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1	STEPHEN G. DAVIES, D.PHIL.
2	why would they need to discuss anything about
3	the structure.
4	Q So you would agree with me that in
5	the context of this patent discussion of the
5	problem of NSAID-BAC complexation, there's no
7	discussion of the degree of lipophilicity of
8	different NSAIDs, right?
9	MS. LEBEIS: Objection.
C	Mischaracterizes the document, asked and
L	answered, and to the extent it
2	mischaracterizes prior testimony.
3	A There's no reason why they would
1	discuss the lipophilicity about a problem
5	that they don't experience.
6	Q In talking generally about the
7	problem of NSAID-BAC complexation, whether or
3	not it's experienced in this patent, the
9	authors of the patent don't discuss differences
0	in lipophilicity between different NSAIDs; is
1	that right?
2	MS. LEBEIS: Objection, same
3	objections.
4	A Well, I don't think that I've seen
5	any evidence that the problem exists anywhere

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1	STEPHEN G. DAVIES, D.PHIL.	
2	let alone in this patent so	
3	Q Again, Dr. Davies, we're going to be	
4	here a long time if you don't answer my	
5	questions. So I've heard you testify now that	
6	you don't believe there's a problem. We got	
7	that. I'm trying to get you to answer the	
8	questions I'm asking you.	
9	MS. LEBEIS: Counsel, he's answering	
10	your questions.	
11	Q And, again, my question to you is	
12	that in the context of this paragraph that's	
13	discussing a general problem of NSAID-BAC	
14	complexation, is there any discussion in this	
15	patent in that section of differences between	
16	NSAIDs in terms of their lipophilicity?	
17	MS. LEBEIS: Objection, asked and	
18	answered. Mischaracterizes the document	
19	and mischaracterizes to the extent it	
20	mischaracterizes prior testimony.	
21	A There's no discussion because there's	
22	no problem experienced in this patent.	
23	Q And you would agree that in this	
24	paragraph that talks about the problem of	
25	NSAID-BAC complexation, there's no discussion	
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1	STEPHEN G. DAVIES, D.PHIL.
2	of the degree of hydrogen bonding among
3	different NSAIDs; is that right?
4	MS. LEBEIS: Objection.
5	Mischaracterizes the document.
6	A There's no discussion because the
7	problem isn't observed in this patent, and
8	that's not the aim of the patent.
9	Q Now, you would agree with me that
10	we're talking here about the "Background of the
11	Invention" section of this '876 patent, right?
12	A Yes.
13	Q And you would agree with me that the
14	"Background of the Invention" section generally
15	doesn't talk about problems that are or
16	experimental data that are observed in the
17	context of the patent, right?
18	MS. LEBEIS: Objection. Calls for a
19	legal conclusion. Calls for speculation.
20	A I would think that depends on patent
21	to patent.
22	Q Well, certainly when you publish a
23	paper, when you have a background section of
24	your paper, that's not the section in which you
25	report your experimental data, right?

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114 1 STEPHEN G. DAVIES, D.PHIL. 2 MS. LEBEIS: Objection. No 3 foundation. You might report the result. 4 Α 5 0 But, generally, that section is 6 directed to concepts that are known in the 7 background in the relevant field, right? 8 MS. LEBEIS: Objection, no 9 foundation. Asked and answered. 10 A In one of my papers, every statement 11 we would make in the background section would 12 have a reference to it to substantiate whatever 13 comment we were making. 14 0 And those would be comments or 15 concepts that were known in the field already, 16 not new data that you generated in your 17 laboratory, right? 18 MS. LEBEIS: Objection to the form of 19 the question. Vague and ambiguous. No 20 foundation. 21 I think we would try to put A 22 references to everything. 23 And those references would reflect 0 24 what was known in the field already prior to 25 the publication at issue, right?

		1	15
1		STEPHEN G. DAVIES, D.PHIL.	
2		MS. LEBEIS: Objection. Asked and	
3		answered. Same objections.	
4		A It would be substantiating what we	
5		were saying in the background introduction	
6		section.	
7		Q And that background introduction	
8		section would detail information that was known	
9		in the relevant field, right?	
10		MS. LEBEIS: Objection, no	
11		foundation. Asked and answered.	
12		A It would show substantiate	
13		substantiatable data, properly referenced	
14		describe substantiatable data with properly	
15	12.100	referenced.	
16		Q And, again, that substantiatable	
17		data, properly referenced, would be information	
18		that was known in the field, right?	
19		MS. LEBEIS: Same objections.	
20		A We wouldn't be able to substantiate	
21	1	it if it wasn't known in the field.	
22		Q So it would be information that was	
23		known in the field then.	
24		MS. LEBEIS: Objection.	
25		A It would be	

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116 1 STEPHEN G. DAVIES, D.PHIL. 2 MS. LEBEIS: Same objections. 3 A It would be known in the field 4 because we could put a reference to it. 5 So a person of ordinary skill in the 0 art reading a patent would understand that the 6 7 "Background of the Invention" section often sets forth information that's known in the 8 9 field, right? 10 Objection to the extent MS. LEBEIS: 11 it calls for a legal conclusion. Asked and 12 answered. Calls for speculation. 13 A I don't think that's necessarily 14 So I haven't seen any evidence in this true. 15 case that there is a problem of an insoluble 16 complex. 17 Q Let's see if you can answer the 18 question I'm asking, which is, would a person 19 of skill in the art, reading a background 20 section of a patent, generally understand that 21 that section will include information that's 22 known in the field? 23 Objection. Calls for a MS. LEBEIS: 24 legal conclusion, asked and answered, and 25 calls for speculation.

1	STEPHEN G. DAVIES, D.PHIL.	
2	A I'm not sure, if it's not referenced,	
3	they would be able to tell whether it was	
4	speculation or fact.	
5	Q So if a statement in a patent has no	
6	reference, in your view, a person of skill in	
7	the art would just read it and move on and not	
8	pay any attention to it. Is that your	
9	testimony?	
10	MS. LEBEIS: Objection	
11	A No.	
12	MS. LEBEIS: to the extent it	
13	mischaracterizes prior testimony. Calls	
14	for a legal conclusion and speculation.	
15	A I think if a person of ordinary skill	
16	in the art knew references themselves that	
17	substantiated a statement, then that would be	
18	fine.	
19	MS. RAPALINO: Let's look at another	
20	reference, if we could. Let's mark as	
21	Davies Exhibit 3 U.S. Patent 5,603,929.	
22	(Exhibit 3 was marked for identification	l
23	and attached to the deposition transcript.)	
24	BY MS. RAPALINO:	
25	Q Now, Exhibit 3 is another U.S. patent	

118 1 STEPHEN G. DAVIES, D.PHIL. 2 that you considered in forming your opinions, 3 right? А Yes. 4 5 0 This patent indicates that the date of the patent is February 18th, 1997, right? 6 7 А That's what it says. 8 The patent is entitled "Preserved 0 ophthalmic drug compositions containing 9 10 polymeric quaternary ammonium compounds," 11 right? 12 А Yes. 13 If you turn to column 1 of the '929 Q patent, Exhibit 3 --14 15 А Yes. 16 -- and you look at the paragraph that 0 17 begins at line 27 --18 А Okay. -- you would agree that the patent 19 0 20 reports that benzalkonium chloride is widely 21 used in ophthalmic solutions, right? 22 Α That's what it says, yes. 23 And it goes on in that paragraph in 0 24 the next sentence to say that BAC and other 25 quaternary ammonium compounds are generally

STEPHEN G. DAVIES, D.PHIL. 1 2 considered incompatible with ophthalmic compositions of drugs with acidic groups like 3 4 NSAIDs. Do you see that? 5 MS. LEBEIS: Objection. Mischaracterizes the document. 6 7 It makes that general statement. A 8 0 And then it goes on to make the 9 general statement that this is because the 10 preservative BAC loses its ability to function 11 because it forms complexes with the charged 12 drug compounds. Do you see that? 13 MS. LEBEIS: Objection. 14 Mischaracterizes the document. 15 It's a general statement without any A 16 reference. 17 And that general statement about BAC 0 18 forming complexes with acidic NSAIDs is not 19 limited to any particular NSAID, right? 20 A Well, it doesn't even give one 21 example. 22 Q Right. So it's not limited to even 23 one example, right? 24 MS. LEBEIS: Objection to the extent 25 it mischaracterizes prior testimony.

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1 STEPHEN G. DAVIES, D.PHIL. 2 Mischaracterizes the document. 3 It doesn't give any evidence that A 4 there's a problem with even one. It's just a 5 general statement without any foundation. And that general statement is not 6 0 7 limited to any particular NSAID. It's about 8 NSAIDs generally, right? 9 MS. LEBEIS: Objection to the extent it mischaracterizes the document. Asked 10 11 and answered. 12 Α Without even giving an example of one 13 occurrence, a person of ordinary skill would 14 have -- wouldn't know on what basis that was 15 being made. 16 But you would agree that the general 0 17 statement itself is not limited to any 18 particular NSAID, right? 19 MS. LEBEIS: Objection to the extent 20 it mischaracterizes prior testimony. Asked 21 and answered. 22 A This is not informing a person of 23 ordinary skill of any instance where there 24 actually is a problem between a carboxylic acid 25 and NSAID and benzalkonium chloride. The

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121 STEPHEN G. DAVIES, D.PHIL. 1 2 actual patent itself is about preservative 3 action, again. And this general statement that we 4 0 just looked at in column 1 ties the formation 5 of complexes between BAC and NSAIDs to the 6 7 issue of preservatives losing their ability to function, right? 8 MS. LEBEIS: Objection. 9 10 Mischaracterizes the document. Well, it doesn't give any evidence 11 A 12 that that's true. There would be other ways 13 that preservatives could lose their function. 14 But this suggests that one way could 0 15 be that the preservatives lose their ability to 16 function as they form complexes with the 17 charged drug compounds, right? That's what it 18 suggests? 19 MS. LEBEIS: Objection. 20 Mischaracterizes the document. But since it doesn't give any 21 A 22 examples where it actually happens, it's a 23 meaningless statement. 24 It may be true that complexes form 25 which cause the preservatives to lose their

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1	STEPHEN G. DAVIES, D.PHIL.	
2	efficacy, right?	
3	MS. LEBEIS: Objection to the extent	
4	it mischaracterizes prior testimony, and	
5	asked and answered. Mischaracterizes the	
6	document.	
7	A Without any examples, it may never be	
8	true.	
9	Q And it may be true, right?	
10	MS. LEBEIS: Objection to the extent	
11	it mischaracterizes prior testimony.	
12	A Without examples, you cannot just	
13	make the assumption. Otherwise you would have	
14	to assume millions of things, billions of	
15	things. You need to have a problem that's	
16	concrete before you have to worry about it.	
17	Q But this patent at column 1 suggests	
18	that the problem of complexation leads to	
19	preservatives losing their ability to function,	
20	right?	
21	MS. LEBEIS: Objection, asked and	
22	answered. Mischaracterizes the document.	
23	A It suggests without any evidence that	
24	that might be the case, but unless a person of	
25	ordinary skill sees the problem in reality,	

1 STEPHEN G. DAVIES, D.PHIL. 2 then it's irrelevant. 3 0 But you can't know with certainty 4 whether or not these complexes form without 5 seeing the test data, right? 6 MS. LEBEIS: Objection. Vague and 7 ambiguous. To the extent it 8 mischaracterizes prior testimony. 9 You have -- you would not assume A 10 there was a problem until you've done a test 11 and found the problem existed. You wouldn't know with certainty 12 0 13 whether or not a complex formed between a 14 particular NSAID and benzalkonium chloride 15 until you saw the test data, right? 16 A Sorry, I missed the first part of 17 that question. 18 (Record read.) 19 Α You would not know, no. In this patent, the '929 patent, 20 0 21 Exhibit 3, there is no discussion in this 22 section that talks about this potential problem of complexation about differences between 23 24 NSAIDs in terms of their chemical structure, 25 right?

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STEPHEN G. DAVIES, D.PHIL. 1 2 MS. LEBEIS: Objection, no foundation. Mischaracterizes the document. 3 There isn't, nor would one expect 4 Α 5 there to be when the problem isn't actually 6 observed. 7 There's also no discussion in this 0 8 section of the patent that talks about the 9 potential problem of complexation between NSAIDs and BAC of the differences in electron 10 density between different NSAIDs, right? 11 12 MS. LEBEIS: Same objections. There isn't, nor would a person of 13 Α ordinary skill expect there to be when the 14 15 problem isn't presented. There's also no discussion in this 16 0 17 '929 patent of the differences between NSAIDs 18 in terms of whether they're primary, secondary, 19 or tertiary amines as being relevant to this 20 issue of potential complexation, right? MS. LEBEIS: Same objection. 21 22 The patent is not about potential A 23 complexation so there would be no discussion. There's also no discussion, in this 24 0 25 section of the patent that talks about the

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125 1 STEPHEN G. DAVIES, D.PHIL. problem of potential complexation between 2 3 NSAIDs and BAC, of the differences between 4 NSAIDs in terms of the presence or absence of 5 halogenation on the compounds? MS. LEBEIS: Objection to the form of 6 7 the question. There wouldn't be because that's not 8 A the problem being addressed by the patent. 9 10 0 And there's also no discussion in 11 this patent, in the section that talks about 12 the potential complexation between NSAIDs and 13 BAC, about differences in lipophilicity between 14 different NSAIDs, right? MS. LEBEIS: Objection. 15 16 Mischaracterizes the document. 17 I lost the end of the sentence, end A 18 of the question. 19 (Record read.) 20 MS. LEBEIS: Objection. There isn't because it's irrelevant 21 A to what the main part of the patent is about. 22 23 And there's also no discussion in 0 24 this patent in the section that talks about 25 potential complexation between NSAIDs and BAC

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1	126 STEDUEN C. DAVIES D. DUII
	STEPHEN G. DAVIES, D.PHIL.
2	of differences between NSAIDs in terms of their
3	degree of hydrogen bonding, right?
4	MS. LEBEIS: Objection.
5	Mischaracterizes the document.
6	A There wouldn't be because such facts
7	are irrelevant to the rest of the patent and
8	what it's actually dealing with.
9	Q What do you think this patent is
10	directed to, this Exhibit 3, '929 patent?
11	MS. LEBEIS: Objection, vague and
12	ambiguous.
13	A Well, the data that's presented has
14	to do with preservative action.
15	Q So this patent is directed to
16	ophthalmic pharmaceutical compositions with
17	good preservative efficacy?
18	MS. LEBEIS: Objection to the extent
19	it mischaracterizes the prior testimony and
20	mischaracterizes the document.
21	A As I said, the data that is presented
22	has to do with preservative action.
23	Q In what kind of formulations?
24	A (Document review.)
25	In diclofenac formulations. This is

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1	STEPHEN G. DAVIES, D.PHIL.	
2	another one, sulfacetamide and suprofen. Those	
3	three are formulated.	
4	Q So this patent provides a formulation	
5	that's suitable for use with those three	
6	compounds; is that right?	
7	MS. LEBEIS: Objection.	
8	Mischaracterizes the document.	
9	A (Document review.)	
10	The results seem to be on formulation	
11	A, which is sodium diclofenac, in terms of its	
12	preservation activity.	
13	Q In your view, is the subject of the	
14	patent then limited to formulations of	
15	diclofenac sodium?	
16	MS. LEBEIS: Objection to the extent	
17	it mischaracterizes prior testimony.	
18	A That's a legal question. It's not	
19	for me to say. But the data is only presented	
20	for, as far as I can see, for formulation A,	
21	which has diclofenac in it.	
22	Q So you don't have an opinion one way	
23	or another on whether this patent is limited to	
24	formulations of diclofenac sodium or includes	
25	other formulations?	

128 1 STEPHEN G. DAVIES, D.PHIL. 2 MS. LEBEIS: Objection to the extent 3 it mischaracterizes prior testimony. The data presented and what a person 4 Α 5 of ordinary skill would see is data on sodium 6 diclofenac. 7 Now, if we go back to the paragraph 0 8 in column 1, starting at line 27. 9 Α Yes. So if you can keep that open and then 10 0 11 go back to Exhibit 2. 12 A Okay. 13 And look at the paragraph we looked Q 14 at in column 1 of Exhibit 2, the '876 patent 15 that starts at line 10. 16 А Starts at line --17 0 10. 18 A 10? 19 Column 1. 0 20 Α Okay. 21 You would agree that the statements 0 22 in Exhibit 2, the '876 patent, in column 1, are 23 consistent with the statements in Exhibit 3, 24 the '929 patent, at column 1? 25 MS. LEBEIS: Objection to the form of

129 1 STEPHEN G. DAVIES, D.PHIL. the question. Vague and ambiguous. 2 3 They're broadly consistent. They're A from the same -- both patents are from the same 4 company. There's no evidence in either of them 5 that they're true or not. 6 7 I think you pointed out, they're both Q from Alcon Laboratories, Inc., right, both of 8 9 those patents? 10 A That's correct. MS. RAPALINO: Let's mark as Davies 11 12 Exhibit 4 European Patent 0306984. 13 (Exhibit 4 was marked for identification 14 and attached to the deposition transcript.) BY MS. RAPALINO: 15 16 Dr. Davies, this is a European patent 0 17 you considered in forming your opinions in this 18 case? 19 Α Yes. 20 Is it okay if we refer to that as EP Q '984? 21 That's fine. 22 Α 23 This patent has a date of publication 0 24 of March of '89; is that right? 25 That's correct, yes. Α

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1		STEPHEN G. DAVIES, D.PHIL.	
2	Q	This patent is indicates that the	
3	applicant	is Syntex, Inc., right?	
4		MS. LEBEIS: Objection.	
5	Mischa	aracterizes the document.	
6	A	It says, "Applicant, Syntex, Inc."	
7	Q	That's a separate company from Alcon	
8	Laborator	ies, right?	
9		MS. LEBEIS: Objection. Calls for	
10	specu	lation.	
11	A	I don't know.	
12	Q	Well, it doesn't list Alcon as the	
13	applicant	, right?	
14	А	It does not.	
15		MS. LEBEIS: Objection,	
16	argume	entative.	
17	A	It doesn't say Alcon.	
18	Q	And the inventors listed on this	
19	patent are	e not the same inventors as the	
20	those on 1	Exhibits 2 and 3 that we looked at	
21	earlier, :	right?	
22	А	They're not, no.	
23	Q	Now, if we look at page 2 of EP '984,	
24	Exhibit 4	•	
25	A	Page 2.	

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131 1 STEPHEN G. DAVIES, D.PHIL. 2 0 Page 2. 3 Α Okay. 4 0 You see that in the paragraph 5 beginning at line 10, EP '984 describes an earlier patent, U.S. Patent 4,454,151? 6 7 Α Yes. 8 MS. LEBEIS: Is that a question? Is 9 there a question? 10 MS. RAPALINO: Yes, I think we just 11 got an answer to it. I see the patent number there, yes. 12 A 13 And then it goes on to say that Yes. Q "While the formulations described in the '151 14 15 patent were efficacious, an insoluble complex was found to form between the NSAID and BAC." 16 17 Do you see that? 18 Α That's what it says. 19 Q And if you go down to page 2, line 20 31 --21 Α Yes. 22 Q -- you see there's a sentence that 23 says, "Benzalkonium chloride, a quaternary 24 ammonium compound, has been widely used in ophthalmic solutions and is considered to be 25

132 1 STEPHEN G. DAVIES, D.PHIL. 2 the preservative of choice"? 3 A That's what it says. 4 You don't disagree that benzalkonium 0 5 chloride had been widely used in ophthalmic formulations and was a preservative of choice, 6 7 do you? 8 MS. LEBEIS: Objection. Calls for speculation. 9 10 Α I haven't done that analysis. 11 0 So you don't have an opinion one way 12 or another? 13 A Since I haven't done the analysis. 14 So you don't have an opinion one way 0 15 or another? MS. LEBEIS: Asked and answered. 16 17 A I haven't done the analysis so I 18 don't. I don't know. And I suspect it depends 19 on the ophthalmic solution as what the 20 preservative of choice is. I've seen others 21 that don't have the benzyl ammonium, the 22 quaternary ammonium compound. 23 But you haven't done the analysis one 0 24 way or another to know when benzalkonium 25 chloride would be a preservative of choice,

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1	STEPHEN G. DAVIES, D.PHIL.	
2	right?	
3	MS. LEBEIS: Objection to the extent	
4	it mischaracterizes prior testimony.	
5	A I haven't done the analysis, and I	
6	suspect it depends on which formulation we're	
7	talking about as to which would be the	
8	preservative of choice.	
9	Q That suspicion that you have is not	
10	based on any analysis that you've done; is that	
11	right?	
12	MS. LEBEIS: Objection, asked and	
13	answered. Argumentative.	
14	A I've not done a detailed analysis,	
15	but I have seen formulations that don't contain	
16	benzalkonium chloride as a preservative.	
17	Q Which formulations are those?	
18	A I think we saw some earlier in one of	
19	the patents we've already looked at.	
20	Q Do you want to tell me which	
21	formulation that was?	
22	A (Document review.)	
23	In the '929 patent.	
24	(Document review.)	
25	Q Apart from the formulation that	

134 1 STEPHEN G. DAVIES, D.PHIL. 2 you've seen in the '929 patent, are you aware 3 of any other formulations for ophthalmic use that don't contain benzalkonium chloride as the 4 5 preservative? MS. LEBEIS: Dr. Davies, you can take 6 7 your time looking at the '929 patent in 8 answering counsel's question. Just to be clear, though, my question 9 0 10 is, apart from the formulations in the '929 11 patent, are you aware of any ophthalmic 12 formulations that don't contain benzalkonium 13 chloride as the preservative? I don't think you need to look at the '929 patent to answer 14 15 that question. But if you feel you do, please 16 feel free. 17 I believe I've seen other A 18 formulations, yes. 19 0 Can you point to any of those 20 formulations? Not sitting here at this moment. 21 A 22 Let's go back to Exhibit 4, the EP 0 23 '984 patent. 24 Okay. If you look at page 2 again, 25 at line 33, you see that the EP '984 patent

135 1 STEPHEN G. DAVIES, D.PHIL. goes on to say that "BAC has typically been 2 3 considered to be incompatible with anionic 4 drugs, forming insoluble complexes which cause 5 the solution to become cloudy or turbid." Do you see that it says that? 6 7 MS. LEBEIS: Objection. Mischaracterizes the document. 8 9 A That's what it says. 10 0 It goes on to say that such 11 complexation between an anionic drug and BAC 12 can cause a decrease in the pharmaceutical 13 activity of the drug. 14 Do you see that? 15 MS. LEBEIS: Objection. 16 Mischaracterizes the document. 17 It's the same as the previous cases. A 18 I don't see any evidence that that's true, that 19 there is a problem. 20 You would agree, though, that EP '984 0 21 asserts that that's a problem, right? MS. LEBEIS: Objection to the form of 22 23 the question, asked and answered, to the 24 extent it mischaracterizes prior testimony. 25 It makes a broad statement without A

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136 STEPHEN G. DAVIES, D.PHIL. 1 2 any evidence. And that broad statement is that 3 0 4 there's a problem of complexation between 5 anionic drugs and BAC, right? 6 MS. LEBEIS: Objection to the extent 7 it mischaracterizes prior testimony and 8 mischaracterizes the document. It doesn't give any evidence that 9 A 10 such a complex would form. But the EP '984 nonetheless makes the 11 0 12 broad statement that there is a problem of complexation between anionic drugs and BAC, 13 14 right? 15 MS. LEBEIS: Objection. Asked and answered, mischaracterizes the document, 16 17 and to the extent it mischaracterizes prior 18 testimony. 19 Without any evidence, a person of А 20 ordinary skill wouldn't be able to take anything from that. 21 22 Let's look at paragraph -- the 0 23 paragraph on page 2 just below the one we were 24 looking at. 25 Α Okay.

STEPHEN G. DAVIES, D.PHIL. 1 2 Do you see that it says "In the past, 0 3 as in the case with other ophthalmic drugs that contain a carboxylic acid group, 4 anti-inflammatory solutions of NSAIDs for 5 ocular use have proven to be incompatible with 6 7 quaternary ammonium compounds such as BAC." 8 MS. LEBEIS: Objection. Mischaracterizes the document. 9 10 Do you see that it says that? 0 11 It says those words, but there's no A 12 evidence to allow person of ordinary skill to 13 understand if they're correct or not. 14 0 Okay. But those are the words that 15 the patent uses, right? 16 MS. LEBEIS: Objection. Asked and 17 answered. 18 A The words are written down in the patent, but, without any evidence, a person of 19 20 ordinary skill can't take anything from them. And it goes on to explain that this 21 0 22 incompatibility is due to the fact that the 23 carboxylic acid group can form a complex with 24 the quaternary ammonium compound, rendering the 25 preservative less available to serve its

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1	STEPHEN G. DAVIES, D.PHIL.	138
2	function and reducing the activity of the	
3	active ingredient, right? That's what it says?	
4	MS. LEBEIS: Objection,	
5	mischaracterizes the document.	
6		
	A That's an assumption for which there	
7	is no evidence.	
8	Q So this EP '984 patent talks about	
9	the general problem of complexation between	
10	drugs, ophthalmic drugs in the carboxylic acid	
11	group and benzalkonium chloride consistent with	
12	the way that that problem was discussed in	
13	Exhibits 2 and 3, the '876 and '929 patents,	
14	right?	
15	MS. LEBEIS: Objection.	
16	Mischaracterizes the document. Asked and	
17	answered.	
18	A In none of the patents is there any	
19	evidence that this problem actually exists.	
20	Q You would agree, though, that the	
21	statement of this problem in EP '984 at the	
22	paragraph from line on page 2, lines 29	
23	through 44 is consistent with the statement we	
24	looked at in the '876 patent, Exhibit 2, at	
25	column 1, lines 10 through 24, right?	

139 1 STEPHEN G. DAVIES, D.PHIL. 2 MS. LEBEIS: Objection to the form of 3 the question and to the extent it mischaracterizes prior testimony. 4 5 They describe the same general A purported problem for which there is no 6 evidence being presented. So a person of 7 ordinary skill wouldn't be concerned about it 8 9 unless they faced it. And the discussion in EP '984 of this 10 0 11 general problem of complexation between 12 carboxylic-acid-containing compounds and BAC 13 does not mention any differences between 14 different NSAID compounds, in terms of their 15 chemical structure, as being relevant to that problem, right? 16 17 MS. LEBEIS: Objection. Mischaracterizes the document. 18 19 Well, it wouldn't, though, because Α 20 it's not what the rest of the patent is about. 21 So they wouldn't need to discuss those things. 22 There's also no discussion in the EP 0 23 '984 of any differences between NSAID compounds 24 in terms of their electron density, right? 25 MS. LEBEIS: Same objection.

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1	STEPHEN G. DAVIES, D.PHIL.	
2	A It wouldn't discuss such matters	
3	because they're irrelevant to what the rest of	
4	the patent is discussing.	
5	Q There's also no discussion in EP '984	
6	of differences between NSAIDs in terms of	
7	whether they're primary, secondary, or tertiary	
8	amines, right?	
9	MS. LEBEIS: Same objection.	
10	A They wouldn't do because it's not	
11	what the patent goes on to discuss.	
12	Q There is also no discussion in EP	
13	'984 of the impact of the presence or absence	
14	of halogenation on NSAIDs as relevant to the	
15	issue of complexation, right?	
16	MS. LEBEIS: Same objection and	
17	objection to the form of the question.	
18	A It wouldn't discuss that because it's	
19	not relevant to the rest of the patent.	
20	Q So there's no discussion, right?	
21	MS. LEBEIS: Same objection.	
22	A Nor would a person of ordinary skill	
23	expect there to be a discussion.	
24	Q So there is no discussion in the	
25	patent of presence or absence of halogenation	

141 1 STEPHEN G. DAVIES, D.PHIL. 2 of different NSAIDs, right? MS. LEBEIS: Same objection. 3 There is no discussion because it's A 4 5 irrelevant to the rest of the patent. There's also no discussion in the 6 0 7 patent of the differences between NSAIDs in 8 terms of their degree of lipophilicity with 9 respect to this problem of complexation, right? 10 MS. LEBEIS: Same objection. There is no discussion because it 11 Α 12 would be irrelevant to the rest of the patent. 13 There's also no discussion in the 0 patent regarding the degree -- differences in 14 15 the degree of hydrogen bonding as between different NSAIDs as it relates to the issue of 16 17 complexation. 18 MS. LEBEIS: Same objection. 19 Α No, because it's irrelevant to the 20 rest of the patent. 21 And there's also no discussion about 0 22 the degree of solvation of any of the NSAIDs in 23 this patent in relation to the problem of 24 complexation, right? 25 MS. LEBEIS: Objection.

142 1 STEPHEN G. DAVIES, D.PHIL. 2 Mischaracterizes the document. 3 I don't believe so because it would A 4 be, well, irrelevant to the rest of the patent. 5 Now, let's look at page 4. Q 6 Yes. A 7 And there are some examples given of 0 8 formulations according to the invention of this 9 patent, right? Do you see the tables? 10 A I see the boxes, yes. 11 And each of those formulations on 0 12 page 4 and over to the top of page 5 lists the 13 active ingredient as NSAID. Do you see that? MS. LEBEIS: Objection to the extent 14 15 it mischaracterizes the document. 16 A It said these are preferred 17 formulations. They're not actual formulations 18 unless they release the NSAID in that formulation. 19 20 Q Right. So these just say generically 21 NSAID for these preferred formulations, right? 22 MS. LEBEIS: Objection. 23 Mischaracterizes the document. 24 A Well, it says "NSAID." It could be 25 one particular NSAID. You have to read the

143 1 STEPHEN G. DAVIES, D.PHIL. whole of the rest of the patent to determine 2 3 whether it's one or any one. And then if we look at page 6 of the 4 0 EP '984, Exhibit 4 --5 Yes. 6 A 7 -- there are some more preferred 0 8 ophthalmic NSAID solutions listed on page 6. Do you see that? 9 10 А Yes. And each of those lists the active 11 0 12 ingredient as NSAID, right? 13 Yes. But, again, that could be one Α 14 or more. You have to read the whole patent. Then if we look at the examples in 15 Q 16 the EP '984 patent, Exhibit 4, starting at page 17 7, and going on to page 8 --18 A Yes. 19 -- there are examples of Q 20 representative pharmaceutical formulations. Do 21 you see that? 22 Α Yes. 23 The active ingredient in some of 0 those formulations is ketorolac tromethamine. 24 25 Do you see that?

1 STEPHEN G. DAVIES, D.PHIL. 2 A In the first three, which is 3 consistent with the statement underneath the general boxes on page 8, where it says the 4 5 "most preferred is the ophthalmic solution 6 according to the above formulation wherein the 7 NSAID is ketorolac tromethamine or an isomer 8 thereof," yes. 9 And ketorolac tromethamine is an 0 10 NSAID, right? 11 A Yes. 12 It's a carboxylic acid containing 0 13 NSAID? 14 A Yes. 15 And it's an NSAID that's anionic at 0 16 pH 7 to 9, right? 17 Α Yes. 18 Each of these formulations in EP 0 19 '984, Exhibit 4, contain octoxynol 40. Do you 20 see that? 21 MS. LEBEIS: Objection to the extent 22 it mischaracterizes the document. 23 Α It's listed in them, yes. 24 0 Have you ever worked with octoxynol 25 40?

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1		STEPHEN G. DAVIES, D.PHIL.	
2	А	I personally haven't, no.	
3	Q	Octoxynol 40 is an ethoxylated	
4	octylphen	ol compound, right?	
5	А	Yes.	
6	Q	On page 9 of EP '984, under example	
7	5, the EP	'984 patent compares formulations of	
8	ketorolac	tromethamine, benzalkonium chloride,	
9	and three	different surfactants in three	
10	different	formulations, right?	
11	A	Yes.	
12	Q	If you look at line 11 on page 9, it	
13	describes	the experiment of example 5, and it	
14	says, "Th:	ree surfactants were evaluated for	
15	their abi	lity to dissolve the	
16	ketorolac.	-benzalkonium chloride complex and	
17	maintain a	a physically clear solution over an	
18	extended]	period of time."	
19		Do you see that?	
20	A	Yes.	
21	Q	The three surfactants that were	
22	tested in	example 5 were octoxynol 40,	
23	polysorba	te 80, and Myrj 52. Do you see that?	
24		MS. LEBEIS: Objection.	
25	Mischa	aracterizes the document.	

146 STEPHEN G. DAVIES, D.PHIL. 1 I see that. It says tween on -- in 2 A 3 the actual table, but ... 4 0 Tween 80 is the same as polysorbate 5 80, right? As it says above, yes. 6 А 7 0 The results presented in the table in 8 example 5 show that the ethoxylated octylphenol 9 surfactant, octoxynol 40, was the best among 10 those tested in that it provided a clear 11 solution at all the time points and conditions 12 tested, right? 13 MS. LEBEIS: Objection to the extent it mischaracterizes the document. 14 15 А It says it was superior, yes. 16 For the formulations tested in EP 0 17 '984, the ethoxylated octylphenol surfactant, 18 octoxynol 40, provided the superior results in terms of solubilization at all of the test 19 20 conditions, right? 21 MS. LEBEIS: Objection to the extent 22 it mischaracterizes the document. 23 Well, to the extent that it remained Α 24 clear all the time, yes. 25 For ophthalmic solutions, it's Q

147 STEPHEN G. DAVIES, D.PHIL. 1 desirable to have a solution that remains 2 3 clear, right? MS. LEBEIS: Objection. Calls for 4 5 speculation. 6 THE WITNESS: Can you repeat the 7 question, please. 8 (Record read.) THE WITNESS: I didn't get the first 9 10 two words. 11 (Record read.) 12 A Yes. 13 MS. LEBEIS: We've been going about an hour. Do you think it's a good time to 14 15 take a lunch break? MS. RAPALINO: Can I do one more 16 17 document and then we'll break? Are you 18 okay with that? 19 THE WITNESS: That's fine, yes. 20 MS. LEBEIS: Yes, that's fine. 21 BY MS. RAPALINO: 22 In your view, do the results 0 23 presented in example 5 provide any evidence of 24 complexation between an NSAID and benzalkonium 25 chloride?

STEPHEN G. DAVIES, D.PHIL. 1 MS. LEBEIS: Objection to the extent 2 it mischaracterizes the document. 3 There's no analytical data to suggest 4 A 5 what is making some of these solutions turbid. 6 So something is making some of the Q 7 solutions turbid. You would agree with that, 8 right? But there's no indication as to what 9 A 10 that might be. So you can't assume and you wouldn't assume that it's a 11 ketorolac-benzalkonium chloride complex. 12 13 EP '984 doesn't provide any 0 14 suggestion about what else that precipitate or turbidity might be, right? 15 16 MS. LEBEIS: Objection to the extent it mischaracterizes the document. 17 18 Α It doesn't give you any indication what it is in fact. There's no data produced. 19 20 Q And just to be clear, EP '984, even 21 if it has no data to back it up, certainly 22 suggests that these surfactants were being 23 evaluated for their ability to dissolve the ketorolac-benzalkonium chloride complex. 24 Do 25 you see that?

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1	STEPHEN G. DAVIES, D.PHIL.
2	A Objection to the extent it
3	mischaracterizes the document.
4	A person of ordinary skill reading
5	that would not and reading the experimental
6	that's been done would not be able to
7	understand the experiment because it says "were
8	evaluated for their ability to dissolve
9	ketorolac-benzalkonium chloride complex." That
10	would imply that there is solid
11	ketorolac-benzalkonium chloride complex
12	available as solid form and that it was being
13	dissolved. That is not what is that is not
14	the experiment that they do.
15	Q So, in your opinion, a person of
16	skill in the art wouldn't understand this
17	experiment in example 5 of EP '984, Exhibit 4?
18	MS. LEBEIS: Objection to the extent
19	it mischaracterizes prior testimony.
20	A I've told you what the words would
21	mean to a person of ordinary skill. When you
22	dissolve something, you take a solid, and you
23	add a liquid, and you watch the solid dissolve
24	in a liquid.
25	Q So with that semantic definition of

1 STEPHEN G. DAVIES, D.PHIL. 2 dissolve, a person of skill in the art then 3 would be at a loss to understand what was being done in this experiment in example 5 of EP 4 5 '984. Is that your testimony? MS. LEBEIS: Objection to the extent 6 7 it mischaracterizes prior testimony. А They could go back and look at the 8 9 actual experimental, which is also -- no, that 10 is not a proper description. 11 0 Where do you see the actual 12 experimental? 13 А Well, it lists the ingredients, none of which are ketorolac -- any ketorolac-BAC 14 15 complex. So they would -- they would -- they 16 would know that -- so this is on page 7 under 17 the box. 18 It says, "The above ingredients," none of which are ketorolac-benzalkonium 19 20 chloride complex, "are mixed, adding purified 21 water until they're dissolved, and the pH 22 adjusted to 7.4," then the balance made up with 23 purified water. So they can read the actual 24 experiment that was done. 25 So then they would understand what Q

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		151
1	STEPHEN G. DAVIES, D.PHIL.	
2	experiment is being done in example 5?	
3	A And, therefore, that it isn't what's	
4	written above the quote you gave to me, which	
5	was the ability to dissolve	
6	ketorolac-benzalkonium chloride.	
7	Q Now, you don't actually think that	
8	the formulations that were tested in example 5	
9	were all the formulation that you pointed to on	
10	page 7, right?	
11	MS. LEBEIS: Objection to the extent	
12	it mischaracterizes prior testimony.	
13	A It's given the general experimental	
14	of how these solutions were being made up.	
15	Q Okay. So you're just pointing to	
16	page 7 to show how they're manufacturing the	
17	how they're making the formulation, right, that	
18	they're mixing the ingredients and adding	
19	purified water until they're dissolved? Is	
20	that what you mean?	
21	MS. LEBEIS: Objection to the extent	
22	it mischaracterizes prior testimony or the	
23	document.	
24	A What I'm trying to illustrate is that	
25	they really are not starting from	

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152 1 STEPHEN G. DAVIES, D.PHIL. 2 ketorolac-benzalkonium chloride complex and 3 trying to dissolve that, which is what is implied in lines 11 to 12 on page 9. 4 5 But in the context of the rest 0 Okay. 6 of the patent, a person of ordinary skill in 7 the art reading example 5 would understand that 8 example 5 is intended to evaluate the ability of these different surfactants to solubilize 9 10 any complexes that are formed between ketorolac 11 and benzalkonium chloride, right? 12 MS. LEBEIS: Objection to the extent 13 it mischaracterizes the document. 14 Α There is not -- there is nothing 15 in -- no data produced to say that the 16 turbicity is -- turbidity, rather, is due to a 17 complex between ketorolac and benzalkonium 18 chloride. 19 That's just what's being suggested by 0 20 the author, right, without any data, that 21 what's being evaluated here is the ability to 22 solubilize those complexes? 23 MS. LEBEIS: Objection. 24 Mischaracterizes the document. 25 Well, there's no -- there's no --A

STEPHEN G. DAVIES, D.PHIL. 1 2 without any evidence as to what this 3 precipitate or the turbidity is due to, you 4 can't tell what is being solubilized. 5 What else, in your view, could cause 0 the turbidity in this solution? 6 7 MS. LEBEIS: Objection. Vague and 8 ambiguous, incomplete. 9 A Any --10 MS. LEBEIS: One second. Also 11 incomplete hypothetical. 12 A Without experimentation, you can't 13 tell what the turbidity is due to. 14 0 So you don't have a view, one way or 15 the other, whether there's anything else that 16 could be causing the turbidity in this 17 composition? 18 MS. LEBEIS: Objection to the extent 19 it mischaracterizes prior testimony. 20 Α Until you know what the turbidity is 21 due to, you can't possibly tell what is causing 22 it. MS. RAPALINO: Let's mark as Davies 23 24 Exhibit --25 MS. LEBEIS: We went another 10

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1	STEPHEN G. DAVIES, D.PHIL.
2	minutes on this reference. Would it be
3	okay to take a lunch break now?
4	MS. RAPALINO: Dr. Davies, do you
5	need a lunch break?
6	THE WITNESS: Yes, can we?
7	MS. RAPALINO: Sure.
8	THE VIDEOGRAPHER: We're going off
9	the record at 12:36 p.m.
10	(A lunch recess was taken.)
11	THE VIDEOGRAPHER: We're going back
12	on record at 1:20 p.m. This is the start
13	of disc number 4 in the deposition of
14	Stephen Davies.
15	MS. RAPALINO: I'm going to ask the
16	court reporter to mark as Davies 5 an
17	international patent application WO
18	94/15597.
19	(Exhibit 5 was marked for identification
20	and attached to the deposition transcript.)
21	BY MS. RAPALINO:
22	Q Is this an international or PCT
23	patent application you considered in forming
24	your opinions in this case?
25	A Yes.

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155 STEPHEN G. DAVIES, D.PHIL. 1 2 It was published in July of 1994; is 0 3 that right? That's the international publication 4 A 5 date, yes. And you see that it's entitled 6 0 7 "Ophthalmic compositions comprising 8 benzyl-lauryl-dimethyl-ammonium chloride." A Yes. 9 10 Now, benzyl-lauryl-dimethyl-ammonium 0 11 chloride is sometimes abbreviated LAC, or 12 L-A-C, right? 13 А I believe so. 14 That's a different preservative from 0 15 BAC; is that right? 16 It's a similar type. A 17 So they're similar preservative? 0 18 They're similar in the sense that A 19 they're benzyl ammonium salts. 20 0 Okay. 21 If you look at page 2 of this PCT application -- and if it's okay with you, I'll 22 23 refer to it as the WO '597 application; is that 24 right? 25 A Okay.

156 1 STEPHEN G. DAVIES, D.PHIL. So let's turn to page 2 of WO '597. 2 0 3 And if you look at the first paragraph on page 2, WO '597 reports that "BAC is a quaternary 4 5 ammonium compound that has been widely used in ophthalmic solutions, right? 6 7 MS. LEBEIS: Objection. Mischaracterizes the document. 8 That's what it says. 9 Α 10 0 And then it goes on to say in the 11 second sentence in that first paragraph on page 12 2, "It is also well-known that BAC is 13 considered incompatible with anionic drugs, forming insoluble compounds which cause the 14 15 solution to turn cloudy." 16 Do you see that? 17 MS. LEBEIS: Objection. 18 Mischaracterizes the document. 19 I read the words, yes. A 20 0 If you go back to the cover page of 21 WO '597, Exhibit 5, you see that the applicant 22 for this international application is Allergan, 23 Inc., right? 24 A Yes. 25 That's another pharmaceutical company Q

157 STEPHEN G. DAVIES, D.PHIL. 1 2 that specializes in ophthalmic products, right? 3 MS. LEBEIS: Objection. Calls for 4 speculation. I don't know that. 5 A 6 0 You're not familiar with Allergan? 7 I've heard of it, but I don't know A 8 that its speciality is ophthalmic. Okay. You know it's a pharmaceutical 9 Q 10 company? 11 Objection. Calls for MS. LEBEIS: 12 speculation. 13 I believe it to be a pharmaceutical A 14 company, yes. 15 Then if you look at -- going back to Q 16 page 2 of WO '597, the next two paragraphs on 17 page 2 go on to describe the reason for the 18 complexation phenomenon that was discussed in 19 the first paragraph, right? 20 MS. LEBEIS: Objection. Mischaracterizes the document. 21 22 А Well, it doesn't give any evidence in 23 those paragraphs so it's speculation. 24 Right. So it provides some 0 25 speculation about the reason behind the

158 1 STEPHEN G. DAVIES, D.PHIL. formation of insoluble precipitates of NSAIDs 2 3 and quaternary ammonium compounds, right? MS. LEBEIS: Objection to the extent 4 5 it mischaracterizes the document. Calls for speculation. 6 7 It doesn't give any evidence that any A 8 cloudiness or precipitate is due to the 9 interaction of the positively charged 10 preservative with the negatively charged 11 active. 12 WO '597 here is positing a theory as 0 13 to what might lead to insoluble compounds due to the association between benzalkonium 14 15 chloride and a negatively charged acidic drug, 16 right? 17 MS. LEBEIS: Objection. Mischaracterizes the document. Calls for 18 19 speculation. 20 A They're making -- they put those 21 words in the introductory paragraph without any 22 backup. So I don't know what a person of 23 ordinary skill would take from it in terms of 24 fact. 25 But they're positing a theory, right, 0

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1	STEPHEN G. DAVIES, D.PHIL.	
2	as to what might lead to insoluble complexes	
3	due to the association between benzalkonium	
4	chloride and a negatively charged acidic drug,	,
5	right?	
6	MS. LEBEIS: Objection.	
7	Mischaracterizes the document, calls for	
8	speculation, and asked and answered.	
9	A It's what it says in the introductor	сy
10	part for this prep.	
11	Q And what it says in these first thre	e
12	introductory paragraphs of WO '597, that's	
13	consistent with what we saw in Exhibit 4, EP	
14	'984, and Exhibit 3, the '929 patent, and	
15	Exhibit 2, the '876 patent, right?	
16	MS. LEBEIS: Objection, form of the	
17	question. You should feel free to go back	٢
18	and look at those other documents if you	
19	need to.	
20	A Well, it's not exactly the same	
21	wording. This has different suggestions than	
22	the other patents.	
23	Q The concept, though, is the same, is	3
24	consistent between this patent, the WO '597,	
25	and the earlier Exhibits 2, 3, and 4 that we	

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1	STEPHEN G. DAVIES, D.PHIL.
2	looked at in terms of the description of the
3	general phenomenon of an insoluble precipitate
4	forming between an acidic NSAID and
5	benzalkonium chloride, right?
6	MS. LEBEIS: Objection.
7	Mischaracterizes the documents. Calls for
8	speculation. Asked and answered.
9	A There can't be a general phenomenon
10	if there's no evidence that it's actually
11	occurring.
12	Q You would agree, though, that this WO
13	'597, consistent with the prior three exhibits
14	that we looked at, Exhibits 4, 3, and 2,
15	provides a general description of a phenomenon
16	even without evidence, but they all provide a
17	consistent description of the phenomenon of the
18	formation of an insoluble precipitate due to
19	the formation due to the interaction of
20	benzalkonium chloride and an acidic drug or
21	NSAID, right?
22	MS. LEBEIS: Objection.
23	Mischaracterizes the documents, calls for
24	speculation, asked and answered, and
25	objection to the form of the question.

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1	STEPHEN G. DAVIES, D.PHIL.	
2	A A phenomenon is something that	
3	actually exists that needs an explanation. I	
4	haven't seen that any evidence that you get	
5	a precipitate from benzalkonium chloride and	
6	carboxylic acid.	
7	Q So your issue is with the word	
8	"phenomenon"? Is that the problem?	
9	A That's one of the issues, I suspect.	
10	Q So why don't we try this. You would	
11	agree with the description of this potential	
12	problem in WO '597 of interaction between	
13	benzalkonium chloride and anionic drugs is	
14	consistent with the description of that same	
15	problem we looked at in Exhibits 4, 3, and 2,	
16	right?	
17	MS. LEBEIS: Objection.	
18	Mischaracterizes the documents, calls for	
19	speculation, asked and answered, and	
20	objection to the form of the question.	
21	A I don't think in any of the cases	
22	it's a problem because it hasn't been shown to	
23	exist.	
24	Q The speculation in each of these	
25	references about a potential problem in the	

1 STEPHEN G. DAVIES, D.PHIL. 2 formation of a complex between benzalkonium chloride and an NSAID is consistent as between 3 WO '597 and the other references that we looked 4 5 at, EP '984, U.S. patent '929, and U.S. patent 6 '876, right? 7 MS. LEBEIS: Objection. 8 Mischaracterizes the documents, calls for 9 speculation, objection to the form of the 10 question, and asked and answered. He's answered this guestion. You've asked it 11 12 now several times. 13 А Without some evidence, you don't know the problem exists. And in none of the 14 15 previous cases we looked at did whatever was 16 being suggested have anything to do with the bulk of the patent. 17 18 Let's look at EP '984 at Exhibit 4. 0 19 A Yes. 20 0 You would agree with me, would you 21 not, that on page 2 of EP '984 at line 31, the 22 European patent says that "benzalkonium 23 chloride has been widely used in ophthalmic 24 solutions," right? 25 MS. LEBEIS: Objection.

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163 STEPHEN G. DAVIES, D.PHIL. 1 Mischaracterizes the document. 2 3 Α That's what it says there, but --4 0 Then if you look at --5 -- I have no way of knowing that A 6 that's --7 I didn't ask about what you know. 0 Ι 8 just asked whether that's what the patent said. 9 Do you understand the question? 10 Α That is what the patent says, yes. 11 Then if you look at Exhibit 5 that we 0 12 were just looking at, the WO '597, at page 2 --13 Α Yes. 14 0 -- you see at the top of the page 2, 15 the first sentence also says, "Benzalkonium 16 chloride has been widely used in ophthalmic 17 solutions." 18 Do you see that? MS. LEBEIS: Objection. 19 Mischaracterizes the document. 20 21 That's what it says in the document, Α 22 yes. So those two statements in the two 23 0 24 patents we just looked at are consistent with one another, right? 25

164 1 STEPHEN G. DAVIES, D.PHIL. 2 MS. LEBEIS: Objection to the form of 3 the question. Well, that single sentence is they're 4 Α 5 consistent with one another, but you have to 6 read them in context in each of the patents. 7 Okay. Let's look at some more of the 0 8 context then. If you could go back to Exhibit 9 4, the EP '984. 10 A Yes. 11 And let's look at the next sentence 0 12 on page 2 that starts at line 33. 13 Α Yes. 14 It says that "BAC has typically been 0 15 considered to be incompatible with anionic 16 drugs, forming insoluble complexes which cause 17 the solution to become cloudy." 18 Do you see that? 19 MS. LEBEIS: Objection. 20 Mischaracterizes the document. 21 Well, it actually quotes as the A 22 anionic drug salicylates and nitrates. 23 Q Okay. So with that amendment, you agree that's what it says in EP '984? 24 MS. LEBEIS: Objection to the extent 25

165 STEPHEN G. DAVIES, D.PHIL. 1 it mischaracterizes prior testimony. 2 3 There's no evidence that --A 4 0 I'm not asking about evidence now. MS. LEBEIS: You need to let him 5 6 finish answering the question. 7 MS. RAPALINO: He needs to answer my 8 question. MS. LEBEIS: You need to let him 9 10 finish answering the question and give his 11 full answer to your question before you start with another question. 12 BY MS. RAPALINO: 13 14 0 Dr. Davies, you would agree that EP '984, starting at line 33, says, "BAC has 15 16 typically been considered to be incompatible 17 with anionic drugs (e.g., salicylates or nitrates, et cetera), forming insoluble 18 complexes which cause the solution to become 19 20 cloudy or turbid." 21 Do you see that? I can see the words written there. 22 А 23 And then if you look at --Q MS. LEBEIS: He wasn't finished 24 25 answering the question.

166 1 STEPHEN G. DAVIES, D.PHIL. 2 MS. RAPALINO: That was the answer to 3 the question. MS. LEBEIS: He had not finished 4 5 answering the question. Dr. Davies, you can finish answering. 6 7 BY MS. RAPALINO: 8 0 Could you turn, Dr. Davies, to --9 But there was -- there's no evidence Α provided that that is a real phenomenon. 10 11 Did you think that was the answer to 0 12 the question about whether the words were 13 written on the page? 14 MS. LEBEIS: Objection to the form of 15 the question. Argumentative. 16 А I'm giving you the answer I think is the answer I wish to give to the question you 17 asked me. 18 19 You've got to answer the questions I 0 20 ask, not just give the testimony you wish to 21 give. Do you understand that? 22 A I believe I'm answering the questions 23 you ask. So let's go on to my next question. 24 0 25 Let's see if you can answer the question I ask.

1 STEPHEN G. DAVIES, D.PHIL. 2 If you look at WO '597, which is 3 Exhibit 5, do you see that in the second sentence, it says, "It is also well-known, 4 5 however, that benzalkonium chloride is 6 considered incompatible with anionic drugs, 7 forming insoluble compounds which cause the 8 solution to turn cloudy." 9 Do you see that it says those words? Those are the words that are written 10 A 11 down, yes. 12 Q You would agree that that sentence is 13 consistent with the sentence that we just read 14 from EP '984 on page 2, lines 33 through 35. 15 MS. LEBEIS: Objection to the form of 16 the question. Asked and answered. 17 Α They're not exactly the same words. 18 Right. So which words do you think 0 are different? 19 20 A So which were the lines you were 21 asking me about on the '984? 22 Page 2, lines 33 to 35. Q 23 A That says, "BAC has typically been 24 considered to be incompatible with anionic 25 drugs (e.g., salicylates or nitrates, et

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168 1 STEPHEN G. DAVIES, D.PHIL. 2 cetera), " so it's qualified, "forming insoluble 3 complexes which cause the solution to become cloudy or turbid." So the one in '984 is 4 5 qualified. 6 When you say it's "qualified," you 0 7 mean that there are examples that are provided 8 of anionic drugs? 9 Α Yes. And other than the fact that one 10 0 11 patent provides examples of anionic drugs and 12 the other one doesn't, those sentences are consistent with one another, right? 13 14 MS. LEBEIS: Objection to the extent 15 it mischaracterizes prior testimony. 16 Α What's written in the two patents is consistent between the two patents but is 17 18 meaningless to the person reading it on their 19 own. 20 0 Now, if we look at page 5 of Exhibit 5, the WO '597 patent. 21 22 A Yes. 23 The first sentence under "Detailed 0 24 Description" says that "Flurbiprofen is a 25 classic example of an acidic drug that forms an

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	1 <u>12</u> 3			169
1			STEPHEN G. DAVIES, D.PHIL.	
2		insoluble	ion pair with benzalkonium chloride."	
3			Do you see that?	
4		A	Yes.	
5		Q	And flurbiprofen is an acidic NSAID	
6		with a car	rboxylic acid moiety, right?	
7		A	That's correct.	
8		Q	Bromfenac is also an acidic NSAID	
9		with a car	rboxylic acid moiety, right?	
10		A	It is an NSAID, and it has a	
11		carboxylic	c acid group, yes.	
12		Q	And I think we might have established	
13		this earl:	ier. Bromfenac is also an anionic	
14		drug at th	ne relevant pH for ophthalmic	
15		solutions,	, right?	
16			MS. LEBEIS: Objection to the extent	
17		it mis	scharacterizes prior testimony.	
18		A	I've said it before, yes.	
19		Q	Now, if you look at table 1 on pages	
20	1	6 and 7 o:	f WO '597, this is example 5, there	
21		are th:	is table, table 1, provides two the	
22		ingredient	ts of two different formulations of	
23		sodium flu	urbiprofen, right?	
24			MS. LEBEIS: Objection to the extent	
25		it mi:	scharacterizes the document.	

170 1 STEPHEN G. DAVIES, D.PHIL. 2 Sorry, you have to repeat the Α 3 question, please. If you look at table 1 on pages 6 and 4 0 5 7 of the WO '597 in Exhibit 5, table 1 provides the ingredients of two different formulations 6 7 of sodium flurbiprofen, right? 8 MS. LEBEIS: Same objection. 9 А That's what it looks like, yes. 10 Example A in table 1 contains sodium 0 11 flurbiprofen and benzalkonium chloride, right? 12 A That's correct. 13 0 Example B in table 1 contains sodium 14 flurbiprofen and lauralkonium chloride, right? 15 А That's correct. 16 Under the table -- under table 1 on 0 17 page 7, the patent reports -- the patent 18 application reports that example A, that's the 19 example with benzalkonium chloride, "results in 20 a cloudy solution with precipitate and loss of 21 antimicrobial efficacy." 22 Do you see that? 23 A Yes. 24 0 And example B, the one that contained the lauralkonium chloride but no benzalkonium 25

171 STEPHEN G. DAVIES, D.PHIL. 1 chloride, remained as a solution and the 2 3 solution maintains its antimicrobial efficacy. That's what's recorded there, right? 4 That's what's written down. 5 Α The only difference between example A 0 6 7 and example B, in terms of the formulations presented in table 1, is the identity of the 8 9 preservative, right? Yes, that's true. 10 Α So in the formulation with the 11 0 benzalkonium chloride and the acidic NSAID, the 12 patent reports that it became cloudy with a 13 14 precipitate and loss of antimicrobial efficacy, 15 right? MS. LEBEIS: Objection to the extent 16 it mischaracterizes the document. 17 It just says it's cloudy. It doesn't 18 A 19 say what the cloudiness is due to, but it says 20 it's cloudy. 21 Right. And then in the other 0 22 formulation, example B, where the only difference in that formulation was substituting 23 lauralkonium chloride for benzalkonium 24 25 chloride, it reports that the solution remained

172 1 STEPHEN G. DAVIES, D.PHIL. 2 clear, right? MS. LEBEIS: Objection to the extent 3 4 it mischaracterizes the document. 5 It doesn't say it's clear. A 6 0 It says it remains a solution, right? 7 A Yes. 8 Okay. And it maintained its 0 9 antimicrobial efficacy, right? 10 A That's what it says. I don't see the 11 results on that table that it's done so. 12 I'm sorry, what is it that you said Q 13 you don't see? In that table it just says the words 14 А "it maintained." 15 16 If you turn the page to table -- I'm 0 17 sorry, to page 8, do you see table 3? 18 A Yes. 19 That table reports the results of 0 20 a -- microbiology results on the example B 21 formulation, right? 22 MS. LEBEIS: Objection to the extent 23 it mischaracterizes the document. 24 A It doesn't actually say for table 3 25 it's example B. It just says lauralkonium

173 1 STEPHEN G. DAVIES, D.PHIL. chloride itself is able to maintain its 2 3 antimicrobial efficacy of a period of up to one 4 year or more. 5 Then on page 7, line 13, the patent 0 6 reports that example B passes the British 7 Pharmacopeia preservative effectiveness test, 8 right? 9 A That's what it says, yes. 10 Q You're not an expert in preservative 11 efficacy, are you? 12 A No. 13 You're not an expert in any of the 0 14 pharmacopeial methods for evaluating 15 preservative efficacy? 16 A No. 17 You yourself have never evaluated a 0 18 formulation for its preservative efficacy, have 19 you? 20 I have not. А 21 You would agree that a person of 0 skill in the art reading the information in WO 22 23 '597 about the sodium flurbiprofen and benzalkonium chloride formulations would 24 25 conclude that the presence of benzalkonium

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1	STEPHEN G. DAVIES, D.PHIL.	
2	chloride in example A is responsible for the	
3	cloudiness and precipitate formation in the	
4	example A formulation, right?	
5	MS. LEBEIS: Objection.	
6	Mischaracterizes the document.	
7	A I don't think I can agree with that	
8	because we don't know the result of what	
9	happens if you leave out the benzalkonium	
10	chloride altogether. So you have a if you	
11	look at example B, you have a non-cloudy	
12	solution that does contain lauralkonium	
13	chloride. You take that out, and it goes	
14	cloudy. That does not mean it's responsible	
15	for the thing you've added, which is	
16	benzalkonium chloride.	
17	Q Okay. So you can't conclude one way	
18	or another from that data whether or not	
19	benzalkonium chloride is responsible for the	
20	cloudiness of example A?	
21	A I can't, no.	
22	Q It's certainly possible that the	
23	presence of benzalkonium chloride is	
24	responsible for that cloudiness, which is	
25	and removal or replacement of benzalkonium	

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1	STEPHEN G. DAVIES, D.PHIL.
2	with lauralkonium chloride resolved that issue,
3	right?
4	MS. LEBEIS: Objection.
5	Mischaracterizes the document, calls for
6	speculation, asked and answered.
7	A You can't make the conclusion that it
8	is responsible from that.
9	Q Right. But without making any
10	conclusion, it's possible, that's one
11	explanation for what's observed here, that it's
12	the presence of benzalkonium chloride that's
13	responsible for that cloudiness, right?
14	MS. LEBEIS: Same objections.
15	A I don't I wouldn't speculate
16	without the proper experimental data.
17	Q Let's look at your expert report at
18	page 5. This is in Exhibit 1.
19	A Sorry, which page?
20	Q Page 5.
21	A Page 5. Okay.
22	Q You have a footnote 1 there at the
23	bottom. Do you see that?
24	A Yes.
25	Q And in the second sentence of your

176 1 STEPHEN G. DAVIES, D.PHIL. 2 footnote, you write, "An NSAID and a quaternary 3 ammonium compound, however, cannot form a complex and can only potentially form a salt." 4 5 Do you see that? 6 А Yes. 7 0 So you agree that an NSAID and 8 benzalkonium chloride can potentially form a 9 salt, right? 10 MS. LEBEIS: Objection to the extent it mischaracterizes the document. 11 12 I'm talking about chemical А 13 differences between what a complex is and what a salt is. 14 And you wrote, "An NSAID and 15 0 Right. 16 a quaternary ammonium compound can only 17 potentially form a salt, right? 18 MS. LEBEIS: Objection. 19 Mischaracterizes the document. 20 A It's defining what a salt is and what a complex is. There's no -- I don't see how a 21 22 complex can be formed between an NSAID and a 23 quaternary ammonium complex -- compound. But you do see how a salt could be 24 0 25 formed between an NSAID and a quaternary

1 STEPHEN G. DAVIES, D.PHIL. 2 ammonium compound? 3 MS. LEBEIS: Objection, asked and 4 answered. 5 These are definitions of what a salt A 6 and a complex are, and an NSAID itself can't 7 form a salt, and a quaternary ammonium compound can't form a salt with something else directly. 8 9 Right. But an interaction of the Q 10 NSAID and the guaternary ammonium cation could 11 form a salt, right? MS. LEBEIS: Objection to the form of 12 13 the question. 14 A In principle, anything with a 15 negative charge can form a salt with something 16 with a positive charge. Whether or not it ever does depends on the particular circumstances 17 and what the positive and the negative charge 18 19 are. If you put them into solution, then essentially you have a solution of a salt, but 20 21 whether it will ever form a solid salt is --22 you can't predict. 23 So it might, but it might not? 0 MS. LEBEIS: Objection to the form of 24 25 the question. Asked and answered.

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1	STEPHEN G. DAVIES, D.PHIL.	
2	A You have no way of telling unless you	
3	do the experiment.	
4	Q Now, this point you're making in	
5	footnote 1, that's a I think you said before	
6	it's a definitional point, right? You're	
7	defining what a complex is and what a salt is?	
8	MS. LEBEIS: Objection to the extent	
9	it mischaracterizes prior testimony.	
10	A What I'm showing is that under the	
11	definition of complex and salt, NSAIDs and	
12	quaternary ammonium compounds won't form	
13	complexes.	
14	Q Because of you wouldn't use the	
15	terminology "complex" to refer to the potential	
16	entity that would be formed through interaction	
17	of an NSAID and a benzalkonium chloride ion; is	
18	that right?	
19	MS. LEBEIS: Objection to the extent	
20	it mischaracterizes prior testimony.	
21	A Well, I've written down in this	
22	footnote exactly what a complex and a salt is	
23	and what a person of ordinary skill would	
24	understand a complex and a salt is, and	
25	Dr. Lawrence's defini use of complex is not	

179 1 STEPHEN G. DAVIES, D.PHIL. 2 correct. 3 Let's go back again just for a moment 0 to Exhibit 2, the '876 patent. 4 If you look at column 1, line 16 --5 Sorry, I've got the wrong exhibit. 6 Α 7 We're in Exhibit 2, '876. 0 8 A Okay. Column 1? Column 1. 9 0 10 MS. LEBEIS: Make sure that you're 11 there before answering. 12 0 Line 16. 13 You would agree that the authors of 14 the '876 patent, right or wrong in your view, 15 right or wrong, they refer to whatever is -whatever they're hypothesizing is the 16 interaction between BAC and NSAIDs as insoluble 17 18 complexes. Do you see that word "complexes" on 19 line 16? 20 MS. LEBEIS: Objection to the form of 21 the question. 22 Well, they're using the word Α "insoluble complexes" but without any evidence 23 24 that they would actually form. Since they 25 can't form complexes, I'm not -- I don't expect

180 1 STEPHEN G. DAVIES, D.PHIL. 2 them to be formed, and a person of ordinary 3 skill reading this wouldn't expect complexes to be formed. 4 5 Okay. So we've established that the 0 6 '876 patent uses that term "complexes," right? 7 MS. LEBEIS: Objection to the extent 8 it mischaracterizes prior testimony. 9 Would you agree with me that the '876 0 patent uses the term "complexes"? 10 11 The word "complexes" is written in А 12 the '876. 13 Then let's look, if you would, at Q 14 the -- Exhibit 3, the '929 patent. A Yes. 15 16 Q And if we can go in Exhibit 3 to 17 column 1, line 34. 18 A Yes. 19 And you would agree that the '929 0 20 patent also uses the word "complexes" in 21 describing this phenomenon, right? 22 MS. LEBEIS: Objection to the form of 23 the question. Well, I don't think there is a 24 A 25 phenomenon, and maybe it is because they can't

181 STEPHEN G. DAVIES, D.PHIL. 1 2 form complexes. 3 Okay. But you see that it uses the 0 4 term "complexes" there to describe the 5 interaction between NSAIDs and BAC? MS. LEBEIS: Objection to the extent 6 it mischaracterizes the document and to the 7 8 extent it mischaracterizes prior testimony. 9 Objection to the form of the question. 10 Α It uses the word "complexes," but there's no evidence that an interaction between 11 12 an NSAID and benzalkonium occurs. 13 Then if you look at Exhibit 4, which 0 14 is the EP '984 patent we were looking at 15 earlier --16 A Okay. -- and we look at page 2, line 34 --17 0 18 A Yes. -- the EP '984 patent also uses the 19 0 word "complexes" to describe the interaction 20 21 between BAC and anionic drug compounds, right? 22 MS. LEBEIS: Objection to the extent it mischaracterizes the document. 23 24 А Well, without any evidence it's a 25 hypothetical interaction. They use the word

STEPHEN G. DAVIES, D.PHIL. 1 2 "complexes," but there's no evidence that 3 complexes or salts form. 4 So it's your view that a person of 0 5 skill in the art -- and, again, a person of 6 skill in the art related to these patents that 7 are at issue, that person wouldn't use the word 8 "complex" in talking about the interaction of NSAIDs and benzalkonium chloride even though 9 10 each of the prior art references that we looked 11 at just now all use that word in referring to 12 that interaction --13 MS. LEBEIS: Objection. 14 0 -- is that right? 15 MS. LEBEIS: Objection to the extent 16 it mischaracterizes prior testimony. And 17 objection to the form of the question. 18 Whatever the personal people writing Α 19 these patents are using for a term to describe 20 the precipitate or whatever, there's no 21 evidence that such a precipitate exists. 22 But in your view, all these people 0 23 writing these patents, they're all wrong to 24 refer to it as a complex, right? 25 MS. LEBEIS: Objection.

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183 STEPHEN G. DAVIES, D.PHIL. 1 2 Mischaracterizes prior testimony and 3 argumentative. It's not -- it does not fit within 4 A 5 the absolute definition of a complex or a salt. From a chemist's perspective. 6 0 From any scientist's perspective. 7 A Except for these scientists who wrote 8 0 these patents, right? 9 10 MS. LEBEIS: Objection to the extent 11 it mischaracterizes prior testimony. 12 Argumentative. Asked and answered. There's no evidence what the 13 Α precipitate is so they may well think it is a 14 complex, but I can't see how one forms. 15 Could you envision a way in which a 16 0 17 salt might form between an NSAID and 18 benzalkonium chloride? 19 MS. LEBEIS: Objection. Calls for 20 speculation. 21 A I can envisage a way that a salt can 22 be formed in solution. Well, as I said 23 previously, potentially a salt can form from anything that has a plus charge with anything 24 25 that has a minus charge. And whether it does

1 STEPHEN G. DAVIES, D.PHIL. 2 requires experimentation to find out. 3 So, potentially, a salt could form Q 4 between the plus charge of the benzalkonium ion 5 and the minus charge of an NSAID compound at 6 pHs relevant to ophthalmic solutions? 7 MS. LEBEIS: Objection to the form of the question. Calls for speculation. 8 9 Improper -- incomplete and improper 10 hypothetical. 11 A It's a theoretical possibility, but 12 without any evidence, you don't know it's going 13 to happen. 14 MS. RAPALINO: Let's mark as Davies 15 Exhibit 6 U.S. Patent Number 5,110,493. (Exhibit 6 was marked for identification 16 and attached to the deposition transcript.) 17 BY MS. RAPALINO: 18 19 Exhibit 6 is another U.S. patent you 0 20 reviewed in forming your opinions in this case? 21 А (Document review.) 22 I don't recall looking at it at this 23 Can you refresh my memory? moment. Okay. We'll just take a look at the 24 Q 25 patent, and maybe, as we look at it, that will

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1	STEPHEN G. DAVIES, D.PHIL.	
2	refresh your memory. This patent issued in May	
3	of 1992, right? That's the date of the patent?	
4	MS. LEBEIS: Objection calls for a	
5	legal conclusion.	
6	A It says the date of the patent is May	
7	1992.	
8	Q It's entitled, "Ophthalmic NSAID	
9	formulations containing a quaternary ammonium	
10	preservative and a nonionic surfactant," right?	
11	A And a nonionic, yes.	
12	Q The first sentence of the abstract on	
13	the cover page of the '493 patent, Exhibit 6,	
14	describes the invention as directed to a	
15	"stable, clear, antimicrobially effective	
16	ophthalmic formulation," right?	
17	MS. LEBEIS: Objection to the extent	
18	it mischaracterizes the document.	
19	A So that's the first part of the first	
20	sentence, yes.	
21	Q Right. And the rest of that sentence	
22	more specifically describes the subject of the	
23	patent as formulations including "especially a	
24	carboxylic acid group-containing drug or an	
25	NSAID, a quaternary ammonium preservative, and	

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1	STEPHEN G. DAVIES, D.PHIL.	
2	a nonionic surfactant all in an aqueous	
3	vehicle," right?	
4	MS. LEBEIS: Objection.	
5	Mischaracterizes the document.	
6	A Well, that's what it says in the	
7	abstract. Whether that's what it does in the	
8	rest of it, we would have to have a look.	
9	Q That's what the abstract says anyway,	
10	right?	
11	A You've just read from the abstract,	
12	so yes.	
13	Q If you look at column 1, starting at	
14	line 36	
15	A Okay.	
16	Q the patent says, "While the	
17	formulations described in the '151 patent were	
18	efficacious, a complex was found to form	
19	between the NSAID and BAC." Do you see that?	
20	A That's what it says, yes.	
21	Q And, again, this patent uses the term	
22	"complex" to describe the interaction between	
23	NSAID and BAC, right?	
24	MS. LEBEIS: Objection to the extent	
25	it mischaracterizes the document.	

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187 STEPHEN G. DAVIES, D.PHIL. 1 2 Α Well, I assume it's quoting from the 3 '151 patent rather than using it itself. 4 But it repeats then what the '151 0 5 patent -- what you suppose the '151 patent 6 says, which is that it's a complex that forms 7 between the NSAID and BAC? 8 MS. LEBEIS: Objection to the extent it mischaracterizes prior testimony. 9 10 Α We would have to look at the '151 11 patent to see what it actually says. I haven't 12 seen any evidence that precipitate forms 13 between an NSAID and BAC. 14 Again, just to be clear, this patent, Q the '493 patent, refers to a complex. It uses 15 16 the word "complex" when talking about the interaction between NSAID and BAC, right? 17 18 MS. LEBEIS: Objection to the extent 19 it mischaracterizes the document and prior 20 testimony and asked and answered. Well, the word "complex" is there, 21 A 22 but looks like it's a quote from the '151 23 rather than the authors of the '493 using it. 24 0 And if we look at the bottom of 25 column 1, line 65, in the '493 patent, which is

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1	STEPHEN G. DAVIES, D.PHIL.
2	Exhibit 6
3	A Okay.
4	Q it says, "Benzalkonium chloride, a
5	quaternary ammonium compound, has been widely
6	used in ophthalmic solutions and is considered
7	to be the preservative of choice."
8	Do you see that?
9	A That's what it says there, yes.
10	Q That's consistent with the
11	descriptions of benzalkonium chloride that
12	we've seen in some of the other patents we've
13	looked at, right?
14	MS. LEBEIS: Objection to the form of
15	the question.
16	A Similar statements have been made but
17	without any substantiation.
18	Q Then the next sentence goes on to
19	say, "However, BAC has typically been
20	considered to be incompatible with anionic
21	drugs (e.g., salicylates or nitrates, et
22	cetera), and can be inactivated by
23	surfactants."
24	Do you see that?
25	A That's what it says there.

1 STEPHEN G. DAVIES, D.PHIL. 2 If you go to column 2, line 8, the 0 '493 patent also says that "These NSAIDs have 3 proven to be incompatible with quaternary 4 5 ammonium compounds such as BAC because they can form a complex with them, rendering the 6 preservative less available to serve its 7 function, as is the case with other ophthalmic 8 9 drugs that contain a carboxylic acid group." 10 Do you see that? 11 MS. LEBEIS: Objection. 12 Mischaracterizes the document. 13 Well, you're reading from the patent A 14 so I can see the words. So that statement in the '493 patent, 15 0 that's consistent with statements we've seen in 16 17 the prior -- each of the prior patents that 18 we've looked at, right? 19 MS. LEBEIS: Objection to the form of 20 the question. 21 А Well, similar statements have been 22 made in other places but without demonstration 23 that it forms a complex. And if we look at column 4 of the 24 0 25 '493 patent --

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190 1 STEPHEN G. DAVIES, D.PHIL. 2 A Yes. 3 0 -- you see that there's a paragraph that begins at around line 20 that starts, 4 5 "NSAIDs useful in the practice of this invention"? 6 А 7 Yes. 8 That paragraph lists a number of 0 NSAIDs for use in the formulations of this 9 invention, right? 10 11 Objection to the extent MS. LEBEIS: 12 it mischaracterizes the document. 13 THE WITNESS: Can you repeat the 14 question, please. 15 (Record read.) 16 Α It lists some NSAIDs, yes, none of 17 which are bromfenac. But it lists some. 18 And the patent here doesn't describe Q 19 any structural differences between these 20 different NSAIDs that would affect their use in 21 this formulation, right? 22 Well, it just names them, so -- and A 23 in context of the patent, they wouldn't need 24 to. 25 And there's no discussion in this Q

1 STEPHEN G. DAVIES, D.PHIL. 2 patent of any differences in electron density 3 between those different NSAIDs that would be 4 relevant to the use of these patents in this 5 formulation? Such a discussion wouldn't be 6 A 7 relevant to this patent so they wouldn't need 8 to discuss them. There's also no discussion in here of 9 0 10 any differences between any of those listed 11 NSAIDs in terms of whether they're primary, 12 secondary, or tertiary amines as relevant to whether they would be useful in this 13 14 formulation? 15 They obviously didn't think it was Α 16 necessary to do so, no. 17 There's also no discussion here of 0 18 the presence or absence of halogenation of the different NSAIDs listed here as being relevant 19 20 to their use in this formulation, right? 21 They don't need to in the context of Α 22 the patent. There's likewise no discussion here 23 0 24 of differences in lipophilicity as between 25 these different NSAIDs listed in column 4 with

192 1 STEPHEN G. DAVIES, D.PHIL. 2 respect to their usefulness in the formulation 3 of the patent, right? Α There's no discussion because they 4 5 wouldn't need to. 6 And, likewise, there is no discussion Q 7 here about the differences in degree of 8 hydrogen bonding as between the different NSAIDs set forth in this patent as useful in 9 this formulation? 10 11 А The same answer. They don't need to 12 discuss it in the context of the patent. 13 0 The nonionic surfactants that are 14 called out as useful in the formulations in this patent at column 4, starting at line 32, 15 16 include preferably polyoxyethylated surfactants, right? 17 18 Α That's what it says, yes. And I think you -- is that the same 19 0 20 as saying polyethoxylated octylphenol 21 surfactant? 22 A Yes. 23 And I think you said earlier that Q 24 octoxynol 40 is one such surfactant, right? 25 A Yes.

193 STEPHEN G. DAVIES, D.PHIL. 1 2 Tyloxapol is another polyoxyethylated 0 3 surfactant, right? It's one of a very large family of 4 A 5 such compounds, each of which have their own 6 properties. 7 So tyloxapol is in the family of 0 polyethoxylated surfactants? 8 It has chains of polyoxyethylated 9 A 10 groups attached to it. In that sense, yes. 11 And it's actually a polyethoxylated 0 12 octylphenol surfactant, right? Well, you say oligomer of -- not an 13 Α 14 oligomer. It's a co- -- it's got a group -it's got seven such head groups and seven 15 chains. 16 17 You wouldn't want to call it an 0 18 oligomer, would you? 19 It's not an oligomer. Α 20 0 Okay. 21 Α I misspoke. 22 0 And it's an -- the head group -- the 23 head groups in tyloxapol are octylphenol head groups, right? 24 25 It has -- tyloxapol has seven such A

194 1 STEPHEN G. DAVIES, D.PHIL. 2 head groups. 3 0 By "such," you mean seven octylphenol 4 head groups? 5 A Substituted octylphenols, yes. 6 0 So you would agree that it's in the 7 family of polyethoxylated octylphenol surfactants? 8 9 A It's one of a very large number of 10 such things, each of which will have its own 11 properties. 12 0 As of 2003, how many polyethoxylated 13 octylphenol compounds have been used in 14 approved ophthalmic solutions? 15 MS. LEBEIS: Objection. Calls for 16 speculation. 17 A I haven't done that analysis. 18 So you didn't consider how many Q 19 ethoxylated octylphenol surfactants were in use 20 in approved pharmaceutical products in reaching 21 your opinions in this case? 22 MS. LEBEIS: Objection, asked and 23 answered, form of the question. 24 I didn't do the analysis of how many А 25 there were.

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1	STEPHEN G. DAVIES, D.PHIL.
2	MS. RAPALINO: Let's mark as Davies
3	Exhibit 7 U.S. Patent 5,504,113.
4	(Exhibit 7 was marked for identification
5	and attached to the deposition transcript.)
6	BY MS. RAPALINO:
7	Q This is another U.S. patent, right?
8	A It's a United States patent, yes.
9	Q Do you recall whether you considered
10	this patent in forming your opinions in this
11	case?
12	A I believe I did, yes.
13	Q It's a patent that the date of the
14	patent is April of 1996, right?
15	A That's correct.
16	Q It's entitled "Enhancement of
17	benzalkonium chloride preservative activity in
18	formulations containing an incompatible drug,"
19	right?
20	A That's what the title says, yes.
21	Q What did you understand incompatible
22	drug to mean in that title?
23	A Well, I didn't know when I read the
24	patent precisely because they don't don't
25	they give an example of the I'll have to

196 STEPHEN G. DAVIES, D.PHIL. 1 2 check -- of an incompatible drug? 3 0 Are you familiar with The Merck Index? 4 5 A Yes. 6 Is that a reference that you use in 0 7 your work? 8 А I have used it, yes. It's on my 9 shelf. 10 Q And is it a reliable reference? 11 MS. LEBEIS: Objection. Calls for 12 speculation. 13 It's what it is. It gives you a very Α 14 brief summary of a somewhat random list of 15 properties of biologically active molecules. 16 When you say it's on your shelf, is 0 17 it a book that you consult and rely upon in the 18 course of doing your work? 19 MS. LEBEIS: Objection, asked and 20 answered. 21 I use it very infrequently. It's on А 22 my shelf because they gave it to me. 23 Who gave it to you? 0 24 Whoever publishes The Merck Index. Α 25 Okay. Is it a -- is it a common 0

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1	STEPHEN G. DAVIES, D.PHIL.	
2	reference text for chemists to use?	
3	A It used to be before Google arrived.	
4	Q As of 2003 I guess Google was	
5	probably around, but was it something that was	
6	in use in around 2003?	
7	A I would think so.	
8	Q If we look at going back now to	
9	Exhibit 7, the '113 patent	
10	A Okay.	
11	Q the abstract of this patent	
12	describes the patent as covering a formulation	
13	that includes an acceptable drug, including	
14	flurbiprofen or ketorolac tromethamine that is	
15	interactive with benzalkonium chloride, right?	
16	MS. LEBEIS: Objection.	
17	Mischaracterizes the document.	
18	A Sorry, what was the question that you	
19	asked me.	
20	Q The abstract of this patent describes	
21	the patent as covering a formulation that	
22	includes an acceptable drug including	
23	flurbiprofen or ketorolac tromethamine that is	
24	interactive with benzalkonium chloride, right?	
25	A That's what it says in the abstract,	

198 STEPHEN G. DAVIES, D.PHIL. 1 2 but you have to read the body of the patent to 3 see what they're actually doing. 4 0 We'll get there. 5 And the abstract specifies that 6 interactive with benzalkonium chloride means 7 that the drug forms a precipitate with 8 benzalkonium chloride, right? 9 I don't think they give any evidence A that that's the case. 10 11 0 That's what the abstract says, right? 12 MS. LEBEIS: Objection, asked and answered. 13 14 That's what the words in the abstract A 15 say. It's meaningless unless there's some evidence produced. 16 17 And then if we look at column 1 of 0 the '113 patent, and I'm looking now starting 18 19 at line 31 --20 Α Okay. -- it says, "Therefore, benzalkonium 21 0 22 chloride, which is a quaternary ammonium 23 compound, has been widely used in ophthalmic 24 solutions." 25 Do you see that?

199 STEPHEN G. DAVIES, D.PHIL. 1 2 A That's what it says. 3 That's consistent with prior 0 statements we have seen in other patents we've 4 looked at? 5 MS. LEBEIS: Objection to the form of 6 7 the question. A The words are consistent, but nowhere 8 is any evidence produced. 9 10 And then it goes on to say, "It is 0 also well-known, however, that benzalkonium 11 12 chloride is considered incompatible with 13 anionic drugs, forming insoluble complexes 14 which cause the solution to turn cloudy." 15 Do you see that it says that? 16 А The words are there, yes. And those words are also consistent 17 0 18 with the prior statements we've seen in the 19 other patents we've looked at, right? 20 MS. LEBEIS: Objection to the form of 21 the question. It's consistent with the words in 22 Α 23 other patents, but in no case has it been 24 demonstrated that any cloudiness is due to 25 insoluble complexes.

200 1 STEPHEN G. DAVIES, D.PHIL. 2 Then the next paragraph starting at 0 3 line 37 goes on to say, "This is because of the 4 fact that many anionic drug entities carry a 5 negative charge at physiological pH. In fact, 6 all acidic drug entities will carry a negative 7 charge at all pHs above their PKAs." 8 Do you see that? 9 Α I can read that, yes. 10 0 Okay. And you agree that anionic 11 drug entities -- I'm sorry, acidic drug 12 entities will carry a negative charge at all 13 pHs above their PKAs? 14 Α That is correct, yes. 15 Then the next sentence goes on to 0 16 say, "In the case of benzalkonium chloride, 17 which is a positively charged preservative, 18 insoluble complexes can be formed with acidic 19 drug entities causing the drug to precipitate 20 out of solution." 21 Do you see that? 22 A I read those words, yes. 23 You agree that benzalkonium chloride 0 24 is a positively charged preservative, right? 25 А Well, it contains the benzalkonium

201 STEPHEN G. DAVIES, D.PHIL. 1 2 cation that is positively charged, and it's a 3 preservative, I agree with that. 4 And given that benzalkonium -- the 0 5 benzalkonium ion is a positively charged ion 6 and that acidic drug entities will be 7 negatively charged at pHs above their PKAs, you 8 agree that insoluble salts may form between an 9 acidic drug and benzalkonium chloride, causing 10 the drug to precipitate out of solution, right? 11 MS. LEBEIS: Objection to the form of 12 the question, calls for speculation, and to 13 the extent it mischaracterizes the 14 document. 15 It's possible that a salt could be Α 16 formed under certain circumstances between 17 anything that has a positive charge and 18 anything that has a negative charge, but I have 19 seen no evidence to suggest that it happens in 20 the cases that are being discussed here. And then if we look down to the 21 0 22 paragraph that begins just after that chemical 23 structure in column 1, so we're about line 24 57 --25 A Yes.

202 1 STEPHEN G. DAVIES, D.PHIL. -- it says, "As hereinbefore noted, 2 0 3 it is well-known that benzalkonium chloride is generally incompatible with anionic detergents 4 or anionic drug compounds." 5 Do you see that? 6 7 А That's what the words say there, yes. 8 For that proposition, the patent 0 9 cites The Merck Index, 11th Edition, Merck & 10 Company, Inc., 1989, right? MS. LEBEIS: Objection. 11 12 Mischaracterizes the document. 13 It says "See The Merck Index." Α The Merck Index isn't a primary source of results. 14 So I doubt there's any data in The Merck Index. 15 16 0 Okay. But it cites The Merck Index 17 for the proposition that BAC is "generally 18 incompatible with anionic detergents or anionic 19 drug compounds, " right? 20 MS. LEBEIS: Objection. 21 Mischaracterizes the document. 22 А The Merck Index is cited in that 23 paragraph, yes. 24 MS. RAPALINO: Let's mark as Davies 25 Exhibit 8 U.S. Patent 6,265,444.

203 STEPHEN G. DAVIES, D.PHIL. 1 2 (Exhibit 8 was marked for identification 3 and attached to the deposition transcript.) BY MS. RAPALINO: 4 5 Exhibit 8 is a U.S. patent that you 0 6 considered in forming your opinions in this 7 case; is that right? 8 Α It is, yes. 9 Q It issued, or the date of the patent 10 is July 2001, right? 11 A The date of the patent is, yes, July 12 2001. 13 It's entitled "Ophthalmic 0 14 composition"? 15 Yes. Α 16 0 And it's assigned to InSite Vision, 17 Incorporated, right? 18 Α Yes, it is. 19 Then if we look at column 2, starting 0 20 at line 34, the '444 patent at Exhibit 8 says, 21 "Additionally, preserving an ophthalmic 22 composition that contains an NSAID can be 23 problematic." 24 Do you see that? 25 MS. LEBEIS: Objection.

204 1 STEPHEN G. DAVIES, D.PHIL. 2 Mischaracterizes the document. 3 That's what it says in the A introductory part to this patent without any 4 5 evidence, yes. And then the next sentence goes on to 6 0 7 say, "Conventional broad spectrum antimicrobial 8 agents like BAC tend to interact with the NSAID 9 agents over time and thereby reduce the efficacy of the medication." 10 11 Do you see that? 12 MS. LEBEIS: Objection. 13 Mischaracterizes the document. That's what it says in this 14 A 15 introductory part of the patent without any 16 data to back it up. And those statements are consistent 17 0 with the statements that we've seen in the 18 19 prior patents that we looked at, right? 20 MS. LEBEIS: Objection to the form of 21 the question. Vague and ambiguous. 22 А We've seen similar statements, but 23 there's never anything to back it up. 24 0 If you look for a moment at the 25 claims of this patent, the '444 patent,

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1		STEPHEN G. DAVIES, D.PHIL.	
2	starting	at column 15 and going on to column	
3	16.		
4	А	Yes.	
5	Q	Do you see that this patent is	
6	generally	directed to compositions that are	
7	suspensio	ns?	
8		MS. LEBEIS: Objection. Calls for a	
9	legal	conclusion.	
10	A	Where do I see that?	
11	Q	So, for example, if we look at claim	
12	1, it tal	ks about compositions wherein from	
13	"about 80	mole percent to less than 100 mole	
14	percent o	f said agent is in the form of a	
15	precipita	te."	
16		Do you see that?	
17	A	I see that, yes.	
18	Q	And do you understand that to be a	
19	suspensio	n formulation?	
20	A	Not without reading the bulk of the	
21	patent.		
22	Q	Do you see, in claim 29 at column 16,	
23	that the	composition being claimed explicitly	
24	describes	it as an aqueous suspension?	
25	А	Well, it says, "An ophthalmic	

206 1 STEPHEN G. DAVIES, D.PHIL. 2 composition comprising an aqueous suspension of 3 a crosslinked carboxyl-containing polymer, solid diclofenac in free acid form, dissolved 4 5 diclofenac, and dissolved magnesium two plus or 6 calcium two plus cations." So that says it's a 7 suspension. 8 0 Okay. 9 Then if you look at column 7 of the 10 '444 patent at line 55. 11 Α Line what, say, 65? 12 Line 55. 0 13 55. А 14 0 Do you see that the patent says, "It 15 should be noted that BAC was found to be 16 unexpectedly compatible with diclofenac in the 17 present ophthalmic composition"? 18 A That's what it says, so that means, 19 presumably, there was no complex or precipitate 20 formed. 21 Could you point me to the 0 22 experimental data that shows that in this 23 patent. 24 A I'm just reading the words you just 25 read to me.

		207
1	STEPHEN G. DAVIES, D.PHIL.	
2	Q Okay. So in this instance you feel	
3	that you can just read the words without the	
4	experimental data?	
5	MS. LEBEIS: Objection,	
6	argumentative, and to the extent it	
7	mischaracterizes prior testimony.	
8	A Well, as I read it, it implies	
9	well, I better look at the read the whole	
10	thing again. But it says it's unexpectedly	
11	compatible, presuming nothing untoward is going	
12	on. So there's no adverse event.	
13	Q So when it says that when the	
14	statement in the patent is that it was	
15	unexpectedly compatible, you just take that at	
16	face value, but statements that say that	
17	benzalkonium chloride and NSAIDs are	
18	incompatible, for those you would need some	
19	experimental data? Is that your position?	
20	MS. LEBEIS: Objection to the extent	
21	it mischaracterizes prior testimony,	
22	argumentative, and asked and answered.	
23	A This is in I'm reading it in the	
24	Detailed Description of the Invention.	
25	Q Oh, so because it's in the section	

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1	STEPHEN G. DAVIES, D.PHIL.	
2	"Detailed Description of the Invention," you	
3	don't need experimental data to believe it; is	
4	that right?	
5	MS. LEBEIS: Objection to the extent	
6	that it mischaracterizes prior testimony,	
7	argumentative, and asked and answered.	
8	A Well, I think there's a difference	
9	between assuming there's a problem in some	
10	instances and being told there is no problem in	
11	another instance. That's different.	
12	Q Is there any difference between being	
13	told there is a problem and being told there	
14	isn't a problem?	
15	MS. LEBEIS: Objection to the extent	
16	it mischaracterizes prior testimony,	
17	argumentative, and asked and answered.	
18	A I would say there's no there's	
19	only a problem when you encounter one. If you	
20	don't encounter a problem, that's fine.	
21	Q And you'd take at face value a	
22	statement that no problem was encountered, but	
23	you wouldn't take at face value a statement	
24	that a problem was encountered? Is that your	
25	view?	

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209 1 STEPHEN G. DAVIES, D.PHIL. 2 MS. LEBEIS: Objection to the extent 3 it mischaracterizes prior testimony, argumentative, and asked and answered. 4 5 I've seen no evidence that a problem A 6 exists with an acid precipitating or causing 7 turbidity with benzalkonium salts whereas this is describing a nonproblem. 8 So to believe a statement about a 9 0 10 nonproblem, you don't need experimental data to 11 show that? 12 MS. LEBEIS: Objection to the extent 13 it mischaracterizes prior testimony, 14 argumentative, and asked and answered. 15 A problem only exists when it occurs. А 16 If something works the way it is supposed to 17 work and there is no problem, why invent one. What do you understand the authors to 18 0 19 mean when they say that BAC was unexpectedly 20 compatible with diclofenac? What do you understand to be unexpected about that? 21 22 MS. LEBEIS: Objection to the extent 23 it calls for speculation. Mischaracterizes 24 the document. 25 I don't know is the answer, but what A

210 1 STEPHEN G. DAVIES, D.PHIL. 2 you take out of that is BAC is compatible with diclofenac. 3 And you don't take out of that that 4 0 5 the authors didn't expect BAC to be compatible 6 with diclofenac? 7 MS. LEBEIS: Objection to the extent 8 it mischaracterizes prior testimony. 9 Argumentative. 10 Α The sentence says what it says. What 11 I take out of it is that BAC is compatible with 12 diclofenac. What they're expecting or not is irrelevant to the fact that BAC is compatible 13 with diclofenac. It does not precipitate. 14 Now, the authors of this patent 15 0 16 hypothesize a theory as to why this -- why BAC is unexpectedly compatible with diclofenac in 17 18 the formulations discussed in this patent, 19 right? 20 MS. LEBEIS: Objection to the extent 21 it mischaracterizes the document. 22 Α You'll have to show me where that is. 23 Q I'm looking at column 7, starting at 24 line 57. 25 Well, they're basically saying they A

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STEPHEN G. DAVIES, D.PHIL. 1 haven't got a clue because they say "the 2 3 reasons are not entirely clear, and without wishing to be bound by any theory, the presence 4 5 of the divalent cation is believed to prevent BAC from complexing the diclofenac out of the 6 7 system." There's no basis for that. So what is the theory they're 8 0 proposing here as to why the BAC here is 9 unexpectedly compatible with diclofenac? 10 MS. LEBEIS: Objection to the extent 11 it mischaracterizes the document. 12 They haven't really got one. 13 Α They're 14 just basically saying that because there's some divalent cations in there, maybe that's got 15 something to do with it, but they don't want to 16 17 be bound by it at all because they have no experimental evidence that that's true. 18 Right. So they're just proposing a 19 0 theory as to what might be preventing the BAC 20 from complexing with the NSAID, right? 21 MS. LEBEIS: Objection to the extent 22 it mischaracterizes the document. 23 24 They're not really proposing a theory Α because they say they don't want to be bound by 25

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1 STEPHEN G. DAVIES, D.PHIL. 2 it. 3 0 Right. But they say that's what they 4 believe is happening. 5 MS. LEBEIS: Objection to the extent 6 it mischaracterizes the document. 7 A You have to read the whole sentence. 8 It's obvious that they are completely unsure 9 what's going on. 10 Right. They're not sure, but they 0 11 say "the presence of the divalent cation is 12 believed to prevent the BAC from complexing the diclofenac out of the system, " right? 13 14 MS. LEBEIS: Objection to the extent 15 it mischaracterizes the document. Asked 16 and answered. 17 A A person of ordinary skill reading 18 that sentence would understand they don't know 19 what's going on. 20 And a person of skill in the Q Right. 21 art would understand that they believe that the 22 presence of the divalent cation is preventing 23 the BAC from complexing the diclofenac out of 24 the system, right? 25 Objection to the extent MS. LEBEIS:

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	2	213
1	STEPHEN G. DAVIES, D.PHIL.	
2	it mischaracterizes the document and to the	
3	extent it mischaracterizes prior testimony,	
4	asked and answered.	
5	A If you read the whole sentence, it's	
6	clear they don't know what's going on.	
7	Q They don't know for certain what's	
8	going on, right?	
9	MS. LEBEIS: Objection, asked and	
10	answered.	
11	A They don't know what's going on, and	
12	that's why they say that they don't want	
13	that it's not clear and they don't want to be	
14	bound by anything they're talking about.	
15	Q But then they postulate a theory,	
16	right?	
17	MS. LEBEIS: Objection, asked and	
18	answered.	
19	A If you read the whole sentence, as I	
20	read the whole sentence, it's clear they don't	
21	know what's going on.	
22	Q You haven't seen any prior art	
23	bromfenac formulations that contain magnesium	
24	chloride or calcium chloride, have you?	
25	MS. LEBEIS: Objection. Calls for	

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214 STEPHEN G. DAVIES, D.PHIL. 1 2 speculation. Vague and ambiguous. 3 А I don't recall any. MS. LEBEIS: I think it might be a 4 5 good time for a break. We've been going for about an hour and a half. Short break? 6 7 MS. RAPALINO: Sure, take a break. 8 THE VIDEOGRAPHER: We're going off 9 the record at 2:41 p.m. 10 (A brief recess was taken.) 11 THE VIDEOGRAPHER: We're going back 12 on the record at 2:51 p.m. This is the 13 start of disc number 5 in the deposition of 14 Stephen Davies. MS. RAPALINO: Let's mark as Davies 15 16 Exhibit 9 U.S. Patent 5,597,560. (Exhibit 9 was marked for identification 17 18 and attached to the deposition transcript.) BY MS. RAPALINO: 19 20 Q Is this a patent you considered in forming your opinions in this case? 21 22 А Yes. 23 The date of the patent is January of 0 24 1997, right? 25 А That's correct.

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1	STEPHEN G. DAVIES, D.PHIL.	
2	Q It's entitled, "Diclofenac and	
3	tobramycin formulations for ophthalmic and otic	
4	topical use," right?	
5	A Yes.	
6	Q If we look at column 2, starting at	
7	line 18	
8	A Yes.	
9	Q do you see that the patent	
10	describes that "Fu, et al., reports that the	
11	use of nonionic surface active agents,	
12	especially polyoxyethylene alkylphenol	
13	surfactants, avoids the unacceptable	
14	interactions between NSAID and quaternary	
15	ammonium compounds, wherein the NSAID and	
16	quaternary ammonium compound form a complex	
17	that is either insoluble or retards the	
18	absorption of the NSAID"?	
19	A That's what it says there, yes.	
20	Q This reference to "unacceptable	
21	interactions between NSAID and quaternary	
22	ammonium compounds" is consistent with the	
23	statements we've seen in the other patents we	
24	looked at regarding those interactions, right?	
25	MS. LEBEIS: Objection to the form of	

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216 1 STEPHEN G. DAVIES, D.PHIL. 2 the question. Vague and ambiguous. 3 It's consistent with some of the A other things we've seen, but yet again, there's 4 5 no evidence that the problem actually exists. 6 This statement also refers to the use 0 7 of polyoxyethylene alkylphenol surfactants as a 8 way of avoiding unacceptable interactions. Do 9 you see that? Well, it's -- that's what it said, 10 A 11 but since we haven't seen any evidence that 12 there are unacceptable interactions between an 13 NSAID and quaternary ammonium compounds, it's 14 hard to see what's been avoided. 15 0 Then if we look at column 6, 16 comparative example C, toward the bottom -- do 17 you see that? 18 A Yes. 19 And it describes in comparative 0 20 example C that two comparative controls were 21 prepared, one with sodium diclofenac as the 22 active and the other with tobramycin as the 23 active ingredient. Do you see that? 24 MS. LEBEIS: Objection to the extent 25 it mischaracterizes the document.

	21	7
1	STEPHEN G. DAVIES, D.PHIL.	
2	A That's what it says.	
3	Q And those were compared to another	
4	formulation that had diclofenac, tobramycin,	
5	benzalkonium chloride, and octoxynol 40, right?	
6	I'm just reading at the beginning of	
7	comparative example C now.	
8	A Oh.	
9	Okay, yes.	
10	Q So then you would agree with me the	
11	comparative controls were the same as that	
12	formulation of sodium diclofenac, tobramycin,	
13	benzalkonium chloride, octylphenol 40, but just	
14	each of those controls had just a single active	
15	ingredient, right?	
16	MS. LEBEIS: Objection to the extent	
17	it mischaracterizes the document.	
18	A (Document review.)	
19	I'm sorry, what was the question,	
20	please?	
21	Q I'm just trying to make sure we	
22	both we're on the same page in terms of what	
23	they're doing in comparative example C.	
24	A Yes.	
25	Q So you would agree that there was one	
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218 1 STEPHEN G. DAVIES, D.PHIL. formulation that contained sodium diclofenac, 2 tobramycin, BAC, and octoxynol 40, right? 3 А Yes. 4 5 0 Then there were two controls, each of which contained either diclofenac or tobramycin 6 7 along with those other ingredients that were in 8 that first formulation, right? 9 MS. LEBEIS: Objection to the extent 10 it mischaracterizes the document. 11 Dr. Davies, you should feel free to 12 read the entirety of comparative example C 13 and not just the portions that counsel has directed you to. 14 (Document review.) 15 A 16 It doesn't specifically say that all 17 of the other components were the same. 18 0 Is that your understanding of what a 19 control is? 20 A I guess in this case we can take 21 that. 22 And you would agree that the 0 23 formulation that contains diclofenac, BAC, and 24 tyloxapol after 41 days at 4 degrees did not 25 develop a precipitate, right?

219 STEPHEN G. DAVIES, D.PHIL. 1 2 Objection to the extent MS. LEBEIS: 3 it mischaracterizes the document. Repeat the question --4 А 5 0 Sure. -- please. 6 А The control formulation containing 7 Q diclofenac, BAC, and octoxynol 40 did not 8 9 develop a precipitate after storage for 41 days at 4 degrees, right? 10 After 41 days they didn't develop a 11 A 12 precipitate. 13 0 Right. 14 You agree with that? 15 А That -- I agree with that, yes. I note that a precipitate that was 16 17 formed isn't anything to do with BAC. There was a precipitate that 18 Right. 0 19 formed in the presence of octoxynol 40, but that was a precipitate between the two active 20 21 ingredients, right? 22 Right. So BAC isn't involved, wasn't Α 23 involved. 24 Right. So octoxynol 40 successfully 0 25 prevented the precipitate -- any precipitate

	22	20
1	STEPHEN G. DAVIES, D.PHIL.	
2	from forming in the formulation of diclofenac,	
3	BAC, and octoxynol 40, right?	
4	MS. LEBEIS: Objection to the extent	
5	it mischaracterizes the document.	
6	A I wouldn't come to that conclusion	
7	because well, there was no precipitate, but	
8	you don't know that it anything is	
9	preventing the formation of a precipitate.	
10	It's not evidence that a precipitate would have	
11	been formed between BAC and either of the	
12	active ingredients.	
13	Q If you keep this Exhibit 9 open in	
14	front of you but also pull out Exhibit 4, which	
15	is the EP '984 patent.	
16	A Okay.	
17	Q If you would turn to page 9 of the EP	
18	'984 patent, Exhibit 4.	
19	A Okay.	
20	Q You would agree that in Exhibit 9,	
21	the '560 patent, we see a report of no	
22	precipitate in a formulation of diclofenac,	
23	BAC, and octoxynol 40, right?	
24	A Where do I see that?	
25	Q We're looking now back at the '560	

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