- 1 TP.ONE
- 2 DESIRAE S. JURA
- **3** HVC134550
- 4 INTERVIEW OF: JANET WOODCOCK, M.D.
- 5 Monday, May 13, 2024
- 6 U.S. HOUSE OF REPRESENTATIVES,
- 7 COMMITTEE ON OVERSIGHT AND ACCOUNTABILITY,
- 8 SELECT SUBCOMMITTEE ON THE CORONAVIRUS PANDEMIC,
- 9 WASHINGTON, D.C.

10 The Interview Commenced at 10:03 a.m.

11	Appearances		
12			
13	For the SELECT SUBCOMMITTEE ON THE CORONAVIRUS PANDEMIC:		
14	MITCH BENZINE, Majority Staff Director		
15	PETER SPECTRE, Majority Professional Staff Member		
16	ERIC OSTERHUES, Majority Counsel		
17	, Minority Staff Director		
18	, Minority Counsel		
19			
20			
21	For HHS:		
22	PERRIN COOKE, Senior Oversight Counsel		
23	YELENA TSILKER, HHS		
24	Washington, DC 20037		
25			
26	For FDA:		
27	MANASI RAVEENDRAN, Senior Advisor		

28	Exhibits		
29	Majority Exhibit No.	Page No.	
30	1 - Email communication	69	
31	2 - Email communication	71	
32	3 - CNN Article, FDA grants priority		
33	review to Pfizer/BioNTech Covid-19		
34	vaccine; decision on approval		
35	expected by January 2022	83	
36	4 - Memorandum for All Department of		
37	Defense Employees, Subject:		
38	Message to the Force	97	
39	5 - Memorandum for Senior Pentagon		
40	Leadership Commanders of the		
41	Combatant Commands Defense Agency		
42	and DOD Field Activity Directors,		
43	Subject: Mandatory Coronavirus		
44	Disease 2019 Vaccination of		
45	Department of Defense Service		
46	Members	99	
47	6 - FDA News Release, Joint Statement		
48	from HHS Public Health and Medical		
49	Experts on COVID-19 Booster Shots,		
50	August 18, 2021	101	
51	7 - Considerations in boosting		
52	COVID-19 vaccine immune responses	103	

53	Exhibits Continued		
54	Majority Exhibit No. Page No.		
55	8 - The New York Times, Coronavirus		
56	Briefing: What Happened Today	106	
57	9 - The New York Times, "All vaccines		
58	have at least occasional side		
59	effects. But people who say they		
60	were injured by Covid vaccines		
61	believe their cases have been		
62	ignored."	108	
63	10 - CBER Sentinel Program Sufficiency		
64	Memorandum	119	
65	11 - National Academies, Evidence		
66	Review of the Adverse Effects of		
67	COVID-19 Vaccination and		
68	Intramuscular Vaccine		
69	Administration	124	
70	12 - BMJ.com, Is the US's Vaccine		
71	Adverse Event Reporting System		
72	broken?	132	
73	13 - Medical Summary, Case Number:		
74	2021101980	137	

75

## PROCEEDINGS

76 Mr. Spectre. Go ahead and go on the record.

77 BY MR. SPECTRE.

Q This is a transcribed interview of Dr. Janet Woodcock conducted by the House Select Subcommittee on the Coronavirus Pandemic under the authority granted to it by House Resolution 5 and the rules of the Committee on Oversight and Accountability. This interview was requested by Chairman Brad Wenstrup, as part of the Select Subcommittee's oversight of the federal government's response to the coronavirus pandemic.

85 Further, pursuant to House Resolution 5, the Select Subcommittee 86 has wide ranging jurisdiction, but specifically to investigate the 87 development of vaccines and treatments, and the development and 88 implementation of vaccination policies for federal employees and 89 members of the Armed Forces, and executive branch policies, 90 deliberations, decisions, activities, and internal and external 91 communications related to the coronavirus pandemic.

92 Can the witness please state her name and spell her last name for 93 the record?

94

А

Janet Woodcock, W-O-O-D-C-O-C-K.

95 Q Thank you. Dr. Woodcock, my name is Peter Spectre, and I 96 am a professional staff member for the Majority staff of the Select 97 Subcommittee. I want to thank you for coming in today for this 98 interview. The Select Subcommittee recognizes that you are here 99 voluntarily and we appreciate that. 100 Under the Select Subcommittee and Committee on Oversight and 101 Accountability's rules, you are allowed to have an attorney present to 102 advise you during this interview. 103 Do you have an attorney representing you in a personal capacity 104 with you today? 105 A No, I do not. 106 Is there an attorney present representing the Department Q 107 with you today? 108 A My understanding --109 Mr. Cooke. Yes. 110 Mr. Spectre. Will counsel please identify themselves for the 111 record? 112 Mr. Cooke. Perrin Cooke, senior counsel at HHS. 113 Mr. Spectre. For the record, starting with the Majority staff, 114 can the additional staff members please introduce themselves with their 115 name, title, and affiliation? 116 Mr. Benzine. Mitch Benzine, staff director for the Majority 117 staff. 118 Mr. Osterhues. Eric Osterhues, chief counsel for the Majority 119 staff. 120 . , chief counsel for the 121 Minority staff. 122 . Democratic staff director. 123 Ms. Tsilker. Yelena Tsilker, senior adviser for oversight at 124 HHS.

Ms. <u>Raveendran.</u> Manasi Raveendran, senior adviser for oversight
at FDA.

127 Mr. Spectre. Thank you.

BY MR. SPECTRE.

129 Q Dr. Woodcock, before we begin, I would like to go over130 some of the ground rules for this interview.

The way this interview will proceed is as follows: The Majority and Minority will alternate asking questions, one hour per side per round, until each side is finished with their questioning. The Majority staff will begin and proceed for an hour, and then the Minority staff will have an hour to ask questions. We will then alternate back and forth in this manner until both sides have no more questions.

138 If either side is in the middle of a specific line of questions, 139 they may choose to end a few minutes past an hour to ensure completion 140 of that specific line of questioning, including any pertinent 141 follow-ups. In this interview, while one member of staff from each 142 side may lead the questioning, additional staff may ask questions.

There is a court reporter taking down everything I say and everything you say to make a written record of the interview. For the record to be clear, please wait until the staffer questioning you finishes before you begin your answer, and the staffer will wait until you finish your responses before proceeding to the next question.

148 Further, to ensure the court reporter can properly record this 149 interview, please speak clearly, concisely, and slowly, and I will try 150 to do that as well.

151 Also, the court reporter cannot record any nonverbal answers, 152 such as nodding or shaking your head, so it is important that you 153 answer each question with an audible verbal answer.

154 Exhibits may be entered into the record. Majority exhibits will 155 be identified numerically and Minority exhibits will be alphabetically. 156 Do you understand?

157 A Yes, sir.

158 Q We want you to answer in the most complete and truthful 159 manner possible, so we will take our time. If you have any questions 160 or do not fully understand the question, please let us know and we will 161 attempt to clarify, add context to, or rephrase our questions.

162 Do you understand?

163 A Yes.

Q If we ask about specific conversations or events in the past, and you are unable to recall the exact words or details, you should testify to the substance of those conversations or events to the best of your recollection. If you recall only a part of the conversation or event, you should give us your best recollection of those events or parts of conversations that you do recall.

Do you understand?

171 A Yes.

172 Q Although you are here voluntarily and we will not swear 173 you in, you are required, pursuant to Title 18, Section 1001 of the 174 United States Code, to answer questions from Congress truthfully. This 175 also applies to questions posed by Congressional staff in this

176 interview.

177 Do you understand?

178 A Yes.

179 Q If, at any time, you knowingly make false statements, you180 could be subject to criminal prosecution.

181 Do you understand?

182 A Yes.

183 Q Is there any reason you are unable to provide truthful 184 testimony in today's interview?

185 A No.

186 Q The Select Subcommittee follows the rules of the 187 Committee on Oversight and Accountability. Please note that if you 188 wish to assert a privilege over any statements today, that assertion 189 must comply with the rules of the Committee on Oversight and

190 Accountability.

191 Pursuant to that, Committee Rule 16(c)(1) states, "for the Chair 192 to consider assertions of privilege over testimony or statements, 193 witnesses or entities must clearly state the specific privilege and the 194 reason for the assertion on or before the scheduled date of testimony 195 or appearance."

196 Do you understand?

**197** A Yes.

198 Q Ordinarily, we take a five-minute break at the end of 199 each hour of questioning. But if you need a longer break or a break 200 before that, please let us know and we are happy to accommodate. 201 However, to the extent there is a pending question, we ask that you 202 finish answering the question before we take the break. 203 Do you understand? 204 А Yes. 205 Do you have any follow-up questions before we get Q 206 started? 207 А No. 208 Q All right. 209 First, I just want to talk a little bit about your education and 210 experience. And I thank you for your long career in public health. 211 Just briefly, where did you attend undergraduate school and what degree 212 did you graduate with? 213 А Bucknell University. I received a bachelor of science in 214 chemistry. 215 And what year was that? Q 216 А 1970. 217 Q Thank you. Did you receive any further degrees, and if 218 so, from where and in what? 219 А I received an MD from Northwestern University in 1977. 220 Q Who is your current employer, and what is your current 221 job title? 222 А I'm a private citizen. 223 Congratulations. And briefly, can you run through your Q 224 career prior to joining the FDA? We will get into your FDA experience

after that.

A Well, subsequent to graduating from medical school, I pursued a residency in internal medicine at Penn State University. And subsequent to that, I stayed on as a junior faculty member for a short period of time.

230 Then I went to UCSF, and I pursued a fellowship in rheumatology,
231 which I completed that fellowship. And then I stayed at UCSF for
232 perhaps a year as, again, a junior faculty member.

Subsequent to that, I moved back to Maryland and I had an infant at the time. And so in 1986, I joined FDA, the Center for Drugs and Biologics, it was called at that time. I joined the biologics part as a part-time medical reviewer.

237 Q Thank you. And we'll get into a little bit more of your
238 FDA experience, but do you currently hold honorary positions?

A I have an honorary degree.

Q Okay. From where?

241 A From University of Maryland.

242 Thank you. Do you currently hold or have you previously Q 243 held any positions on boards of companies, nonprofits, or otherwise? 244 I'm on the board of PCORI, Patient-Centered -- I forget А 245 what it stands for. Patient-Centered research group. That is -- I was 246 appointed by the Comptroller General of the United States. It is a 247 nonprofit, but it has an unusual status. But that's the board I'm on. 248 Thank you. Now, if we can elaborate a little bit more. Q 249 I also -- for many years, I served on the editorial board А

250 of the New England Journal of Medicine. 251 Okay. Thank you. Q 252 А Mm-hmm. 253 Now, we can elaborate more on your roles at FDA. I 0 254 understand you had a long career and wore a few different hats. I know 255 you started out as a drug reviewer -- part-time drug reviewer? 256 А Biologics. 257 Biologics reviewer. Can you explain where your path led Q 258 from there? 259 Yes. Well, I started out as a part-time reviewer in the А 260 I&D division in the biologics part of the agency. Subsequently, I 261 became director of that unit. Subsequent to that, I became acting 262 deputy director of the Center for Biologics. 263 That's CBER? Q 264 Yes, it had split at that time, and then was the Center А 265 for Biologics Evaluation and Research. 266 How long were you director of CBER? Q 267 А I was acting deputy. 268 Acting deputy. Q 269 I don't know. Subsequent to that, I was the head of the А 270 Office of Therapeutics of CBER, a newly formed office that was dealing 271 with the new biotech drugs that came online. I did that until 1994 272 when I was appointed director of the Center for Drugs at FDA. 273 Do you want me to continue? 274 Q Yes, please.

275 A I have sort of a disability or something, I can't 276 remember dates. 277 That's okay. Q 278 I always had that. А 279 Just to the best of your recollection. Q 280 This is going to be roughly. I can provide you my CV. А 281 Then I worked for Mark McClellan, when he was Commissioner. And 282 then I stayed on -- he left and I became Deputy Commissioner, chief 283 operating officer of the agency. I did that for a while. Then I went 284 back and took -- I think that was 2007, I went back and took over the 285 Center for Drugs again for another stint. And I remained head of the 286 Center for Drugs until I became Acting Commissioner. 287 Q And do you recall exactly when you became Acting 288 Commissioner? 289 A Well, that was right at the transition of the 290 administration, so it would have been 2021. 291 Q And when did you finish up in that role? 292 А February of that following year. So I did it for about 293 13 months. 294 Q And you went back to another role for a brief stint after 295 that? 296 A Well, for several years until I retired, I was Principal 297 Deputy Commissioner. 298 Thank you very much. And forgive me, when exactly did Q 299 you retire? That was this year at some point?

HVC134550

300 A January 31st.

301 Q Congratulations.

302 A Finally.

303 Q Now, transition to talking a little bit about 304 relationships you may have had over the course of the pandemic. 305 Specifically, I want to go down a list of people, and ask if you 306 communicated with any of them regarding COVID-19 vaccination 307 authorizations, approvals, recommendations, or other vaccine and 308 policy. Does that make sense?

309 Mr. <u>Cooke.</u> And this is all to the best of your recollection, of 310 course.

311 BY MR. SPECTRE.

312 Q President Biden.

313 A No.

314 Q Dr. Francis Collins?

**315** A Yes.

**316** Q Any other NIH officials?

317 A Dr. Fauci. And possibly other individuals who I can't 318 remember their names at NIH.

319 Q Okay. Any other NIAID officials besides Dr. Fauci?
320 A No, I don't believe so.
321 Q Secretary Xavier Becerra?
322 A Yes.
323 Q Dr. Rochelle Walensky?

324 A Yes.

325 Q Any other CDC officials that you can remember 326 specifically? 327 I may have occasionally spoken to the chief of staff А 328 there, Sherri. I don't remember her name. 329 Mr. Benzine. Sherri Berger? 330 The Witness. Potentially. BY MR. SPECTRE. 331 332 Dr. Tom Shimabukuro? Q 333 А No. 334 Secretary Lloyd Austin? Q 335 А No. 336 Any other DoD official? Q 337 Could you restate your question? А 338 I can. So these are communications regarding COVID-19 Q 339 vaccination authorizations, approvals, recommendations, or other 340 vaccine policy. So the name we were on was Secretary Lloyd Austin or 341 any other DoD official. 342 Is there a timeframe you're asking about here? А 343 From December 2020 or -- over the course of the pandemic Q 344 until you left FDA. Mr. Cooke. If you're talking about -- you're talking about 345 346 during her tenure when she would have been involved in the approval 347 process? 348 Mr. Spectre. COVID-19 vaccination authorization or approvals. 349 Mr. Cooke. But just so we are all on the same page, is that

350 referring to when she was part of that process as Acting Commissioner?

351 Mr. <u>Spectre.</u> As any role she had in the FDA, any conversations352 she had about vaccine policy.

353 Mr. <u>Benzine.</u> For Secretary Austin, it would be after Secretary
354 Austin was sworn in.

355 Mr. Cooke. So now we're talking early 2021? Okay.

356 The Witness. Well, I am a little confused.

Mr. <u>Cooke.</u> Sorry, just so we're all on the same page. Are you asking on those topics any conversations with anyone at DoD, beginning in early 2021, when she was actually involved in the approval process; is that right?

361 Mr. Spectre. It --

362 Mr. Benzine. Let's separate the questions.

363 BY MR. BENZINE.

364 Q So January 2020 to December 2020, any conversations with 365 any DoD officials that you remember?

366 A During that time, I was detailed or whatever to Operation 367 Warp Speed, I was the therapeutic lead for Operation Warp Speed, not 368 vaccine lead.

369 Q So the conversations during the time, to the best of your 370 recollection, would have been centered around Operation Warp Speed?

A Could you repeat?

372 Q So the conversations with DoD officials, probably General 373 Perna and a couple others, from January 2020 to December 2020, would 374 have been centered more around your detail to Operation Ward Speed? А

Yes.

375

376 Q Than your FDA position; is that correct? 377 That's correct. А 378 Okay. Q 379 That's why I was having trouble. А 380 And then for Secretary Austin, the timeframe would be Q 381 when he was sworn in, so I don't know the exact date, but January-ish, 382 2021 to when you left? 383 А I did not have conversations, to my recollection, with 384 Secretary Austin. 385 BY MR. SPECTRE. 386 Or how about any other DoD officials? Q 387 Between when I was Acting Commissioner? А 388 Q Yes. 389 Not to my recollection. А 390 Okay, thank you. Q 391 . If you can keep the volume up a little, so we 392 can hear. We've got a fan going back here. Thank you. Appreciate it. 393 The Witness. Sure. BY MR. SPECTRE. 394 395 I am going to go through a few more. Dr. Deborah Birx, Q 396 the same questions. 397 А Could you restate the question very clearly? 398 Any conversations regarding COVID-19 vaccination Q 399 authorizations, approvals, recommendations, or other vaccine policy.

400	Mr. <u>Cooke.</u> And are we subdividing? So there's Operation Warp		
401	Speed		
402	Mr. <u>Benzine.</u> So we'll put Operation Warp Speed to the side. Any		
403	conversations specific to vaccines.		
404	The <u>Witness.</u> After I was Acting Commissioner?		
405	Mr. <u>Benzine.</u> Well, Dr. Birx would have been before.		
406	The <u>Witness.</u> Oh.		
407	Mr. <u>Cooke.</u> But not related to Operation Warp Speed.		
408	Mr. <u>Benzine.</u> But not related to Operation Warp Speed.		
409	Mr. <u>Cooke.</u> So outside that context any conversations with		
410	Dr. Birx regarding those topics.		
411	The <u>Witness.</u> No.		
412	BY MR. SPECTRE.		
413	Q So same stipulations		
414	A I had a complicated time.		
415	Q And we understand that. So same stipulations for		
416	6 Dr. Ashish Jha?		
417	Mr. <u>Benzine.</u> This would have been January 2021 to retirement.		
418	The <u>Witness.</u> I had conversations with Dr. Jha as part of group		
419	conversations, yes.		
420	BY MR. SPECTRE.		
421	Q Dr. Jeffrey Zients?		
422	A I had conversations with him, yes.		
423	Q Dr. Rick Bright?		
424	A No.		

425	Q	Dr. Stephen Hahn?		
426	А	When are we talking about here?		
427	Mr. <u>Benz</u>	zine. This would have been		
428	The <u>Witr</u>	ness. After he was gone?		
429	BY MR. E	BENZINE.		
430	Q	No, January 2020 to December 2020, conversations		
431 regarding vaccine authorizations, approvals, or policies with Dr. Hahn?				
432	Mr. <u>Cool</u>	ke. Not a part of Warp Speed.		
433	Mr. <u>Benz</u>	zine. Correct.		
434	The <u>Witr</u>	ness. Not to my recollection.		
435	BY MR. S	SPECTRE.		
436	Q	Dr. Peter Marks?		
437	А	Yes.		
438	Q	Dr. Marion Gruber?		
439	А	To my recollection, I had one or two conversations with		
440	Dr. Gruber.			
441	Q	Dr. Philip Krause?		
442	А	Yes, one conversation.		
443	Q	Dr. Albert Bourla?		
444	А	Not to my knowledge.		
445	Q	Stephanie Bancel?		
446	А	Not to my knowledge.		
447	Q	Kiran Ahuja or any other Office of Personnel Management		
448	official?			
449	A	No.		

HVC134550

450

Q Denis McDonough, or any other VA official?

451 A Can we restate the question? When was this?

452 Mr. Benzine. This would be January 2021 to your retirement.

453 Mr. <u>Cooke.</u> So during the current administration, any discussions
454 with McDonough in his capacity—

455 The Witness. Regarding vaccines?

456 Mr. Benzine. Yes.

457 The Witness. No.

458 BY MR. SPECTRE.

459 Q Dr. Bernadine Futrell, or any other Office of Head Start 460 official?

461 A No.

462 Q Douglas Parker, or any other OSHA official?

463 A No.

464 Q We'll go back through a couple of these. And just some465 of the ones you said yes to, we'll talk a little bit more.

466 You said you spoke with Dr. Collins about vaccine authorizations,
467 approvals, recommendations, or other vaccine policy. Do you remember
468 any particular conversations that stand out with her?

A Certainly. For emergency use authorizations, the
regulations stipulate that we should consult with CDC -- FDA, when I
say we, should consult with NIH, CDC, and relevant agency parties about
issues.

473 So for example, I recall a conversation NIH and CDC about the474 AstraZeneca vaccine and the thrombotic diatheses that we were

475 experiencing and how that should be managed. We also held those 476 appropriate consultations during various potential actions, labeling 477 actions or other potential changes that might be related to the 478 vaccine.

479 Q Any specific conversations about vaccine recommendations480 or vaccine policy, like vaccine mandates, for example?

481 Mr. <u>Cooke.</u> Can we be more precise? Specifically about vaccine
482 mandates now or policies?

483 BY MR. SPECTRE.

484 Q Vaccine mandates or any other vaccine policy outside of
485 authorizing and approving vaccines, if that makes sense.

486 A Yes, I did have conversations with Dr. Collins about 487 policies related to vaccinating FDA and NIH employees. And we tried to 488 have some uniformity about the exceptions, and how we would handle 489 those matters.

490 Q And was that after the federal employee vaccine mandate 491 was issued or was that prior to that?

492 Mr. Cooke. If you remember.

493 The Witness. I can't recall.

494 BY MR. SPECTRE.

495 Q Thank you. You also said you spoke with Dr. Fauci. Are496 those the same conversations as with Dr. Collins or different ones?

497 A To my recollection, the conversations with Dr. Fauci were
498 also taken in a group consultation around, say, adverse event or
499 labeling decisions around the EUA, in accordance with the regulations.

HVC134550

500

501

Q And no specific conversations about vaccine mandates?A Not to my recollection.

502 Q Secretary Xavier Becerra, do any specific conversations503 jump out, to your recollection?

A Secretary Becerra received every two weeks or so, I don't recall exactly how frequently, briefings from the involved agency heads about the progress of multiple different activities that were going on with regard to COVID vaccine, and I was a part of those.

508 Q Okay. Were your conversations with him strictly about 509 the authorization and approval process, or did it delve into the 510 mandate policies as well?

Mr. <u>Cooke.</u> Sorry, just so I know we're keeping on the right side of the line here, obviously, to the extent you're asking about details with respect to these internal conversations, we have an Executive Branch interest in maintaining the confidentiality of those. We're not going to be able to go into details of all those conversations. I guess, just so I know what you're asking -- -

517 Mr. <u>Benzine.</u> That was a yes or no. If the conversations with
518 Secretary Becerra also involved mandated policies.

519 Mr. <u>Cooke.</u> I want to be sure the yes or no was clear. So did 520 those conversations with Secretary Becerra involve discussion abut 521 mandate policy?

- 522 Mr. Benzine. Yes.
- 523 The Witness. My conversations?

524 BY MR. BENZINE.

525 Q Yes.

526 A To my knowledge, no.

527 Q You said it was like a group biweekly meeting. Did
528 vaccine mandate policies come up with other people in that meeting?
529 A I don't recall.

530 BY MR. SPECTRE.

531 Q You touched on your meetings with CDC. But more
532 specifically with Dr. Rochelle Walensky, do you remember any specific
533 conversations that jump out about these issues?

534 A Can you describe these issues?

535 Q COVID-19 vaccination and authorizations approvals, 536 recommendations, or vaccine policy?

A Yes, the CDC has a dual role with FDA on these matters. And the ACIP, which is the, again, acronym about immunization policies or the Advisory Committee on Immunization Policy of the CDC would meet and opine and make general immunization recommendations after the FDA had done an action on a vaccine.

And that occurs for most vaccines that CDC would have an interest in. And so we would frequently meet with Rochelle and her staff, and discuss what action FDA would potentially be taking. They would often present at our Advisory Committee, which would be first, and then they have an ACIP.

547 So we would discuss this whole process. We didn't want any -- we 548 certainly wanted to be open to different scientific points of view, but 549 didn't want any sort of unseemly different agency -- differences of opinion to -- you know, we would like to work those out in advance.
551 Q Sure. And in those advanced conversations before
552 meetings or other conversations, did FDA provide forewarning, advanced
553 warning or notice that an approval or regulatory action was going to
554 occur?

555 A Yes, because they would need to schedule a meeting with 556 multiple scientific advisers soon afterwards.

557 Q Sure.

558 A We couldn't ever -- FDA can't ever, you know, guarantee 559 that an action is going to happen, but we could certainly give sort of 560 a ballpark, so they could do planning.

561 Q And roughly, how much in advance were you able to give 562 that ballpark, a couple of weeks, months?

563 Mr. Cooke. You mean in general?

564 BY MR. SPECTRE.

565 Q In general.

566 A And you're, again, talking about the various COVID567 vaccines.

Q Yes, that's right.

569 A The way FDA does its review process, it's planned. It's 570 very complicated. Very many pieces have to come together. So 571 generally speaking -- if I could step back away from COVID and just 572 talk about review.

573 So generally speaking, project managers lay out a timeframe and 574 work -- generally speaking, the timeframe is set by PDUFA goals, and

HVC134550

575 then you work backwards. And when does the labeling review have to be 576 done? When do the inspections have to be done? Inspection reports 577 have to be filed? And when does the safety review have to be done? 578 And so you work backward. Here, you kind of work forward. When 579 is filing expected. And as you know, the companies would frequently tell the world they were going to file something. They would 580 581 frequently -- this is true all the time for all products -- they would 582 frequently be wrong, too optimistic, right? And so -- but then what 583 needs to happen -- what would need to happen is a timeframe, a project 584 plan would need to be laid out, okay?

585 So for this filing, do we need to do inspections? Do we -- how 586 much -- how big is the safety review going to be? All this kind of 587 stuff. So generally speaking, you get a target date, like a best case 588 scenario date, and then you refine that.

So FDA was able to tell -- the filing would be public and tell the CDC, we think it would take this long. And refine that as we move forward. And you never -- you find stuff as you're doing a review, and more problems. And it might take longer, or it might be able to get done quicker.

594 Is that helpful?

595 Q Yes. So as you refine that, that due date, it's called 596 an action due date, I believe?

597 A Yes.

598 Q So as the ADD gets moved around, are you providing 599 updates to CDC about that?

600 A Yes.

601 Q Do you typically provide -- or does FDA typically provide
602 updates about the ADD to other agencies besides CDC?

A FDA typically does not do that, because that's market moving information, right? And we ask anybody that -- we generally wouldn't tell people that, right? But this relationship with CDC is very special, because they have an action to take as well.

607 Q So outside of CDC, it's generally private information?
608 A Absolutely.

BY MR. BENZINE.

610 Q You said typically. I don't mean to nitpick on words, 611 but during the COVID vaccine approval process, was the ADD shared with 612 any other agencies?

613 A Not to my -- not by me.

614 BY MR. SPECTRE.

615 Q To your knowledge, did somebody else?

616 A Well, it often would appear in the papers. But that 617 might have been from the companies, because we tell the company, so 618 they can prepare. They have to -- the company has to do a lot of work. 619 It's a very frenetic activity toward the end of that, as you approach 620 that final date.

621 And so the companies would be told. So it's hard to know who
622 would -- but the dates might start floating around out there. You
623 know, companies are talking about that.

624 BY MR. BENZINE.

625 Q Do you know if anyone within the FDA shared the ADD with 626 the Department of Defense?

A I do not know.

628 BY MR. SPECTRE.

629 Q Thank you. I think we'll talk a little bit more about
630 the shifting ADDs and this topic a little later, but just to get
631 through a few more of these names here.

632 You said you have spoken with groups -- and I can say the 633 categories again for you -- with Dr. Ashish Jha about COVID-19 634 vaccination authorizations, approvals, recommendations, or other 635 vaccine policy. Do you remember any specific conversations that jump 636 out to you?

637 Mr. <u>Cooke.</u> I know we went over this, but let me make sure I
638 understood. You're now talking specifically in the context of
639 Operation Warp Speed.

640 BY MR. SPECTRE.

641 Q Unless -- I understand your role in Operation Warp Speed 642 was therapeutics. Did you have any role in vaccines with Operation 643 Warp Speed?

644 A I did not have any direct decisional role.

645 Q Okay. So, yes, outside of Operation Warp Speed. All of
646 these will be outside --

647 BY MR. BENZINE.

648 Q And while Dr. Jha was a member --

A Pardon me?

650 Q Dr. Jha was a private citizen involved in public health, 651 but just became part of the administration in 2021. So the time scope 652 on this would be January 2021 until he left -- I think he left before 653 you. 654 A And I beg your pardon, but could you rephrase the

655 question?

BY MR. SPECTRE.

657 Q Absolutely. How about this? Did you have any specific 658 conversations about vaccine mandates with Dr. Jha while he was a 659 government employee, outside of Operation Warp Speed?

A Not to my knowledge.

661 Q So the same for Dr. Jeffrey Zients. Did you have any 662 conversation about vaccine mandates?

663 A No.

664 Q Dr. Peter Marks, I'm sure you had lots of conversations665 about some of those other topics with Dr. Marks; is that right?

A I was Dr. Marks' supervisor during that period when I was
Acting Commissioner, and I had many conversations with Dr. Marks about
the vaccines.

669 Q Did any conversations ever touch on vaccine mandates or 670 mandatory vaccination policies, broadly?

671 A I believe Dr. Marks brought it up a couple times.

Q A couple of times?

673 A Yes.

674 Q Do you remember specific times?

675 A No.

676 Q Thank you.

677 BY MR. BENZINE.

678 Q What did he bring up?

679 A The fact that different groups were considering vaccine 680 mandates. It was widely being discussed in the press and so forth. 681 And the fact that some of that was tied to status, the status of the 682 vaccine was also being discussed, and he commented on that.

683 BY MR. SPECTRE.

684 Q So if I'm understanding correctly, he mentioned the fact 685 that FDA may need to take regulatory action in order for vaccine 686 mandates to be possible. Is that what you're saying?

687 Mr. <u>Cooke.</u> Again, I think we're getting into some fairly high 688 level details here. If you can keep things general, then I think we're 689 on the right side of the line. But to the extent that you're getting 690 into details of conversations with Dr. Marks, we're not going to --

691 Mr. <u>Benzine.</u> I can rephrase it, so it's a yes or no, too.
692 BY MR. BENZINE.

693 Q Did Dr. Marks ever speak to you about the need for full
694 Biologics approval in order for groups to institute vaccine mandates?
695 A Dr. Marks commented on the fact that mandates for some
696 populations would be tied to their FDA status.

697 Q It was his opinion or was he just commenting on the698 press?

699 A He was commenting on the press, and that this was being

700 talked about, to my recollection, yes. 701 Mr. Spectre. Thank you. 702 BY MR. SPECTRE. 703 Q You said you spoke with Dr. Marion Gruber one or two 704 times. We'll talk about one of those times a little bit later, July 705 19, 2021. But is there another time specifically that you can 706 remember? 707 A No. 708 Q So you said one or two. Just -- you think there may have 709 been another time at some point, but you're not sure when? 710 I may have said good-bye to her when she went off to A 711 Germany. 712 Okay. Thank you. And Dr. Krause, you said you spoke Q 713 with him one time. Was that the July 19th meeting? 714 I believe so. А 715 Thank you. All right. Do you recall ever communicating 0 716 with any of the officials who we spoke with -- and I can go back 717 through, if you would like me to -- via a personal email or personal 718 cell phone? 719 A No. 720 Not on your end or on theirs? Q 721 A I didn't have a personal cell phone. 722 Q Okay. Good for you. 723 BY MR. BENZINE. 724 Q Does FDA have Teams or another messaging app on your

desktop or laptop?

725

726 Mr. Cooke. If you know. 727 The Witness. I don't know. 728 BY MR. SPECTRE. 729 When was the last time you communicated with Dr. Marks? Q 730 In his official capacity? А 731 Q Right. 732 A In my official capacity. 733 BY MR. BENZINE: 734 Did you ever communicate with Dr. Marks about any Q 735 testimony before Congress, yours or his? 736 I spoke to Dr. Marks about ten days ago about my garden, А 737 and mentioned -- he's a fellow gardener. And I mentioned that I might 738 be talking to Congress about this. 739 Did he mention that he just had? Q 740 I believe he told me he had a hearing. А 741 BY MR. SPECTRE. 742 Q Did he mention any other testimony he had given before 743 Congress besides the hearing? 744 А No. 745 Thank you. Q 746 Not to my knowledge. А 747 0 Okay, last little section here on the relationships part. 748 Did you regularly communicate with organizations or entities outside of

749 the FDA as a part of your job as Acting Commissioner?

**750** A Yes.

751 With pharmaceutical companies? Q 752 My job as Commissioner did not involve inserting myself А 753 into discussions between the FDA and pharmaceutical companies unless 754 there was a problem that had been escalated to my level. 755 And did that happen within the context of COVID-19 Q 756 vaccines during your time as Acting Commissioner? Was it elevated to 757 your level, such that you had to get in between those conversations? 758 А You're talking about approvals, and between 759 pharmaceutical companies and the FDA? 760 Authorizations or approvals between the FDA and a Q 761 pharmaceutical company for COVID-19 vaccines. 762 А For vaccines. I cannot recall any, but it might be possible. 763 764 Okay. So did you have any particular conversations with Q 765 the WHO as part of your duties? 766 А No. 767 Q Advocacy groups? 768 А Many. 769 And I assume within advocacy groups, probably patient Q 770 groups as well? 771 Yes, I've always spoken to many patient groups. А 772 0 Thank you. I want to move on, talking a little bit more 773 about the vaccine process and the COVID-19 vaccine itself a little bit 774 more.

HVC134550

Just as a couple of baseline questions, could you explain a little bit what the FDA's typical role is in vaccine development? A FDA does several things. Number one, FDA sets the standards for the safety evaluation of a product as well as its efficacy evaluation.

780 Ideally, that's done quite early, so that the development 781 program's going in the right direction, and there's not a lot of waste 782 of time. Once -- and that might include toxicological evaluation 783 before clinic, but those would be recommendations by the agency which 784 are often published as guidance.

785 Once a company is planning to go into people and agency gets 786 involved, and that's the IND process. So a company must file an IND, 787 and wait 30 days. And the agency evaluates the plan, as well as the 788 safety information to make sure that first in-human, experiment is 789 safe. And then the agency will be overseeing the 790 development -- clinical development program all along.

At some point, probably pretty early for vaccines, part of the result of the safety evaluation is looking at the construct, whether it's a drug or a vaccine, or whatever. How it's made, what the chemistry is. Make sure not only that it's safe, but it's controlled.

And as you get later in the development process, you want to make sure that the product is able to be manufactured reproducibly, so the data from this person actually applies to the next group because the product is the same.

799

So they are more -- as things go along in the development, there

800 are more and more stringent chemistry and manufacturing controls, 801 standards, as well as clinical evaluation. 802 Thank you. So we touched on this a little bit, I think, Q 803 but where within the FDA are vaccines, in particular, regulated? 804 They're regulated by the Center for Biologics Evaluation А 805 and Research. 806 Q And is there a sub-office of CBER that works particularly 807 on vaccines? 808 A Yes, I believe it's Office of Vaccines. 809 Thank you. Who was in charge of CBER while you were Q 810 Commissioner? 811 Dr. Peter Marks. А 812 And who was in charge of the Office of Vaccines? Q 813 А Dr. Marion Gruber. 814 And I understand the Office of Vaccines also has some Q 815 sub-offices; is that right? 816 Likely. А 817 Q More than one? 818 I am not very well-versed in the sub-organization. I А 819 believe it has changed over time. Okay, thank you. As Acting Commissioner, what was your 820 Q 821 role in the COVID-19 vaccine development, authorization, or approval 822 process? 823 As I said, my job was to make sure that all the А 824 activities of the agency continued legally, scientifically valid,

825 appropriate, and so forth. And to deal with problems as they arose.

826 Q Thank you. We touched on this already, but I understand 827 you had a formal role in Operation Warp Speed regarding therapeutics. 828 I think I already asked you this, but just, again, you didn't have a 829 specific role related to vaccines; is that right?

830 A That's correct.

831 Q In your opinion, do you believe Operation Warp Speed was 832 a success?

833 A Yes.

834 Q Do you think anything should be done differently in a 835 future pandemic, with regard to Operation Warp Speed?

A I am certainly on record saying that it has more to do with the clinical trial infrastructure. In fact, that we really don't have a sort of -- warm base for clinical trials in the United States. This was very evident for therapeutics. And there were hundreds and hundreds of trials that went on, I published on this, none of which were able to -- would yield any actionable data.

842 On the vaccine side, the companies ended up running the trials 843 because they had the infrastructure to get that done, you know, with 844 the help of the government and participation of government sites as 845 well.

846 Q So you're saying we need a little bit more infrastructure 847 on the therapeutic side to generate good data?

848 A On both sides. And I have certainly, as I said,849 published on this and been very vocal about it.

850 Q Thank you. We're going to talk a little bit more about 851 authorizations and approvals. And just for the record, I think I can 852 delineate EUA, I'll refer to as authorizations. And full biologics 853 approval, I'll calls it approvals, if that's okay?

A Certainly.

855 Q Could you please explain the difference between an 856 emergency authorization and the full biologics approval?

857 A EUAs were conceived as a way to get products out there 858 before the entire general process had been conducted. The standard for 859 an EUA is -- it's in the regulations. It's basically that the 860 foreseeable benefits and so forth outweigh the expected harm.

And so that's a different standard, okay, than the safe and effective, what have you. Then there are other parts that can be conducted more quickly or perhaps executed more quickly, especially some of the bureaucratic parts, than a full -- you know, a

865 licensed -- a biologic license.

866 Q So are pharmaceutical companies generally permitted to 867 advertise for authorized products?

868 A Yes.

869 Q And they can promote them under an authorized status?
870 A That's my understanding.

871 Q Does an EUA necessitate informed consent from

872 individuals?

873 A My understanding is it does not.

874 Q And could you explain a little bit about what that means?

875

What what means, informed consent or --А 876 Sure, let's start there. What is informed consent? Q 877 Informed consent has turned into, in the United States, a А 878 very long legal document, right? That nobody can understand, 879 practically. That -- but the principle behind it is that the 880 individual has to understand the parameters. That what -- and 881 typically, used in clinical trials, that people understand they're 882 volunteering for an experiment. And that the outcome isn't known, and 883 that's why they're doing the experiment.

884 And so that they can sign something that they were made aware of 885 this, and not just given something and not known about it, right?

886 Right. So within the context of a COVID-19 vaccine under Q emergency use authorization, since it didn't necessitate informed 887 888 consent, does that mean that individuals may not have been fully 889 informed by their physicians about the potential risks?

890 There were information sheets that were given that Ά 891 spelled out, to my understanding, both for therapeutics and for the 892 vaccines, what the parameters were.

893 And that's called a fact sheet, from what I understand, Q 894 in the EUA?

895 А Maybe.

896 Q As opposed to a package insert, is that what it's called, 897 for a full approval?

898 The package insert for full approval for a product that Α 899 isn't a direct consumer product, is intended for the learned

900 intermediary, not for the -- there may be a patient sheet, which I 901 fully endorse, that can be given to patients, or it might be the end of 902 the package insert. But generally speaking, the package insert is 903 intended for somebody with a very high degree of medical understanding. 904 Okay. But to be clear, the EUA vaccines had a document, 0 905 but it was not a package insert; is that right? 906 А That's correct. To my understanding, there was 907 information for prescribers, there was information for patients. 908 Q And my understanding, correct me if I'm wrong, is that 909 package inserts are continually updated as the administration finds new 910 information. Are fact sheets in the EUA, those are also continually 911 updated? 912 А Yes. 913 Thank you. COVID-19 vaccines were very widely 0 914 distributed first under EUA. Had that ever been done before? Not to my knowledge. 915 А 916 Q Do you know, and I understand if not, but do you have a 917 rough understanding of how many doses were distributed or administered 918 under EUA? 919 А I do not, no. 920 Q Is it fair to say that it was millions? 921 А Yes. 922 0 Once the license was approved and issued on August 23rd, 923 2021, to your knowledge, were the EUA doses pulled off the shelves? 924 I do not recollect what happened with that. There was a А

925 discussion about it.

926 BY MR. BENZINE:

927 Q Discussion between whom?

928 A Within the agency.

929 BY MR. SPECTRE.

930 Q To your knowledge, were the approved doses widely 931 available quickly after approval?

932 A I do not recall.

933 Q And we'll dive into this a little bit more later, but
934 just quickly, were COVID-19 vaccines approved more rapidly than normal?
935 Ms. <u>Raveendran.</u> To clarify the question, more rapidly than what?
936 BY MR. SPECTRE.

937 Q My understanding is when a BLA is submitted from a 938 company, it's usually about a 12-month timeline for a vaccine. Is that 939 about right?

940 A The approval of a product, whatever it might be, first of 941 all, it's dictated partly by PDUFA, right, which it gives a ten-month 942 timeframe for general approvals, and a shorter one for priority review.

The agency may decide -- the clinicians, in overseeing the file, may decide that due to the urgency of the need, an unmet medical need, that the product should be approved as quickly as possible, and may accelerate that further. And there are a number of examples, some of them biologics, obviously, that were gotten out much quicker.

948 Vaccines, typically, you know, take -- may have a priority review949 or a standard review, but given that they are a preventive

950 intervention, right, it's more likely they would have a standard 951 review.

952 Q And just for clarity for the record, COVID-19 vaccines 953 were under a priority review; is that accurate?

954 A I do not know.

955 Q Okay. Thank you. So to your recollection or knowledge, 956 are authorized doses manufactured in facilities that are subject to the 957 same FDA oversight as approved doses?

958 A Can you clarify the question?

959 Q Sure. When you were talking a little bit earlier about 960 the FDA's role in development of vaccines, you talked a little bit 961 about ensuring that each dose, that it is what it says it is, that it 962 was manufactured properly, safely, all that.

963 Does the FDA have the same oversight of the facilities who are 964 producing EUA authorized doses as it does oversight of fully approved 965 dose manufacturing facilities?

966 A It's hard to respond to that question. There is no, 967 like, rigorous algorithm about what the oversight might be. If the 968 facility has been inspected recently for other reasons, and then is 969 participating in some phase of the manufacture of a vaccine, for 970 example, then the agency may decide not to look at that facility, 971 whether it's for an emergency use authorization or for an approval.

972 So I honestly can't answer your question. I feel that the FDA973 oversight is what it needs to be at any given stage.

974 Q So to your knowledge, there is no difference between what

975 the FDA does to regulate facilities that are producing EUA vaccines, as 976 opposed to what FDA does to regulate facilities that produce approved 977 vaccines?

978 A There might be legal requirement differences. But 979 scientifically, this is one thing I'm pretty much of an expert in, all 980 right? You know, as far as the quality of the production, ensuring 981 quality production, I think the oversight is very similar. However, 982 there might be different legal requirements for a BLA than there might 983 be for an EUA.

984 Q So there may be different legal -- there might be legal 985 distinctions between the two, but in your view, they are on par, as far 986 as safety?

987 A Well, for an EUA, that -- where you're planning to 988 administer a product, whatever that product may be, to a large number 989 of people, FDA wants to guarantee standard quality assurance., 990 pharmaceutical quality. And so FDA will do what it needs to do to have 991 that.

992 Q Thank you. And this will be my last question before we 993 finish up this hour here. Do you think the government generally did a 994 good job communicating what differences there may be between authorized 995 and approved doses?

996 A I think it's very hard to communicate, as we have just997 been demonstrating, these differences.

**998** Q Okay.

999 Mr. <u>Spectre.</u> Thank you very much. We can go off the record.

1000 [Recess.]

1001

. We can go on the record.

1002 BY .

1003 Q Dr. Woodcock, good morning. Thank you for being here.
1004 My name is \_\_\_\_\_\_. I am the Democratic staff director for the
1005 Select Subcommittee.

1006 I would like to take a step back and ask you a few questions, 1007 some of which may be redundant. To the extent these questions are 1008 redundant, I would appreciate you providing a full answer. And I would 1009 like to begin by discussing the emergency use authorization process 1010 that the FDA follows for the consideration of vaccine products.

1011 As an initial matter, would you mind just briefly walking us 1012 through the FDA's emergency use authorization process for vaccine 1013 products, including the circumstances under which FDA can issue EUAs?

1014 Well, certainly the FDA has to -- follows the regulations А regarding emergency use authorizations. And these -- generally 1015 1016 speaking, there will be an application for an emergency use 1017 authorization, it will be submitted to the agency. That will have the 1018 usual relevant information in it, or should, right, which would include 1019 manufacturing controls information, any other kinds of relevant safety 1020 toxicology information, clinical experience to date, rationale for 1021 using it -- using the product in an emergency.

1022 Then the FDA will review this against the standards, okay, where 1023 foreseeable benefits -- and I'm very much paraphrasing the regulations. 1024 I am not a lawyer, and I can't remember all these things very well.

1025 But where the foreseeable benefits outweigh the potential harms. And 1026 obviously, that also includes the pharmaceutical quality of the product 1027 and so forth in that package. And then we'll make a decision based on 1028 that.

1029 And then that has to be forwarded. During that time, these 1030 emergency use -- during the time that you're referring to, 2021, these 1031 emergency use authorizations were signed off by the chief scientist of 1032 the agency, whose office -- so it would be signed off by the relevant 1033 center, and then reviewed by the chief scientist's office, who 1034 generally do a procedural review.

1035 And that EUA approval would include the relevant documentation 1036 that would be given to patients, the fact sheets, or what have you, the 1037 other relevant information about the product, the rationale for the 1038 decision, and so forth.

1039 There would be a whole package that would be put together. And 1040 then that product would be enabled to be used for an EUA until which 1041 time those conditions no longer applied. And of course, the EUAs were 1042 withdrawn by the agency as well.

1043QSo focusing on your scientific perspective, we'll set1044aside the legal sort of aspects for a moment. I was hoping you could1045offer me your view on the mechanisms that are in place through the EUA1046process to maximize consumer safety, specifically for vaccine products.

1047 A Well, first of all, the agency has complete discretion on 1048 deciding to what extent they will verify or validate the pharmaceutical 1049 quality. So how many inspections they wish to do, whatever testing 1050 they wish to do of the product, or require additional testing to be 1051 done.

1052 That, for example, to mention another one, hydroxychloroquine 1053 that has been imported from somewhere in Asia and brought to the United 1054 States, full testing of that product was done before, for 1055 pharmaceutical quality before it would be put -- be made available. So 1056 that's an example.

1057 With the vaccines, with the COVID vaccines, which I assume is 1058 what you're referring to here.

1059 Q Sure.

1060 A Okay. They had come -- been tested in very large 1061 clinical trials, larger than most vaccine programs -- development 1062 programs would have contemplated, right?

And so there was a tremendous amount of information on performance characteristics of these vaccines in the subjects in the trials. So that would be very carefully reviewed by the FDA, as well as ensuring by looking to pharmaceutical quality that the product that would be authorized under the EUA would be the same product that was tested within the clinical trials.

1069 So that would give you an assurance of safety, as well as the 1070 efficacy from -- that was derived from clinical trials.

1071 Q So you just mentioned, there was a tremendous amount of 1072 data that was produced relevant to the clinical trials. You also 1073 mentioned, I believe in the preceding hour, that there was a process by 1074 which known and potential benefits are weighed against known and

1075 potential risks through the EUA process.

1076 Can you share a little bit about how that process takes place, 1077 and specifically how it occurred for the COVID-19 vaccine EUAs? 1078 A To my recollection -- and please remember, this is 1079 somewhat of a blur to me, because I was doing a very large number of 1080 things at once.

1081 Q Okay.

A The agency had put forth standards which, as I already said in my prior discussion, that frequently do put standards for how effective -- how something should perform as far as effectiveness. So the agency had put forward an effectiveness standard, right, a threshold or bar that a vaccine should theoretically have, to be considered an effective vaccine, okay?

1088 That threshold was quite well exceeded, to my recollection, by 1089 the various candidate vaccines that were tested in trials. Certainly 1090 the ones that received emergency use authorizations. And that is a 1091 typical process for all products as the agency puts out guidance for 1092 information about what standard should be met, and that was the 1093 standard for efficacy, okay?

1094 So that -- to my recollection, that standard was well exceeded by 1095 the vaccines, as far as preventing infection and different things like 1096 that, things that were tested in the trial.

1097 The safety evaluation is more a judgment call. However, as I 1098 said, these vaccines had had far more human exposure than most any 1099 products that FDA typically would approve. I think many, many, many 1100 years ago, under -- it wasn't called EUA at the time, it was called 1101 compassionate use, there were -- for a cardiovascular drug, I think 1102 there were tens of thousands of people who got that drug before 1103 approval. That was many, many decades ago, okay?

But again, that's a huge amount of human experience, relevant, safety experience, but it wasn't in trial, whereas these vaccines were tested in trial, whereby there was a systematic collection of safety information and comparison groups -- randomized comparison groups for safety.

So that information, I think, would far exceed almost any package -- any approval package that the agency would get normally, as far as human experience. And that information was thoroughly reviewed prior to granting an EUA.

1113 Q Taking a step back, just on to the efficacy and 1114 effectiveness side. In epidemiology, those are distinct terms. Just 1115 to clarify, when you say efficacy and effectiveness, are you using them 1116 synonymously or like a breakdown of the epidemiologic concepts?

1117 A Right. I am using it with respect to the Food, Drug, and 1118 Cosmetics Act, the statutory standard which calls for safety and 1119 effectiveness. Now, granted that was passed in 1962, and they didn't 1120 probably, the lawmakers, appreciate these distinctions. And many 1121 people -- agencies use that terminology routinely, safe and effective. 1122 Now, I am fully aware of the distinctions that are made, but

1123 let's just talk about what the primary end point was. That's what FDA 1124 considered effectiveness, right? And those exceeded -- those vaccines 1125 all exceeded the threshold that had been set by the agency for that 1126 performance, okay? And so they had met that threshold.

1127 And of course, as it relates to evaluating the efficacy 0 1128 or effectiveness of a product, there are some limitations by which that 1129 can occur. For example, from a temporal standpoint, if there were 1130 certain variants of COVID-19 in place at the time, that is the metric 1131 by which you are measuring effectiveness or efficacy -- the benchmark 1132 by which you are measuring effectiveness and efficacy. New variants, 1133 for example, are not something that can be immediately considered 1134 discretely through existing processes because they, in fact, do not 1135 exist yet; is that correct?

1136 A That's correct.

1137 Q Continuing in the same vein, relating to the EUA process 1138 as a whole for vaccine products, to the extent you would like to 1139 comment specifically on COVID-19 vaccines, that is welcome.

1140 What mechanisms are in place to insulate the emergency use 1141 authorization product -- process for vaccine products from political 1142 interference?

A If I may step back. Generally speaking, one of the roles of the senior management of the agency is to insulate the professional review staff from any type of outside influence. The agency is lobbied all the time by patient groups, by industry, by advocacy groups, who have one position or another on a very wide variety of different topics. And the goal is to allow staff to conduct their reviews without considering -- without being subject to those kind of

1150 pressures.

1151 Q So then as the acting FDA Commissioner at the time, as an 1152 expert on these matters, do you feel that consumers should feel 1153 confident in the safety of products that are authorized under emergency 1154 use, even if they have not gone through the full approval process of 1155 the FDA?

1156 A Yes.

1157 Q Would you like to elaborate on that any more or --1158 As I said earlier, the FDA tries to ensure that those А 1159 products, as well as they do for an approval -- approved product, that 1160 any product under an EUA might be fit for its purpose. In other words, 1161 its benefits -- its foreseeable and known benefits outweigh its known 1162 and foreseeable risks, and it's appropriate. This is basically medical 1163 judgment that FDA makes every day with all the products it regulates.

1164 Q Of course. So as I understand it, based on the 1165 regulations you're referencing, the laws that govern the operation of 1166 the Food and Drug Administration, it is necessary for the Secretary of 1167 Health and Human Services to declare that circumstances are necessary, 1168 justifying use of emergency use authorization for products; is that 1169 correct?

1170 A That's my understanding.

1171 Q For the COVID-19 vaccine products, would you be able to 1172 remind me at what point the Secretary of Health and Human Services 1173 declared that there were circumstances that existed justifying the EUA 1174 process for COVID-19 vaccines? 1175

No, I can't recall that. А

1176 Okay. As I understand it, there was a February 4th, 2020 0 1177 declaration from Secretary Azar that took effect March 27, 2020. Does 1178 that sound roughly correct to you?

1179 А It does.

1180 And so then just to clarify, it was actually the former Q 1181 administration's Secretary of Health and Human Services, President 1182 Trump's HHS Secretary, Dr. Azar, who declared that circumstances were 1183 appropriate for an EUA to be considered for COVID-19 vaccines; is that 1184 correct?

1185 That's my understanding, yes. А

1186 And just taking us back to February or March of 2020, Q 1187 sort of that late winter, early spring 2020 period, could you remind us 1188 what circumstances were like for our society and for public health in 1189 that early point in the COVID-19 outbreak?

1190 Mr. Cooke. Sorry. Just as a reminder, as we talked about with 1191 your colleagues, at this point, Dr. Woodcock didn't have a 1192 decisionmaking role with respect to the approval process. So this is 1193 speaking as a general scientist.

1194

. Of course. Thank you.

1195 The Witness. Well, during that time, there were outbreaks in 1196 large cities such as New York. There were huge number of fatalities. 1197 The hospitals were overwhelmed in certain areas. That was definitely a 1198 crisis, a medical crisis situation.

1199 BY . 1200 Q And that point in time, am I correct that the options we 1201 had to go prevent and also treat COVID-19 were severely limited?

1202 A That is correct.

1203 Q So the Pfizer booster was authorized in 2021, as I 1204 understand. Am I correct in my interpretation that that emergency use 1205 authorization occurred under an amendment to the EUA that was issued 1206 during the previous administration by Secretary Azar?

1207

A I believe that is the case.

1208 Q And similar question, again, sort of late summer, early 1209 fall of 2021, could you remind us of the circumstances that we, as a 1210 society, were navigating vis-a-vis the COVID-19 pandemic at the time 1211 when FDA was evaluating booster products for emergency use 1212 authorization?

A Well, scientifically, the pandemic had gone through several different stages. There were various variants that came and went. And the concern was that with waning immunity, which we knew was the case from -- waning immunity either from infection with COVID or actually being vaccinated with the regimen, the neutralizing titers were dropping across the population, particularly as you get older, with the older people.

1220 And the concern -- and if you get a variant, then the 1221 neutralizing titers which may have been more effective against the 1222 original strain it was raised against would be even less effective 1223 against a variant, and then with remaining titers even less effective. 1224 And this is a situation we see with a number of types of

1225 immunizations and viruses that tend to undergo a lot of mutations. The 1226 virus is circulating broadly all over the world, and therefore, lots of 1227 variants were coming up. They were scary. Sometimes they would go 1228 back down again. There was concern that a more infectious and 1229 potentially more virulent variant would occur, and we would be faced 1230 with a population with waning immunity.

1231 Q And as you alluded to earlier, the emergence of new 1232 variants in the COVID-19 pandemic and other public health circumstances 1233 oftentimes merits the updating of products or the release of new 1234 products to maintain current levels of protection for populations; is 1235 that correct?

A Yes. When I started as Acting Commissioner, I had all three centers -- I called for scenario planning, which we did. And we went through various scenarios that might occur. You know, perhaps the virus would just sort of go away, perhaps we get variants to which we were not protected against, and so forth. And we did that.

1241 And then we also issued guidance for diagnostics, because you 1242 could get a variant that wouldn't be detected with current diagnostics, 1243 okay?

1244 If it's a PCR, the primer pairs wouldn't be correct. If it's a 1245 monoclonal, it maybe wouldn't be grabbing on to the right, you know, 1246 virus because the virus had changed.

1247 So we said what we would do in those situations with the 1248 diagnostics. We issued what we would do with the therapeutics. And 1249 indeed, we had to withdraw, if you recall, a number of the monoclonal 1250 antibodies because they no longer were effective. But what we did is 1251 we published that and told everybody what would happen under different 1252 scenarios.

The same with the vaccines. We said how we would try to pick -- and you know, we put this out there scientifically to get input in the discussion. How we would try to pick a booster, or whatever you want to call it, to kind of forecast if there was a rise in a variant that wasn't well covered by current vaccination. However, the background was that titers were falling for everybody.

1259 Q And so focusing specifically on the data that Pfizer 1260 submitted to FDA for the emergency use authorization and evaluation of 1261 its booster product, did that data, from your scientific perspective, 1262 demonstrate that the booster product that Pfizer had proposed was both 1263 safe and effective?

1264 A Yes.

1265 Q I would like to ask you a similar set of questions as it 1266 relates to the approval process that's in place. So full BLA approval. 1267 Briefly, again, would you just be able to quickly walk us through the 1268 approval process that is in place for vaccine products at the Food and 1269 Drug Administration?

1270 A It's hard to be brief.

1271 Q Fair.

1272 A The companies must submit -- and for a long time, we have 1273 standardized a lot of this under the ICH, International Council for 1274 Harmonization of, you know, medicines. They have to submit a very 1275 large application that has multiple sections. There's a section on 1276 manufacturing and how they control the product, and how its quality is 1277 maintained. A toxicology section, clinical and statistical.

1278 There's information on all the facilities where the product, or 1279 parts of the product could be manufactured and their status and their 1280 role and so forth. And they submit a draft label or package insert. 1281 That is the technical term for that, so they submit a draft package 1282 insert.

Generally speaking, once that's submitted, you know, the agency holds a meeting or series of meetings to develop a rigorous plan. And as I said earlier, that will include what has to be reviewed, who -- which experts should review each part, when those parts should be completed.

For example, if inspections are needed, when the inspections would be done. Some of them might be all around the globe. Then when could the reports be back. And then when could all the information be synthesized.

1292 There's also post-market commitments. For example, if there are 1293 adverse events you're concerned about, you'll want to develop a plan 1294 for monitoring them afterwards, and have the company commit to that. 1295 There's also often a plan for younger age groups called the pediatric 1296 plan that has to do with the Best Pharmaceuticals for Children Act, and 1297 so forth.

1298 So all these things, it's too complicated for a person just to do 1299 in the back of their brain. They -- you know, a project plan should be 1300 created, typically, and charts and so forth. All this information 1301 would be put together. So a huge cadre of experts would be recruited 1302 and assigned different parts of the work. And then when those people 1303 all come together, and this whole thing comes together, and then you 1304 have a proposed or best guess date for completion.

1305 Q So as part of the robust process you just described, it 1306 sounds as though there are mechanisms in place to maximize consumer 1307 safety, again, that are built into this FDA approval process for 1308 vaccine products. Could you elaborate on those mechanisms to maximize 1309 consumer safety?

A Certainly. Well, there would be -- and particularly with the vaccines, since there was emergency use authorization, a separate group would look at the safety information. That would be, like, the post-market group would be looking at all the safety information that was submitted from spontaneous reports or from the company, from the experience of tens of thousands of individuals who had received the product under an emergency use authorization.

1317 That would be separate from the group that, again, would look 1318 at -- and of course, that had already been reviewed, the clinical trial 1319 safety data. But those two data sets need to be put together to learn 1320 anything new from this broad exposure of people. And if so, what? And 1321 how does that modify our safety assessment?

1322 And then there would be supervisors of all these folks who, at 1323 various points during this review process, would review and sign off on 1324 the safety findings. 1325 Q Am I correct in my understanding that that process you 1326 just described was the process that was followed for Pfizer's COVID-19 1327 primary series vaccine product?

1328 A To my knowledge, yes.

1329 Q And in the process you just described, again, similar 1330 question, what mechanisms are in place to insulate that approval 1331 process from political interference?

A FDA's regulations state that a person should sign their part of their review. A number of years ago, I tried to get a combined review done, so that everybody worked together better. And one of the difficult parts was getting -- how could people sign off on combined review.

So people -- what the regulations say is, when you sign as a scientist, you're signing that you concur, right? That you -- that's your work and you agree with it, right? Not that you were pressured into it or whatever. People can write dissenting memos, and we have that ability and a process for dissent on approvals, and so forth.

1342 And as I said, the review staff themselves are not exposed to any 1343 pressures, like, from the advocacy groups or whatever, generally, 1344 directly. That would be taken by the center directors or 1345 Commissioner's staff, and so forth.

1346 Q So as the acting FDA Commissioner at the time, did you 1347 have any concern that the mechanisms that you described to maximize 1348 consumer safety, as well as the mechanisms to insulate approvals from 1349 political interference, were insufficient or ineffective when the 1350 Pfizer COVID-19's BLA was being considered?

1351 A When I heard about the issues related to the review, I 1352 was concerned that the staff, Marion and her people, could not 1353 immediately cough up a very detailed Gantt chart about what they were 1354 doing.

And I had raised several times that this is a complicated review with all this EUA safety data, and suggested that they take some resources from CDER, computational science people, and also pediatric cardiology to look at myocarditis, and how that would be followed over time.

Because I feel like I -- I felt that pediatric cardiology was the correct discipline to evaluate adolescent myocarditis, right, and sequelae -- potential sequelae, if any, of that.

1363 So when Dr. Marks talked to me about the review, I repeatedly 1364 raised these issues. Otherwise, I feel like, you know, a very thorough 1365 and complete assessment was being conducted.

1366 Q So at the end of the day, and I imagine there will be 1367 subsequent questions related to the discrete evidence you discussed, 1368 but the processes that were in place, the mechanisms that were in place 1369 to maximize consumer safety, to insulate the approval process, the BLA 1370 for the COVID-19 vaccine from political interference resulted in a 1371 product that you felt was safe and effective?

1372 A Absolutely.

1373 Q I would also like to shift gears slightly, and now look1374 at sort of the back end of what occurs when products have been deployed

1375 to market. And specifically, the process that is in place for 1376 evaluating and acting in response to vaccine-related adverse events. 1377 Am I correct that FDA's role in this process is informed by data 1378 that is generated from multi-tiered surveillance systems that are 1379 operated both by the Food and Drug Administration and the CDC? 1380 Α Yes. 1381 So when signals of adverse events are detected through 0 1382 these surveillance systems, what actions does the FDA take in response? 1383 А Well, first of all, technically, a signal is just a 1384 signal. It doesn't necessarily mean causal relationship. So there are 1385 multiple -- and these signals may arise from reporting. In other 1386 words, a clinician or a patient may report an adverse experience to the 1387 agency. And that's encouraged. Or CDC may, from their surveillance 1388 systems, they may see some imbalance or signal, okay? It doesn't mean 1389 it's related, causally related. 1390 So what happens is a workup of that, to evaluate whether or not 1391 there is a link. And the Center for Biologics have established the 1392 BEST system -- BEST medical records-based system where they can do

1393 signal evaluation, and they can see if they can find it anywhere.

1394 They also -- as I said, the CDC has a smaller number of people, 1395 but they have active surveillance. And the FDA has access to, say, the 1396 Medicare database. They have access and cooperate with the 1397 international authorities who have hundreds of millions of experiences 1398 also.

1399 And if I dare say so, they have better acquisition of

1400 information, because their health care system is not as fragmented as 1401 in the United States. So those groups that have national health care 1402 systems have pretty full data on people, and the FDA has access to 1403 that.

1404 So what happens when a signal arises either from a drug or 1405 vaccine, or whatever, is this type of look is done across all these 1406 databases to see if the signal is actually related.

1407 Q And so to be clear, it is your view that the federal 1408 government does have in place a comprehensive, robust, multi-tiered 1409 system to evaluate and determine signals and trends of potential 1410 vaccine-related adverse events; is that correct?

1411 A Yes.

1412 Q And these systems were operating to detect possible 1413 signals or trends of adverse events for Pfizer's COVID-19 vaccine 1414 products; is that correct?

1415 A Oh, yes.

1416 Q Did these systems generate any data that warranted 1417 concern for you sufficient to remove these vaccine products from the 1418 market?

1419 A No.

1420 Q And what role, in your estimation, does continued
1421 comprehensive investment in these surveillance systems have to ensure
1422 that only the safest products are available to American consumers?
1423 A These are -- the systems are critical. I built the first
1424 FAERS, FDA Adverse Event Reporting System, in the '90s. Subsequently,

1425 we also built an active surveillance system for CDER. And BEST is the 1426 sort of echo of that for the vaccines, okay?

1427 So these are critical, and it's critical for us to use the 1428 electronic health record data and all digital data to try to follow up 1429 all regulated products and make sure their performance characteristics 1430 stay positive for the country.

1431 Q And to be clear, when there are instances of adverse 1432 events, signals, or trends that are detected, that warrant or sort of 1433 merit the removal of a product from the market, FDA would act to do so; 1434 is that correct?

1435 A Correct.

1436 Q And just to put a finer point on that, that did not occur 1437 with Pfizer's COVID-19 products?

1438 A That's correct.

1439 We can go off the record.

1440 [Recess.]

1441 Mr. Spectre. Back on the record.

1442 BY MR. SPECTRE.

1443 Q We finished talking a little bit about authorized versus 1444 approved doses at the end of our last hour, but I am going to switch a 1445 little bit now to some questions about the general public's 1446 understanding of sort of these complicated issues we're talking about 1447 today.

1448 First, do COVID-19 vaccines prevent the spread of the virus?1449 A Most likely, to some extent.

1450

Q But not entirely?

1451 A Not entirely.

1452 Q Do COVID-19 vaccines prevent illness?

1453 A Yes.

1454 Q Were COVID-19 vaccines designed to prevent transmission?
1455 Mr. Cooke. If you know.

1456 The <u>Witness.</u> I don't understand the question. Technically 1457 speaking, you try to get the immune system to eradicate the virus and 1458 prevent its replication, right? So vaccines are designed to prevent 1459 transmission, to some extent.

However, different viruses, depending on their mode of transmission, whether they're respiratory -- like, for example, norovirus, okay, you can get norovirus on a cruise and you can get it again six to eight weeks later, okay? Lovely thought, huh? And that's because it's intestinal. You need intestinal immunity.

So the answer to the question is, yes, vaccines are designed, in my opinion, to prevent transmission, but you don't normally succeed in everything. In fact, during development, you often don't succeed.

1468 Q And specifically within COVID-19 vaccines, were those 1469 clinical trials designed to assess whether the vaccine was preventing 1470 the spread of the illness?

1471 A To my understanding, the primary end point was to prevent 1472 illness.

- 1473 Q Rather than --
- 1474 A Correct.

**1475** Q -- spread?

1476 A Mm-hmm.

1477 Q Was the FDA's issuance of EUAs for COVID-19 vaccines 1478 dependent on that vaccine's ability to prevent the spread?

1479 A No.

1480QSimilarly, were the biologics licenses for COVID-191481vaccines dependent on the vaccine's ability to prevent the spread?

1482 A No.

1483 Q Thank you. Moving on a little bit now. Sort of the last 1484 hour covered some of the questions I had in this section, so I think we 1485 can be brief. I won't introduce the document unless that's easier, but 1486 the first FDA emergency use authorization for a COVID-19 vaccine was on 1487 December 11th, 2020. Is that accurate?

1488 A To my knowledge. I was not at the agency at that time.
1489 Q That's right. So you played no direct role in the
1490 consideration or authorization of that EUA?

1491 A That is correct.

1492 Q You mentioned during the last hour that within the FDA, 1493 the evaluation of the safety side of the equation is somewhat of a 1494 judgment call, I think was how you phrased it. Whose judgment is it to 1495 make that call?

1496 A It is the generally combined judgment of the clinical
1497 staff of the agency, the medical people looking at frequency, severity
1498 of adverse events, and weighing that against the benefits.

1499 Q So when you say the clinical staff, would that be

1500 Dr. Gruber and her team, or someone --

1501 A The clinical side, correct, of that.

**1502** Q Okay.

1503 A As well as the center directors also play a role.

1504 Q So who has the final decisionmaking authority on any EUA? 1505 Is it somebody within the Office of Vaccines?

1506 A At the time, the final decisionmaking authority was the 1507 chief scientist of the FDA, who signed off, finally signed off on the 1508 EUAs.

1509 Q Thank you. I'll move a little bit to the full approval.
1510 The minority covered some of these. I'll try not to double efforts too
1511 much here, but forgive me if that happens a little bit.

1512 Do you recall when the first biologics license application was 1513 submitted for a COVID-19 vaccine, roughly?

1514 A No.

1515 Q Does about May 2021 sound about right?

1516 A Yes.

1517 Q And we touched on this a little bit earlier, but how long 1518 does the entire process take under normal circumstances usually? When 1519 would the action due date typically be targeted for if the application 1520 was sent in May?

A As I said, I think at the time of the PDUFA agreements, the agency agreed that most standard applications would be completed in eight months or ten months, and six months for priority. That's what I recall. 1525 And I think that might include, and correct me if I'm 0 1526 wrong, two months on the front end for, like, the rolling application. 1527 Does that sound right? Is it ten months, total, but eight months with 1528 the two months at the beginning? 1529 А I don't recall. This has changed multiple times with the 1530 different PDUFA negotiations, but that's in the ballpark. 1531 I understand. So COVID-19 vaccines were under Q 1532 accelerated approval. So my understanding, if you look at some of the 1533 documents, the initial action deadline -- action due date, ADD, 1534 appeared to be January 2022. But is it accurate to say that there was 1535 a general understanding that that was too late? 1536 First of all, accelerated approval as a technical term А 1537 doesn't apply here, okay? So you might say they were -- made the 1538 review faster. 1539 Priority review, is that more accurate? Q 1540 They were -- to my understanding, they were under Ά 1541 priority review, all right? 1542 Q Thank you. 1543 Can you rephrase the rest of your question? А 1544 Yes. So under typical priority review, if the Q 1545 application was submitted in May, that was supposed to land the action 1546 due date sometime around January of the next year. 1547 А Okay. As I said earlier, those are the user fee due 1548 dates that are agreed to by the agency to meet as a target. So the 1549 agency said, we'll meet 90 percent of the standard, I think. Again,

1550 this has changed, those percentages, over time.

And we agreed to try to meet 90 percent of the priority reviews within that timeframe, all right? Where there are medical circumstances, the urgency, the agency will review products faster, especially if they have a huge impact. For example, cystic fibrosis drugs, where people with cystic fibrosis die in their 20s and they get very sick in their teens and so forth.

These were life-changing and they were -- I think the first one we might have reviewed in six weeks, I'm not sure about that, is Gleevec. If you recall Gleevec, that was 20 years ago, but it was a game changer for chronic myelogenous leukemia, and some other, and that was reviewed very quick. So it depends on the circumstances.

1562 Those dates that you're talking about are what are agreed to 1563 under the user fee agreements with the industry and with Congress.

1564 Q I understand. So with that context in mind, 1565 when -- around May or June of 2021 -- 2021, when, to the best of your 1566 recollection, was the FDA's target date to finish the review of 1567 Pfizer's BLA?

1568 A Again, I'm sorry, I can't remember that.

1569 Q I understand. I'll try to use the word priority. Do 1570 priority reviews have different standards than typical reviews?

1571 A No.

1572 Q So how is the priority or the accelerated timeline 1573 achieved typically?

1574 A It will differ, depending on the circumstances. More

1575 staff can be put on the review, so that the pieces can be done more 1576 quickly on a different basis.

1577 Very frequently the agency will have known about the findings 1578 from the trial well before the filing, and so they will have reviewed 1579 pieces in advance and much of the work could be done in advance before 1580 the actual application comes in. This is very typical.

When, say, Gleevec or some trial result like that, some incredibly life-changing result occurs, then everyone knows. And start talking -- the staff will start talking to the company about, what can you send us now? What can we get done? So that when the application comes in, we just have to do a label and final safety review, and so forth.

1587 Q That makes sense. So my understanding is that some of 1588 the data that the FDA may, or likely does request from a pharmaceutical 1589 company is follow-up data after the vaccine's been administered. Is 1590 that true, safety data?

A Absolutely.

1592 Q Does a priority review change the length of time of 1593 follow-up that is able to be collected, as far as data?

A Again, this is very particular to whatever the application is. For the COVID vaccines, they had been given to an unprecedented number of people for a very -- since the time you mentioned the EUA for that particular vaccine had been granted, there had been a huge amount of exposure.

1599 There were spontaneous report and other surveillance data, safety

1600 data coming in all along. And of course, the agency would be looking 1601 at that all along.

1602 Now, for 50 years -- well, since PDUFA was passed, okay, the left 1603 wing has been saying, oh, you're reviewing things too fast, right, and 1604 therefore, they're not safe anymore.

And I will tell you, it has been profoundly irritating to me, okay? The real issue is how competent the review is. And frankly, some of our older medical officers, I had intervened in this a long time ago. It would take them months to go through a data file because they were geezers, like me, okay?

An 18-year-old could have looked at this in two days, and had a much more comprehensive understanding that this person who had never used a dataset before, you know, is trying to do an analysis on. So it's more technical competence, in my very experienced opinion, than it is speed.

1615 To answer your question, though, of course, the longer you wait, 1616 the more experience you accumulate. The question is, how much 1617 experience do you need to make a conclusion.

1618 Q Thank you. Again, we touched --

1619 A And my apologies if the left wing is in the room.

1620 Q We may have touched on this a little bit. But is it fair 1621 to say, it is the Office of Vaccines that leads review of a BLA, is 1622 that accurate? Does the Office of Vaccines lead the review of the BLA? 1623 A Yes.

1624 Q And I sort of asked this about the EUAs, but who has the

1625

5 final decisionmaking authority on BLA?

1626 A My understanding that that signatory at the time, because
1627 this has to do with the delegations of authority within the agency,
1628 that signatory was the office director in the Office of Vaccines.

1629 Q Thank you. Did you play any role in the decision to 1630 approve the Pfizer BLA?

Ms. <u>Raveendran.</u> Do you need a clarification of the question? The <u>Witness.</u> It's complicated. I did not play a direct role in deciding if, scientifically, it was ready, okay? What I did was ask that certain -- make sure certain experts were involved in the review process.

1636 BY MR. SPECTRE.

1637 Q Thank you.

1638 A That was my contribution to it.

1639 Q So it's fair to say you didn't provide any scientific 1640 expertise, it was more directing the employees on how to do that 1641 scientific valuation?

1642 A Mm-hmm. That's correct.

1643 Q Maybe I'll just be a little more specific. I think we 1644 touched on this at the very beginning, went through a list of names. 1645 But did you communicate with any federal government entities regarding 1646 the Pfizer BLA for COVID-19 vaccine prior to it being issued?

1647 Mr. <u>Cooke.</u> If it's a yes or no question, did you communicate 1648 with anyone?

1649 The <u>Witness.</u> Yes.

1650 BY MR. SPECTRE. 1651 Did you communicate with anyone at the Department of 0 1652 Defense prior to the BLA being issued regarding the BLA? 1653 А No. 1654 The same question for the White House. Did you 0 1655 communicate with anybody at the White House regarding the Pfizer BLA 1656 prior to being issued? 1657 Mr. Cooke. Again, if it's just --1658 Mr. Osterhues. A yes or no question. 1659 Mr. Cooke. The topic, that it wasn't discussed, then you can 1660 answer. 1661 The Witness. Yes. BY MR. SPECTRE. 1662 1663 Did you discuss with the White House the expected ADD as 0 1664 it evolved over time for the Pfizer BLA? 1665 Mr. Cooke. Now we're getting more into the substance, and at 1666 that point, we're not going to be able to answer. 1667 Mr. Spectre. You're instructing the witness not to answer? Mr. Cooke. Yes. 1668 Mr. Spectre. Thank you. 1669 1670 BY MR. SPECTRE. 1671 So we talked about these names a little bit earlier, but Q 1672 Dr. Philip Krause and Dr. Marion Gruber, who are they? 1673 Marion Gruber was the head of the Office of Vaccine, Dr. А 1674 Krause was her deputy.

1675 Q Do you recall Dr. Krause or Dr. Gruber raising any 1676 concerns with the pace that the FDA was taking regarding the review of 1677 the Pfizer BLA? 1678 A Yes. I was told of that by Dr. Marks and I spoke to them 1679 directlv. [Majority Exhibit No. 1 was 1680 1681 identified for the record.] 1682 BY MR. SPECTRE. 1683 I'm going to introduce Majority Exhibit 1. This is an Q 1684 email sent on July 8 from Dr. Marks to Dr. Gruber. It's just one piece 1685 of paper, so you can take one and pass it along. 1686 I see. I was worried how thick that was. А 1687 Have you seen this email before? I'll give you a second Q 1688 to look at it. 1689 A I don't know. 1690 You are not on the email, so you may not have. 0 1691 А Possibly I saw this before. I don't know. 1692 So if you look sort of in the middle of that paragraph, Q 1693 Dr. Marks writes, "I need to be able to demonstrate to Janet that we 1694 are diligently pursuing the process, and this would be very helpful." 1695 Is it fair to say that Janet would be you, Dr. Woodcock? 1696 That's correct. А 1697 0 What do you think Dr. Marks means here? 1698 Well, I was interrogating him on the process of the Α 1699 review, what experts -- I knew there was a very large amount of

1700 post-market data, a very large safety database. We had this pediatric 1701 cardiology concern, and I wanted to see the project plan for completing 1702 the review, who was on there.

1703 My goal partly is to help usually in, for example -- like in some 1704 other parts of the agency during my tenure, I brought other people in 1705 to assist and get things done. I wanted to make sure. This is a small 1706 office in CBER, I wanted to make sure they were adequately staffing 1707 this and they had enough people and so forth.

1708 Q Did you direct Dr. Marks to accelerate the review of the 1709 BLA?

1710 A I did not.

1711 Q As of this email on July 8, 2021, do you recall when the 1712 ADD would be?

1713 A I do not.

1714 Q Is it fair to say Dr. Marks says, I need to be able
1715 to -- excuse me.

1716 In the previous sentence, Dr. Marks writes, "Regarding the Pfizer 1717 review timeline, by early next week, would it be possible to get a high 1718 level listing of review activities sorted by week over the course over 1719 next two and a half months."

1720 Is it fair to say that he is indicating here, and there are some 1721 other documents that show this data as well, that there was a September 1722 15th ADD that came along at some point, is it fair to say that's what 1723 Dr. Marks is referring to there?

1724 A I don't know.

1725 Q Thank you. At this point, do you recall any 1726 conversations about moving the ADD earlier than January 2022? 1727 I recall that the center told me that they would likely А 1728 get this done in the early fall. 1729 Early fall? Q 1730 Mm-hmm. А 1731 But you don't remember any specific dates? Q 1732 A Well, based on at this point, no. Based on later 1733 discussions. 1734 That's fair, thank you. I would like to introduce Q 1735 Majority Exhibit 2. This is a much longer email chain, a couple 1736 different email chains, there's some forwarding happening within it. 1737 So I'll pass this around as well. 1738 [Majority Exhibit No. 2 was 1739 identified for the record.] 1740 BY MR. SPECTRE. 1741 Q I'll tell you which pages we're referring to at each time 1742 here. 1743 Mr. Cooke. There's a lot here, so we want to be sure she has a 1744 chance to get a sense of what she's looking at. Mr. Spectre. Absolutely. And each question will likely refer to 1745 1746 a very, very small section of these emails. I will point you to those. 1747 BY MR. SPECTRE. 1748 First, if you could flip to the page marked Q 1749 SSCPVaccine000069. So that should be an email that Dr. Marks forwarded

1750 to you on Thursday, July 15th, around 10:00 a.m. I will give you a 1751 second to look at that.

Do you recall this email?

1753 A I do not. But I get -- at the time, I was getting
1754 hundreds and hundreds of emails every day.

1755 Q Absolutely. Well, I will read a part of it here. "Dear 1756 Janet, Perhaps we can have a brief call tomorrow? I can fill you in on 1757 the conversation that I had with Marion and Phil subsequent to their 1758 sending me this document. I have asked them to provide me with a 1759 timeline of milestones, and they are meeting with the review team today 1760 to be able to do so tomorrow morning. That said, they are intransigent 1761 at this time on the September 15 date."

1762 So firstly, do you recall having a phone call with Dr. Marks as 1763 he suggests --

1764 A I do.

1765 Q -- happened in this email?

1766 A Yes.

1767 Q And do you recall talking about concerns from Dr. Gruber 1768 and Dr. Krause regarding the timeline on that call?

1769 Mr. <u>Cooke.</u> So we have something of a reflection of what would 1770 have been discussed on the call. But to the extent you're asking for 1771 something beyond the document, I would have to draw the line here.

1772 Mr. <u>Spectre.</u> You're instructing the witness not to answer the1773 question?

1774 Mr. Osterhues. What privilege is being asserted?

1775 Mr. <u>Cooke.</u> As I mentioned, these are deliberative conversations
1776 in which the Executive Branch has a confidentiality interest.

1777 Mr. Osterhues. So what do you think are the deliberative nature 1778 of these conversations?

Mr. <u>Cooke.</u> I think it's fairly clear, this is about
deliberations regarding the BLA, and in any event, we're here
voluntarily.

1782 Mr. Osterhues. Is it about recommendations on policy? 1783 Mr. Cooke. Look, I'm not going to sit here and litigate this 1784 issue. But to the extent we're getting into the details of 1785 deliberative conversations, we're not going to get into that here. 1786 But, look, ask the question and we can see if we can answer it, but I 1787 just want to put that on the record, to the extent we're getting into 1788 the details of deliberations of the documents, we're not going to get 1789 into those here.

1790 Mr. <u>Spectre</u>. Just for the record, you're instructing the witness 1791 not to answer the question?

1792 Mr. Cooke. Why don't you ask the question again? Sorry.

BY MR. SPECTRE.

1794 Q So on the call that -- you just testified that you had a 1795 call with Dr. Marks following this email, did you discuss concerns from 1796 Dr. Gruber and Dr. Krause about moving the ADD?

1797 Mr. <u>Cooke.</u> Yes, so if you can answer by reference to this
1798 document and the attachment, I think that's fine. But anything beyond
1799 that, I direct you not to answer.

1800 The <u>Witness</u>. Okay.

1801 Yes, we discussed that. My concern was not about the timing of 1802 the -- as I've already said, about the timing of the action, but about 1803 the fact that they had not produced the Gantt chart. This is 1804 supposedly a complex BLA. You need to have a project plan, a whole 1805 project management sheet.

1806 And I could have seen who was on there, how many people were 1807 staffing this part of the application, who was doing that. I was 1808 particularly concerned about the clinical review and that there was the 1809 appropriate and adequate staff on that.

1810 So that was most of the conversation I had with Peter, although 1811 he reported on, he felt that all the action -- all the activities could 1812 be completed in a certain timeline.

1813 BY MR. SPECTRE.

1814 Q You already testified earlier that you had not instructed 1815 anyone to accelerate the review. But did Dr. Marks tell you that he 1816 had instructed them to accelerate the review?

1817 Mr. <u>Cooke.</u> Again, if it's not reflected here, we're not going to
1818 be able to go --

1819 Mr. <u>Spectre.</u> In the email, I will point you to the part where he
1820 says they are intransigent at this time on the September 15th date.
1821 BY MR. SPECTRE.

1822 Q I don't see the word intransigent very often, but my 1823 understanding of that is that Dr. Krause and Dr. Gruber told Dr. Marks 1824 that they were unwilling to move on the September 15th deadline.

1825 Is it fair to say just looking at this email that Dr. Marks is 1826 indicating that he had asked them to move the date earlier? 1827 Yes, I believe this came up in the context of Marion А 1828 saying she was going to take a month off and go to different country, 1829 and you know, attend family matters, which was totally appropriate. But that would remove the senior clinician from this activity. 1830 1831 So the potential moving of the deadline was, in your Q 1832 view, related to Dr. Gruber's leave that she may be taking? 1833 I was not in a position to know that. However, I was А 1834 concerned that I did not have in hand a project plan and a Gantt chart 1835 on how this was going to be done. And, yes, having one of the 1836 principal leads -- the lead person be absent during the review process 1837 is always very disruptive to an application. 1838 Before this email, were you aware that anyone had 0 1839 concerns about the approval timeline? The date of the email is July 1840 15th. 1841 А July 15th. Not to my knowledge. 1842 0 Okay. So in the same exhibit, if you flip to the page 1843 ending with 74. 1844 А Mm-hmm. 1845 Q This is an email from Dr. Marks to a Deirdre Hussey. Do 1846 you know who Deirdre Hussey is? 1847 А I do. 1848 What is her position, if you can recall specifically? 0 1849 А She is the -- she was the executive officer of CBER.

1850 Q Is she someone that would be in charge of HR issues for 1851 CBER?

1852 A HR is a centralized function. She would be someone who
1853 would be assisting in that -- potentially in HR matters.

1854 Okay. So if we look at the email, and I will give you a 0 1855 second to read the whole thing. I won't read the whole thing into the 1856 record here. But at the beginning, Dr. Marks says, "Dear Deirdre, I am 1857 copying this to you because I think that it is important to document 1858 that despite repeated verbal attempts, and as documented in the 1859 attached email, I have asked Marion for a timeline that would help 1860 justify the September 15 data that she provides for completion of the review." 1861

1862 Why do you think Dr. Marks might be documenting his interactions 1863 with Dr. Gruber to someone who works with HR?

1864 A Well, first of all, Deirdre does not work in HR. She was
1865 exec officer. It's an administrative position. I do not know why
1866 Dr. Marks would do that.

1867 Q By this point, and this email is July 16, 2021, to the 1868 best of your recollection, had the idea of relieving Dr. Gruber and 1869 Dr. Krause of their duties been discussed?

1870 A I can't recall.

1871 Q To reiterate, was Dr. Marks pressuring Dr. Gruber and 1872 Dr. Krause to accelerate the deadline?

1873 A My understanding is that Dr. Marks' professional
1874 opinion -- and he's a very accomplished scientist with industry

1875 experience, as well as deep regulatory experience. He believed that 1876 activities could be accomplished more quickly, and he was seeking the 1877 Gantt chart or the timeline that the Vaccine Office had to understand 1878 why they thought it would take longer.

1879 Q You mentioned a little earlier that one of the 1880 roles -- in the last hour when the Democrats were asking questions, one 1881 of the roles of the senior FDA leadership is to insulate FDA reviewers, 1882 staff, from political pressure.

1883 A Mm-hmm.

1884 Q Would that duty also fall to someone like Dr. Marks?
1885 A Yes.

1886 Q As far as you are aware, was Dr. Marks pressured by 1887 anybody? You said not yourself. But are you aware of any pressure 1888 that may have been exerted on Dr. Marks to accelerate the timeline?

1889 A I do not, no. Dr. Marks told me that, in his
1890 professional opinion, this could be completed more expeditiously with
1891 the appropriate plan and oversight.

1892 Q Was anybody pressuring you to accelerate the deadline, 1893 even if you hadn't passed that pressure along?

1894 A No.

1895 Q So it's a little confusing, because I think later on in 1896 the chain, as earlier on in document -- let me confirm that I have the 1897 right number for you here. So on the page ending in 58.

1898 A If I could make a slight amendment to my previous 1899 statement.

1900 Q Absolutely.

1901 A Members of the public wrote me, many of them, about many 1902 things, including that I would be tried at Nuremburg for being involved 1903 in the vaccine. But many of them said that they wanted an approved 1904 vaccine before they would take vaccination.

1905 So some of them said they would not take an mRNA vaccine, but 1906 they only wanted an approved vaccine and that we had to approve one of 1907 the other vaccines quickly.

So to be totally correct in my answer, yes, there were people writing me and trying to call me and so forth saying, we have got to have an approval because I won't -- my family won't take the vaccine unless it's approved -- a vaccine unless it's approved by FDA. So sorry for that.

1913 Mr. Osterhues. That's helpful.

1914 The <u>Witness.</u> You asked me if anybody. Not if anybody political, 1915 you asked me anybody. Well, yeah, there were members of the public who 1916 were very torqued about this and there was a whole campaign about 1917 younger children. People wrote in. There were many campaigns, pro and 1918 con, the whole time. So there was a flood of groups and individuals 1919 advocating on the outside for various positions.

1920 BY MR. SPECTRE.

1921 Q Thank you for the clarity on that.

1922 A Yeah.

1923 Q So I think it's perfectly understandable that you were 1924 receiving pressure from the public, and you've already testified that

1925 you didn't pass that pressure along to Dr. Marks or to any of the 1926 employees; is that correct?

1927 A That is correct.

1928 Q Do you think that they probably felt similar pressures?
1929 A I'm sure Dr. Marks got emails, because he was one of the
1930 faces of the agency in this regard. But we always, also got, as I
1931 said, we got all kinds of accusations, that we were criminals and so
1932 forth as well. So that was on the other side.

1933 Q Thank you. So as I mentioned, this email I'm going to 1934 reference now is on the page ending in 58, which is a little confusing, 1935 later on in the same chain.

1936 So it appears to be you responding to Dr. Marks, that email where 1937 he mentioned that Dr. Gruber and Krause were intransigent on the 1938 September 15th date.

You replied about an hour later and said, "Well, they seem open to additional support on other vaccine efforts, and are already working with CDER Office of Computational Science, which is a good thing. Peter, you can find out more when you take over. JW."

1943 A Mm-hmm.

1944 Q I think you mentioned earlier sort of the computational 1945 science resources that you were hoping to reallocate from CDER to CBER. 1946 Is that what you were talking about there?

1947 A That's what I was talking about.

1948 Q And you said, "Peter, you can find out more when you take 1949 over." Are you referring to Dr. Marks taking over the review from 1950 Dr. Gruber? 1951 Yes, I believe I was. А 1952 So is it fair to say that --Q 1953 July 16th. А 1954 By July 16th, you had decided that Dr. Marks would be Q 1955 taking over? 1956 А That's fair. 1957 Did you talk about that on the call we were discussing a Q 1958 little bit earlier? Is it possible that's when you told Dr. Marks he 1959 would be taking over for Dr. Gruber? 1960 I don't know. А 1961 So you don't recall exactly when you told Dr. Marks? Q 1962 Clearly within this timeframe. А 1963 Did you make that decision on your own? Q 1964 А Yes. 1965 And did Dr. Marks request that, or was it your idea? Q 1966 А It was my idea. 1967 Q And you made it unilaterally? No one else was involved 1968 in that decision? 1969 А I was the person responsible. 1970 Thank you. Could you explain why? You said earlier Q 1971 Dr. Krause was Dr. Gruber's deputy. Why didn't Dr. Krause take over? 1972 А Several reasons. Number one, they had made quite an 1973 issue, and I think it was true they had multiple other vaccines under 1974 review at various stages, including other COVID vaccines.

1975 So the office was very busy at that time. My experience is that 1976 at the very end of a review cycle, especially if you have to transition 1977 from one lead to another, it's a very tense time. So I thought the 1978 Vaccine Office should keep going and get all this work done, and Peter, 1979 who is very involved in this and was very aware of everything, would be 1980 the best person to get this one over the finish line.

1981 I was also concerned that they weren't bringing all the 1982 appropriate resources to bear. And it's very concerning here that 1983 Peter said that he is trying to get a Gantt chart together. Why didn't 1984 they have one? You should have all that laid out.

1985 I mean, CDER had hundreds of applications at one time. Every 1986 single one of them, you know who was working on each piece, when that 1987 deliverable was expected, and how it was supposed to come together at 1988 the end.

1989 And here you have this extraordinarily complex application
1990 because of all the people who had been exposed because of the EUA and
1991 so forth. And I was just concerned that it didn't have the appropriate
1992 resources put against it. And I talked to Peter about that.

1993 BY MR. OSTERHUES.

1994 Q Just to clarify, because toward the beginning of your 1995 answer there, you said they weren't bringing the appropriate resources 1996 to bear. So is it CDER?

- 1997 A No, no.
- **1998** Q Who?
- 1999 A The review committee.

2000

Q I'm sorry. Thank you.

2001 A Yeah, I was concerned that, and I had been for -- since I 2002 heard about the status of this review. You said it was submitted in 2003 May?

2004 Q Yes.

2005 A So this was July. So all of that should have been in 2006 place, and, you know, pediatric cardiology working on a follow-up plan 2007 for myocarditis and so forth.

2008 BY MR. SPECTRE.

2009 Q So is it fair to say that you had concerns with 2010 Dr. Gruber's performance? Is that fair?

A I was concerned they were treating this sort of business as usual, that they had not experienced something this big before, and that these -- certain of these side effects were very unusual for -- vaccinologists don't usually have pediatric cardiologists as a member of their team, for example.

And so that's what I was concerned about, is that they had just been treating this more like they would an ordinary -- and leaving aside what you think about the vaccine and all that, you have to admit, this is a complicated application that needed a lot of attention. That's why I had been on their case about the computational science people who are data scientists, so they can get in the database, so they know how to do the analyses very quickly and so forth.

2023 So that was basically -- and then when they couldn't cough up a 2024 project plan, my level of concern was raised, too. So it wouldn't be a

2025 performance issue in the sense of like bad performance. It was like 2026 maybe they did not raise their level up to where they should have. 2027 BY MR. SPECTRE. 2028 Thank you. Now I would like to introduce a CNN article 0 2029 also from July 16th. 2030 [Majority Exhibit No. 3 was 2031 identified for the record.] 2032 BY MR. SPECTRE. 2033 Q I'll give you a second to look at it. But just on first 2034 glance, have you seen this article before? А 2035 No, I didn't read all this stuff during this time. I was 2036 too busy. 2037 That is understandable. So we talked a little bit about Q 2038 this issue before, but I will just point you to the first two 2039 paragraphs on the front page there. And it says that an FDA official 2040 said a decision on full approval was coming, quote, soon. It also says 2041 that "The FDA official told CNN on Friday that a decision on full 2042 approval is likely to come within two months." 2043 I know you testified earlier that you have to share these 2044 expected deadlines with the drugmakers. 2045 А Correct. 2046 But that generally this is private information. Q 2047 А That's correct. 2048 0 And it shouldn't be in the public. 2049 А That's right.

2050

2051 A No.

0

2052 Q Do you know who that may have been?

2053 A No.

2054 Q If you knew who they were, would they have received 2055 disapproval from you?

Were you the FDA official that shared that with CNN?

2056 A Likely.

2057 Q Is that an offense that would result in some kind of 2058 punishment within the FDA, or is that just a, don't do it next time? 2059 A I think it depends on the kind of leak. But I have very

2060 little experience with punishment, because you never -- the reporters 2061 won't tell their sources, so you don't know who said that.

2062 Q Certainly. So just for clarity for the record, it is 2063 abnormal and not in the interest of the FDA to have a deadline -- to 2064 have a quote like this about a deadline be shared publicly in an 2065 article?

A Well, this is still kind of vague, likely comes within two months. So it's desirable for us not to do these things because we don't know what we're going to find when we -- but I don't think this would necessarily -- the decision, it could be an adverse decision. So I think this is more mild than sometimes we see.

2071 Q Is it possible that this being shared publicly, this data 2072 being shared publicly in the CNN article put undue pressure on the 2073 Office of Vaccines or other clinical personnel who are responsible for 2074 ensuring the review?

2075

A I cannot say that, one way or another.

2076 Q Okay. Thank you. We'll set that one aside now.

2077 I believe we'll go back to the long email chain, if you can flip2078 to the page marked with the last two numbers are 78.

2079 Mr. Osterhues. That's Majority Exhibit 2 for the record.

2080 The Witness. Okay.

2081 Mr. Spectre. Thank you.

BY MR. SPECTRE.

2083 Q This is an email Dr. Marks forwarded to you on July 16th 2084 as well. The underlying email is from Dr. Gruber and was sent to 2085 Dr. Marks. I'll give you a second.

2086 Do you recall this email?

2087 A Well, it obviously -- I was -- it was sent to me, so -2088 Q But you don't have any particular recollection of it
2089 today?

2090 A I have seen this email.

2091 Q Thank you. So if you look to the email which was 2092 forwarded to you, so Dr. Gruber's original email says, "See attached 2093 our projected timelines for completing currently ongoing reviews, task 2094 and responsibilities for the above BLA."

2095 Just quickly, Dr. Gruber also CC'd Mary Malarkey and Steven 2096 Anderson. Who are they?

2097 A Mary was the head at the time of the Office of 2098 Compliance, and so she would have been overseeing the inspections of 2099 the facilities. And Steve Anderson does the post-market safety evaluation, and so they would have been doing the -- most likely, the review of the safety -- the nonclinical trial safety information. Q Thank you. So the following pages within the document, within Exhibit 2, are Bates marked with numbers ending in 79 and 80. So this appears to be the timeline that you may have been referring to earlier that hadn't been prepared as of some previous emails.

A Or coughed up.

2107 Q Now it is being provided. Is that fair to say?
2108 A That's -- this is a timeline, yes, this -- it is not
2109 complete with staffing. It is more or less a fairly skeletal timeline,
2110 but it is a timeline, yes.

2111 Q Could you -- and I know there's a lot here, but maybe 2112 just briefly walk us through what this says here, what exactly this 2113 timeline is representing?

A What this is representing is the various activities that have to be accomplished before an action can be taken by the FDA, including also when the inspections would be done and the reports and the labeling review, there's a post-market commitment review that has to be done and sent to the company and they have to agree to that.

So some of this, as I noticed Marion said in the previous email here, is contingent on the timely responses from the companies. So it can't necessarily -- that's another reason why the FDA should never talk publicly about timeframes, because you don't know if you're going to find something and the company will submit in a timely way.

2124 So this simply said what has to be done. It doesn't say who is

2125 going to do it and how these are going to be staffed and so forth, but 2126 it does go through all different activities. And you can see, as I 2127 said previously, that toward the end, there is always a cluster of 2128 activities that need to be accomplished.

2129 Q Thank you.

2130 A The action package has to be all finalized and all the 2131 different memos and reviews and assessments are all put together.

2132 Q And just for the record, what does it appear that the 2133 deadline or when the approval is being targeted for as according to 2134 this timeline?

2135 A Pardon me?

2136 Q So just for the record, what date does this timeline 2137 indicate the Pfizer BLA will be approved?

2138 A September 15th.

2139 Q Thank you. If you go back to the email on the page 2140 ending in 78, Dr. Marks writes in his email to you that he "can already 2141 see a number of potential efficiencies." And asks, "Perhaps we can 2142 discuss over the weekend in preparation for Monday?"

So a couple questions there. Monday would be July 19th. Is the thing Dr. Marks is saying you need to prepare for on Monday, is that the meeting between you, Dr. Gruber, Dr. Krause, and Julia Tierney that ended up occurring on July 19?

2147 A Most likely, that was when it occurred. I'm sorry about 2148 my problem with dates.

2149 Q Understandable, and we'll get to more specifics later.

2150 But fair to say that likely is?

2151 A Yes.

2152 Q And similarly to an earlier email, Dr. Marks is 2153 suggesting that you have a call to discuss these issues. Did you end 2154 up having a call?

2155 A I don't recall.

2156 Q Did Dr. Marks ever explain to you what "efficiencies" he 2157 saw?

2158 A Yes, I believe he did.

2159 Q And do you recall what those were?

2160 A Not in detail. They had to do with the conduct of the 2161 review. Some of these activities, you know, could be completed in a 2162 more -- faster timeframe.

2163 Q Okay. Now, I would like to talk about your July 19th 2164 meeting. We've already talked about it a couple times, and you said 2165 you at least vaguely recall having this meeting. Is that true?

2166 A If you're talking about a meeting that occurred amongst 2167 Phil Krause, Marion Gruber, Julia Tierney, me, and Peter Marks, yes, I 2168 recall that meeting.

2169 Q Yes.

2170 A I do not recall that date.

2171 Q Yes, that is the meeting. And was anyone else there
2172 besides those you just listed, Gruber, Krause, Marks, Tierney?
2173 A To my knowledge, no.

2174 Q And on that note, was this an in-person meeting or was

2175 this on a Zoom call?

2176 A My belief is it was on a Zoom call.

2177 Q Thank you. Do you recall roughly how long this meeting 2178 went?

2179 A I do not.

2180 Q In your recollection, was it a very long meeting or -2181 A No, it was not a long meeting.

Q What do you remember discussing during that meeting?
A Well, what I discussed was I said that I was going to
have Peter finalize this review because Marion was going to go away,
and I felt that the rest of the office work needed to keep going and
that this needed full attention to be gotten over the finish line. And
Peter was very involved in it.

2188 Q Thank you. And that was the reason you gave in the 2189 meeting for why Dr. Marks was taking over, that it was because 2190 Dr. Gruber was going on leave?

2191 A Yes.

2192 Q Did you discuss, and we talked about this issue earlier 2193 already. But in this meeting, did you discuss why Dr. Krause would not 2194 be taking over for Dr. Gruber?

A To my recollection, because this is a long time ago, I said that Phil could -- could continue with the rest of the activities of the office and that this very tense activity of getting this particular application done would be led by Peter, that the lead would transfer to Peter. Dr. Krause had not been the lead. So it's very 2200 typical to transfer the lead to somebody, right, and so I thought this 2201 was a very good solution.

2202 Q Did the topic of vaccine mandates or mandatory 2203 vaccination policies come up at all during this meeting?

2204 A Not by me.

2205 Q But do you recall that someone else may have brought them 2206 up?

2207 A I do not recall.

2208 Q Do you recall, as we've established you said you have not 2209 pressured anyone to accelerate the timeline. But did Dr. Mark pressure 2210 anyone during this meeting to accelerate the timeline for reviewing the 2211 BLA the Pfizer COVID-19 BLA?

2212 A Dr. Marks simply stated he felt it could get done 2213 earlier. And of course, they had a massive amount of work in the 2214 Vaccine Office, other applications, other important activities needed 2215 to be done. It was very important during this emergency to get things 2216 completed, but in -- to the highest standard of technical excellence.

2217 Q So is it fair to say that in this meeting, Dr. Gruber was 2218 being replaced, and also it was discussed that the timeline could or 2219 should be faster than the one that she was working on -- working 2220 towards?

A I was not saying that Dr. Gruber was going to be replaced. Dr. Gruber was going on vacation, and I was putting a very senior regulator in charge of this application. My understanding is that when Marion came back, she actually remained involved in the

2225 application, so -- and Dr. Krause was stuck in as managing the rest of 2226 the office.

2227 Q Thank you very much. So we have just a couple minutes 2228 here, so my last question before we wrap this hour up will be 2229 referencing an email on the page marked ending in 83 and 84.

2230 A Uh-huh.

2231 Q So at the bottom of 83, and this is kind of a long email, 2232 so I'll give you a second. It is an email from Dr. Gruber to 2233 Dr. Marks, yourself, and she CC'd Julia Tierney and Philip Krause. I 2234 may have asked you this already, but just for the record, who is Julia 2235 Tierney?

2236 A At the time, she was the chief of staff of FDA.
2237 Q Okay. Thank you. So I will give you a second to look
2238 over that email because, like I said, it's a bit long. Just let me
2239 know when you've had a chance.

2240 A Okay.

2241 Q Thank you. I know that's a long one. And we'll refer 2242 back to this email a little bit more when we pick back up in our next 2243 hour, but just really quickly, do you generally agree -- let me start 2244 over.

Is it fair to say this is an email from Dr. Gruber summarizing what was, in her view, what you all discussed on your July 19th call? A Yes, she's summarizing that and also arguing her own position, and it's written to Dr. Marks and to me.

2249 Q Thank you. Do you generally agree with her summary of

the meeting?

A She's focusing on the timelines. I did not focus on that in my part of the meeting. I focused on the fact that she would be on vacation, which is perfectly reasonable, some family time, out of the country, not in a position to oversee this very complicated, as she said, review.

2256 Dr. Krause is an expert, he's not a clinician, and I asked that 2257 Peter take over the review. That was what -- a lot of sort of 2258 extraneous comments in this email about the timeline and other things 2259 that I don't think were really the heart of the meeting.

2260 Q So to your recollection, you primarily focused on
2261 Dr. Marks' taking over the lead of the review of the Pfizer BLA?

2262 A Yes, that was my intent of having the meeting and2263 explaining that rationale to Marion and to Dr. Krause.

2264 Q But so did Dr. Marks, the things that you did not bring 2265 up directly that Dr. Gruber refers to in this email, is her summary a 2266 fair summary of what Dr. Marks had said?

2267 A I'm not in a position to remember.

2268 Q Okay.

A I do not remember.

2270 Q Thank you. We'll talk a little bit more about that 2271 meeting in just a little bit in our next hour, but we can go off the 2272 record for now.

[Lunch recess.]

. Back on the record.

2275 BY

2276 Q Dr. Woodcock, we had a few clarifying questions about 2277 some of the content from the previous hour. One of them is grounded in 2278 a document. So if you could find Exhibit -- Majority Exhibit 2 and 2279 within that, it's the Bates numbered page 84.

2280 A Okay.

Q So there is a lot of text there. I will just talk about what I'm talking about, and that will spur your recollection. I think you have testified previously today that in this meeting, to the best of your recollection, you did not mention anything related to the linkage between vaccine mandates and BLA approval, that's right?

2286 A That's right.

2287 Q And I think you also said that you are not in a position
2288 to recall whether anybody else did say something about that, and if so,
2289 who and what, you just don't recall?

2290 A That's right.

2291 Okay, great. I only wanted to clarify because it looks 0 2292 like here in Dr. Gruber's write-up of the memo, on page 84, towards the 2293 top of that page, maybe two-thirds of the way down in that first big 2294 paragraph, Dr. Gruber said that "you" -- the you was a little unclear 2295 there. I think she is referring to both yourself and Dr. Marks. I don't know, but she said, "You expressed concern about rising COVID 2296 2297 cases in the US and globally, largely caused by the Delta variant and 2298 stated your opinion that, absent a license, states cannot require 2299 mandatory vaccination and that people hesitant to get an EUA authorized

2300 vaccine would be more inclined to get immunized when the product was
2301 licensed."

2302 So consistent with what we just said, as far as you know, whoever 2303 said that, that that wasn't you as related to the mandates comment?

2304 A That's right.

2305 Q Great. The other component of that, this idea that there
2306 are folks out there who would feel more comfortable getting an
2307 immunization if it were the recipient of the full BLA approval, you did
2308 talk a little bit earlier that was something you had heard?

2309 A That's correct. And I may have brought that up. I heard2310 that from many members of the public, yes.

2311 Q Great. Is it right to say that at no point in this
2312 meeting or this series of conversations about the Pfizer BLA that you
2313 did not feel that the safety or efficacy of the vaccine was ever being
2314 jeopardized or at risk; is that right?

2315 A That is correct.

2316 Q This is also just a minor factual clarification.
2317 Dr. Gruber going out on leave for this extended period, that was
2318 already happening for personal reasons, right? That has no linkage to
2319 this BLA application?

A That's what precipitated this conversation, when
Dr. Marks informed me that the lead for this review was actually going
to be absent during that period of intense effort toward the end of the
review process.

2324 Q Those were preexisting personal plans?

2325 A That's her plans that she put forward.

2326 Q Right.

2327 A To my understanding.

2328 Q Great. Just one other, it's a minor factual point but on 2329 Majority Exhibit 3, the CNN article, if you've got in front of you.

2330 A Yes.

2331 Q As a reader, it felt as if the lead or the source, the 2332 FDA official -- the article was in the context of an FDA decision, 2333 right? I don't see at any point that the decision is being predicted 2334 one way or the other, in terms of approval or denial. It's just a 2335 decision in the abstract. I don't know if that is also your perception 2336 as a reader.

2337 A People are quoted, which is me and Peter Marks, it
2338 appeared, as the FDA usual terminology, that action or a decision,
2339 which is the appropriate way to never telegraph what you're going to
2340 do.

2341 Q And that would be typical with FDA's usual practice?
2342 A That's correct.

2343 Q Great.

2344 That's all we have for this round. We can go 2345 off the record.

2346 [Discussion held.]

2347 Mr. Spectre. We can go back on the record.

BY MR. SPECTRE.

2349 Q Just to pick back up a little bit. The minority's

2350 questions just now covered a couple things here, but we're going to go
2351 back over a couple of the same topics.

Just to start out with, during the Select Subcommittee's hearing on February 15th of this year, is that the hearing you mentioned earlier that Dr. Marks had mentioned to you -- Dr. Marks was asked if he recalled "any conversations regarding the need to approve COVID-19 vaccines in order for it to then be mandated." Dr. Marks said, "There was an acknowledgement that an approval could allow vaccine mandates to occur."

And we have touched on this a little bit already, but you said that you were aware of that, you were aware that the decision to approve the vaccine could lead to or allow vaccine mandates. But do you recall any specific conversations discussing that?

2363 A Only that point. This had been widely raised in the
2364 press and elsewhere, and I recall people, Peter and others,
2365 acknowledging this.

2366 Q Do you remember a specific time that Dr. Marks 2367 acknowledged this?

2368 A No, I do not.

2369 Q Thank you. Does the FDA have any role in shaping 2370 policies like vaccine mandates?

2371 A No.

2372 Q Were you favorable to the idea of mandatory COVID-192373 vaccination in the summer of 2021?

2374 Mr. Cooke. You, meaning, Dr. Woodcock personally?

2375 BY MR. SPECTRE.

2376	Q Dr. Woodcock, in your personal view, were you favorable
2377	to the idea of mandatory COVID-19 vaccination as of the summer of 2021?
2378	A I had no opinion on that.
2379	Q Okay. Thank you. I will refer back to that same email
2380	that the Minority was just talking about there.
2381	Mr. Osterhues. And this is Majority Exhibit 2.
2382	Mr. Spectre. Majority Exhibit 2, the page ending 83 and 84.
2383	BY MR. SPECTRE.
2384	Q So just to be clear, and again, you testified to this in
2385	the last section, but the possibility of mandatory vaccination policies
2386	played zero role in the rationale for the actions that were taken
2387	during that meeting. Is that true?
2388	A No, not in my rationale.
2389	Q Not in your rationale.
2390	A And I was the decisionmaker.
2391	Q Thank you.
2392	Mr. <u>Spectre.</u> I will now introduce Majority Exhibit 4.
2393	[Majority Exhibit No. 4 was
2394	identified for the record.]
2395	BY MR. SPECTRE.
2396	Q This is a one-page document. I will let you take a look,
2397	but this is a memo issued by the Secretary of Defense on August 9,
2398	2021. So this obviously would have been prior to the BLA decision. I
2399	will give you a second to look at that. You can let me know when

2400 you're ready.

2401 Looks like you're ready. Are you familiar with this document?
2402 A No, this is the first time I've seen it.
2403 Q Okay. So I guess that answers the question whether you
2404 recall seeing it between August 9th and August 23rd.

2405 A I do not.

Q I know you just had a brief minute to look at it, and this is the first time you've seen it apparently. But just in your quick look, is it fair to say that this memo indicates that Secretary Austin was planning to mandate COVID-19 vaccination for service members as soon as the vaccines received full approval or as soon as President Biden gave a waiver, whichever came first? Is that fair to say?

2412 A I don't understand about the waiver, but it sounds -2413 Q I believe that's a legal issue.

A I don't understand, so I can't answer that. I understand what he's saying here is that after -- should there be an FDA licensure, which is the proper term, that he would mandate the vaccines for military.

2418 Q My understanding is that the waiver was a legal matter or 2419 a legal issue, where if the vaccine was still under EUA, that the 2420 Secretary would have to seek a waiver from the President to mandate it. 2421 It sounds like you don't have any familiarity with that issue?

2422 A I do not.

Q Okay. Since you have not seen this memo before today, I
assume you were not aware that Secretary Austin was planning to issue a

2425 mandate prior to the mandate being issued on August 24th, or 2426 rather -- let me rephrase that.

2427 Were you aware that Secretary Austin was planning to mandate2428 COVID-19 vaccination before August 24th, 2021?

2429 A No.

Q In the interest of time, I won't introduce it as an exhibit, it's here if you would like to see it, but it is just the announcement that the Pfizer vaccine Comirnaty received full BLA approval on August 23rd. I'm sure you recall that announcement. So we'll set that aside, but the next day, and I'll introduce this as Majority Exhibit 5.

2436 [Majority Exhibit No. 5 was

2437 identified for the record.]

2438 BY MR. SPECTRE.

2439 Q This is the memo announcing the DoD vaccine mandate
2440 written by Secretary Austin on August 24th. I'll give you a second to
2441 look at that one as well. It's a single page, double-sided document.

2442 It looks like you're ready. Are you familiar with this document?
2443 A No.

2444 Q So this is the first time you're seeing it as well?
2445 A To my knowledge, yes.

2446 Q You've already answered a couple of these questions here.
2447 So I'll skip to -- this memo came out just one day after the FDA
2448 announced the -- for approval of Comirnaty. To your knowledge, would
2449 DoD have had advanced knowledge that the full approval was imminent?

2450 Not to my knowledge. He says here about the press А 2451 talking about it. Public reporting suggests that it could achieve full 2452 FDA licensure early next month. 2453 You're reading from the August 9th memo? 0 2454 Yes. So that's all I know. А 2455 So you're not aware of any reason why they would have had Q 2456 more specific knowledge of when the BLA would be approved? 2457 А No. 2458 Just to round out that section, sorry, I'm trying to 0 2459 decide if it's worth introducing as an exhibit or not here. 2460 In the interest of time, we'll just skip to the next section 2461 here. Talk a little bit about COVID-19 vaccine boosters. Do you 2462 recall when the first COVID-19 vaccine booster was authorized by the 2463 FDA? 2464 А No. 2465 Does sometime around September 22nd, 2021, does that 0 2466 sound correct? 2467 А It does. 2468 But when this was authorized in September of 2021, it was Q 2469 only authorized for certain individuals; is that right? 2470 That's my recollection. А 2471 Does it sound right that it was authorized for people Q 2472 over 65, people between the ages of 18 and 64 with a high risk of 2473 COVID-19, and people 18 to 64 whose occupation put them at a high risk 2474 of complications from COVID. Does that sound about right?

2475 A That sounds right.

2476 Q And this dose -- this first booster dose was an identical 2477 formula as the primary two-dose series; is that correct?

2478 A I don't recall, but I believe so.

2479 Q Thank you. As we discussed, the Pfizer vaccine was given 2480 in August of 2021. Do you know when the FDA began consideration of the 2481 first booster emergency authorization?

2482 A To my recollection, it was in the previous spring.

2483QIn the previous spring. Did Pfizer have or any other2484company have to proactively request this, or does the FDA prompt them?

2485 <u>Ms. Raveendran</u>. Could you clarify what "this" is.

BY MR. SPECTRE.

2487 Q Did Pfizer have to proactively request that the FDA 2488 assess the same doses as being a booster dose?

A Companies have to submit an application for a change to their BLA or for an EUA, as like earlier discussed. So, yes, any company that wished to have a booster or something like that would have to submit an application that had manufacturing control data if it were different, as well as clinical data or other data.

As I said earlier, we had put out guidance about what kinds of information we would be interested in should variants change, should they not change, should immunity drop low, et cetera, et cetera.

2497 Q Thank you. Do you recall when the first public
2498 announcement was made regarding a plan to authorize a booster dose?
2499 A I do not.

2500

2501 [Majority Exhibit No. 6 was 2502 identified for the record.] 2503 BY MR. SPECTRE. 2504 This is a press release from the FDA from August 18th. 0 2505 I'm sorry, I got my documents mixed up here. 2506 This is a press release from August 18 that indicates it was 2507 attributable to you as well as CDC Director Walensky, Surgeon General 2508 Vivek Murthy, among others, a one page, double-sided document here. 2509 Thank you. А 2510 And I will give you a second to review it, but I am going 0

2510 Q And I will give you a second to leview it, but I am going 2511 to point to a particular paragraph, that's the fourth paragraph. It 2512 should be on the back here. Excuse me, in the last paragraph on the 2513 first page. It says, "We are prepared to offer booster shots for all 2514 Americans beginning the week of September 20 and starting 8 months 2515 after an individual's second dose."

Mr. Spectre. I would like to introduce Majority Exhibit 6.

2516 So at this point, on August 18th, 2021, had the EUA for a
2517 COVID-19 vaccine booster been -- had the FDA decided on that EUA yet?
2518 A No, the paragraph said, subject to FDA conducting an
2519 independent evaluation and ACIP's issuing booster dose recommendations
2520 based on a review of the ACIP.

2521 Q Yes, thank you.

2522 A So it was caveated.

Q Okay, thank you. So President Biden made a similar
announcement on that same day on August 18, announcing that the

2525 government was planning to offer booster doses the week of September 2526 20th. Is it fair that you are agreeing with that plan as a goal at the 2527 very least?

2528 A As a goal.

2529 Q Okay. And within our earlier conversation about sharing 2530 these expected deadlines outside of the FDA, would you say that this 2531 announcement falls within the general guidelines of what kinds of 2532 information can be shared outside the FDA?

A Well, again, as I said, it's caveated about the week of September 20th. It's not about an approval, it's about potentially an approval but not of a new molecular entity. It's about yet another dose, more of the same, so to speak. So it's a little less vague than what usually FDA would do, but yet this is within the public health emergency.

2539 Q So it's a little bit less vague?

2540 A Yes.

2541 Q Do you think that this potentially less vague 2542 announcement could put any undue pressure on the scientists who are 2543 conducting the review?

A Well, it says subject to independent evaluation and determination. I think our scientists take that very seriously. They have to sign that they agree with it. I certainly never wanted anything other than a thorough and complete evaluation.

2548 [Majority Exhibit No. 7 was

identified for the record.]

2550 BY MR. SPECTRE.

Q I would like to introduce Majority Exhibit 7. The date at the bottom left indicates that it's from Volume 398 of the Lancet October 9, 2021. You will have to take my word for the fact that it was published online initially on September 13th, 2021.

And this is a Lancet article which was coauthored by Dr. Krause and Dr. Gruber titled "Considerations in boosting COVID-19 vaccine immune responses." It argues that, "Currently available evidence does not show the need for widespread use of booster vaccination in populations that have received an effective vaccination regimen."

2560 Do you recall this article?

2561 A I knew it was published. I never read it.

2562 Q So I will give you a second to look it over if you would 2563 like.

2564 A More than a second.

2565 Q Certainly longer than a second to fulsomely evaluate the 2566 entire article. But if we can just focus on that one quote that I read 2567 that currently available evidence does not show the need for widespread 2568 use of booster vaccination in populations that have received an 2569 effective primary dose regimen. Do you disagree with that assessment? 2570 Ms. <u>Raveendran.</u> Could you point to where in the article it is? 2571 The <u>Witness.</u> Third paragraph.

2572 Basically, it says current evidence does not therefore appear to 2573 show. It doesn't say does not show. And it would require me to read 2574 this article to answer your question. 2575 BY MR. SPECTRE.

2576 Q Okay.

2577 Mr. Osterhues. Just a follow-up question.

2578 BY MR. OSTERHUES.

2579 Q You mentioned you had not read this article. Was there a 2580 particular reason you had not read it, or was it just you didn't -- you 2581 had a lot to do?

A At the time, I was very well aware of all the data, and including data from other countries about the use of boosters and the impact, and so forth. So I did not feel -- I know these folks, and I did not feel the need to read their argument.

2586 BY MR. SPECTRE.

2587 Q Had you heard this sort of concern raised from within FDA 2588 prior to September 13, 2021, when this article was published? Similar, 2589 meaning concerns that the evidence may not or does not show the need 2590 for widespread use of booster vaccination in populations that have 2591 received an effective primary regimen?

2592 A Well, first of all, if I may.

2593 Q Certainly.

A They are talking about general population. This wasn't indicated -- the booster at the time of approval was not indicated in the general population. So you might say they were arguing against something that didn't happen.

2598 Q Do you recall when it was expanded to include all adults?
2599 A I do not recall.

2600 Q Does November 19th, 2021 sound --

2601 A I literally can't remember.

2602 Q Okay.

2603 A As you know, there were many iterations of boosting and 2604 other activities during that following year.

2605 Q Certainly. I won't introduce that, but my understanding 2606 is that it was the emergency use authorization for a booster for adults 2607 was issued on November 19th.

A After more data became available, obviously. But I just -- I simply would say this article, at least as my brief reading of it, is about general population, which isn't -- wasn't the subject of the initial booster recommendation.

Subsequently, of course, there were many, many conversations that went on in the scientific community about this all around the world, not just in the U.S., not just people within the FDA, but all over the scientific community about how to deal with this, how to deal with the evolution of variants, should a booster be engineered to be more forward-looking to cover future variants, how would you predict that.

2618 So this was one of many, many, many. And actually, at least the 2619 way this is phrased, they were not talking about what happened 2620 initially with boosters.

2621 Q Sure. Do you recall the first time that President Biden
2622 publicly said that the booster would be expanded to adults?

2623 A I don't recall when. I know it happened.

2624 Q I'll introduce Majority Exhibit 8.

2625

[Majority Exhibit No. 8 was

identified for the record.]

2627 BY MR. SPECTRE.

Q This is a New York Times article from September 24, 2021. On page 2 as we printed it out here, near the bottom the paragraph says, you are going to see that President Biden is quoted as saying, "'You're going to see that in the near term, we're probably going to open this up anyway.'" He also said, "We're also looking to the time when we're going to be able to expand the booster shots, basically across the board."

So just to be clear, when President Biden said this on September 2636 24th, and I know you said you didn't recall it specifically when the 2637 booster was expanded, but that was in November. Had the FDA made any 2638 determination about authorizing booster doses for more Americans?

2639 A I'm getting really confused here. When was the approval 2640 of the booster?

2641 Q So this is President Biden on the same day that the 2642 booster was announced for that specific cohort --

2643 A Limited population.

Q Exactly. He is quoted as saying the government was planning to open this up and that "we're going to be able to expand the booster shots, basically across the board." And for the record, that didn't occur until November.

2648 So the question was, when President Biden said this, had the FDA 2649 made any determination about authorizing booster doses for all adults? 2650 A No, they had just made a decision that they stand behind 2651 for the population that was approved or authorized. 2652 Thank you. Could statements like this potentially put 0 2653 undue pressure on the FDA scientists who are conducting the review? 2654 I think it was vague enough that I don't actually А 2655 understand what that means, okay, so I wouldn't think it would put too 2656 much pressure on. But that's speculation on my part. 2657 0 Okay. And we have asked this sort of question with the 2658 initial approval. But did you receive any pressure from any government 2659 official to speed up the review of booster doses authorizations? 2660 Not to my knowledge. А Okay. We are going to switch gears a little bit now and 2661 Q 2662 talk a little bit about adverse events associated with COVID-19 2663 vaccines. I know my Minority colleagues touched on that a little bit 2664 in their last hour. 2665 I will start with introducing this article which is a New York 2666 Times article from just this month, which I am sure you may have seen. [Majority Exhibit No. 9 was 2667 2668 identified for the record.] 2669 The Witness. Yeah, Apoorva sent this to me but it was behind the 2670 pay wall so I couldn't read it. 2671 BY MR. SPECTRE. 2672 0 Here's a copy for you. It was initially published on May 2673 3rd, and you're quoted a couple times. 2674 Mr. Osterhues. For the record, this is Majority Exhibit 9.

2675

Mr. Spectre. Thank you.

BY MR. SPECTRE.

2677 Q It was published on May 3rd in the New York Times and 2678 you're quoted a couple times.

2679 A Mm-hmm.

2680 Q Were these quotes that you gave in an interview you gave 2681 directly to The Times?

2682 A Yes.

2683 Q Do you recall when this interview took place?

2684 A It was after I retired, I think, in February or March.

2685 Q Okay. So since it was recent, I am going to assume that 2686 it accurately reflects your current belief on these issues generally?

2687 A Yes.

2688 Q I would like to go through each of these quotes and see 2689 if you can give me a little more context on what you're saying.

2690 The article indicates that you believe that some recipients of 2691 COVID vaccines "experienced uncommon but 'serious' and 'life-changing' 2692 reactions beyond those described by federal agencies."

2693 What kinds of reactions are you referring to there?

A I'm referring to reactions that medical science has trouble dealing with. A common problem that occurred before this, before COVID used to be called chronic fatigue syndrome or myalgic encephalitis. And the medical establishment has struggled for 20 years trying to figure out what it is and still have no idea. All right. That's typically a post viral or post infectious illness. However, I 2700 think it could occur post any immune stimulus.

2701 So to answer your question, folks had brain fog, fatigue,
2702 prostration, some of them had neurologic symptoms. None of them fit
2703 neatly into any diagnostic category.

2704 Q So because they didn't fit neatly inside a diagnostic 2705 category, you're saying they're harder to be described or analyzed?

A Well, they're harder to be identified because many of these folk struggled for months and months to even be acknowledged that there was anything wrong with them. Many of them were told, you know, they were just -- it's all in your head. And that's very similar to chronic fatigue syndrome, myalgic encephalitis.

2711

Q

Do you think it's all in their head?

A I believe that like anything in the human sphere, okay, some people are going to like 'swing the lead,' as they say, but I think that these are real reactions, many of them, and that the people are suffering. I will say exactly what I think is said here.

2716 Q So you said beyond those described by federal agencies, 2717 or at least that's how it's framed in the article. Which in your view 2718 have been described by federal agencies?

A Well, certain immune reactions are well known post vaccination. Guillain-Barre syndrome, idiopathic thrombocytopenia, and in some people say that other neuropathies. But these others are not acknowledged to be vaccine adverse events because they don't have a medical definition, nobody knows what they are. And so -- and if somebody comes in and complains of brain fog, what are you going to do

2725 with that?

2726 So I think there are well-known reactions to vaccines and to 2727 viruses that occur and are easily categorized because they have 2728 distinctive syndromic characterizations. But this isn't one of them. 2729 You were also guoted as saying that you "feel bad for 0 2730 those people" and you "believe their suffering should be acknowledged, 2731 that they have real problems, and they should be taken seriously." 2732 I think we just talked about that a little bit, but is there 2733 anything further you wanted to share on that topic?

A Well, I tried, I harassed the people at CBER to certainly search worldwide databases repeatedly at my insistence to look for this. They could not find a signal. So that means scientifically it wasn't there, all right?

They got these reports, too. I talked to many of the people who had this, many times. I even talked to NIH, I talked to even see if they would add an arm, because this is very similar to some of the things that people get with long COVID. You get-- people get long COVID much more frequently after getting COVID than they do getting this after vaccination. But it does seem to happen.

So I wanted to get it studied because I think what the first thing we need is study. And the NIH study on long COVID is looking for syndromic definitions. That's mainly what they're doing, they're trying to find syndromic clusters so they can name these conditions in the same way that people get POTS, postural orthostatic tachycardic syndrome, which is another probably autonomic neuropathy, okay?

2757

better.

2750 So my goal was to try and, number one, get the people studied so 2751 they can be acknowledged, that they were having a problem, and also 2752 start working up ideas of treatment. Now, I wasn't really that hopeful 2753 because CFS ME has gone so long without effective interventions. 2754 But Dr. Nath over at NIH had done some work with some people and 2755 given them IVIG early in their -- they had more, he's a neurologist. 2756 They had more predominant neurologic symptoms and those people got

That doesn't really mean anything, because some people get better, right? But at least to define these syndromes, so that they would show up in the databases. So if somebody had this and they went in to a doctor, they wouldn't just send them home and say that the -- just send them home and say you need to rest more.

2763 Which is similar with people with long COVID at first, right, you
2764 know, you had a bad virus infection, you need to rest, take vitamins,
2765 right?

2766 Q You said that the symptoms are at least somewhat similar 2767 between long COVID and some of these other neuropathies you're 2768 describing.

2769 A Yes.

2770 Q Does it seem to you that long COVID has been taken more 2771 seriously by many than these neuropathies associated with COVID 2772 vaccines?

2773 A Well, I would say when long COVID happened at very first,2774 there weren't that many people who had it, so it wasn't taken that

2775 seriously, right? There were other things to worry about, like people 2776 dying in hospitals on ventilators and ECMO and everything.

2777 Eventually, there was such a huge number of people who got this
2778 post viral syndrome that it couldn't be ignored, whereas it's still not
2779 that many people who have this.

2780 Q You mentioned that you were -- I forget the exact
2781 language you used, but that you were trying really hard to get CBER to
2782 look into some of these things.

2783 A They did.

2784 Q And you do believe that they did?

A They looked into it. As I said, they went and searched international databases, they asked our international regulatory colleagues to look. But where are the search terms, you know? Even POTS. Some of these patients told me or some of maybe the physicians told me that POTS-there were only a few centers in the United States that actually can definitively diagnose it.

2791 So how are you going to get a person like in Iowa or something, 2792 they go to their general practitioner and say, I can't stand up 2793 anymore. I mean, how are they going to get into the system and get 2794 properly diagnosed? And that was -- these are like still my concerns 2795 about this.

2796 Q You also say in the article that you are, quote, 2797 disappointed in yourself and that you, quote, did a lot of things you 2798 feel very good about, but this is one of the few things that you feel 2799 you just didn't bring home.

HVC134550

2800 What did you mean by that?

A Well, I wished I could have gotten an arm of the study over at NIH started, for example, but it was really hard. I talked to the companies, but how are you going to get them to do it unless you actually have scientific data?

**2805** Q A study on?

A Well, there's a study called Recover at NIH and it's on post COVID, and they're studying all different phenotypes, they're called different clusters of symptoms of COVID, post COVID, long COVID, whatever you want to call it.

And they are trying to categorize them, and then they are going to try to look at interventions. What if you took an antiviral for a long time or what if you took an immunosuppressant, would you get better? And so forth.

I was thinking at a norm of post vaccine, post COVID like syndrome, and get them characterized. And then hopefully maybe they could get treated. But I failed to get that done. I feel bad about it. I feel bad for these people.

2818 Q Why do you think that that stalled?

A Well, I had too many things to do. And I think the main reason is without a signal, you know, like we get a lot of signals in our real--, like I was telling you earlier. You have to work them up and they aren't causally related. That requires some strong causality -- Potentially causally related signals hardly get the companies to pay for it. They would have had to pay for a study like

2825 that at NIH.

2826 Q So do you feel that others within FDA took this as 2827 seriously as you did?

2828 A No.

Q Where within FDA should have taken this more seriously? A Well, it isn't that. They tried. CBER, it was their responsibility and the post-market safety people I talked to them numerous times, had emails with them and they tried, they looked. But they're data driven. I talked to all these people because I'm a doctor, okay, so I talk to them.

And I was convinced many of them were like very pro-vaccine type people, you know, but their lives have just been wrecked. And I was convinced -- as I told you earlier, I'm a rheumatologist or trained in rheumatology and immunology. So I've seen a lot of these odd immune reaction type of things, and that's what I think this probably is.

2840 Q But you said you have spoken with lots of patients, and 2841 we talked earlier, you talked with advocacy groups. Was one of these 2842 groups React 19 or Brianne Dressen of React 19?

2843 A I spoke to Bri Dressen. I don't know if she was part of
2844 React 19 or not. This was quite a while ago, yes.

2845 Q And do you feel that -- you already talked about this a 2846 good bit, but do you feel that you've adequately -- you shared those 2847 concerns that were brought to you by patient groups or individual 2848 patients within the FDA or outside of the FDA?

2849 A I'm sure people thought I overshared them. I was very

2850 vociferous. You know, as you probably know, I'm very outspoken. I
2851 said I think these are real reactions, I think it's very difficult to
2852 categorize them medically. I think we need to do a better job, blah,
2853 blah, blah. I did.

2854 Q And did you share those thoughts outside of FDA as well?
2855 A Well, yeah, certainly I talked to the advocates. Yeah, I
2856 was not silent about this. I talked to NIH about getting a trial arm
2857 going. But they only had a certain amount of money. They had already
2858 dedicated that to the post COVID trial. They would have needed
2859 somebody to finance another arm.

2860 Q That makes sense. Did you ever share these thoughts 2861 publicly, I guess, other than in this New York Times article that we're 2862 discussing?

2863 A Yes, I did. I wasn't perhaps as -- here, I was honest 2864 that I felt I had not gotten this done because I have gotten many 2865 things done in my career.

**2866** Q Okay.

2867 A Many pieces of legislation, many this, that, and the 2868 other thing. I just feel I couldn't get this to a place where I felt 2869 good about it.

Q Just skipping ahead a little bit, because you have shared a lot that covers some of the other questions I've asked here. But what role does the FDA play in surveilling for or assessing possible safety signals associated with the vaccine? What is FDA's role in that? 2875 A The FDA's primary role in the United States is-- CDC 2876 shares that role whereas for pharmaceuticals, for example, it's 2877 strictly FDA. So FDA, I would say, is the primary post-market 2878 surveillance vaccine entity.

2879 Q This New York Times articles mentioned that the European 2880 Medicines Agency has linked the Pfizer and Moderna vaccines to facial 2881 paralysis, tingling sensations and numbness, and also considers 2882 tinnitus as a side effect of the Johnson & Johnson vaccine. Were these 2883 issues, those conditions I just said, assessed by the FDA?

2884 A I don't have direct knowledge of that, but I am sure they 2885 were.

Q Shingles, facial paralysis, tingling, numbress?
A Bell's palsy is a post -- can be a post-viral syndrome.
So whether or not it's elevated, I'm sure these were assessed by the
FDA based on signals that were received and determined to be or not be
worthy of being put in the label.

2891 Q And so since the European Medicines Agency linked some of 2892 these and the U.S. has not, I understand you don't have direct 2893 knowledge of the assessment of those conversations, but just in your 2894 view, why do you think the U.S. is seeing different results than other 2895 countries?

2896 A Well, that doesn't occur uncommonly with drug regulation.
2897 These are, to some extent, as I've said, a matter of judgment. The FDA
2898 looks very carefully, does the signal evaluation of every signal and
2899 they decide which ones they feel might be causally related. And those

HVC134550

2900 are the ones that are usually put in here.

2901 So that -- it's a difference of opinion about whether they were 2902 causally related. Because these events that we were talking about 2903 here, tinnitus, facial, Bell's palsy, and so forth, occur spontaneously 2904 as well. So you have to try to distinguish those.

2905 Q Do you believe FDA's systems or procedures to identify 2906 causal links are robust enough?

2907 А Well, as I said earlier, I feel that because U.S. has a 2908 fragmented health care system that it is more difficult to consolidate 2909 the records. That was complicated in the case of COVID vaccines 2910 because it was very difficult to link vaccination recipients with their 2911 medical records because they would get a vaccine at some big, you know, stadium or anywhere. And then that record wouldn't necessarily go with 2912 2913 their other health records. So the FDA -- and these events that we're 2914 talking about here are rare enough you don't see them in clinical 2915 trials, right? Generally speaking.

So the FDA also, and CBER also, as I said, relies upon the data and gets data from the other regulators. So those data are by no means mysterious or secret. The agency gets to see those as well. So they would know the basis upon which the EMA or other regulator decided if Bell's palsy was linked and would overtly decide whether or not they agreed with that.

2922 Q Thank you. The New York Times article also mentions the 2923 U.S. officials were not the first to identify myocarditis in young 2924 people, that Israeli officials first raised the alarm in 2021, but U.S.

HVC134550

2925 officials hadn't seen the link. Why do you think the U.S. was behind 2926 in identifying the link with myocarditis? 2927 Because Israel had a national health care system. А 2928 I guess that answers -- what could be done to fix that, 0 2929 in your view? 2930 А Better linkage of vaccination records with medical health 2931 records. 2932 Q Okay. Thank you very much. I am going to introduce Majority Exhibit 10. 2933 2934 [Majority Exhibit No. 10 was 2935 identified for the record.] 2936 BY MR. SPECTRE. 2937 This is a document that the FDA produced to the Select Q 2938 Subcommittee, CBER Sentinel Program Sufficiency Memorandum, and it 2939 indicates that on May 18th, it's for a product that was submitted on 2940 May 18th, also action due date is January 16, just the bottom left of 2941 the page indicates that the document was last updated January 29, 2019. 2942 I believe that is inaccurate, or at the very least, it's just a 2943 reflection of when the template was updated. 2944 А I see. 2945 Is that your view? Q 2946 Probably -- I don't know. А 2947 0 Just for the record, it's referring to a biologics 2948 license application that did not exist as of January 2019. So just for 2949 the record.

2950 A Yes.

2951 Q It appears that that is a different date. Are these 2952 memorandums standard?

2953 A I do not know.

2954 Q Have you seen this one before?

2955 A I have not.

2956 Q The second page defines the objectives and scope of the 2957 memo, which it says is, "reviews the capability and sufficiency of the 2958 CBER active post-market risk identification and analysis system 2959 referred to as the CBER Sentinel Program to evaluate the serious risk 2960 for myocarditis and pericarditis following receipt of BNT162b2."

At the top of page 6, there is a block of blue text, it's vaguely blue here on my printout, which begins with "Available data sources in the CBER Sentinel Program are NOT sufficient to identify the outcomes of myocarditis and pericarditis due to reasons identified in 2.3.1," and so on.

2966 What does that mean?

A My understanding is that, first of all, Sentinel was a CDER-driven -- is a CDER-driven program. I set this up, which is an active surveillance program to monitor -- and as they say here, at the time it was under contract, activities conducted through the contract of Harvard Pilgrim Health Care Institute, the current and future contracts through BEST, interagency agreement with Medicare and Medicaid.

2974

Okay, so it's all of those, okay? So go ahead and ask me that

2975 again, please?

2976 Q Sure. Certainly. It says at the top of page 6, there is 2977 a block of blue text that says, "Available data sources in the CBER 2978 Sentinel Program are NOT sufficient to identify the outcomes of 2979 myocarditis and pericarditis due to reasons identified" -- the chart 2980 identifying those reasons is on page 5, if you want to take a look.

2981 But what does that mean, that CBER Sentinel is not sufficient to 2982 identify the outcomes of myocarditis and pericarditis?

A Well, what they're saying is the data elements or sources that they currently have available or collect cannot adequately characterize that risk, okay? And mainly -- and you're making me do this really fast.

2987 But mainly, if you look at 2.3.1, right, in the chart there, and 2988 why is that. First of all, they say there aren't any biomarkers that 2989 are very reliable. That's element 2 there.

2990 But mainly element 5, the algorithm for, as I was saying,
2991 research definition. And they say no, okay? That's very similar to
2992 what I was talking about with this adverse, the adverse event of brain
2993 fog, and if there's no algorithm here.

2994 Of course, myocarditis is a much better defined entity, but 2995 they're saying that it's not in the literature, there isn't a really 2996 good algorithm, they can't search all these claims data and so forth 2997 and reliably identify myocarditis.

2998 Is that helpful?

2999 Q That is. And it's not clear to me given the date on the

3000 bottom left appears to be inaccurate when this memorandum was filled 3001 out. But clearly at some point between May 18th, 2021 and January 16, 3002 2022, given the timeline of the BLA which is also on the front.

3003 Does this memo indicate that the FDA's Sentinel Program was not 3004 sufficiently capable to assess the risk of myo and pericarditis?

3005 A I think -- can I answer your question in a larger 3006 context?

3007 Q Certainly.

3008 A I believe when Sentinel was authorized by Congress, we 3009 were told you had to look at Sentinel first before you put in 3010 post-market convention and so forth, to see if it were adequate alone, 3011 if active surveillance alone would be adequate to further characterize 3012 the risk.

3013 So just -- this is my take on this, having very briefly looked at 3014 this memo. My assessment of this is that, no, you need 3015 additional -- the answer is no, you can't just rely on Sentinel. The 3016 whole -- and BEST and so forth, the Medicare database. You need to put 3017 in place other specific post-market requirements for this because just 3018 use of generic active surveillance won't get you the answers.

3019 Q So in your view, did FDA sufficiently analyze the risk of 3020 myo and pericarditis?

A Yeah, this isn't related to analyzing it. It's related more or less to follow it up. I think cases that were identified were very carefully looked into and also that although our population's not identical to other populations, the incidence in other countries that

3025 again had national health care systems, so they did -- they knew 3026 everyone who was vaccinated between the ages of 15 and 40 or whatever, 3027 and they were able to catch all the cases of myocarditis.

3028 So the incidence of myocarditis following first vaccination and 3029 follow up second vaccine and so forth could be characterized better by 3030 those -- by those data sets than by the U.S. experience. However, I 3031 think that what they say here -- this is what they say, which is what I 3032 said.

3033 The Sentinel Program, this is number 3 in the second box.
3034 "Sentinel Program is NOT sufficient to assess the serious risks," "in
3035 lieu of PMR safety studies under FDA Amendments Act."

3036 So the FDA Amendments Act said you have to look and see if3037 Sentinel would work first, and that's what this is about.

**3038** Q Okay.

3039 A And this is saying this didn't work, we need a 3040 post-market study or registry or whatever type of thing, which is what 3041 I was saying about pediatric cardiologists, all right?

3042 Q Thank you. That's helpful context. Do you recall any 3043 conversations discussing the downplaying of the risk of myo or 3044 pericarditis?

3045 A With whom? What are you talking about?

3046 Q Do you recall any conversations within the FDA about 3047 downplaying the risks that the vaccines have of myo and pericarditis? 3048 A No, I mean, there was intense interest in figuring out 3049 who got it, who was at risk, how common was it, what were the sequelae, 3050 how quickly did people recover and so forth.

**3051** Q Thank you. I will show you Majority Exhibit 11.

3052

[Majority Exhibit No. 11 was

3053 identified for the record.]

3054 BY MR. SPECTRE.

3055 Q This is a National Academies report titled Evidence
3056 Review of the Adverse Effects of COVID-19 Vaccination and Intramuscular
3057 Vaccine Administration. It was issued in April of this year.

3058 Have you seen this before?

3059 A No, I have not.

3060 Q I'll give you a second. This is just a summary of a 3061 longer report, from what I understand. So it's not super long if you 3062 want to give it a brief look-at, but it indicates that the evidence was 3063 insufficient to establish, favor acceptance of, favor rejection of the 3064 65 potential relationships between vaccines and possible harms.

3065 Mr. Cooke. That's the bottom of the first page?

3066 Mr. <u>Spectre.</u> Yes.

3067 The Witness. Okay.

3068 BY MR. SPECTRE.

3069 Q As I mentioned, the report indicates that the evidence 3070 was insufficient to establish, favor acceptance of, or favor rejection 3071 of 65 potential relationships between vaccines and possible harms.

3072 What does that mean?

3073 A Well, when you give an intervention, and I'm talking3074 generally, a drug, give it to millions of people, they're going to have

3075 everything. They're going to get hit by a bus, they're going to have 3076 hair loss, they're going to get illnesses, they're going to have 3077 gallbladder attacks, gout. So you have to figure out, right, are any 3078 of these causally related? Sometimes it really surprises you. We've 3079 had relationships that really surprised us for drugs, right?

3080 So you vaccinate hundreds of millions of people, they're going to 3081 have everything under the sun happen to them, okay? If you gave them 3082 saline, the same thing would occur, generally, except those that are causally related. And it's picking a needle out of the haystack. The 3083 3084 rarer they are and the harder they are to define medically, the less 3085 likely you are to be able to tell whether they are causally related or 3086 not. If they're extremely common and there's a very small increase 3087 caused by the vaccination, you may be unlikely to find that, too, 3088 except in a randomized study.

3089 So that's what they're saying.

3090 Q So do you believe -- well, you touched on this a little 3091 bit already. But do you believe our surveillance systems have blind 3092 spots when it comes to data?

A Well, what I said before about the very strange severe post vaccination reaction, some individuals are having, it's a not blind spot on the surveillance system. It's a failure of the medical construct to recognize these syndromes, which is different. You could have tremendous amount of surveillance, you would still miss it because people wouldn't recognize the person in front of them, what they had, because there's no name for it. You may have talked to some of these

3100 people and they have all kind of terms.

3101 So your question about our surveillance system, the answer is it 3102 depends on how fine you want to grind the grain, all right? Our 3103 surveillance system can obviously pick up and did, according to this, a 3104 lot of the major adverse events related to these vaccines because our 3105 health care system is so fragmented.

In the U.S., it's much more difficult to find the less likely things. So there's quite a bit of reliance on other health care systems where they know the status of every individual. And frequently the safety staff at FDA have gone to other countries for vaccines to look for those things.

3111 Q Thank you.

3112 Mr. <u>Spectre.</u> We are just about out of time, so we can go off the 3113 record.

**3114** [Recess.]

3115 Back on the record. One quick question for me 3116 and it's a factual question.

3117 BY .

3118 Q My understanding, is it right that back on the BLA, the 3119 Pfizer BLA that Dr. Gruber signed the final BLA for the Pfizer vaccine; 3120 is that right?

3121 A That's my

That's my understanding.

3122 Q And is it also right that that fact has some sort of 3123 regulatory significance, basically an endorsement or something like 3124 that? Could you explain your understanding of that? 3125

That's correct. It's actually in the FDA regulations, А 3126 and if you don't agree with everything that you're signing to, you have 3127 to write a different memo or you should not sign that.

3128 Great. Thank you. Q

3129 BY \_\_\_\_\_.

3130 So, Dr. Woodcock, I just wanted to follow on to something Q 3131 that my Majority colleagues were discussing, which is instances of 3132 vaccine-related adverse events or vaccine injuries.

3133 Just to clarify for the record, do you agree that adequate and 3134 comprehensive compensation for individuals who experience rare but 3135 serious adverse events relating to vaccines is an important element of 3136 promoting confidence in vaccines?

3137 I agree with that. А

3138 Would you care to elaborate on why that is? Q

3139 Because any medical intervention will cause some harm as А 3140 well as some -- as well as major benefit. So the statutes say safe and 3141 effective, but safe really means relative to the magnitude of the 3142 benefit, not without any harm.

3143 So people who are taking vaccines are not only protecting 3144 themselves but doing it to protect others, and so forth. And my 3145 understanding is the Vaccine Incentive Compensation Act was passed in 3146 order to recognize that people can be harmed and to adequately 3147 compensate them and protect them.

3148 As you were just alluding to, evaluating products for use 0 3149 is an exercise of looking at the safety of the product versus the

3150 safety of outcome for which the product is seeking to prevent or 3151 reduce. At the end of the day, people contracting COVID-19 are 3152 experiencing adverse health outcomes including myocarditis and other 3153 complications at greater frequency and at greater severity than 3154 instances of vaccine-related injuries or adverse events; is that 3155 correct?

3156 A That's correct.

3157 Q I briefly want to revisit a few of the exhibits that the 3158 Majority introduced in the last round. If we could start with the 3159 Lancet paper which is Majority Exhibit 7.

3160 A 'Considerations,' uh-huh.

3161 Q And I actually wanted to focus in on a statement that you 3162 had sort of highlighted in the previous round. It is that last 3163 paragraph on the first page here. I will read it for the sake of the 3164 record. It states, "Current evidence does not, therefore, appear to 3165 show a need for boosting in the general population, in which efficacy 3166 against severe disease remains high."

3167 Now, in our first round of questioning from the Minority side, we
3168 discussed the various processes that were in place through the FDA
3169 approval and authorization processes relating to maximizing consumer
3170 safety and insulating these processes from political interference.

3171 As I understand it, one aspect of these processes is the 3172 convening of the advisory committees, and in this instance that was the 3173 Vaccines and Related Biological Advisory Committee or VRBPAC. Is that 3174 correct? 3175

A Yes, that's correct.

3176 Q So when VRBPAC was convened to evaluate the EUA for the 3177 booster, ultimately VRBPAC did not recommend that the booster be 3178 applied or administered across general populations. Rather, it 3179 recommended that the booster be recommended for a narrower set of 3180 populations, elderly individuals and people with immunocompromised 3181 status or immune complications; is that correct?

3182 A That's correct.

3183 Q So, functionally, what we are seeing here in the Lancet 3184 paper by Dr. Krause, Dr. Gruber, and others, that suggestion is not 3185 what FDA ultimately proceeded with, consistent with VRBPAC's 3186 advisement?

3187 A That's correct.

3188 Q Thank you. I also wanted to briefly revisit Majority 3189 Exhibit 10. This is the Sentinel document.

**3190** A Yes.

3191 Q And I actually wanted to quickly go back to the paragraph 3192 that my Majority colleague was focused on, which is in a slight shade 3193 of blue on page 6.

**3194** A Okay.

3195 Q If you would like to take a moment just to sort of 3196 refamiliarize yourself with this paragraph, please do, and let me know 3197 when you're ready.

A I'm ready.

**3199** Q So four or five lines into this paragraph, there is a

3200 clause that reads, "the CBER Sentinel data sources are not sufficiently 3201 powered to assess the magnitude of risk for the 12-30 years old" 3202 population "that has been reported in VAERS in an epidemiology study." 3203 So to paraphrase that, but would you agree that is what that 3204 statement says?

3205 A Yes.

3206 Q So in epidemiology and in statistics, when we are 3207 discussing power, we are discussing the ability of a methodology 3208 working with a dataset to detect an adverse outcome or an incident, 3209 basically to reject a known hypothesis.

3210 A Yes.

3211 Q Is that correct?

3212 A That's correct.

3213 Q So we see later in this paragraph, there are a few 3214 different sentences, one of which is referencing, I'll quote here, 3215 "CBER Sentinel data sources do not have sufficient longitudinal data on 3216 patients to conduct this type of analysis."

3217 In the preceding sentence, it's referencing that a minimum 3218 follow-up time of three to six months is required to assess and 3219 adequately capture long-term sequelae. Do you agree with that 3220 characterization of this paragraph?

3221 A Yes.

3222 Q So when we're talking about the power of a data source 3223 and a statistical analysis to detect an adverse outcome, of course 3224 longitudinal data, adequate data is necessary to have a powerful enough

3225 statistical exercise to reach a conclusion; is that correct?

3226 A Well, it's more like the number of events.

**3227** Q Right.

3228 A To reach a conclusion.

3229 Right. And so at the end of the day, the fact that the Q 3230 myocarditis outcome may not be detected or the CBER Sentinel Program is 3231 not sufficient to identify outcomes of myocarditis and pericarditis due 3232 to the reasons identified on the preceding page, that is not 3233 necessarily a commentary on the Sentinel Program as an apparatus. 3234 Rather, it is a commentary on the data that is available, the frequency 3235 and the outcomes and the combination at which those two phenomenon will 3236 allow the Sentinel Program to detect rare but serious adverse outcomes 3237 like myocarditis and pericarditis?

A Yes. The Congress told FDA in the FDA Amendments Act that they had to assess the ability of Sentinel Program writ large to adequately monitor an adverse event prior to putting in place a requirement on the company that they have a registry or some other type of post-market study, feeling that the active surveillance, you know, taxpayers have paid for that, and it will be sufficient for certain things.

3245 So this was assessing the sufficiency of an active surveillance 3246 system to detect and monitor these adverse event outcomes and determine 3247 that Sentinel alone would not be sufficient.

3248 Q And then just on the point about long-term data necessary 3249 to evaluate, detect, and react to long-term sequelae. We heard in the

3250 previous round that other nations had greater success in identifying 3251 more early -- or earlier some of these adverse health outcomes. For 3252 example, in Israel, you had nodded to the fact that nationalized health 3253 insurance or a less fragmented health care program in the United States 3254 would facilitate that.

3255 Would you also agree that issues relating to collecting 3256 sufficient longitudinal data to assess sequelae outcomes like serious 3257 myocarditis and pericarditis were delayed by the fact that we at 3258 initial points in deploying the vaccine did not have the rapid 3259 infrastructure to get it out immediately to people, such that in the 3260 opening months of the vaccine being available, there were some delays 3261 in people getting appointments, getting their first doses and second 3262 doses?

**3263** A

I can't comment on that.

**3264** Q Okay.

3265 I think we can go off the record.

- 3266 [Pause.]
- 3267 BY MR. SPECTRE.

3268 Q Back on the record. We are going to pick up with a few
3269 more questions about adverse events associated with COVID-19 vaccines.
3270 Firstly, you are quite familiar with the VAERS system of adverse
3271 reporting system; is that right?
3272 A I'm familiar with it.
3273 Q I am going to introduce 12 Majority Exhibit 12.

3274 [Majority Exhibit No. 12 was

HVC134550

3275 identified for the record.]

3276 BY MR. SPECTRE.

3277 Q This is a British Medical Journal investigation published 3278 in November 2023. It is titled, "Is the US's Vaccine Adverse Event 3279 Reporting System broken?"

3280 Have you seen this article before?

3281 A I have not.

3282 Q Then I will give you a second to take a look at it. But 3283 I would first point you to the first heading, Understaffed, where it 3284 says that VAERS is comanaged by the US Centers for Disease Control and 3285 Prevention and the Food and Drug Administration.

3286 What is the FDA's role in managing VAERS, as far as you're aware?
3287 A I'm not exactly sure of the relationship between CDC and
3288 FDA in managing VAERS, I'll be honest.

3289 Q That's okay.

3290 A I set up FAERS, but I never actually deeply involved 3291 myself in VAERS.

3292 Q Okay. Under the next header, which is at the bottom of 3293 the back of the first page, The User Experience. It discusses an 3294 instance where a doctor submitted a VAERS report in 2022 for a 3295 seven-year-old boy who had a cardiac arrest after COVID vaccination, 3296 the boy died a week later, but the doctor was unable to update the 3297 report in VAERS.

3298 Why don't you just look at that for a second.
3299 I can give you additional time to read it, but just for context,

3300 Dr. Whelan appeared at the Select Subcommittee's hearing on March 21st, 3301 and testified that nobody at CDC or FDA followed up about this instance 3302 of this 7-year-old boy until he brought it to Dr. Marks' attention 3303 directly and then was ultimately able to meet with staff members at the 3304 FDA.

3305 Are you familiar with that case with Dr. Whelan?

**3306** A I am not.

3307 Q So I assume you are not involved with that meeting; is 3308 that correct?

A No, I was not.

3310 Q Dr. Whelan also testified that VAERS indicates that the 3311 boy's injury was a cardiac arrest and gives no clue to the ultimate 3312 outcome and VAERS is not set up to acknowledge a change in outcomes 3313 like this.

3314 And you mentioned already that you were involved in the creation 3315 of FAERS, is that right?

**3316** A Yes.

3317 Q And FAERS is set up to acknowledge changes in an 3318 individual report; is that correct?

3319 A Yes, serial reports is my understanding, but yes.
3320 Q Are you aware whether -- are you able to verify that
3321 VAERS is not able to set up --

3322 A I am not.

3323 Q If it is not, as Dr. Whelan has reported and as this3324 article from the BMJ indicates, should VAERS be set up to acknowledge

HVC134550

3325 changing outcomes the way that FAERS is?

3326 A Ideally, any adverse -- any spontaneous reporting system
3327 should be able to keep up to date on the status of the case, and help
3328 people report and provide updates.

3329 Q Do you know how many FDA staff are responsible for 3330 following up on serious VAERS reports?

3331 A No.

3332 Q Dr. Daniel Jernigan, CDC's director of the National 3333 Center for Emergency and Zoonotic Infectious Diseases, testified to the 3334 Select Subcommittee that, "Every serious adverse event in VAERS is 3335 followed up, medical records are collected and autopsy records are 3336 collected to identify that."

3337 To your knowledge, is every serious adverse event in VAERS 3338 followed up on?

3339 A Sorry, I don't have knowledge of that.

3340 Q Thank you. If you look back on the BMJ investigation, 3341 the heading that says Two VAERS - only one public. It's on page 4.

**3342** A Mm-hmm.

3343 Q I will give you a second after I read this quote, but it 3344 explains that, "FDA and CDC essentially maintain two separate VAERS 3345 databases: a public facing database, containing only initial reports; 3346 and a private, back end system containing all updates and 3347 corrections - such as formal diagnosis, recovery, or death." 3348 A Okay.

3349 Q And as you mentioned, you don't have a lot of direct

3350 knowledge of VAERS, but do you know if that is accurate?

3351 A Honestly, I don't know the administrative aspects of 3352 VAERS. I just don't.

3353 Q Okay. Thank you. And then the third paragraph from the 3354 bottom. Let me read this quote to you, and then I will find the actual 3355 document here.

3356 A Okay.

3357 Q But a physician called Helen, for the purpose of the 3358 article, argues that there is a "negative feedback group" whereby "the 3359 FDA is not naming additional adverse reactions to vaccines because the 3360 passive surveillance systems aren't displaying it. But the passive 3361 surveillance systems aren't displaying it because physicians are 3362 blinded to the adverse reactions in their patients, and thus aren't 3363 reporting them."

3364 Are you familiar with this negative feedback loop idea?
3365 A I don't understand this statement. Physicians are
3366 blinded to the adverse reactions in their patients?

3367 Q I was curious, and the reason I bring it up to you is 3368 because I'm curious of your thoughts about this topic. And you 3369 mentioned a little bit earlier, where physicians are having a hard time 3370 identifying conditions because the symptoms are not strongly associated 3371 with a particular disease or outcome, right? Is that maybe what this 3372 doctor called Helen is referring to there?

3373 A I have no idea what she is referring to. That's why I3374 said, it's a very confusing sentence to me. I don't know what that

means.

3376	Q Okay. Just switching gears a little bit, are you
3377	familiar with the case of Maddie de Garay?
3378	A I know about it.
3379	Q Who is she, to your recollection?
3380	A Minor who was in a trial of the COVID Pfizer COVID
3381	vaccine.
3382	Q And do you remember when you were first made aware of her
3383	condition?
3384	A No.
3385	Q I will introduce Majority Exhibit 13.
3386	[Majority Exhibit No. 13 was
3387	identified for the record.]
3388	BY MR. SPECTRE.
3389	Q If you would flip to the page marked FDA 2022, 4101, it
3390	ends with 133. I believe that's a little hard to read also because
3391	it's red on black, but it's the first page that looks like an email.
3392	A Okay. All right.
3393	Q You'll see an email from Patrick de Garay which was
3394	forwarded to you on June 25, 2021 by Steve Kirsch regarding Maddie de
3395	Garay condition. The email from Patrick de Garay to Steve says,
3396	"Steve, been a little crazy here since Maddie's last MRI, she's
3397	struggling to hold her head up and can't stand on her own. Stephanie
3398	will resend the folder today."
3399	Do you recall receiving this email?

3400 A I don't.

3401 Q You replied, "I forwarded the last email you sent to the 3402 team, and of course, FDA evaluates every serious adverse event related 3403 to a clinical trial, and intensively if in a healthy population."

3404 I assume that by "in a healthy population," a minor who was 3405 otherwise healthy.

3406 A Preventive, yeah.

3407 Q Is that what you meant by that?

3408 A I meant, generally speaking, clinical trials of people 3409 are treating an illness, they're sick. Here, you're treating generally 3410 healthy -- intervening to prevent something.

3411 Q That makes sense. So you said "FDA evaluates every 3412 serious adverse event." What kind of evaluation was done in this case, 3413 if you can recall?

3414 A My question is, to what extent am I allowed to talk about 3415 this due to HIPAA?

3416 Q These emails were released under FOIA.

3417 A But you're asking me to expand on that.

3418 Mr. <u>Cooke.</u> If you're not sure that you can answer the 3419 question --

3420 The Witness. Just very generally.

3421 Mr. <u>Cooke.</u> I think ultimately, if you know that you can't speak 3422 to things that are covered by HIPAA, I think you should not speak to 3423 those things.

3424 The <u>Witness.</u> I would say I forwarded this. So people were aware

3425 of this case. They had intensively investigated it. They had been in 3426 contact with the treating physician, which is the typical way, and been 3427 having conversations.

3428 As usual, I stayed out of it in the sense that it was being 3429 handled in the ordinary way that these types of things would be 3430 handled.

3431 BY MR. SPECTRE.

3432 Q Thank you. On the next page, down to 134, this email 3433 from Doran Fink at 9:32. My apologies, that email is on the following 3434 page that ends in 135. That is an email at 9:32 a.m. from Doran Fink.

3435 Mr. <u>Cooke.</u> Bottom of the page.

3436 The <u>Witness</u>. Okay.

3437 BY MR. SPECTRE.

3438 Q Dr. Fink asks for an update on where things stand on 3439 Maddie de Garay case, so he can "get back to Peter Marks and Janet 3440 Woodcock."

3441 Donna Boyce replies at 9:49 a.m., confirming that Maddie was a 3442 participant in the Pfizer group COVID-19 trial. She also said that, 3443 "Dr. Alejandra Gurtman spoke with Dr. Frenck who is the Principal 3444 Investigator at Cincinnati's Children's today and confirmed that this 3445 case is not related to the vaccine, and that the participant had 3446 extensive work up with consultations with various specialties, 3447 including pulmonary, neurology, pain management, and psychiatry with no 3448 findings of anything organic."

3449

Dr. Fink eventually forwards the information from Pfizer to

Dr. Marks who forwards it to you. You reply, "Thanks," at the top of 3450 3451 the page there.

3452 Do you happen to recall these emails?

3453 Yes, I recall that they got back to me that there had А 3454 been this activity, mm-hmm.

3455 Q Thank you. Did FDA conduct any further evaluation of 3456 this case?

3457 А I can't say specifically.

3458 Q Because you don't know?

А

3459 I asked them to also talk to the investigator themselves. А 3460 I do not know the follow-up from that. I received verbal follow-up, I 3461 think, from Peter that this had been evaluated further.

3462 Q And generally speaking, the FDA would want to evaluate 3463 further than just taking this email at face value; is that correct? 3464

Yes, for something serious in a clinical trial.

3465 And you believe that that occurred in this case? 0 3466 А Yes. Well, it says, "It was also presented to the ACIP 3467 working group and many other recommending bodies," yeah. But, yeah, 3468 usually we would get the records ourselves or we talk to the 3469 investigator. I believe that occurred.

3470 Q So you do believe that FDA sufficiently evaluated this 3471 case?

3472 А To the extent that FDA could. FDA cannot go and do scans 3473 themselves and so forth. We have to take the -- I saw more records, 3474 okay, of this. We have to take the assessment of the treating

3475 clinicians.

3476 Q Can you say what the FDA's official determination was in 3477 this case? 3478 No, I can't. А But it made an official determination? 3479 0 3480 I don't know what an official determination is. I think Α 3481 they evaluated the -- they evaluated the workup that had been done by 3482 the treating clinicians in this case. 3483 Q So the FDA did, in some way, evaluate whether there was a 3484 causal relationship between the vaccine and Maddie de Garay condition? 3485 A Yes. 3486 And you're just not able to share that because you don't Q 3487 recall or because it's private? 3488 А Based on the workup that was done by the patient's 3489 doctors. 3490 0 I think you've already said that it was common for you to 3491 interact with members of the public regarding vaccines; is that 3492 correct? 3493 А Yes. 3494 So this isn't an uncommon interaction you had here? Q 3495 Α Not uncommon at all. 3496 Q Can you remember other specific instances that you spoke 3497 with people about? 3498 Certainly. I had many, many people who had various А 3499 concerns or reactions. I usually would send them to the team. I would

follow up with Doran Fink or with other members, depending on what the case was, Steve Anderson or whatever, make sure they had followed up on what I sent them, so I could get back to the people who had written in to me, and say, I looked into this, it's being evaluated or worked up or handled.

**3505** Q Okay. Thank you very much.

3506 A That was part of my job, I think.

3507 Q Certainly.

3508 Mr. Spectre. Well, thank you. We can go off the record with 3509 that.

3510 [Whereupon, at 3:20 p.m., the taking of the instant interview 3511 ceased.]