

Exhibit 2

1 IN THE UNITED STATES DISTRICT COURT
2 FOR THE NORTHERN DISTRICT OF WEST VIRGINIA
3

4 REGENERON PHARMACEUTICALS,
5 INC.,

6 Plaintiff,

7 -vs-

Case No. 1:22-cv-00061

8 MYLAN PHARMACEUTICALS, INC.,

9 Defendant.

10 *** OUTSIDE COUNSEL EYES ONLY ***

11 VIDEOTAPED DEPOSITION OF FRANKLIN SWARTZWELDER

12 TAKEN ON BEHALF OF THE DEFENDANT

13 ON APRIL 12, 2023, BEGINNING AT 9:18 A.M.

14 IN BARTLESVILLE, OKLAHOMA

15
16 APPEARANCES:

17 on behalf of the PLAINTIFF, REGENERON PHARMACEUTICALS,
18 INC.

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25 REPORTED BY: Shannon S. Harwood, CSR, RPR, CRR

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1 STIPULATIONS
 2
 3 It is hereby stipulated and agreed by and
 4 between the parties hereto, through their respective
 5 attorneys, that the deposition of FRANKLIN SWARTZWELDER,
 6 PhD, may be taken pursuant to agreement and notice and
 7 in accordance with the West Virginia Rules of Civil
 8 Procedure on April 12, 2023, at the Hilton Garden, Inn,
 9 205 SW Frank Phillips Boulevard, Bartlesville, Oklahoma,
 10 before Shannon S. Harwood, CSR, RPR, CRR.
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1 THE VIDEOGRAPHER: This is the videotaped
2 deposition of Franklin Swartzwelder in the matter of
3 Regeneron Pharmaceuticals versus Mylan Pharmaceuticals.
4 This deposition is being held at 205 Southwest Frank
5 Phillips Boulevard in Bartlesville, Oklahoma, on April
6 12, 2023. We are on the record at 9:18 a.m.
7 Will counsel please state your appearances for
8 the record?
9 MR. EHRICH: Tom Ehrich of RMMS for the Mylan
10 defendant and my cocounsel will introduce himself.
11 MR. McLAUGHLIN: Neil McLaughlin also from
12 RMMS on behalf of Mylan.
13 MR. FLETCHER: Tom Fletcher, Williams &
14 Connolly, LLP for Regeneron Pharmaceuticals, Inc. With
15 me are my colleagues, Adam Pan and Haylee Bernal
16 Anderson from Williams & Connolly, and also present from
17 Regeneron Pharmaceuticals is Petra Scamborova.
18 THE VIDEOGRAPHER: On the computer?
19 MR. FRANKS: Raymond S. Franks, II, Carey,
20 Douglas, Kessler & Ruby in Charleston, West Virginia,
21 local counsel for Regeneron.
22 THE VIDEOGRAPHER: The court reporter will now
23 swear in the witness.
24 (Witness sworn.)
25 WHEREUPON,

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1 FRANKLIN SWARTZWELDER, PhD,
2 after having been first duly sworn, deposes and says in
3 reply to questions propounded as follows, to-wit;
4 DIRECT EXAMINATION
5 BY MR. EHRICH:
6 Q. Good morning, Dr. Swartzwelder.
7 A. Good morning.
8 Q. Could you please state your full name for the
9 record?
10 A. Yeah, my name is Franklin Swartzwelder.
11 Q. Okay. And have you ever been deposed before?
12 A. No, I have not.
13 Q. Okay. So just a couple of ground rules. As
14 you can, see the deposition is being transcribed, and so
15 please remember that the transcriptionists do not
16 understand a nod or shake of the head, so please make
17 all of your answers verbal. And if any of my questions
18 are unclear, please just let me know and I'll be happy
19 to repeat or rephrase them.
20 And as we are going along today, if you later
21 happen to think of something you want to add to an
22 earlier question, please just let me know and we'll be
23 happy to revisit that.
24 A. I will.
25 Q. Your attorney will be objecting to some of my

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1 questions. In order to preserve the record, it's just
2 part of the process, but you still need to answer all of
3 the questions unless your attorney specifically asks you
4 not to.
5 And, finally, this is not an endurance test.
6 If you need a break or need to leave at any time, please
7 just let me know. The only thing I would ask is that
8 you please -- if there's a question pending, please just
9 answer the question before we break.
10 A. Thank you.
11 Q. Okay. I'd like to hand you what's been marked
12 as Exhibit DX 2012.
13 (Defendant's Exhibit No. 2012 was marked for
14 identification and made part of the record.)
15 Q. (By Mr. Ehrich) Do you recognize this as your
16 opening report in this case?
17 A. Yes, I do recognize this as my -- as my
18 opening expert report.
19 Q. Okay. And I believe your background
20 qualifications starts with Paragraph 11 on Page 2,
21 correct?
22 A. That's correct.
23 Q. Okay. And is it fair to very briefly
24 summarize as most of your career was spent in industry
25 in the area of cell culture media development?

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1 A. Yes, it's fair to -- to say that.
2 Q. Okay. Could you please -- I'd like to ask a
3 couple of questions about a couple of the specific
4 points in this section. Could you please go to the
5 bottom of Page 3 and on to page 4, paragraph 17. It
6 says that you focused on the design, development and
7 manufacture of catalog cell culture products.
8 Do you see that at the top of Page 4?
9 A. Yes, I see where it states that I focused on
10 design, development, and manufactured catalog cell
11 culture products and new custom CHO media.
12 Q. Okay. And, sir, just an additional question.
13 What is catalog cell culture product?
14 A. A catalog cell culture product in -- in my job
15 involve the production of cell culture media that were
16 basically manufactured and placed on the shelf for sale
17 and distribution to researchers --
18 Q. Okay.
19 A. -- in both academia and industry.
20 Q. Okay. Are you -- are you able sitting here
21 today to think of any examples of catalog cell culture
22 products that you would have been involved in the design
23 or development of?
24 A. One example that I can give you is EX-CELL
25 Advanced --

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1 Q. Okay.
2 A. -- CHO Medium.
3 Q. Okay. And did the -- did the EX-CELL Advanced
4 CHO Medium contain -- sorry. Apologize. Let me back up
5 a second.
6 Are you familiar with the term hydrolysate?
7 A. Yes, I'm familiar with the term hydrolysate.
8 Q. Okay. And are you familiar with the term
9 serum as it's used in the cell culture industry?
10 A. Very familiar.
11 Q. Okay. So you understand if I say -- use the
12 word serum, I'm probably talking about -- or I'm
13 talking about, for example, fetal calf serum or --
14 A. Fetal bovine serum.
15 Q. Fetal bovine serum, exactly.
16 A. Yes.
17 Q. Okay. Okay. Did -- does -- when you were at
18 Sigma, did the EX-CELL Media, did -- was it a -- did --
19 was it a media that was meant for use with serum or was
20 it meant as serum-free formulation?
21 A. It was meant as a serum-free formulation.
22 Q. Okay. And do you -- do you recall, did the
23 formulation include hydrolysate?
24 A. It does not include hydrolysate.
25 Q. Okay. And was it meant to be used with

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1 hydrolysate or was it meant to be used just on its own?
2 MR. FLETCHER: Objection.
3 A. EX-CELL Advanced is meant to be used on its
4 own initially, but for batch culture.
5 Q. (By Mr. Ehrich) Okay.
6 A. And fed batch culture.
7 Q. For fed batch culture?
8 A. Yeah.
9 Q. Okay. So by the term "fed batch culture," I
10 think you're kind of anticipating my next question. Is
11 it fair to say that EX-CELL Advanced is designed to be
12 used to culture cells that are producing recombinant
13 proteins?
14 A. EX-CELL Advanced -- what one use of EX-CELL
15 Advanced Medium is in the use of culturing CHO cells to
16 produce proteins.
17 Q. Okay.
18 A. That's one example.
19 Q. Okay. And turning back to the text of your
20 report, I see that it -- you say -- you use the term
21 "new custom Chinese Hamster Ovary" or CHO subculture
22 media products, and I'm curious. Why do you specify
23 that they're CHO subculture media products?
24 A. I specify in the excerpt from my resume -- my
25 CV, I specify CHO because that was the predominant cell

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1 that I worked with during my time at Sigma-Aldrich.
2 Q. Okay. And does -- does this mean that the
3 formulations were designed for use with CHO cells
4 specifically?
5 A. The formulations are originally designed for
6 use with CHO cells specifically.
7 Q. Okay. And do you happen to recall if the
8 EX-CELL Advanced includes nickel in the formulation?
9 A. I don't recall that and I couldn't share that
10 if I did.
11 Q. Okay.
12 A. Because it's proprietary formulation.
13 Q. Okay. Then -- then in that case, I'd like to
14 go just one paragraph ahead to Paragraph 18 --
15 A. Sure.
16 Q. -- of your opening report. It says that you
17 -- the second sentence says, "As part of that work, you
18 routinely assessed existing cell culture processes." Do
19 you see that?
20 A. And what is your question?
21 Q. Well, just make sure you're -- we're at the
22 same place.
23 A. Yes.
24 Q. Okay.
25 A. Yeah, I apologize.

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1 Q. Okay. No problem. And then so just to follow
2 up on this a little bit, can you give an example or two
3 of what kind -- sort of things you would look at in
4 assessing existing cell culture processes? Can you
5 just, I guess, walk me through what that entails a
6 little bit?
7 A. Assessing cell culture processes in --
8 involves -- if we start from ground zero, it involves
9 taking a cell, in this case, a CHO cell.
10 Q. Okay.
11 A. And identifying what base medium it would grow
12 in best.
13 Q. Okay.
14 A. And we would assess growth, viability, and if
15 it was a clone that was engineered to produce a product,
16 we would assess the level of the expression of that
17 product. We may look at other attributes and critical
18 quality attributes --
19 Q. Okay.
20 A. -- of the clone.
21 Q. So -- and then does it mean that -- just so I
22 -- just so I understand what you're saying, were all --
23 did all -- sitting here this morning, is it your memory
24 that all of these projects would involve CHO cells
25 specifically?

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