clot material captured by the 13 interventional device. 14 So I don't see any catheter based -- sorry, 15 patent-based definition of what they're calling an 16 interventional device. But my understanding is that it 17 could be basically any device that the physician would 18 want to use, choose to use, through the elongated shaft in 19 order to treat the clot material. 20 Q So then advancing an interventional device 21 distally through the attachment member, the attachment 22 member, that's -- would be a hemostasis valve; is that 23 right? 24 A That's my understanding in this patent. 25 Q And advancing an international device -- excuse	162 1 A Certainly, the user would have to have the 2 interventional device exit the first catheter in order to 3 engage the clot material. 4 Q And in order for the user to have the 5 interventional device exit the first catheter, requires 6 advancing an interventional device, correct? 7 A It says, Advancing an interventional device 8 distally through the attachment member and elongated 9 device, so yes. 10 Q Going up to line 16, do you see the phrase, 11 Attachment member coupled to a proximal portion -- sorry, 12 same column, Column 25, line 15. I apologize for not 13 being clear. 14 A Sorry. Line 15? 15 Q Yes -- sorry, 16. 16 A It reads, Unsealing an attachment member coupled 17 to a proximal portion of the elongated shaft. 18 Q What does coupled mean in that phrase? 19 A I would interpret it to mean attached to. 20 Q Would it have to be physically attached to? 21 A Is there an alternative? 22 Q So that means, yes, it would have to be 23 physically attached to; is that right? 24 A I can't think of another way to attach two 25 components together.

163 1 Q If you could go to Column 26, line 62, you see 2 Claim 30? 3 A Yes. 4 Q Do you understand what's claimed in Claim 30? 5 A Yes. 6 Q What does the phrase, Translating the 7 interventional device relative to the elongated shaft mean 8 in that claim? 9 A I think it can mean advancing or retracting the 10 interventional device, the inner device, relative to the 11 first catheter that was in place, the elongated shaft. 12 Q Does translating have a particular meaning in the 13 field of the '580 patent? 14 A I'm not sure if they use the word in the 15 specification. In my experience translating can mean 16 advancing and retracting, which is a pretty common thing 17 to do with -- when using catheters. 18 Q If you can go to Column 25, line 49. Do you see 19 Claim 10? 20 A Yes. 21 Q Do you understand what's recited in Claim 10? 22 A Yes. 23 Q Does the phrase, Wherein the blood vessel is a 24 pulmonary blood vessel in Claim 10 mean that the method 25 being treated is a pulmonary embolism?	165 1 Q Do you understand what's shown in Figures 29 and 2 30? 3 A Yes. 4 Q Do Figures 29 and 30 show a dual lumen catheter? 5 A Yes. As paragraph 119 says in another 6 embodiment, shown in Figures 29 and 30, the catheter is a 7 second lumen to maintain guidewire access to facilitate 8 readvancement or exchange of the catheters. 9 Q And do you understand why Figures 29 and 30 10 include a dual lumen as opposed to a single lumen? 11 A They're just providing an additional embodiment, 12 a different embodiment, wherein the same catheter can be 13 used to -- well, the guidewire lumen can be used to 14 facilitate exchanging devices without readvancement or 15 exchange of catheters, or recrossing the target anatomy. 16 THE STENOGRAPHIC REPORTER: You said guidewire lumen? 17 THE WITNESS: Guidewire is one word, yeah. 18 BY MR. HAMILTON: 19 Q What does recrossing the target anatomy mean? 20 A Well, as in most interventional procedures, once 21 you have a guidewire in place to guide the system being 22 advanced, you don't really want to lose guidewire position 23 and have to recross, readvance the guidewire or catheter 24 to the target again. It's just typical interventional 25 cardiology practice.
164 1 MR. BARNES: Object to the form. 2 THE WITNESS: That's my understanding, that it's a 3 pulmonary embolism is being treated. 4 BY MR. HAMILTON: 5 Q And just to be clear, I had said the method being 6 treated. I meant the clot being treated is a pulmonary 7 embolism. Is that correct? 8 MR. BARNES: Object to the form. 9 THE WITNESS: Well, Claim 1 talks about treatment of 10 clot material within a blood vessel. Claim 10 says the 11 blood vessel is a pulmonary blood vessel. So that would 12 imply pulmonary embolism is being -- is the method being 13 used starting with Claim 10. 14 BY MR. HAMILTON: 15 Q And by implied, do you mean that means it is a 16 pulmonary embolism that is being treated in the method of 17 Claim 10? 18 A That's my understanding. 19 Q All right. If you could go to the Garrison 20 reference. Turn to page 18. I'm going to ask a couple of 21 questions about Figures 29 and 30. If it's helpful, 22 paragraph 119, I believe, and 120. Excuse me, 119 relates 23 to those figures. Let me know when you're ready for a 24 question. 25 A Okay.	166 1 Q And why is it typical cardiology practice not to 2 recross or readvance the guidewire or catheter to the 3 target area again? 4 A I think just efficiency, good practice. 5 Q Any other reasons? 6 A Not that I can think of. 7 Q Are there any reasons when treating an embolism? 8 MR. BARNES: Object to the form. 9 BY MR. HAMILTON: 10 Q That it would be good practice not to recross the 11 target anatomy? 12 A Certainly, there's always a risk of dislodging 13 clot material. So I believe that's a typical technique 14 that physicians use if they're crossing or if they can 15 cross with a guidewire, to leave that guidewire in place. 16 Q And what's the consequence -- what are the 17 consequences of dislodging clot material? Why is that a 18 bad thing? 19 MR. BARNES: Object to the form. 20 THE WITNESS: Well, distal emboli is not a good thing. 21 Could go to other branches downstream. 22 BY MR. HAMILTON: 23 Q So could harm the patient; is that right? 24 A Sure. 25 Q Could that harm be severe?

167 1 A Possibly. 2 Q Could it kill a patient? 3 A I don't know. 4 Q Would the harm be different if one was treating a 5 cerebral embolism versus a pulmonary embolism? 6 MR. BARNES: Object to the form. Object to the form. 7 THE WITNESS: I don't know. I'm not a doctor. 8 BY MR. HAMILTON: 9 Q What about would the harm be different treating a 10 cerebral embolism versus treating a deep vein thrombosis? 11 MR. BARNES: Object to the form. 12 THE WITNESS: Yeah, I don't know. 13 BY MR. HAMILTON: 14 Q If you go to paragraph 120 of the Garrison 15 reference, so that's the next paragraph after the one you 16 were just looking at. Do you see the phrase, Can increase 17 in diameter? 18 A Yes. 19 Q Do you understand what that phrase means in that 20 sentence? 21 A It says, In some instances, it may be desirable 22 for the catheter to have a distal tip which can increase 23 in diameter after being positioned at a target treatment 24 site. For example, to facilitate removal of an occlusion 25 when an aspiration device is connected to the proximal	169 1 facilitating capture of occlusive material such as 2 thrombus. 3 BY MR. HAMILTON: 4 Q So does that mean it allows a smaller catheter to 5 remove a larger clot, is that what that means? 6 A It just says, To facilitate capture of occlusive 7 material. They specifically say though that the -- if it 8 expands -- but then expands the distal luminal area for 9 facilitating capture so it's larger lumen at the tip. 10 Q So does that mean it allows a smaller catheter to 11 remove a larger clot? 12 A It just says facilitate removal. Capturing 13 removal. 14 Q And what does facilitate removal, capture 15 removal, what does that mean to a person of skill in the 16 art? 17 A Facilitate capture of the occlusive material 18 would mean to make it easier to capture occlusive 19 material, more effective to capture occlusive material. 20 Q Would it be easier and more effective to capture 21 a larger clot with a larger distal end? 22 A Maybe. I'm not sure. 23 Q If you could turn to paragraph 50 of Garrison. 24 Five lines down there is a -- sorry, let me know when 25 you're there. Do you see the phrase, Arterial access
168 1 portion of the catheter. 2 Q Why would it be desirable for the catheter to 3 have a distal tip which can increase in diameter after 4 being positioned? 5 A As it says, To help facilitate removal of an 6 occlusion when using aspiration. So larger diameter could 7 in theory capture more embolic material. 8 Q When you say capture more, capture more compared 9 to the -- to a smaller catheter or the rest of the 10 catheter size? 11 MR. BARNES: Object to the form. 12 THE WITNESS: Compared to not having a funnel-type 13 tip. Expandable tip portion, which I don't think they 14 show an embodiment of. 15 BY MR. HAMILTON: 16 Q So just to be clear, so it would capture more 17 material compared to the same catheter not having the tip; 18 is that right? 19 MR. BARNES: Object to the form. 20 THE WITNESS: What they say is it would facilitate 21 removal of an occlusion using aspiration. So it would 22 help remove the thrombotic material. It goes on to say, 23 Expandable tip allows the catheter to maintain a small 24 profile during tracking of the catheter to the target 25 anatomy but then expands to the distal luminal area for	170 1 device 210? 2 A Yes. 3 Q What is arterial access device 210? 4 A It's a catheter that's designed -- it's sized and 5 shaped to be inserted into the common carotid artery. It 6 has a port 2015 which provides access to the arterial 7 access device's internal lumen which is configured for 8 introducing additional devices into the cerebral 9 vasculature. 10 Q Do you see the parenthetical following arterial 11 access device 210 sometimes referred to as an arterial 12 access sheath? 13 A I think they use the terms interchangeably within 14 this patent. I remember both terms being used for that 15 component. 16 Q And what's a sheath in the context of the '580 17 patent -- let me rephrase that. What's a sheath in the 18 context of treating blood clots with aspiration? 19 A Well, depending on the size of the device going 20 in, the doctor may choose an access sheath to put into the 21 vessel in order to advance the interventional devices and 22 treatment catheters. 23 Q So the access sheath is something that allows an 24 operator to insert other devices into the vasculature; is 25 that right?

171 1 A That's the general field -- in general, in 2 cardiology and cardiovascular procedures, that's how 3 I'm -- that's the description I'm giving. 4 Q But is that -- is that how that term sheath is 5 commonly used in the field of cardiology, cardiovascular 6 procedures? 7 A Introducer sheath would be the most common term I 8 would say. It's the most common term that I'm aware of. 9 Q And introducer, does that mean that the sheath is 10 allowed -- allowed -- the sheath is to provide access? 11 MR. BARNES: Object to the form. 12 THE WITNESS: In general, introducer sheaths are 13 providing access into a blood vessel, yes. In Garrison 14 specifically, what they call the arterial access device or 15 arterial access sheath 210 -- 2010, is also an aspiration 16 catheter as it's shown in Figures 33 and 34, where they 17 are applying a pressure source, vacuum source, in order to 18 aspirate blood through that sheath. 19 MR. HAMILTON: We've been going about an hour. Why 20 don't we take a quick break. 21 THE VIDEOGRAPHER: We are going off the record at 22 10:01. 23 (Recess taken.) 24 THE VIDEOGRAPHER: We are back on the record at 10:13. 25	173 1 Q What's the difference between a transcarotid 2 versus a transfemoral approach? 3 A The access site location, the distance that has 4 to be traveled to reach the treatment site in the cerebral 5 vasculature. 6 Q Why does it matter, the distance to be traveled 7 in performing or treating blood clots? 8 MR. BARNES: Object to the form. 9 THE WITNESS: I think what they're saying is that it 10 may be -- they use the term rapid in relatively short 11 access for introducing the devices. So it may be quicker 12 and easier in patients to access the cerebral vasculature 13 from the carotid artery versus from the femoral artery 14 which was more standard at the time, and I think is still 15 an approach that's used. 16 BY MR. HAMILTON: 17 Q When you say at the time, you mean in 2018? 18 A When they wrote this patent in 2015, it looks 19 like. 20 Q Was it also more standard in 2018? 21 A I don't know. 22 Q What would be the advantage of having a 23 nontortuous pathway when treating a clot in the 24 vasculature? 25 A Well, in the cerebral vasculature, there's
172 1 BY MR. HAMILTON: 2 Q Do you understand you're still under oath? 3 A Yes. 4 Q Did you read any documents related to this -- 5 these matters during the break? 6 A No. 7 Q Did you review any other materials during the 8 break? 9 A No. 10 Q Did you communicate with anybody in any way 11 regarding the subject matter of these cases during the 12 break? 13 A No. 14 Q If you could look at the Garrison reference and 15 turn to page 40, paragraph 47. Let me know when you're 16 ready for a question. 17 A Okay. 18 Q You see in the first sentence the phrase, 19 Relatively short and straight transcarotid access to the 20 carotid artery in the cerebral vasculature? 21 A Yes. 22 Q What does that mean relatively short and straight 23 transcarotid access? 24 A As I say later in the paragraph as compared, for 25 example, to a transfemoral approach.	174 1 frequently lots of tortuosity to navigate so if the 2 approach is closer to that, and you cannot have additional 3 length and tortuosity, as they say, by, you know, from a 4 transfemoral approach, it could make the, as they say, 5 easing the time and difficulty of the procedure. 6 Q So easing the time, that means it takes less time 7 to get to the treatment site; is that right? 8 A That's what they say in line -- well, 9 paragraph 47, toward the end. 10 Q And easing the difficulty, what does that mean? 11 A I think what it says, it's easier, less difficult 12 if you have less tortuosity through which to advance your 13 guidewire and treatment catheters. 14 Q Does it reduce the risk of any other 15 complications? 16 A Toward the end they say this access route reduces 17 the risk of emboli generation from navigation of diseased, 18 angulated or tortuous aortic arch or carotid artery 19 anatomy. 20 Q What does that mean, risk of emboli generation? 21 A There are lots of places in the body between the 22 femoral artery and the brain that could have diseased 23 segments that could be disturbed by advancing guidewires 24 and catheters. 25 Q What is the consequence of disturbing those

175 1 diseased segments by advancing guidewires and catheters? 2 A As they say, there's a risk of emboli generation. 3 Q What is emboli generation? 4 A Creating emboli -- creating's not the right word. 5 Disturbing the diseased segments such that emboli are 6 released and travel with the bloodstream. 7 Q And is -- can emboli generation be harmful to a 8 patient? 9 A Yes. 10 Q Is there any reason one would want to generate 11 emboli during a procedure? 12 A I don't know of any. 13 Q Can emboli generation be severely harmful to a 14 patient? 15 A Yes. 16 Q Is emboli generation, is that the same as distal 17 embolization we discussed earlier today? 18 A Sure. Any emboli that's generated would move 19 with the blood, which is -- in this example you're in the 20 arterial system. So it would go downstream with the blood 21 flow. 22 Q Do you understand what the term blood return 23 means in the context of treating a blood clot via 24 aspiration? 25 A Yes.	177 1 may be one of them. 2 BY MR. HAMILTON: 3 Q And generally, a larger catheter would result in 4 more blood loss, correct? 5 A It depends how much blood is removed from the 6 patient. 7 Q Would a larger catheter generally remove more 8 blood from a patient during aspiration? 9 MR. BARNES: Object to the form, incomplete 10 hypothetical. 11 THE WITNESS: It depends how long of a period of time 12 they're aspirating, at what level of vacuum would 13 determine the rate of blood loss. 14 BY MR. HAMILTON: 15 Q So the amount of blood loss -- withdraw that. 16 Can the rate of blood loss, so how quickly the 17 blood is lost, also be harmful to a patient? 18 A Sure. If one gets their arm cut off, there's a 19 faster release of blood, and that could be very harmful to 20 the patient. So the rate of loss is certainly important. 21 Q So assuming all things are equal, the exact same 22 amount of blood is lost from a patient, in one instance, 23 the rate of loss is quicker than in another instance, is 24 there a difference in harm to the patient in those two 25 scenarios?
176 1 Q What does it mean? 2 A Well, as is shown in Garrison, Laub, and Aklog, 3 they discuss returning filtered blood back to the patient 4 during the aspiration steps. 5 Q So does that mean blood return means returning 6 filtered blood back to the patient during the aspiration 7 steps? 8 A During or after the aspiration steps. 9 Q Why would one want to return blood to a patient 10 during or after the aspiration steps? 11 A To minimize blood loss to the patient. 12 Q And why is it important to minimize blood loss to 13 the patient? 14 A I think it depends on the amount of blood loss, 15 but if the amount of aspirated blood is significant, there 16 could be negative effects on the patient. 17 Q Could it kill the patient? 18 A Depends how much blood is removed from the 19 patient. 20 Q Does the amount of blood loss during aspiration 21 to treat a blood clot depend on the inner diameter of the 22 aspiration catheter? 23 MR. BARNES: Object to the form, incomplete 24 hypothetical. 25 THE WITNESS: Again, depends on many factors. That	178 1 A I don't know. 2 MR. BARNES: Object to the form. 3 BY MR. HAMILTON: 4 Q Would it depend on how much blood is lost? 5 MR. BARNES: Object to the form. 6 THE WITNESS: I'm not sure. I haven't considered 7 that. 8 BY MR. HAMILTON: 9 Q Could it depend on where that blood is lost from? 10 MR. BARNES: Object to the form. 11 THE WITNESS: I don't know. I haven't thought about 12 it. 13 BY MR. HAMILTON: 14 Q Is blood return required when treating ischemic 15 stroke? 16 A I don't know that it's required. 17 Q When you say you don't know it's required, you 18 mean it's not required? 19 MR. BARNES: Objection; mischaracterizes testimony. 20 THE WITNESS: I think the medical community has 21 different ways of treating ischemic stroke. I don't think 22 there's any requirement for blood return. 23 BY MR. HAMILTON: 24 Q What about when treating a pulmonary embolism, is 25 blood return required?

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9 (179 to 182)

179 1 A I don't know. 2 Q What about when treating DVT, is blood return 3 required? 4 A I don't know. 5 MR. HAMILTON: Why don't we take another break. I may 6 be close to wrapping up. 7 THE VIDEOGRAPHER: We are going off the record at 8 10:32. 9 (Recess taken.) 10 THE VIDEOGRAPHER: We are back on the record at 11 10:40 a.m. 12 BY MR. HAMILTON: 13 Q Mr. Thornton, have you ever designed a device 14 intended to be used for blood return during a 15 cardiovascular procedure? 16 A For the MitraClip steerable sheath, when it's 17 placed in the patient, as the dilator's being removed, the 18 doctor aspirates blood back into the steerable guide 19 catheter and returns it back to the patient by injecting 20 the blood back into the sheath. So that would be the only 21 example I can think of. 22 Q Did you design -- withdraw the question. 23 For the MitraClip, how did the doctor return 24 blood to the patient? 25 A Via syringe attached to a stopcock, extension	181 1 standard interventional cardiology practice. We didn't 2 necessarily design it with the intent of -- I'll rephrase 3 that. 4 The main thrust of the design had nothing to do 5 with that one step of the procedure. It had to do with 6 the other 50 steps of the procedure and the three 7 catheters and the implant device, not the aspect of blood 8 return. 9 Q So then would you consider yourself an expert in 10 the aspect of blood return during a cardiovascular 11 procedure? 12 MR. BARNES: Object to the form. 13 THE WITNESS: No. 14 BY MR. HAMILTON: 15 Q I have no further questions. Thank you for your 16 time. 17 A You're welcome. 18 MR. BARNES: I do not have any questions for the 19 witness. Thank you. 20 THE VIDEOGRAPHER: This marks the end of the 21 deposition of Troy L. Thornton. We are going off the 22 record at 10:48. 23 (WHEREUPON THE DEPOSITION WAS 24 CONCLUDED AT 10:48 A.M.) 25
180 1 tubing was part of the connection between the steerable 2 guide catheter and the syringe. 3 Q Do you recall the volume of blood that was 4 returned to the patient for use with the MitraClip? 5 A I believe the IFU called for using a 60 CC 6 syringe. I don't know that the full 60 CC syringe was 7 needed to fill the guide and return to the patient. 8 Q Was blood return always required when the 9 MitraClip was used? 10 A It was in... I don't believe that step was in the 11 instructions for use. It was a typical practice for 12 physicians. I don't know if it was in the instructions 13 for use or whether it was not in instructions for use. 14 Q Did you design any portion of the MitraClip with 15 the intention -- withdraw that. 16 Was the MitraClip itself used for blood return? 17 A No. That's a permanent implant that was deployed 18 on the patient's mitral leaflets. 19 Q Would you consider yourself an expert in methods 20 of blood return in a patient? 21 MR. BARNES: Object to the form. 22 THE WITNESS: Not necessarily. 23 BY MR. HAMILTON: 24 Q What do you mean not necessarily? 25 A The blood return I was just describing is pretty	182 1 Please be advised I have read the 2 foregoing deposition, pages 147 3 through 184, inclusive. 4 I hereby state there are: 5 6 (Check one) _____ no corrections 7 _____ corrections per attached 8 9 10 11 TROY L. THORNTON 12 13 14 15 16 17 18 19 20 --oOo-- 21 22 23 24 25

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1 WITNESS'S CHANGES OR CORRECTIONS 2 3 NOTE: If you are adding to your testimony, print 4 the exact words you want to add. If you are 5 deleting from your testimony, print the exact 6 words you want to delete. Specify with "Add" 7 or "Delete" and sign this form. 8 9 Deposition of: TROY L. THORNTON 10 Case Title: IMPERATIVE V. INARI 11 Date of Deposition: FEBRUARY 19, 2026 12 13 I, _____ have 14 the following corrections to make to my deposition: 15 Page Line Change/Add/Delete 16 _____ 17 _____ 18 _____ 19 _____ 20 _____ 21 _____ 22 _____ 23 _____ 24 _____ 25 _____	183
1 CERTIFICATE OF SHORTHAND REPORTER/STENOGRAPHER 2 3 I, Christa Yan, Certified Shorthand/Stenographic Reporter 4 within and for the State of California do hereby certify: 5 6 That Troy L. Thornton, the Witness whose deposition is 7 hereinbefore set forth, was duly sworn by me before the 8 commencement of such deposition and that such deposition 9 was taken before me and is a true record of the testimony 10 given by such witness. 11 12 I further certify that both parties were represented by 13 counsel at the deposition. 14 I further certify that the deposition of Troy L. Thornton 15 occurred at 333 Bush Street in San Francisco, California 16 on February 18, 2026 commencing at 9:04 a.m. to 10:48 a.m. 17 I further certify that I am not related to any of the 18 parties to this action by blood or marriage, I am not 19 employed by or an attorney to any of the parties to this 20 action, and that I am in no way interested, financially or 21 otherwise, in the outcome of this matter. 22 23 IN WITNESS WHEREOF, I have hereunto set my hand this 25th 24 day of February 2026. 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000	184

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