

1 UNITED STATES PATENT AND TRADEMARK OFFICE
2 BEFORE THE PATENT AND TRIAL APPEAL BOARD

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5 ALPHATEC HOLDINGS, INC., Case Nos. IPR2019-00361

6 And ALPHATEC SPINE, INC., IPR2019-00362

7 Petitioners, IPR2019-00546

8 Vs. Patent Nos. 8,187,334

9 NUVASIVE, INC., 8,361,156

10 Patent Owner. 8,187,334

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17 Deposition of

18 Matthew Link

19 Tuesday, January 7, 2020

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23 Reported by:

24 JOSHUA MANEA, CSR No. 13754

25 Job No: 596168

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APPEARANCES

For the Patent Owner:


WILSON, SONSINI, GOODRICH & ROSATI, PC
By: Michael T. Rosato, Attorney at Law
701 Fifth Street, Suite 5100
Seattle, WA 98104
206.883.2500
Mrosato@msgr.com

For the Petitioners:

WINSTON & STRAWN, LLP
By: Nimalka Wickramasekera, Attorney at Law
333 S. Grand Avenue, 38th Floor
Los Angeles, CA 90071
213.315.1819
Nwickram@winston.com

Also present:

Michael Doyle, In-House Counsel, NuVasive

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Exhibits

Deposition of Matthew Link
January 7, 2020

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11 _____ /

12
13 BE IT REMEMBERED that on Tuesday, January 7,
14 2020, commencing at the hour of 9:35 a.m. in the law
15 offices of Mintz, Levin, Cohn, Ferris, Glovsky & Popeo,
16 PC, 3580 Carmel Mountain Road, Suite 300, San Diego,
17 California, before me, JOSHUA MANEA, a Certified
18 Shorthand Reporter in and for the State of California,
19 personally appeared

20 MATTHEW LINK

21 Called as a witness herein, and after having
22 been first duly affirmed to tell the truth, the whole
23 truth, and nothing but the truth, was examined and
24 testified as follows.

25
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1 EXAMINATION BY MS. WICKRAMASEKERA:

2 Q. Good morning, Mr. Link.

3 A. Good morning.

4 Q. You understand, you are here to testify
5 regarding -- you are here to testify in the proceedings
6 that are before the patent office, case number
7 IPR2019-361, 362 and 546, regarding the 334 and 156
8 patents; is that correct?

9 A. That is my understanding, yes.

10 Q. Okay. Let's go ahead and mark your
11 declarations; for the record.

12 (Exhibits 1, 2 marked for identification.)

13 BY MS. WICKRAMASEKERA:

14 Q. I'm going to show you what's been marked as
15 Exhibit 1, which is the declaration you submitted in the
16 361 proceeding for the 334 patents.

17 A. Okay.

18 Q. As Exhibit 2, I'm handing you what's been
19 marked -- I'm sorry. As Exhibit 2, I'm handing you your
20 declaration in the 362 proceeding for the 156 patents.

21 (Exhibit 3 marked for identification.)

22 BY MS. WICKRAMASEKERA:

23 Q. And Exhibit 3 is your declaration in the 546
24 proceeding for the 334 patents. Here you go.

25 And Mr. Link, are these declarations that you
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1 submitted in the three proceedings, are they
2 substantively identical?

3 A. It is my understanding that they are
4 substantively identical, yes.

5 Q. And did you review the 334 and the 156 patents
6 in preparing your declarations?

7 A. I did not review those specifically. I relied
8 on information, I believe, was provided by Jim Youssef
9 and it was related to those patents.

10 Q. Okay. And what did you understand, from Dr.
11 Youssef, the 156 patent covers?

12 A. I don't -- I don't know the numeric assignment
13 to the specific patents. If you have that, I am happy
14 to take a look at it. My general understanding?

15 Q. Sure. I can mark the - if it is easier, I'll
16 go ahead and mark the patents for you.

17 (Exhibit 4 marked for identification.)

18 BY MS. WICKRAMASEKERA:

19 Q. So as Exhibit 4, I'm handing you what's been
20 marked as the -- I keep doing this wrong. I'm handing
21 you the 156 patent that I've marked as Exhibit 4.

22 A. Okay.

23 Q. There you go.

24 (Exhibit 5 marked for identification.)

25 BY MS. WICKRAMASEKERA:
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1 Q. Exhibit 5, which I'm handing you, is the 334
2 patents.

3 Do these look familiar to you?

4 A. Yes, they look generally familiar. Yes.

5 Q. Okay.

6 A. So, again, do you mind repeating the question?

7 Q. Sure. For the -- I'll start with the 334
8 patent. I'm not sure which one I started with earlier.
9 For the 334 patent, what did you understand, from Dr.
10 Youssef, this patent covers?

11 A. So, again, not being an attorney or expert in
12 this field, my general understanding is that this patent
13 covered claims related to the CoRoent implant.

14 Q. Okay. Did you believe -- same question for
15 the 156 patent. Based on your -- your understandings,
16 from Dr. Youssef, what did you understand the 156 patent
17 to cover?

18 A. So similarly, understood it to cover claims
19 related to the CoRoent implant.

20 Q. Okay. How many different versions of the
21 CoRoent implant are there?

22 A. I don't know, off the top of my head.

23 Q. Okay. You are familiar with the CoRoent XL,
24 correct?

25 A. I am familiar with CoRoent XL, yes.
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1 Q. And is that implant, the CoRoent XL, only used
2 for lateral procedures?

3 MR. ROSATO: Objection. Form.

4 THE WITNESS: In my experience, I have only
5 observed it being utilized for lateral procedures.

6 BY MS. WICKRAMASEKERA:

7 Q. Okay. Can you tell me, one way or the other,
8 whether it has been used in non-lateral procedures?

9 A. I do not know conclusively if it has or has
10 not.

11 Q. Okay. Are you familiar with the CoRoent XLR?

12 A. The CoRoent XLR? I'm not sure I'm familiar
13 with that one.

14 Q. Did I stump you?

15 Are you familiar with the CoRoent XL implant
16 that was the assignment for anterior procedures?

17 A. Yes. I don't recall as having the designation
18 of R, but I'm familiar with the CoRoent implant that is
19 designated for anterior approaches.

20 Q. Okay. And do you know, structurally, how the
21 CoRoent design for anterior differs from the CoRoent
22 design for lateral?

23 A. Again, I'm not an expert in that field. I'm
24 not sure I'm qualified to answer that question.

25 Q. Well, I'm just asking if you know. If you
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1 don't know, that's okay.

2 A. I believe I answered that.

3 Q. So is the answer that you don't know?

4 MR. ROSATO: Objection to form.

5 BY MS. WICKRAMASEKERA:

6 Q. I guess, I'm not trying to trick you and I'm
7 not, actually, asking for opinion testimony. I'm asking
8 if you know -- do you know, structurally, any
9 differences between the CoRoent that's used for lateral
10 and the CoRoent that's used for anterior?

11 A. And based on my experience, I understand those
12 two implants to be different in geometry.

13 Q. Okay. How?

14 A. Within the geometry of length and width.

15 Q. So the CoRoent that's used for anterior has a
16 different length than the CoRoent that's used for
17 lateral?

18 A. The --

19 MR. ROSATO: Objection to form.

20 THE WITNESS: Again, in my experience and
21 familiarity with our implants that are in those
22 categories for anterior ALIF surgery versus lateral
23 surgery, the relative dimension of the length to the
24 width are proportionately different in those two implant
25 types.

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1 BY MS. WICKRAMASEKERA:

2 Q. Okay. And what are you referring to as to the
3 length to the anterior -- CoRoent anterior implant?

4 A. I'm sorry. I don't understand your question.

5 Q. What's -- is the -- when the CoRoent anterior
6 implant is in place, once it's been inserted, which
7 direction does the length go in? Is it the
8 anterior-posterior direction or the lateral direction?

9 MR. ROSATO: Objection to form.

10 THE WITNESS: Yeah.

11 MR. ROSATO: Foundation.

12 THE WITNESS: My understanding of it is the
13 lateral direction.

14 BY MS. WICKRAMASEKERA:

15 Q. Okay. And what's the -- what's the greatest
16 length for the anterior implant?

17 A. I don't know.

18 MR. ROSATO: Objection to form, foundation.

19 THE WITNESS: I don't recall what the greatest
20 length is, off the top of my head. If there's a
21 reference, so I'd be happy to review it and see if it is
22 familiar, based on past experiences.

23 BY MS. WICKRAMASEKERA:

24 Q. Do you know what the anterior-posterior depth
25 of the anterior CoRoent implant is?

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1 MR. ROSATO: Objection to form, foundation,
2 scope.

3 THE WITNESS: The anterior CoRoent implant,
4 again, there is a range of depths associated with that
5 implant. I don't recall what those are, off the top of
6 my head, no.

7 BY MS. WICKRAMASEKERA:

8 Q. Okay. Would the anterior-posterior depth of
9 the lateral implant, the lateral CoRoent implant,
10 necessarily be different from the depth of the CoRoent
11 anterior implant?

12 MR. ROSATO: Same objection.

13 THE WITNESS: Yeah, so if we are talking about
14 the CoRoent XL lateral implant, at least is my
15 understanding as we have categorized that, the primary
16 implant for the lateral XL implant is 18 millimeters in
17 depth or width, if you want to categorize it that way,
18 so anterior to posterior.

19 BY MS. WICKRAMASEKERA:

20 Q. And is that 18 millimeters, is that an
21 anterior-posterior depth that's unique to lateral
22 implants?

23 MR. ROSATO: Objection. Form, foundation.

24 THE WITNESS: Again, based on my understanding
25 and experience at the time it was introduced, it was
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1 unique to implants, lateral implants, yes.

2 BY MS. WICKRAMASEKERA:

3 Q. Do you know whether the CoRoent XLR is
4 available in an 18 millimeter anterior-posterior depth?

5 A. I don't recall, off the top of my head, no.

6 Q. Any other structural differences you can think
7 of between the CoRoent XLR for anterior and the CoRoent
8 XL?

9 MR. ROSATO: Objection. Form.

10 THE WITNESS: Again, as I answered previously,
11 my recollection of the primary differences between the
12 implants, from my observations, are the proportion, sort
13 of, the relative dimensions anterior to posterior to
14 lateral.

15 BY MS. WICKRAMASEKERA:

16 Q. Okay.

17 A. I guess, actually, and that observation
18 categorized maybe better, the proportion of those
19 dimensions, one implant, as I understood it, was defined
20 to be wholly contained within the disc space versus
21 another that was designed to be able to bridge across
22 the end plates of the disc space. And so the intended
23 clinical application, I understood to be different.

24 Q. Okay. What ranges of lengths is the CoRoent
25 XL available in?

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1 MR. ROSATO: Objection to form.

2 THE WITNESS: Yeah. So as I recall, the
3 ranges of lengths were 40 to 55 millimeters with a line
4 addition sometime -- I don't remember exactly when -- I
5 believe, it extended that length out to 60 millimeters.

6 BY MS. WICKRAMASEKERA:

7 Q. Are you referring to the CoRoent XL standard?

8 A. I'm referring to the CoRoent lateral implant.

9 Q. Okay. Don't you also have a thoracic implant
10 that's CoRoent XL?

11 A. I don't believe that was the naming
12 nomenclature. I believe that was XLT. And so since you
13 made it a point to characterize XLR as a different
14 implant, I thought we were going to continue down that
15 line.

16 Q. Oh. I'm sorry if I confused you.

17 From my understanding, XLR is the anterior
18 implant.

19 A. Right.

20 Q. And so that's correct?

21 A. Yes.

22 Q. And the CoRoent XL comes in standard and
23 thoracic; is that correct?

24 A. And, again -- yeah. And so I'm -- the -- as I
25 understand the naming nomenclature, it is XLT.

1 Q. Okay.

2 A. And so since you made it a point to designate
3 the XL implant as XLR, I wanted to be as specific as
4 possible.

5 Q. Did that name change at some point?

6 A. I believe it may have changed, but given I
7 have been with the company since 2007, that's the
8 nomenclature I'm familiar with.

9 Q. Okay. Is the CoRoent XLT for lateral
10 insertion?

11 MR. ROSATO: Objection to form.

12 THE WITNESS: As I understand it, it was
13 designed for lateral insertion, yes.

14 BY MS. WICKRAMASEKERA:

15 Q. Do you know what the greatest length of the
16 CoRoent XLT is?

17 MR. ROSATO: Objection to form, scope.

18 THE WITNESS: Yeah, I don't recall, with
19 certainty, what the maximum length was. I believe it to
20 be 40, but I'm not 100-percent certain on that.

21 BY MS. WICKRAMASEKERA:

22 Q. That's my understanding as well.

23 To insert a CoRoent XLT laterally, you don't
24 have to go through the psoas muscle, correct?

25 MR. ROSATO: Objection. Form, foundation.
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1 THE WITNESS: It depends on which anatomic
2 level you choose to insert it.

3 BY MS. WICKRAMASEKERA:

4 Q. In the lower thoracic, do you necessarily have
5 to go through the psoas muscle?

6 MR. ROSATO: Objection to form, foundation,
7 scope.

8 THE WITNESS: So in the lower thoracic spine,
9 that would not be typical anatomy to traverse, no.

10 BY MS. WICKRAMASEKERA:

11 Q. Okay. Are you familiar with where the markers
12 are located in the CoRoent XLT?

13 MR. ROSATO: Objection to form, foundation and
14 scope.

15 THE WITNESS: I do not recall all of the exact
16 locations, no.

17 BY MS. WICKRAMASEKERA:

18 Q. Okay. In your -- actually, let me ask you a
19 few more questions about the patents.

20 For the 156 patent, is it your understanding
21 that the patent requires going through the psoas muscle?

22 MR. ROSATO: Objection to form, foundation and
23 scope.

24 THE WITNESS: Yeah, I'm not an attorney. I
25 don't have a complete understanding as to what all the

1 specific claims and requirements are of that.

2 BY MS. WICKRAMASEKERA:

3 Q. Okay. So based on your conversations or your
4 understanding from reading Dr. Youssef's declaration, do
5 you have any understanding, based on that, whether the
6 claims for either patent require you to go through the
7 psoas muscle?

8 A. Yeah, again, so per my declaration, it is my
9 understanding that, based on Dr. Youssef's expert
10 opinion, that it -- that, you know, there are certain
11 areas of claims. I am not qualified to characterize all
12 of those things specifically.

13 Q. In various parts of your declarations, you
14 refer to the nerves of the psoas muscle and creating a
15 corridor through the psoas muscle. And I'm just
16 wondering why you thought that was relevant to put in
17 your declaration?

18 A. Do you mind pointing out specifically --

19 Q. Sure.

20 MR. ROSATO: Let me get my objections.

21 Objection to form, foundation.

22 BY MS. WICKRAMASEKERA:

23 Q. Okay. So you can look at paragraph 5 of your
24 declaration.

25 A. I'm sorry, paragraph 5?
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1 Q. Yes. Let me know once you've had a chance to
2 review it.

3 A. So as I read paragraph 5, it is in a section
4 related to NuVasive and XLIF history, and as I read the
5 paragraph, in my recollection at the time is when asked
6 to provide a characterization of, you know, what the
7 XLIF procedure is, that's a relevant component of the
8 procedure -- or a relevant consideration in the approach
9 related to the procedure.

10 Q. Let me back you up to paragraph 3. You define
11 XLIF, as you've used it throughout your declaration, as
12 "NuVasive's eXtreme Lateral Interbody Fusion, products
13 and systems." Do you see that?

14 A. I see in paragraph 3 where it says that, yes.

15 Q. Okay. Can you tell me what's all included in
16 that, what products and systems are you referring to?

17 MR. ROSATO: Objection to form.

18 THE WITNESS: So a general characterization of
19 the products and technologies associated with that
20 portfolio. Portfolio being the eXtreme Lateral
21 Interbody Fusion.

22 Again, from my tenure at the company, which is
23 13 years, has been a series of retractor systems,
24 dilating tools associated with retractor system. Sub --
25 some components of an automatic nerve physiology system.

1 Instrumentation associated with addressing spinal
2 anatomy, particularly the disc, space, as well as a
3 number of interbody devices and fixation options for the
4 lateral procedure.

5 BY MS. WICKRAMASEKERA:

6 Q. Okay. So when you are referring to XLIF
7 throughout your declaration, you are referring to all of
8 these systems and products that you just mentioned?

9 MR. ROSATO: Objection to form.

10 THE WITNESS: Again, I think it would depend
11 on the specific context of wherever the statement lies.
12 But as I just stated, generally speaking, those would
13 all be technologies and components that comprise some
14 portion of a XLIF procedure.

15 BY MS. WICKRAMASEKERA:

16 Q. If you already were referring to the implant
17 specifically in your declaration, would you have called
18 it "XLIF" or would you have called it the "CoRoent XL
19 implant"?

20 MR. ROSATO: Objection to form, foundation.

21 THE WITNESS: Is there a specific segment you
22 are referring to where I've categorized it one way or
23 the other?

24 BY MS. WICKRAMASEKERA:

25 Q. Well, I was just asking based on your answer
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1 that if you used XLIF, it would depend on the context.
2 And what I'm just trying to understand is, you have used
3 "XLIF" throughout your declaration. And I understood
4 from paragraph 3, you were defining "XLIF" to be
5 NuVasive's Extreme Lateral Interbody Fusion products and
6 systems. So are you using a different definition of
7 XLIF anywhere else throughout the declaration?

8 MR. ROSATO: Objection to form and foundation.

9 THE WITNESS: Yeah, I don't recall. Again, if
10 there is an area of specific question, I'd be happy to
11 read it and address it. I don't recall any specific
12 example.

13 As I look through the declaration, I also see
14 specific reference to the CoRoent XL implant, in
15 addition to XLIF. So it would be helpful if you could
16 maybe highlight a specific area where you have a
17 question.

18 BY MS. WICKRAMASEKERA:

19 Q. Okay. How about paragraph 4. In the middle
20 of the paragraph, you state, "When NuVasive began
21 development of XLIF." Do you see that?

22 A. "When NuVasive began development of XLIF," in
23 paragraph 4, yes, I do.

24 Q. Yes. When did NuVasive begin development of
25 XLIF?

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1 A. So the development of XLIF predates my time
2 with the company. The procedure had already been
3 launched and commercialized when I joined in 2006.
4 Based on my experience and understanding from others in
5 the company -- I mean, to some extent, the development
6 of XLIF began as early when the company was founded.
7 They began seeking an alternative minimally-invasive
8 solution for the spine. And there was a series of
9 developments.

10 But, I guess, my general understanding was in
11 or around, you know, 2001, in that general time period.
12 But, again, that predates my time with the company. I
13 don't know specifically.

14 Q. Okay. And then when you are saying, "When
15 NuVasive began development of XLIF," what specifically
16 are you referring to in that sentence as "XLIF"? What
17 products, I guess? What -- what -- what products
18 specifically are you referring to --

19 MR. ROSATO: Objection to form.

20 BY MS. WICKRAMASEKERA:

21 Q. -- in that sentence?

22 A. So my recollection at the time of this
23 statement would have been related to the products and
24 technologies that I referenced earlier. So a series of
25 retractor systems, dilating tools to support the

1 retractor system, implant -- interbody-implant options
2 or solutions, lateral-fixation solutions and a subset of
3 neurophysiology technology to support the procedure.

4 Q. When specifically did NuVasive begin
5 development of the CoRoent XL implant?

6 A. I don't -- I don't know. And so when you -- I
7 just want to clarify, when you say "CoRoent" -- you said
8 "CoRoent XL implant"?

9 Q. Yes.

10 A. I don't know, off the top of my head,
11 specifically.

12 Q. Do you know who specifically developed the
13 CoRoent XL implant?

14 MR. ROSATO: Objection to form.

15 THE WITNESS: I don't know who is specifically
16 responsible for it, no.

17 BY MS. WICKRAMASEKERA:

18 Q. Do you know how long it took to develop the
19 CoRoent XL implant?

20 MR. ROSATO: Objection to form and foundation.

21 THE WITNESS: I do not.

22 BY MS. WICKRAMASEKERA:

23 Q. Okay. In paragraph -- actually, stay with
24 paragraph 5. At the end of paragraph 5, you state that,

25 "NuVasive built and tested an array of specialized
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1 instruments and surgical components, e.g., MaXcess
2 retractor, neuromonitoring-equipped dilators,
3 specially-constructed implants, to enable the XLIF
4 surgical approach." Do you see that?

5 A. I do see that, yes.

6 Q. What -- how -- when you refer to
7 "specially-instructed implants," what do you mean?

8 A. So, again, my understanding of the evolution
9 of the development process included an implant that
10 could be optimized based on lateral insertion and the
11 geometry associated with the available anatomy or
12 anatomic access from a lateral approach.

13 Q. What -- what sources of information did
14 NuVasive draw on to develop the CoRoent XL implant, if
15 you know?

16 A. I do not know.

17 Q. Do you know whether they -- NuVasive was
18 looking at other implants that were available in the
19 market at the time?

20 MR. ROSATO: Objection to form and scope.

21 THE WITNESS: I'm sorry. My -- my knowledge
22 at the time was that they -- that there was some
23 instances where allograft implants were utilized in a
24 lateral approach and were found to be suboptimal, based
25 on the -- the footprint or dimension of that implant in

1 the disc space.

2 That's the extent of my knowledge around
3 implants associated with, again, what I understand to be
4 the development of XLIF being the tools and technologies
5 developed by NuVasive.

6 BY MS. WICKRAMASEKERA:

7 Q. Are you familiar with the work of Dr. Crock
8 (phonetic)?

9 A. I'm sorry?

10 MR. ROSATO: Objection to form.

11 BY MS. WICKRAMASEKERA:

12 Q. Dr. Crock?

13 A. I am not, no.

14 Q. Okay. Who are you referring to when you are
15 referring to prior insertion of allograft implants in a
16 lateral approach, who's work are you referring to?

17 A. I'm not referring to any one surgeon, in
18 familiar. I'm referring to information and education I
19 received when I joined the organization and in support
20 of the rationale for the CoRoent XL implants and the
21 advantages it offered relative to other implants that
22 were available in the market at that time.

23 Q. Was NuVasive aware of artificial implants
24 being used in spinal fusion surgery before it developed
25 CoRoent XL?

1 MR. ROSATO: Objection to form, foundation.

2 THE WITNESS: I'm sorry. What do you mean by
3 "artificial implants"?

4 BY MS. WICKRAMASEKERA:

5 Q. Non-bone.

6 MR. ROSATO: Same objection.

7 THE WITNESS: Again, I wasn't at NuVasive at
8 the time that they initiated development of that
9 implant.

10 MR. ROSATO: Excuse me. There is a scope in
11 the objection, please. Thank you.

12 BY MS. WICKRAMASEKERA:

13 Q. How were the -- was NuVasive aware of the
14 publications regarding Dr. Brantigan's use of non-bone
15 implants in spinal fusion surgery before it developed
16 the CoRoent implant?

17 MR. ROSATO: Objection to form, foundation,
18 scope.

19 THE WITNESS: Again, I wasn't present. I
20 wasn't part of the organization at that time, so I do
21 not know.

22 BY MS. WICKRAMASEKERA:

23 Q. Okay. In paragraph 8, you refer to,
24 "NuVasive's initial expenditures for the development of
25 XLIF that were approximately \$20 to \$30 million." Do

1 you see that?

2 A. Paragraph 8? I do see that, yes.

3 Q. Okay. How much of that specifically was
4 attributed to the CoRoent XL implant?

5 A. I do not know how much was directly attributed
6 to CoRoent XL.

7 Q. I'm going to have you flip, just quickly, over
8 to paragraph 16 in your declaration. And I'm going to
9 refer you to the -- sort of the middle of the paragraph
10 and it starts, "As of the end of 2017." Do you see
11 that?

12 A. I'm sorry. To?

13 Q. Paragraph 16.

14 A. Yes.

15 Q. And it is just -- it is towards the middle of
16 the paragraph. There is a sentence that starts, "As of
17 the end of 2017." Do you see that?

18 A. I do see that, yes.

19 Q. Okay. So in paragraph 16 of your declaration,
20 it states that, "As of the end of 2017, the CoRoent XL
21 implant had generated about 400 million in revenue for
22 NuVasive." Do you see that?

23 A. I do see that, yes.

24 Q. And you note in a footnote, "These revenue
25 numbers are for the 18-millimeter-wide CoRoent XL

1 implant." Do you see that?

2 A. I do see that, yes.

3 Q. Do you have any understanding as to what drove
4 the sales of the CoRoent XL implant --

5 MR. ROSATO: Objection to form.

6 BY MS. WICKRAMASEKERA:

7 Q. -- that you are referring to here?

8 A. I'm sorry?

9 Q. That's okay. Maybe I asked that in a
10 confusing way.

11 A. Yeah.

12 Q. Let me ask you this question: In reference to
13 the sentence that I just read in your declaration in
14 paragraph 16, do you have any understanding as to
15 whether it was demand specifically for the CoRoent XL
16 implant as opposed to some other component of XLIF that
17 drove this \$400 million sales figure?

18 MR. ROSATO: Objection to form.

19 THE WITNESS: So it is my understanding, based
20 on financial information provided to me in support of
21 this statement, as well as my own experience, that the
22 revenues attributed to the CoRoent XL implant in that --
23 again, in my experience, the CoRoent XL implant afforded
24 a clinical advantage in terms of its biomechanical
25 stability relative to smaller implants. And that that

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1 was a driving factor in the utilization of an implant
2 like that.

3 And I believe, in my experience, NuVasive
4 invested in biomechanical data in support of those
5 facts, to also then support the marketing and promotion
6 of that implant in the market.

7 BY MS. WICKRAMASEKERA:

8 Q. Do you think any of the 400 million in revenue
9 for the CoRoent XL 18-millimeter-wide implant was driven
10 by anything other than the CoRoent XL implant?

11 MR. ROSATO: Objection to form.

12 THE WITNESS: I'm not sure I understand what
13 you mean by "driven."

14 BY MS. WICKRAMASEKERA:

15 Q. Well, do you -- do you think that the demand
16 from -- from surgeons, for the CoRoent XL implant that's
17 reflected in the \$400 million number that you provided,
18 do you believe that that's due solely to the CoRoent XL
19 implant or could it also be due to the MaXcess
20 retractor?

21 MR. ROSATO: Objection to form.

22 THE WITNESS: So, again, as I understand it,
23 the \$400 million is revenue is attributed directory to
24 the CoRoent XL implant. Theoretically, per a surgeon's
25 discretion, they could place another implant as an

1 alternative. Yet, this was the implant they chose.

2 And so I believe as it relates to this
3 statement, again, it is attributed -- the revenue is
4 attributed directly to the implant. And there, I think,
5 was a consistent demonstration from the surgeon
6 community for a preference for that implant.

7 BY MS. WICKRAMASEKERA:

8 Q. Okay. So do you believe that the sales
9 revenue, that you've mentioned here in paragraph 16 for
10 the CoRoent XL implant, reflects in any way a demand for
11 the MaXcess retractor?

12 MR. ROSATO: Objection to form.

13 THE WITNESS: So, again, as I understand this,
14 this is revenue attributed directly to the CoRoent XL
15 implant. And we have categorization with other products
16 that would be reflective of the retractor utilization.
17 And so as it relates to this \$400 million, I believe it
18 is a reflection of revenues related directly to the
19 implant.

20 BY MS. WICKRAMASEKERA:

21 Q. Okay. And then it does not reflect any demand
22 for the MaXcess retractor; is that correct?

23 MR. ROSATO: Objection to form, asked and
24 answered.

25 THE WITNESS: The 400 million is directly
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1 attributed to product SKUs associated with the CoRoent
2 XL implant, as I understand it, based on the financial
3 information provided.

4 BY MS. WICKRAMASEKERA:

5 Q. If you turn back to paragraph 6.

6 A. I'm sorry? You said paragraph 6?

7 Q. Yes. You say, "Prior to XLIF, there were
8 different procedures available for treating patients in
9 need of spinal fusion that suffered from their own
10 drawbacks." Do you see that?

11 A. I see the sentence, yes.

12 Q. Are you referring to lateral in that -- in
13 that sentence as different procedures that were
14 available?

15 MR. ROSATO: Objection to form.

16 THE WITNESS: So my recollection at the -- the
17 time this statement, that I was referring to a wide
18 range of procedural alternatives to what we have
19 categorized as XLIF.

20 BY MS. WICKRAMASEKERA:

21 Q. That would include other lateral procedures?

22 MR. ROSATO: Objection to form.

23 THE WITNESS: It could be -- it could be
24 inclusive of other lateral procedures, but not exclusive
25 to that.

1 BY MS. WICKRAMASEKERA:

2 Q. And in paragraph 7, you state, "NuVasive
3 recognized the unmet need for an effective spinal fusion
4 surgery without the disadvantages of these earlier
5 procedures." Who -- who specifically at NuVasive
6 recognized that need?

7 A. Again, I wasn't at NuVasive during the time
8 period in which, yeah, the development of XLIF began.
9 During my long tenure at the organization, I understood
10 it to be a combination of -- a combination of people,
11 both within NuVasive as well as, potentially,
12 clinicians.

13 Q. Is it your testimony that NuVasive was the
14 only entity to recognize that need at that time?

15 MR. ROSATO: Objection. Form, foundation.

16 THE WITNESS: I don't know that to be true or
17 not.

18 BY MS. WICKRAMASEKERA:

19 Q. Okay. Further down in paragraph 7, you refer
20 to "when NuVasive invented XLIF."

21 A. I'm sorry?

22 Q. Did I say paragraph 9? I meant to say
23 paragraph 7.

24 A. Okay. Paragraph 7.

25 Q. ~~The last sentence.~~
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1 A. Yeah, I got you. Okay.

2 Q. You see it? So in paragraph 7, you state,
3 "That changed, however, when NuVasive invented XLIF."
4 Do you see that?

5 A. I do see that, yes.

6 Q. Okay. What did you mean by "when NuVasive
7 invented XLIF"? What are you referring to there?

8 A. Again, my recollection from the time of this
9 declaration and in general, how I've referred to XLIF is
10 inclusive of the components we discussed previously,
11 which would be access systems, tools to facilitate the
12 access instruments to facilitate addressing the spine as
13 well as the implants, which ultimately result in
14 stabilization of the spine.

15 Q. Okay. How do you know that NuVasive invented
16 XLIF?

17 MR. ROSATO: Objection to form.

18 THE WITNESS: Again, just based on my tenure
19 with the organization and my experience in the spine
20 market, having been at a competitive spine company at
21 the time XLIF was introduced to the market. That is my
22 understanding, both from within NuVasive, I've heard
23 that certainly categorized that way by other leaders in
24 the company at the time, including Pat Miles, Alex
25 Lukianov, Keith Valentine.

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1 So both from what I've heard from within the
2 organization, from leaders that were involved with the
3 development of XLIF as well as my observation in the
4 marketplace as a competitor and within the organization.

5 BY MS. WICKRAMASEKERA:

6 Q. Did you ever hear Pat Miles say he invented
7 CoRoent?

8 A. I don't recall hearing him say specifically he
9 invented CoRoent. Although, I -- again, I'm not an
10 expert. I thought he was party to the patents
11 associated with the implants, but that's just my general
12 recollection. That's not necessarily a read of the
13 patent.

14 Q. Do you believe that Pat Miles invented
15 CoRoent?

16 MR. ROSATO: Objection. Form, foundation and
17 scope.

18 THE WITNESS: Again, as I understand the
19 development, I believe he was party to those
20 developments, based on his role at the time as the head
21 of marketing and product and technology. But I also
22 understood it was others who may, or likely had,
23 contributed to that.

24 BY MS. WICKRAMASEKERA:

25 Q. Go ahead and turn to paragraph 9.
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1 A. I'm sorry? 9?

2 Q. Yeah, 9 of your declaration.

3 A. Yes.

4 Q. You have excerpts there, a figure from the
5 patents, Figure 2?

6 A. Yes.

7 Q. And you have some photograph -- a photograph
8 of the CoRoent XL implants. Do you see that?

9 A. I do, yes.

10 Q. Okay. And below that, you have a heading
11 titled "Skepticism regarding XLIF and CoRoent XL
12 implant." Do you see that?

13 A. I do, yes.

14 Q. Okay. What skepticism was expressed -- well,
15 actually, withdrawn.

16 Let me ask you this question: Was any
17 skepticism expressed to NuVasive regarding the
18 construction of an implant made of PEEK?

19 MR. ROSATO: Objection. Form, foundation.

20 THE WITNESS: I don't recall hearing an
21 objection to an implant made of PEEK, in my own
22 experience. And I don't recall having heard that
23 accounted from others.

24 BY MS. WICKRAMASEKERA:

25 Q. Okay. Do you recall anyone expressing any
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1 skepticism at the time of using a spinal fusion implant
2 of non-bone construction?

3 MR. ROSATO: Objection to form, foundation.

4 THE WITNESS: I don't recall an objection
5 related to a non-bone product. And as stated in the
6 declaration, the primary skepticism was around the size
7 and dimension of the implant relative to implants that
8 were available in the market.

9 BY MS. WICKRAMASEKERA:

10 Q. And by "size," you are referring to only the
11 width or are you referring to the length as well?

12 A. In -- in my experience, width was a concern.

13 Length, relative to how we suggested the --
14 or, again, at least in my experience, marketing and
15 promoting the device, the sort of recommended length to
16 optimize the stability and stabilizing the interbody
17 space.

18 Q. That was a concern -- that length was a
19 concern? I'm sorry. I might have missed the first part
20 of your answer there. I did understand you to say that
21 width was a concern; is that correct?

22 A. Yes.

23 Q. And as for length, I believe you testified
24 that it was a concern to determine the length to
25 optimize the stability and stabilizing the interbody

1 space; is that correct?

2 A. Correct.

3 MR. ROSATO: Objection to form.

4 BY MS. WICKRAMASEKERA:

5 Q. Okay. Was NuVasive aware of the use of
6 interbody implants that were longer than 40 millimeters,
7 at the time it invented CoRoent?

8 MR. ROSATO: Objection to form, foundation.

9 THE WITNESS: Again, I wasn't present when the
10 development of CoRoent began, so I can't speak to
11 whether or not they were aware of that or not.

12 BY MS. WICKRAMASEKERA:

13 Q. Are you familiar with the BAK long cage?

14 A. I'm not familiar with the BAK long cage. I'm
15 familiar with the BAK cages that were traditionally used
16 from a posterior approach and were shorter than 40
17 millimeters.

18 Q. So you are not aware of the BAK long cage that
19 were inserted in the lateral approach in the late 1990s?

20 MR. ROSATO: Objection to form, foundation.

21 THE WITNESS: I have familiarity with BAK
22 cages being inserted from a lateral approach. I am not
23 familiar specifically of a length of 40 millimeters or
24 longer, no.

25 BY MS. WICKRAMASEKERA:
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1 Q. Were you -- you were at NuVasive during the
2 time that NuVasive was involved in the lawsuit with
3 Medtronic; is that correct?

4 A. I was, yes.

5 Q. Okay. Do you recall the trial in that case?
6 Do you recall a trial occurring in that case?

7 A. I do recall a trial occurring, yes.

8 Q. Okay. Do you recall NuVasive presenting
9 testimony from Dr. Paul McAfee that surgeons had been
10 routinely inserting non-bone implants from a lateral
11 approach since the mid '90s? Do you recall that
12 testimony?

13 MR. ROSATO: Objection to form, foundation and
14 scope.

15 THE WITNESS: Yeah, sorry.

16 I was not involved in the trial at that stage,
17 and so I don't have specific knowledge of Dr. McAfee's
18 testimony, no.

19 BY MS. WICKRAMASEKERA:

20 Q. So you didn't -- you didn't consider the
21 testimony presented by Dr. -- presented by NuVasive,
22 from Dr. McAfee, in preparing your declaration; is that
23 correct?

24 A. I did not review that testimony, no.

25 Q. Do you recall NuVasive presenting evidence of
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1 publications from 19 -- from the late 1990s regarding
2 the use of the BAK long cage in the lateral approach?

3 MR. ROSATO: Objection. Form, foundation,
4 scope.

5 THE WITNESS: Again, I wasn't involved in the
6 trial or proceedings at that time, so no, I'm not
7 familiar with that.

8 BY MS. WICKRAMASEKERA:

9 Q. Okay. So you didn't consider that evidence,
10 in preparing your declaration; is that correct?

11 A. I did not, no.

12 Q. Okay. Do you know who Dr. Regan is?

13 A. I do not know him personally, but I am
14 familiar with who he is, yes.

15 Q. Okay. Are you familiar with the publications
16 of -- from Dr. Reagan during the late '90s about
17 inserting the long BAK cage in a lateral approach?

18 A. I have --

19 MR. ROSATO: Objection to form.

20 THE WITNESS: I have general knowledge of his
21 publications on lateral surgery. And my recollection is
22 that they didn't involve BAK or other cylindrical cages.
23 I don't recall the specific dimensions of those devices,
24 no.

25 BY MS. WICKRAMASEKERA:
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1 Q. Okay. If you know who Dr. Michaelson is?

2 A. I am familiar with Dr. Michaelson.

3 Q. Are you familiar with Dr. Michaelson's patents
4 from 1995 that describe lateral implants that span the
5 full transverse in the vertebral body?

6 MR. ROSATO: Objection to form, foundation and
7 scope.

8 THE WITNESS: I do not have firsthand
9 knowledge of those, no.

10 BY MS. WICKRAMASEKERA:

11 Q. Okay. Are you aware that NuVasive was found
12 to infringe those patents from Dr. Michaelson regarding
13 his translateral spinal implant?

14 MR. ROSATO: Same objection.

15 THE WITNESS: So it was my understanding that
16 they were and that there were some elements of that that
17 are appealed. And, again, my area of expertise is not
18 specific claims associated with patents. So I can't
19 tell I can speak to that. Dr. Youssef would probably be
20 better versed.

21 BY MS. WICKRAMASEKERA:

22 Q. So you're not aware that the Federal Circuit
23 affirmed the jury's verdict that NuVasive's CoRoent XL
24 implant infringes Dr. Michaelson's translateral spinal
25 implant patent, correct?

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1 MR. ROSATO: Objection to form, foundation and
2 scope.

3 THE WITNESS: Again, I know that there are a
4 number of claims associated with these patents. I'm not
5 an expert in the individual claims and...

6 BY MS. WICKRAMASEKERA:

7 Q. So you didn't consider Dr. Michaelson's 1995
8 translateral spinal implant patent, in preparing your
9 declaration, correct?

10 MR. ROSATO: Objection. Form, scope, asked
11 and answered.

12 THE WITNESS: I did not.

13 BY MS. WICKRAMASEKERA:

14 Q. Okay. Were you aware that NuVasive presented
15 testimony, under penalty of perjury, from Dr. Brantigan
16 in the jury trial against Medtronic?

17 A. As stated earlier, I wasn't directly involved
18 with those proceedings, but I did have some general
19 awareness that Dr. Brantigan testified in some capacity.

20 Q. Okay. And were you aware that Dr. Brantigan
21 testified about his use of -- his anterior cages that
22 were made by AcroMed that were long and that he inserted
23 using the lateral approach?

24 MR. ROSATO: Objection. Form, foundation,

25 scope. I'm going to note, you are introducing
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1 representations of evidence that's not in record.

2 MS. WICKRAMASEKERA: That's fine.

3 MR. ROSATO: And I don't like where you are
4 going with this.

5 MS. WICKRAMASEKERA: That's fine. He can tell
6 me whether he is aware of it or not.

7 THE WITNESS: I'm sorry. Can you restate the
8 question?

9 BY MS. WICKRAMASEKERA:

10 Q. Sure. Are you -- okay. Actually, did you --
11 let me just ask this simpler, okay?

12 Did you consider the testimony presented by
13 NuVasive from Dr. Brantigan, under penalty of perjury,
14 in the jury trial against Medtronic, in preparing your
15 declaration?

16 A. I did not consider the testimony of Dr.
17 Brantigan, no.

18 Q. Okay. But you were aware there was testimony
19 from Dr. Brantigan?

20 A. Again, as I stated --

21 MR. ROSATO: Objection. Asked and answered,
22 scope.

23 THE WITNESS: As I stated previously, I was
24 not aware -- I was not party to the proceedings. I was
25 not aware of the specifics associated with that

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1 testimony, no.

2 BY MS. WICKRAMASEKERA:

3 Q. Okay. So when you refer in your declaration
4 to the length of the CoRoent implant being novel --

5 A. I'm sorry. Could you --

6 Q. Actually, you know what? Let me ask you that,
7 as a foundational question.

8 Do you believe that the length of the CoRoent
9 XL -- do you believe the length of the CoRoent XL
10 implant is novel?

11 MR. ROSATO: Objection. Form, foundation and
12 scope.

13 THE WITNESS: I believe, at least, again,
14 based on my experience having competed against NuVasive
15 in the marketplace when they introduced the CoRoent XL
16 implant and then having represented it, marketed it,
17 sold it, having the optionality of lengths, you know,
18 greater than 40 millimeters -- or 40 millimeters and
19 greater, I believe to be novel, based on my experience
20 at the time.

21 BY MS. WICKRAMASEKERA:

22 Q. Okay. So that in -- and is that belief
23 reflected in your declarations?

24 A. I don't recall if that is cited specifically.

25 I believe my reference to -- there is a reference to
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1 size which would include -- in my mind, would have been
2 inclusive of the overall dimensions.

3 Q. Now, you refer in paragraph 15 to testimony
4 from Mr. Miles, "that the CoRoent XL implants were the
5 first commercially available lumbar interbody implants
6 having a length greater than 40 millimeters." Do you
7 see that?

8 A. I'm sorry?

9 Q. It is in paragraph 15. Did I refer to it
10 wrong?

11 A. Yes, I see it in paragraph 15.

12 Q. Yes.

13 A. "Mr. Miles further testified," yes.

14 Q. So Mr. -- you state that, "Mr. Miles further
15 testified that the CoRoent XL implants were the first
16 commercially available lumbar implants having a length
17 greater than 40 millimeters." Do you see that?

18 A. I don't believe that's exactly what that
19 statement says.

20 Q. You go on to state further things about the
21 width and the other -- and other aspects --

22 A. I don't -- I didn't actually state this. Mr.
23 Miles stated this.

24 Q. Right. I think I said that you stated that
25 Mr. Miles did, but if I didn't, let me ask the question

1 again. Okay?

2 In paragraph 15, you state that, "Mr. Miles
3 further testified that the CoRoent XL implants were the
4 first commercially available lumbar interbody implants
5 having a length greater than 40 millimeters."

6 Do you see that?

7 A. Yes, but it also says, "Implants having a
8 length greater than 40 millimeters, a maximum width of
9 18 and designed for insertion," a direct lateral
10 transpsoas approach to the lumbar spine." I don't -- I
11 don't believe that those -- at least my interpretation
12 of those comments from Mr. Miles were not that each of
13 those is mutually exclusive, but that they are
14 interrelated.

15 Q. Right. That's fair.

16 So let me ask you first about the length
17 greater than 40 millimeters. Do you agree with Mr.
18 Miles' statement that CoRoent XL implants were the first
19 commercial available lumbar interbody implants having a
20 length greater than 40 millimeters?

21 A. Again, I think you are mischaracterizing the
22 statement. I don't believe -- at least my
23 interpretation of this is not that he was saying it was
24 greater -- independently greater than 40 millimeters.

25 He is saying that it was greater than 40 millimeters,
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1 inclusive of a maximum width of 18 millimeters, and
2 designed for lateral. That was my interpretation of
3 this statement.

4 Q. Okay. That's fair.

5 So what I want to ask you, though, is I want
6 to specifically ask the 40-millimeter-length portion of
7 the implant and take each one in turn. I understand
8 that you are talking --

9 A. I don't believe that's an accurate reflection
10 of the statement, though.

11 Q. Okay. Well, let me just ask you this. Do you
12 believe that NuVasive was the first to have a 40
13 millimeter lumbar implant?

14 MR. ROSATO: Objection to form, foundation,
15 asked and answered.

16 THE WITNESS: I do not know that NuVasive was
17 the first to have a 40 millimeter implant.

18 BY MS. WICKRAMASEKERA:

19 Q. Okay. Do you believe that NuVasive was the
20 first to have an implant that measured 18 millimeters in
21 the anterior-posterior direction?

22 MR. ROSATO: Objection. Form, foundation,
23 scope.

24 THE WITNESS: I do not know that NuVasive was
25 the first to have an implant that measured 18

1 millimeters. And per the statement, I think the
2 interpretation of importance was a combination of the
3 length and the width of the implant.

4 BY MS. WICKRAMASEKERA:

5 Q. Okay. So you don't have any opinion as to
6 whether NuVasive was the first to have an implant that
7 measured 18 millimeters in the anterior to posterior
8 dimension?

9 MR. ROSATO: Objection. Scope.

10 THE WITNESS: I think my previous answer is
11 the same, which is, I don't know that to be true or not.

12 BY MS. WICKRAMASEKERA:

13 Q. Okay. Do you believe that NuVasive was the
14 first to design an implant for a direct lateral
15 approach?

16 MR. ROSATO: Objection to form, foundation and
17 scope.

18 THE WITNESS: I don't know that to be true or
19 not.

20 BY MS. WICKRAMASEKERA:

21 Q. Do you believe that NuVasive was the first to
22 design an implant for insertion using the transposas
23 approach?

24 MR. ROSATO: Same objection.

25 THE WITNESS: I don't know that to be true or
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1 not.

2 BY MS. WICKRAMASEKERA:

3 Q. And so just to round this out on the
4 skepticism. The skepticism that you are referring to in
5 your declaration regarding the CoRoent XL implant is
6 specifically skepticism of the width and the length of
7 the implant; is that correct?

8 MR. ROSATO: Objection. Form, asked and
9 answered.

10 THE WITNESS: Yeah, so my understanding,
11 consistent with Ms. Howell's statement as well as my own
12 experience, was that there was a skepticism over the
13 overall size of the implant; width being one
14 consideration; the availability of length, in
15 particular, the length in excess of 40 millimeters, that
16 allowed positioning of the implant to bridge the
17 apophyseal ring and optimize the stability.

18 I'm unaware of other implants, as Mr. Miles
19 said, that offered all of those features or benefits
20 through geometry being length of 40 millimeter and
21 greater, along with a width of 18 millimeters
22 specifically designed to be facilitated through a
23 lateral approach.

24 And so I agree with Mr. Miles' statements that
25 the combination of those features were unique, based on
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1 my experience.

2 BY MS. WICKRAMASEKERA:

3 Q. I notice in your excerpts of Ms. Howell's
4 testimony, paragraph 14, you cut off her answer. Do you
5 know why you did that?

6 MR. ROSATO: Objection to form.

7 THE WITNESS: I do not recall at the time. My
8 recollection was in my discussion around experience
9 around skepticism related to the size and geometry of
10 the implant, that Ms. Howell's statements were
11 consistent with what I have heard her and others
12 characterize previously as well as my own experience.

13 BY MS. WICKRAMASEKERA:

14 Q. And how -- how did -- what did Ms. Howell
15 testify -- or how did Ms. -- withdrawn.

16 Did Ms. Howell testify as to how NuVasive
17 overcame that skepticism?

18 A. I do not recall the specifics of her
19 testimony. I can speak from my own experience, how I
20 believe that was addressed in the market.

21 Q. How do you believe that was addressed in the
22 market?

23 A. Well, in paragraph 12, I state specifically,
24 "NuVasive undertook considerable efforts to overcome the
25 skepticism expressed by industry professionals,

1 including establishing a cadaver lab in San Diego,
2 California headquarters as an XLIF training center,"
3 that being one component of it.

4 Q. How did that specifically address skepticism
5 regarding the length and the width of the implant?

6 MR. ROSATO: Objection to form.

7 THE WITNESS: So in my experience, it provided
8 a forum for surgeons to appreciate the anatomic, you
9 know, geometry of the spine and the ability to -- and
10 surrounding that, I mean, the ability to safely deliver
11 the implant.

12 So I believe that training component was
13 important, and that -- an important part of the
14 education process.

15 BY MS. WICKRAMASEKERA:

16 Q. Was there any skepticism expressed regarding
17 the location of the markers in the implant?

18 MR. ROSATO: Objection to form, foundation.

19 THE WITNESS: I don't recall there -- I don't
20 recall, in my own experience, that being a primary point
21 of skepticism, no.

22 BY MS. WICKRAMASEKERA:

23 Q. Do you recall any skepticism about whether
24 placing the markers in the middle of the implant would
25 assist a surgeon with aligning the implant during

1 insertion?

2 MR. ROSATO: Objection to form, foundation,
3 scope.

4 THE WITNESS: I don't recall any skepticism
5 with the markers -- yeah -- placement of the markers are
6 -- the role they played in visualization of the implant.

7 BY MS. WICKRAMASEKERA:

8 Q. How did NuVasive know that you could place the
9 markers in the middle of the implant and that would be
10 useful to a surgeon?

11 MR. ROSATO: Objection. Scope, form.

12 THE WITNESS: So, again, just based on my own
13 experience and recollection of, you know, what I
14 understood it, it was just through clinical evaluation
15 of the implant.

16 BY MS. WICKRAMASEKERA:

17 Q. Before the implant was made or after?

18 A. Again, at least to my understanding. I did
19 not have direct involvement in the development of the
20 implant, but through the development of the implant
21 utilization, I think as I stated in my declaration, in
22 addition to utilizing the cadaver lab as a training
23 facility, it was also a testing facility, not just for
24 XLIF, but other procedures.

25 So it was my understanding, just based on my
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1 experience, that they evaluated different options to
2 facilitate the -- how best to visualize the orientation
3 of the implant in the space. I think, given the size
4 and geometry of the implant, accurate visualization of
5 its placement in the disc space was deemed as important.
6 I certainly heard that type of feedback from surgeons.

7 And, at least, again, just based on my
8 experience, there is implants that have different marker
9 types and different marker orientations that, I've
10 heard, suggested are more difficult to understand the
11 orientation of the implant in the disc space.

12 Q. Are those implants that have different marker
13 types and different orientations, that you just
14 testified were more difficult to understand, were those
15 prior our implants?

16 MR. ROSATO: Objection to form.

17 THE WITNESS: I don't know.

18 BY MS. WICKRAMASEKERA:

19 Q. Okay.

20 A. I'm speaking from my clinical experience.

21 Q. Your clinical experience being -- starting
22 from what time -- time period?

23 A. I started in the spine industry in 2004.

24 Q. Okay. Do you recall any skepticism about
25 having a fusion aperture passing through the implant,

1 from the top to bottom?

2 A. I don't recall a skepticism specific to the
3 fusion aperture.

4 Q. Do you recall any skepticism regarding the
5 number of radiopaque markers to put in the implant?

6 A. I do not recall skepticism specific to the
7 number of markers.

8 Q. Do you believe that NuVasive was the first to
9 conceive of the idea of including radiopaque markers in
10 a PEEK implant?

11 MR. ROSATO: Objection to form, foundation and
12 scope.

13 THE WITNESS: My experience, prior to
14 NuVasive, was that other implants had radiopaque markers
15 in them.

16 BY MS. WICKRAMASEKERA:

17 Q. Okay. And the 18-millimeter width that you've
18 referred to for the CoRoent XL implant, what were the --
19 what were the primary anatomical considerations in
20 arriving at the 18-millimeter width?

21 MR. ROSATO: Objection to form and foundation.

22 THE WITNESS: At least, again, I was not at
23 NuVasive at the time the implant was developed. My
24 understanding at the time that I arrived at NuVasive was
25 that the desire was to make the implant as wide as

1 possible.

2 And, again, as -- when I started with the
3 company in 2006, as I understood at that time, the
4 limitation to making the implant wider was the initial
5 skepticism and feedback from the clinical community,
6 that the 18-millimeter-wide implant could be a challenge
7 clinically to place. And so...

8 BY MS. WICKRAMASEKERA:

9 Q. So when you say it "could be a challenge
10 clinically to place," do you mean -- do you mean its
11 placement safely on the vertebral body or in the
12 intervertebral space itself or do you mean the path of
13 insertion?

14 A. Both are considerations.

15 Q. Okay. And let's take the first one, in terms
16 of the -- where it sits in the intervertebral space.

17 A. Yes.

18 Q. What are the -- what are the considerations
19 there?

20 A. Primary considerations would be a -- if the
21 implant was placed, I think at least in my experience,
22 the primary concern was that the implant was placed too
23 far anterior. It could, upon placement, violate and
24 involuntary release the ligament that sits across the
25 front of the spine, which is an important factor in

1 stabilization, but also protects the vascular structures
2 that reside in the anterior part of the lumbar spine.

3 Q. Do you know what the common anterior-posterior
4 dimension was of the implants that were inserted -- that
5 were commercially available prior to the CoRoent XL?

6 MR. ROSATO: Objection to form, foundation.

7 THE WITNESS: From what approach?

8 BY MS. WICKRAMASEKERA:

9 Q. From any approach.

10 A. Okay.

11 Q. And I'm talking about -- the reason why I said
12 anterior-posterior dimension, is I mean approach.

13 A. Okay.

14 Q. Anterior-posterior dimensions. Are you
15 familiar with what is commercially available?

16 A. So --

17 MR. ROSATO: Same objection.

18 THE WITNESS: -- from a posterior approach, in
19 my experience, an average width was probably somewhere
20 between 9 and 11 millimeters.

21 BY MS. WICKRAMASEKERA:

22 Q. But you're not talking -- in a posterior
23 approach, when you are referring to the width, that's
24 not the anterior-posterior dimension, is it?

25 A. If you place it correctly, it is, yes. So if
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1 you do -- if you do an anterior TLIF procedure, which is
2 a banana-shaped cage to the front of the spine.

3 Q. All right.

4 A. Which will sit in a similar orientation to an
5 ALIF or an XLIF, that is -- that is the correct
6 orientation in width.

7 Q. Okay. So if you are doing a PLIF, a bilateral
8 PLIF, you are familiar with the bilateral PLIF --

9 (Reporter asks for clarification.)

10 BY MS. WICKRAMASEKERA:

11 Q. If you are doing the commercially-available
12 cages that were used for a bilateral PLIF at the time --

13 A. Right.

14 Q. -- before CoRoent XL, what was the typical
15 anterior to posterior dimension of those implants?

16 MR. ROSATO: Objection to form, foundation and
17 scope.

18 THE WITNESS: Yeah, so depending on the
19 offering, there was a -- there is a wide range of
20 offerings. I can't tell you, yeah, conclusively, what
21 the range or average would be. Based on my experience,
22 I'd say the average length is probably in the
23 neighborhood of 25 millimeters.

24 Again, what you're -- you're comingling, you
25 know, the clinical requirements based on the approach,

1 because while you had a -- you are talking about an
2 implant that is placed in a different orientation. You
3 are talking about an implant that's contained entirely
4 within the disc space, not designed to bridge across the
5 apophyseal ring.

6 And so I think you are trying to make a
7 comparison to dimensions that are unrelated to one
8 another. So if you wanted to make a more accurate
9 comparison --

10 BY MS. WICKRAMASEKERA:

11 Q. Yeah.

12 A. -- you could compare it to an ALIF.

13 MR. ROSATO: Let him finish.

14 BY MS. WICKRAMASEKERA:

15 Q. Okay.

16 A. You can compare it to an ALIF.

17 Q. Okay.

18 A. And similarly, while you have a wider implant
19 front to back, anterior to posterior, than 18
20 millimeters, you have a narrower implant laterally,
21 typically, than the CoRoent XL. And, again, the --
22 independent of how they are used, because surgeons can
23 ultimately use an implant at their discretion, an ALIF
24 implant is designed to be contained within the disc
25 space.

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1 And an XLIF -- or CoRoent XL implant is
2 designed to bridge across the interbody space. And so
3 when you think about the anterior-posterior dimension
4 relative to the width, you have a vertebral body that is
5 not of uniform width.

6 **Q. Right.**

7 A. And so you are talking about very different
8 anatomic considerations as you compare approaches in
9 the dimension of an implant of one approach versus the
10 other.

11 **Q. Now, the CoRoent XL implant doesn't actually**
12 **sit on the apophyseal ring on the anterior portion of**
13 **the vertebrae, does it?**

14 A. I'm sorry?

15 **Q. The CoRoent XL implant does not actually sit**
16 **on the apophyseal ring on the anterior portion of the**
17 **vertebral body, correct?**

18 A. Again, so in my experience and how we -- how
19 NuVasive promoted the technique, oftentimes, if not, I'd
20 say most oftentimes, included a discussion around
21 placing an implant that bridged the apophyseal ring.

22 **Q. Now, when you say "bridged the apophyseal**
23 **ring," you're referring to the portions of the**
24 **apophyseal ring on the lateral aspects of the vertebral**
25 **body; am I correct?**

1 A. That is correct.

2 Q. Okay. So you are not you are referring to the
3 portions of the apophyseal ring that are on the anterior
4 and posterior portions of the vertebral body, correct?

5 A. That would be -- in my experience, that would
6 be typically correct, yes.

7 Q. Okay. And so you believe that NuVasive was
8 the first to conceive of the concept of sizing an
9 implant to bridge the apophyseal ring; is that correct?

10 MR. ROSATO: Objection. Form, foundation and
11 scope.

12 THE WITNESS: I did not say that. And I don't
13 know that to be true or not.

14 BY MS. WICKRAMASEKERA:

15 Q. When the CoRoent XL implant is inserted, is
16 the -- is the -- actually, withdrawn, because I can't
17 remember the name of that portion of the anatomy.

18 What is it called, the contralateral -- the
19 part of the disc that remains on the contralateral side
20 when you do a lateral procedure? Do you recall what
21 that's called? Do you know what I'm talking about?

22 A. I'm not trying to be difficult.

23 Q. Yeah.

24 A. In my experience, if you are doing a lateral
25 interbody preparation correctly, there should not be

1 disc or annulus intact on the contralateral side.

2 Q. There should not be? Don't you release it but
3 don't remove it?

4 A. I mean --

5 MR. ROSATO: Objection to form, foundation
6 scope.

7 BY MS. WICKRAMASEKERA:

8 Q. Do you know?

9 A. No, I know.

10 Q. Yeah.

11 A. If you -- if you -- again, in my experience --

12 Q. Right.

13 A. -- the technique that we taught and
14 promoted --

15 Q. Yeah.

16 A. -- to our surgeons and including the
17 certifications we provide in -- on the procedure, our
18 sales force, is that you would comprehensively evacuate
19 the disc across the disc space and that you would
20 completely disrupt the annulus on the contralateral
21 side.

22 Q. Okay. So there is no portion of the anulus on
23 the contralateral side that would remain intact?

24 MR. ROSATO: Objection. Form, foundation,
25 scope.

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1 THE WITNESS: Again, it would depend on the
2 surgeon's technique and how -- how aggressively they
3 release the annulus.

4 BY MS. WICKRAMASEKERA:

5 Q. Okay.

6 A. The -- as I understand how we have most
7 consistently taught the technique would be a release of
8 the contralateral annulus, you know, consistent to the
9 width of the implant, ideally.

10 Q. Right. But a release and a removal of the
11 contralateral annulus are two different things, correct?

12 MR. ROSATO: Same objection.

13 THE WITNESS: It could be, I suppose, yes.

14 BY MS. WICKRAMASEKERA:

15 Q. Okay. And if you release but don't remove the
16 contralateral annulus, it is still attached to the
17 apophyseal ring, correct?

18 A. Again, I'm not sure if that's an accurate
19 characterization or not.

20 Q. Do you have any reason to believe it is not
21 accurate?

22 MR. ROSATO: Objection. Asked and answered.

23 THE WITNESS: Yeah, I'm not sure I'm actually
24 clear on what you are asking.

25 BY MS. WICKRAMASEKERA:
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1 Q. If you release but don't remove the
2 contralateral annulus, what is the contralateral annulus
3 connected to on the vertebral body?

4 MR. ROSATO: Objection. Form, scope, asked
5 and answered.

6 THE WITNESS: In theory, it would be attached
7 to the vertebral end plate.

8 BY MS. WICKRAMASEKERA:

9 Q. At what point?

10 A. On or about the -- yeah, the edge of the
11 vertebral body, which would be an approximation to the
12 apophyseal ring. Whether or not the implant sits in
13 direct contact with the apophyseal ring, if there
14 happens to be some element of annular tissue that's
15 remnant, in my experience based on my knowledge, I don't
16 believe implants the biomechanic stability of the -- of
17 the implant.

18 Q. In paragraph 20 of your declaration, you
19 provide a side-by-side comparison of a CoRoent XL and
20 the Alphatec Battalion implants. Do you see that?

21 A. I do see that, yes.

22 Q. And you refer to the side-by-side comparison
23 as showing "the striking similarities between NuVasive's
24 CoRoent XL and Alphatec's Battalion implants." Do you
25 see that?

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1 A. I do see that, yes.

2 Q. In preparing your declaration, did you
3 consider the Court's -- in the District Court, the
4 Court's dismissal of NuVasive's claims that Alphatec's
5 Battalion lateral implant was similar in design to the
6 CoRoent XL?

7 MR. ROSATO: Objection. Form, foundation and
8 scope. And we are also introducing inaccurate
9 characterizations of evidence that's not in record.

10 THE WITNESS: I did not consider that, no.

11 BY MS. WICKRAMASEKERA:

12 Q. Okay. If the Court in the District Court
13 litigation concluded that Alphatec's Battalion lateral
14 implant had obvious differences between the CoRoent XL
15 implant and -- with the CoRoent XL implant, would you
16 disagree?

17 MR. ROSATO: Same objection.

18 THE WITNESS: Again, I'm not an attorney. I
19 don't have the ability, I think, to form an opinion off
20 of some legal judgment or ruling.

21 BY MS. WICKRAMASEKERA:

22 Q. If the Court in the District Court litigation
23 had concluded that the design of the CoRoent XL implant
24 and the Battalion lateral implant were plainly
25 dissimilar, would you disagree?

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1 MR. ROSATO: Same objection.

2 THE WITNESS: Again, I'm not an attorney and
3 I'm not sure I'm qualified to make a decision on that
4 basis.

5 BY MS. WICKRAMASEKERA:

6 Q. No one provided you a copy of the Court's
7 order dismissing NuVasive's design-pattern claims, in
8 preparing your declaration?

9 MR. ROSATO: Same objection.

10 THE WITNESS: I did not review that, no.

11 BY MS. WICKRAMASEKERA:

12 Q. Do you recall NuVasive making public
13 statements to investors, following the jury verdict,
14 that it infringed the Medtronic implant patent?

15 MR. ROSATO: Objection. Form, foundation,
16 scope.

17 THE WITNESS: I have a general recollection of
18 statements. I don't recall the exact form, whether it
19 be press release or otherwise. I don't recall the
20 specifics now. Several -- many years ago.

21 BY MS. WICKRAMASEKERA:

22 Q. In 2012, did you have any involvement with
23 CoRoent?

24 A. In 2012, I was in a sales leadership role of
25 -- in -- in that capacity, was responsible for the sales
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1 and promotion of CoRoent implants, yes.

2 Q. What design-arounds were considered by
3 NuVasive for the CoRoent XL implants to address the
4 jury's verdict in the -- in the Medtronic case?

5 MR. ROSATO: Objection. Form, foundation,
6 scope. I'll caution we be careful about privileged
7 information.

8 THE WITNESS: I don't recall having any
9 firsthand knowledge related to the specifics of the
10 technical design of the implant at that time.

11 BY MS. WICKRAMASEKERA:

12 Q. Do you know which patents NuVasive was found
13 to infringe in the Medtronic case?

14 A. I do not know, off the top of my head.

15 MR. ROSATO: Objection. Form, foundation,
16 scope.

17 BY MS. WICKRAMASEKERA:

18 Q. You didn't review the Federal Circuit's
19 decision regarding the jury verdict of infringement in
20 the Medtronic case, in preparing your declaration?

21 MR. ROSATO: Objection. Form, foundation and
22 scope.

23 THE WITNESS: I did not. Like I said, I am
24 not an attorney as it relates to legally interpret these
25 claims and implications,

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1 BY MS. WICKRAMASEKERA:

2 Q. Aside from Dr. Youssef, are you aware of
3 anyone else stating that Alphatec copied the design of
4 the NuVasive CoRoent XL implant?

5 A. As indicated in the declaration, it was the
6 expert opinion of Dr. Youssef that I relied upon, with
7 respect to the claims on the -- as it reflected in the
8 patents, and the similarity.

9 Q. Okay. I'm -- I think I'm speaking more
10 generally regarding your opinion as expressed in
11 paragraph 20, that the CoRoent XL and Alphatec Battalion
12 lateral -- Battalion implants are strikingly similar.
13 With respect to that opinion, are you aware of anyone,
14 other than Dr. Youssef, expressing to you that opinion?

15 A. Yeah, so as I read paragraph 20 and recall as
16 best I can, the declaration, I believe that's reflective
17 of my opinion that per the exhibits or images that are
18 provided in the declaration, in my opinion, they look
19 similar or nearly identical.

20 Q. Okay. Has anyone else expressed to you --
21 other than Dr. Youssef, has anyone else expressed to you
22 that the implants, the two implants, are strikingly
23 similar?

24 A. I haven't actively sought that input.

25 Q. No one said it to you anyway, despite your not
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1 actively seeking it?

2 MR. ROSATO: Objection. Asked and answered.

3 THE WITNESS: I haven't actively sought that
4 input, no.

5 MS. WICKRAMASEKERA: We could probably take a
6 break now.

7 MR. ROSATO: Okay.

8 (Recess.)

9 BY MS. WICKRAMASEKERA:

10 Q. Mr. Link, could you turn to paragraph 13 of
11 your report.

12 A. Yes.

13 Q. Let me know once you are there.

14 A. I'm on paragraph 13.

15 Q. Okay. Do you see the second sentence of
16 paragraph 13? It starts with "only"?

17 A. Yes.

18 Q. Okay. So in paragraph 13, you state, "Only a
19 handful of highly-skilled surgeons had even attempted a
20 minimally-invasive lateral approach for degenerative
21 disc spinal fusion surgery, with mixed results at best."
22 Do you see that?

23 A. I do see that, yes.

24 Q. Which surgeons are you referring to?

25 A. So, again, based on my understanding during my
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1 tenure in the company, one surgeon in particular was Dr.
2 Luiz Pimenta, who had a technique, as I understood it,
3 for lateral approaches that was different than the, you
4 know, XLIF procedure and different forms of technology.

5 I think if you -- and I guess, again, in my
6 experience, other surgeons who had done lateral
7 approaches happen to be familiar with Dr. McAfee. You
8 could even argue whether or not it was even considered
9 minimally invasive, depending on how subjectively you
10 categorize that. But those would be two examples of
11 others I had been familiar with prior to my -- my
12 personal experience with XLIF.

13 Q. Okay. Are there any other surgeons that you
14 are referring to here?

15 A. I don't recall what other surgeons may have --
16 I may have considered at that time.

17 Q. Okay. How do you measure reproducibility?

18 A. So I think one of the major measures, at least
19 in my opinion, in my experience of reproducibility is
20 whether or not a procedure could be successfully and
21 broadly adopted. I think that's indicative of
22 reproducibility.

23 In my experience, surgeons tend not to adopt
24 techniques or technologies that don't facilitate good
25 outcomes. So if it is reproducible, i.e. in the
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1 ability to achieve a good outcome. I think
2 reproducibility is reflected through the broad clinical
3 and commercial adoption of a technique or technology.

4 There is other, I think, more objective
5 measures which can be, you know, operative time,
6 associated with -- or variability in operative time
7 between clinicians, things like that. But, certainly, I
8 think the adoption within the marketplace is a solid
9 reflection.

10 Q. How many surgeons need to adopt it for it to
11 be considered reproducible?

12 A. I don't have a set definition of what that
13 would be.

14 Q. Does the number of surgeons who adopt it
15 depend, in part, on a company's efforts with surgeon
16 training?

17 A. I believe --

18 MR. ROSATO: Objection to form and foundation.

19 THE WITNESS: Again, in my experience, a
20 surgeon's ability to adopt is related to, I think, the
21 merits and the validity of the technology, overcoming
22 skepticism over their belief in that, safety and
23 reproducibility, certainly, can be supported through
24 training and education.

25 BY MS. WICKRAMASEKERA:
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1 Q. Have you -- okay.

2 Is there an objective way to measure safety?

3 A. Yes, I believe there is.

4 Q. And what is that measure, objective measure?

5 A. Again, based on my experience in the industry,
6 typically, safety would be reflected through
7 complications measured or associated with a surgical
8 procedure.

9 Q. Okay. So for lateral procedures, what
10 complication rates would be considered the threshold for
11 safety versus -- safe versus non-safe?

12 A. I think the primary consideration would be how
13 those complication rates compare to other procedures or
14 interventions intended to address the same pathology or
15 anatomic disease.

16 Q. So is there a single objective measure to
17 determine whether a lateral approach is safe or not
18 safe?

19 A. I am not aware of one single measure. I am
20 aware of several hundred published studies or examples
21 of clinical evidence related to XLIF that show a
22 clinical profile as safe, or more safe, than other
23 surgical techniques that have commonly been used to
24 address spinal pathology.

25 Q. As safe as ALIF?
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1 A. I believe that the body of clinical evidence
2 around XLIF demonstrates a safety profile as good as
3 ALIF, yes, in my opinion and my experience.

4 **Q. Is there an objective measure to determine**
5 **whether a lateral approach is reproducible or not**
6 **reproducible?**

7 A. I'm not aware of a single objective measure.
8 I would say that my characterization of it as safe and
9 reproducible, again, is a reflection of the broad
10 adoption that we have seen of the technique in the
11 marketplace, including within academic training centers.
12 It is also how I've heard XLIF categorized by clinicians
13 as well as other executives who have been either at
14 NuVasive or previously at NuVasive, like Ms. Miles and
15 Ms. Howell.

16 **Q. Is the phrase "safe and reproducible" a**
17 **marketing phrase?**

18 A. In my experience, it is a reflection of how I
19 have categorized in my own experience and promotion of
20 the procedure, but I think also a reflection of how the
21 company has assessed the procedure, but also how the
22 market has received the procedure, based on a safety
23 profile and the ability to successfully adopt into a
24 physician's practice, or surgeon's practice, in a manner
25 similar to other spinal surgery techniques.

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1 Q. Are you aware of who within NuVasive came up
2 with the term "safe and reproducible"?

3 MR. ROSATO: Objection. Form, foundation.

4 THE WITNESS: I'm not aware of that phrase
5 being attributed to one single individual.

6 BY MS. WICKRAMASEKERA:

7 Q. Okay. But NuVasive did come up with the term
8 "safe and reproducible"?

9 A. I can't say conclusively that NuVasive coined
10 the phrase "safe and reproducible," and that it's never
11 been used in conjunction with any other surgical
12 technology, let alone spine technology, no.

13 Q. Is that a phrase, "safe and reproducible," is
14 that a phrase you generally associate specifically with
15 NuVasive?

16 A. It is a phrase that I have used, yes, in my
17 time at NuVasive. Yes.

18 Q. Is it contained in a lot of the marketing
19 materials for NuVasive?

20 A. I mean, "a lot" is a subjective word, but I am
21 familiar with it being utilized in a number of different
22 marketing materials, yes.

23 Q. Now, in the middle of your paragraph 13, you
24 state, "These earlier lateral approaches were not
25 considered safe or reproducible." And then you go on to

1 state a few other things in that sentence.

2 But I'd like to ask you about your statement
3 that the lateral approaches -- the "earlier lateral
4 approaches were not considered safe or reproducible."
5 Who specifically did not consider those earlier lateral
6 approaches to be safe or reproducible?

7 A. Yeah, so as I stated in my -- in a previous
8 response, I think at least in my view, a measure of the
9 market's perception or acceptance of a -- of safety and
10 reproducibility is reflected through the market's
11 adoption. And in my experience, I did not see other
12 lateral approaches being widely adopted.

13 Q. Are there any other factors that would lead to
14 a competitor company not developing a lateral approach,
15 aside from safety and reproducibility?

16 MR. ROSATO: Objection to form and foundation.

17 THE WITNESS: I suppose there could be. I
18 have not been party to those discussions at other
19 companies.

20 BY MS. WICKRAMASEKERA:

21 Q. Would, for example, cannibalism of your own
22 alternative product lines potentially be a reason why
23 others may not have developed commercial lateral
24 products before NuVasive?

25 MR. ROSATO: Objection. Form, foundation,
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1 scope.

2 THE WITNESS: Again, I'm not at those other
3 companies, so I can't speak to what their rationale in
4 those decisions were.

5 BY MS. WICKRAMASEKERA:

6 Q. So there may be other reasons why others have
7 not commercially launched a lateral interbody fusion
8 technique before NuVasive that have nothing to do with
9 lack of safety and reproducibility; is that correct?

10 MR. ROSATO: Objection. Form, foundation.

11 THE WITNESS: Again, I wasn't at those
12 companies, wasn't party to those discussions. I can
13 only speak to my experience at NuVasive, where, in
14 addition to XLIF, we have developed a full line of
15 complimentary procedures. So that's the only experience
16 I can speak to.

17 BY MS. WICKRAMASEKERA:

18 Q. So you have no opinion, one way or the other,
19 as to whether there might be other factors other than
20 safety and reproducibility that might have prevented
21 other competitors from launching a lateral product
22 portfolio before NuVasive; is that correct?

23 A. What I'm saying is, I can't speak factually as
24 to what their rationale was for whether they made that
25 decision or not.

1 Q. Now, NuVasive has an ALIF product line,
2 correct?

3 A. We do, yes.

4 Q. And is that safe and reproducible?

5 A. In my experience, there is a known
6 complication profile for every procedural type and there
7 is one associated with ALIF. Yes, there is. But it
8 has, I think, a complication profile that at this point
9 seems to have been accepted by the market.

10 Q. Are you uncomfortable saying that your
11 NuVasive's ALIF product line is safe and reproducible?

12 MR. ROSATO: Objection. Form, foundation.

13 THE WITNESS: I'm just trying to understand
14 the question as accurately as possible. You asked me
15 previously how I've categorized something as safe and
16 reproducible and if there was a objective measure. So
17 as accurately and as best I can, I'm answering that ALIF
18 has a known complication profile, but based on its
19 adoption in the market, it seems to have been accepted.

20 BY MS. WICKRAMASEKERA:

21 Q. Is XLIF safe and reproducible?

22 A. In my experience, I would say, based on its
23 market acceptance, that it is.

24 Q. Okay. Is TLIF safe and reproducible?

25 MR. ROSATO: Objection to form, foundation.
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1 THE WITNESS: Similar to my answer on ALIF, it
2 has a known complication profile. Based on that and the
3 clinical experience associated with it, it appears to
4 have been accepted by the market.

5 BY MS. WICKRAMASEKERA:

6 Q. Okay. Is PLIF safe and reproducible?

7 MR. ROSATO: Objection. Form, foundation.

8 THE WITNESS: Similar to my answer on ALIF and
9 TLIF, PLIF has a known risk and complication profile
10 well accepted by the market. It is an interbody
11 technique that, I would say, seems to be declining in
12 market adoption --

13 BY MS. WICKRAMASEKERA:

14 Q. Does --

15 A. -- based on my opinion and experience.

16 Q. Does NuVasive have any PLIF products?

17 A. We do, yes.

18 Q. Okay. Are they still being sold today?

19 A. Yes, we still have sales in those products.

20 Q. Okay. So are PLIFs being performed in
21 NuVasive products even today?

22 A. To the best of my knowledge, they are. Yes.

23 Q. Okay. Do you believe that those procedures
24 are safe and reproducible?

25 MR. ROSATO: Objection. Form, foundation.
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1 THE WITNESS: I believe that -- I believe the
2 products that we offer for PLIF are safe, yes.

3 MS. WICKRAMASEKERA: I don't have anything
4 further.

5 MR. ROSATO: Let's take a five-minute break.
6 (Recess.)

7 MR. ROSATO: Let's go back on the record. We
8 have no further questions. Thank you, Mr. Link.

9 MS. WICKRAMASEKERA: Thank you.

10 MR. ROSATO: Off.

11 (Recess.)

12 COURT REPORTER: Would you like to order a
13 copy of the transcript and a rough draft?

14 MS. WICKRAMASEKERA: I will take the rough and
15 then I guess, yeah, I will do the expedited since --
16 yes.

17 MR. ROSATO: I don't need anything.

18 (Deposition concluded at 11:26 a.m.)

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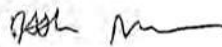
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I certify that the foregoing proceedings in the within-entitled cause were reported at the time and place therein named; that said proceedings were reported by me, a duly Certified Shorthand Reporter of the State of California, and were thereafter transcribed into typewriting.

I further certify that I am not of counsel or attorney for either or any of the parties to said cause of action, nor in any way interested in the outcome of the cause named in said cause of action.

IN WITNESS WHEREOF, I have hereunto set my hand this 13th day of January, 2020.



JOSHUA MANEA
Calif. CSR No. 13754

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