

From: Lauren Martin
To: Kustan, Jeffrey P.; TLU; TPOWERS
Cc: ELLISON; Jennifer Chagnon; David J. Kacpos; Aubrey Haddach; DHOLMAN; mark.stewart@merck.com; Halozyne EGRs; Josh Mack; Mark Snyder; Elliot Choi; Zach Summers; Peterson, Leif; Engen, Christine
Subject: RE: Merck v. Halozyne // Schedule Modifications and Deposition Scheduling
Date: Monday, October 27, 2025 4:49:33 PM
Attachments: image003.png
image004.png
image005.png
image006.png
image007.png
image008.png
image009.png
image012.png
image013.png
90% or more residues.xlsx

EXTERNAL EMAIL - Use caution with links and attachments.

Counsel:

First, with respect to the spreadsheet, as we previously explained, the residues where no tested substitutions are tolerated (colored red) are in Column R of the "Analysis" tab of Ex. 2166. Residues where 30% or fewer substitutions were tolerated (colored orange) are in column U, and residues where 60% or more of the substitutions were tolerated (colored green) are in column S. For your convenience, we provided a spreadsheet with the residues from columns R, U and S. We noted on the meet and confer that there also are figures in which the green residues are those for which 90% or more of the reported substitutions were tolerated. Residues where 90% or more of the tested substitutions were tolerated are in column T of Ex. 2166, and for your convenience those residues are in the attached spreadsheet.

Second, with respect to AutoDock Vina, in view of the fact that Dr. Petsko's deposition is scheduled for December 4th, over five weeks away, and in view of the fact that the AutoDock Vina analysis comprises two paragraphs and two figures in a 226 page declaration, in which Dr. Petsko explains what he did and provides the results, we disagree that there is any prejudice to Merck. In any event, Dr. Petsko used the SwissDock server to run AutoDock Vina. The SwissDock server provides a GUI input for AutoDock Vina.

Because there is a size limitation on the area to be covered in any one run of the program, Dr. Petsko ran the program twice and combined the results. The input and results are as follows:

The first run:

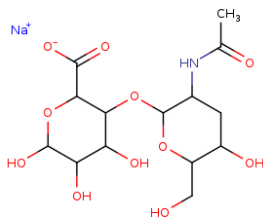
Query	
Ligand	[Na+].CC(=O)NC1CC(O)C(CO)OC1OC1C(O)C(O)C(O)OC1C([O-])=O
Target	receptor.pdb
Method	AutoDock Vina
Date	July 13, 2025, 2:51 pm UTC
Parameters:	
Box center:	134 - 135 - 146 Sampling exhaustivity: 20
Box size:	30 - 30 - 30

If you publish these results, please, cite the following papers:

Bugnon M, Röhrig UF, Gouilleux M, Perez MAS, Daina A, Michielin O, Zoete V. SwissDock 2024: major enhancements for small-molecule docking with Attracting Cavities and AutoDock Vina. *Nucleic Acids Res.* **2024**

Eberhardt J, Santos-Martins D, Tillack AF, Forli S. AutoDock Vina 1.2.0: New Docking Methods, Expanded Force Field, and Python Bindings. *J. Chem. Inf. Model.* **2021**

Ligand

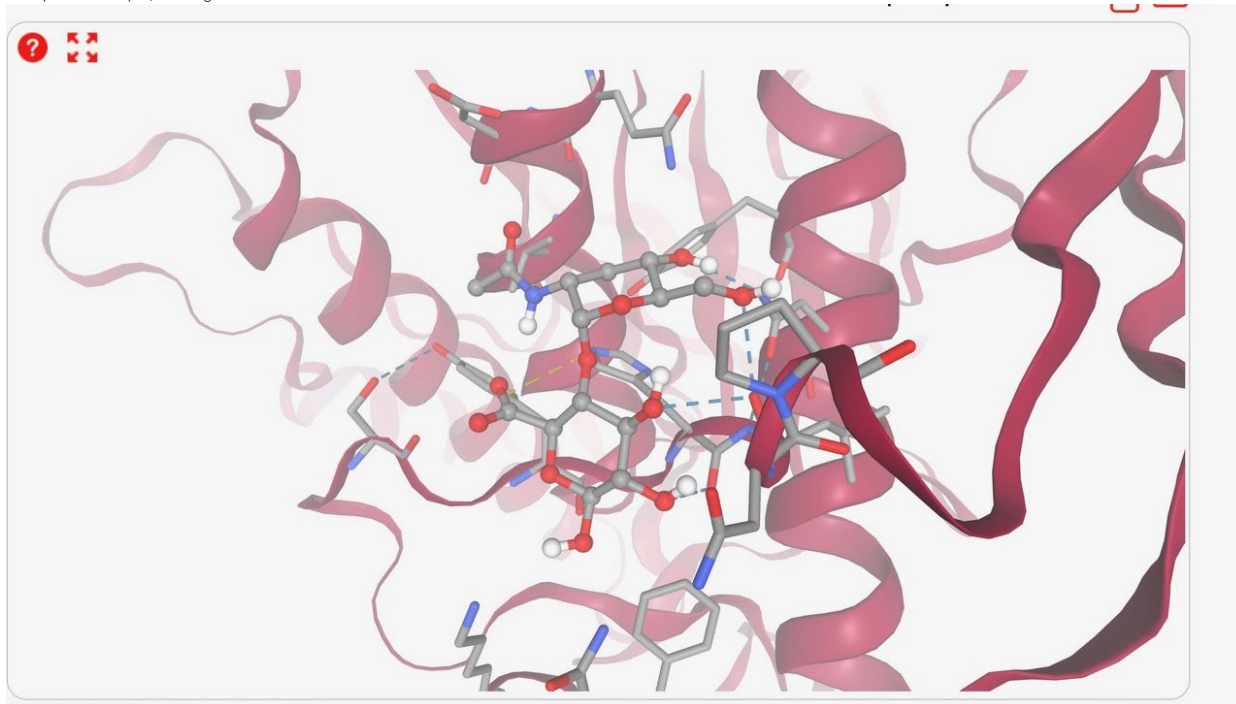


Results:

Model	Calculated affinity (kcal/mol)
1	-5.810
2	-5.597
3	-5.575
4	-5.561
5	-5.542
6	-5.505
7	-5.450
8	-5.387
9	-5.288
10	-5.232
11	-5.228
12	-5.192
13	-5.138
14	-5.136
15	-5.133
16	-5.130
17	-5.129

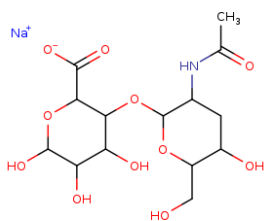
18	-5.109
19	-5.073
20	-5.060

Example of the output, showing the first site identified:



The second run:

	Query
Ligand	[Na+].CC(=O)NC1CC(O)C(CO)OC1OC1C(O)C(O)C(O)OC1C([O-])=O
Target	receptor.pdb
Method	AutoDock Vina
Date	July 13, 2025, 2:44 pm UTC
Parameters:	
Box center:	132 - 129 - 182 Sampling exhaustivity: 4
Box size:	30 - 30 - 30
If you publish these results, please, cite the following papers:	
Bugnon M, Röhrig UF, Goullieux M, Perez MAS, Daina A, Michielin O, Zoete V. SwissDock 2024: major enhancements for small-molecule docking with Attracting Cavities and AutoDock Vina. <i>Nucleic Acids Res.</i> 2024	
Eberhardt J, Santos-Martins D, Tillack AF, Forti S. AutoDock Vina 1.2.0: New Docking Methods, Expanded Force Field, and Python Bindings. <i>J. Chem. Inf. Model.</i> 2021	
	Ligand

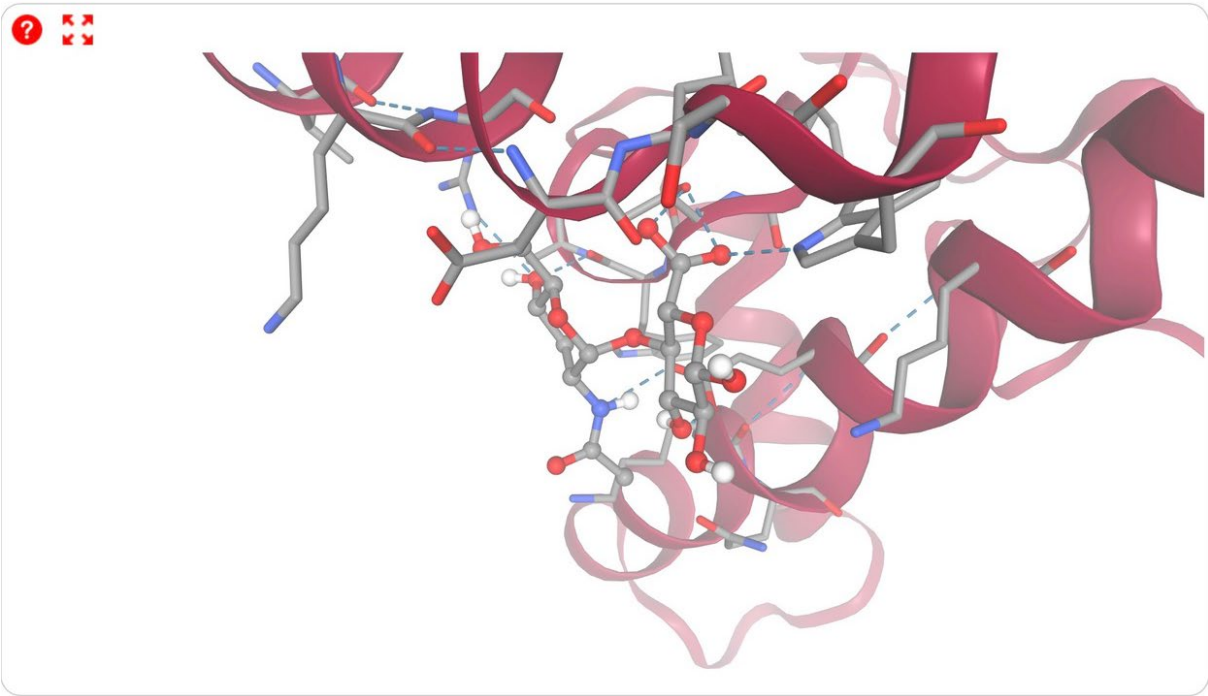


Results:

Model	Calculated affinity (kcal/mol)
1	-5.993
2	-5.866
3	-5.464
4	-5.444
5	-5.140
6	-5.066

7	-5.058
8	-4.869
9	-4.854
10	-4.696
11	-4.681
12	-4.554
13	-4.436
14	-4.290
15	-4.060
16	-4.050
17	-4.033
18	-3.831
19	-3.720
20	-3.579

Example of the output, showing the first site identified:



Best,

Lauren

From: Kushan, Jeffrey P. jkushan@sidley.com
Sent: Friday, October 24, 2025 3:05 PM
To: Lauren Martin <laurenmartin@quinnemanuel.com>; TLIU <TLIU@sternekessler.com>; TPOWERS <TPOWERS@sternekessler.com>
Cc: EELLISON <EELLISON@sternekessler.com>; Jennifer Chagnon <JChagnon@sternekessler.com>; David J. Kappos <dkappos@cravath.com>; Aubrey Haddach <ahaddach@halozyme.com>; DHOLMAN <DHOLMAN@sternekessler.com>; mark.stewart@merck.com; Halozyne PGRs <HalozynePGRs@sidley.com>; Josh Mack <jmack@halozyme.com>; Mark Snyder <msnyder@halozyme.com>; Elliot Choi <elliottchoi@quinnemanuel.com>; Zach Summers <zachsummers@quinnemanuel.com>; Peterson, Leif <leif.peterson@Sidley.com>; Engen, Christine <christine.engen@sidley.com>
Subject: RE: Merck v. Halozyne // Schedule Modifications and Deposition Scheduling

[EXTERNAL EMAIL from jkushan@sidley.com]

Counsel,

We write again to request that Halozyne produce certain files and information Dr. Petsko relied upon for his opinions that were not provided by Halozyne with its Patent Owner responses.

We originally requested this information on September 26. We repeated our request October 3. On October 6, you provided the native file version of Dr. Petsko's Exhibit 2166, but did not provide the other files we had requested, which we explained out in our October 7 email. On October 10, you provided a response that did not address the issues we had raised, and importantly did not provide the files we had requested. On October 11, we explained that our requests were narrow and specific -- files used to produce the images in Dr. Petsko's report that cannot be evaluated meaningfully without further information that was not provided in Dr. Petsko's declaration and Halozyne's exhibits. On October 15, you provided a spreadsheet that identifies the coloring scheme used to produce certain of the images in Dr. Petsko that were the basis of our request. You also indicated on our call of October 16 that you would provide an additional spreadsheet for the other images we had identified in Dr. Petsko's declaration that use different coloring. You have not sent that additional spreadsheet as you indicated you would.

Now, nearly a month after we requested the files associated with Dr. Petsko's work using the AutoDock Vina tool, we have received nothing from you. Your delays in providing the information we have requested are unexplained and are causing prejudice to Merck. Indicate whether you will be providing the requested information or not so that we may assess our options.

Sincerely,

Jeff Kushan
JEFFREY P. KUSHAN

SIDLEY AUSTIN LLP
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From: Lauren Martin <laurenmartin@quinnemanuel.com>
Sent: Wednesday, October 15, 2025 2:53 PM
To: Kushan, Jeffrey P. <jkushan@sidley.com>; TIU <TIU@sternekessler.com>; TPOWERS <TPOWERS@sternekessler.com>
Cc: EELLISON <EELLISON@sternekessler.com>; Jennifer Chagnon <JChagnon@sternekessler.com>; David J. Kappos <dkappos@cravath.com>; Aubrey Haddach <ahaddach@halozyme.com>; DHOLMAN <DHOLMAN@sternekessler.com>; mark.stewart@merck.com; Halozyyme PGRs <HalozyymePGRs@sidley.com>; Josh Mack <jmack@halozyme.com>; Mark Snyder <msnyder@halozyme.com>; Elliot Choi <elliottchoi@quinnemanuel.com>; Zach Summers <zachsommers@quinnemanuel.com>; Peterson, Leif <leif.peterson@sidley.com>; Engen, Christine <christine.engen@sidley.com>
Subject: RE: Merck v. Halozyyme // Schedule Modifications and Deposition Scheduling

Counsel:

We have explained how to generate the figures in PyMOL. As Dr. Petsko explains in paragraph 298, residues “for which no tested substitutions were tolerated” are colored “red.” Residues “for which 30% or fewer of the reported changes were tolerated” are colored orange. Residues “for which 60% or more of the reported substitutions were tolerated” are colored green. No color is specified for residues where more than 30% or fewer than 60% of substitutions are tested. As you note, there are four colors in the figures: red, orange, green and cyan. So the residues that are not red, orange or green are cyan. The residues where no tested substitutions are tolerated are in Column R of the “Analysis” tab of Ex. 2166. Residues where 30% or fewer substitutions were tolerated are in column U, and residues where 60% or more of the substitutions were tolerated are in column S. For your convenience, we have extracted those residue numbers from EX2166 into the attached spreadsheet. In PyMOL, if you color the PH20 model cyan, you can obtain Dr. Petsko’s figure by selecting and highlighting red, orange and green the applicable residues in the attached chart.

We will respond separately regarding AutoDock Vina. We note, however, that Dr. Petsko explained in his declaration at paragraphs 336 and 337 that he used AutoDock Vina to dock HA (which you refer to as “chemical structures” in your email below) on PH20.

We disagree that Merck has been in any way prejudiced. Merck seeks information and documentation that was not provided to Halozyyme by Merck in connection with Dr. Park’s models and figures. The questions you are asking regarding Dr. Petsko’s declaration are appropriate for deposition; we note that we questioned your witnesses regarding the structure of their declarations and the basis for their opinions instead of directing our inquiries to counsel. In any event, we are making every effort to provide the information you have requested.

Best,

Lauren

From: Kushan, Jeffrey P. <jkushan@sidley.com>
Sent: Saturday, October 11, 2025 12:24 AM
To: Lauren Martin <laurenmartin@quinnemanuel.com>; TIU <TIU@sternekessler.com>; TPOWERS <TPOWERS@sternekessler.com>
Cc: EELLISON <EELLISON@sternekessler.com>; Jennifer Chagnon <JChagnon@sternekessler.com>; David J. Kappos <dkappos@cravath.com>; Aubrey Haddach <ahaddach@halozyme.com>; DHOLMAN <DHOLMAN@sternekessler.com>; mark.stewart@merck.com; Halozyyme PGRs <HalozyymePGRs@sidley.com>; Josh Mack <jmack@halozyme.com>; Mark Snyder <msnyder@halozyme.com>; Elliot Choi <elliottchoi@quinnemanuel.com>; Zach Summers <zachsommers@quinnemanuel.com>; Peterson, Leif <leif.peterson@sidley.com>; Engen, Christine <christine.engen@sidley.com>
Subject: RE: Merck v. Halozyyme // Schedule Modifications and Deposition Scheduling

[EXTERNAL EMAIL from jkushan@sidley.com]

Lauren,

In our original email to you, we requested the *annotated* pdb files that were used to create particular images in the expert declarations. We followed up that request with an explanation that such annotations are found in the Pymol session files that are created when generating annotations to a pdb file. We believe these requests were crystal clear.

Importantly, we did not request every Pymol session file or any file that was created by you or your expert but not used to generate images in the expert reports. Nor did we request native files for images showing annotations that are made with the built-in display functions of Pymol (e.g., illustrations showing distances between atoms, basic coloring, etc.). We only requested the annotated PDB files used to create the “Color-coded PH20 Model” discussed in § X.B of Dr. Petsko’s declaration and the images represented as being the result of Dr. Petsko’s work using the AutoDock Vina tool.

You suggest that we can recreate all of the images using the information in the report. We disagree.

First, the images display structures with four colors (i.e., cyan, green, red and orange, see ¶¶ 299 and 300). Dr. Petsko’s classification scheme for those figures omits cyan. In addition, the table at ¶ 274 uses four different colors (dark green, light green, orange and red) and lists several positions without coloring, while the images use one green color. It may be the case that cyan was the “default” color for the structure, or that those cyan shaded residues were selected based on some other criteria. None of this is explained in Dr. Petsko’s declaration.

Second, the figures displayed under ¶¶ 317 and 320 are presented with views that obscure the coloring of individual residues due to the size of the annotations. There are also several orientations presented that do not reveal residues due to the orientation. Despite this, there are no tables accompanying these illustrations to identify which positions were annotated with which color in each image.

Third, the images under ¶ 337 include chemical structures positioned relative to the protein structure. The PDB files do not include the chemical structures are displayed in the image, and there is no information about those structures relative to the protein structure.

We appreciate your offer to provide a spreadsheet that identifies the colors for each position of the sequence. That may resolve some of the questions noted above, but not others. We thus reiterate our request that you provide us with the annotated PDB files used to produce the images in Dr. Petsko’s declaration concerning the “Color-coded PH20 Model” and the images associated with the AutoDock Vina work.

I also note that you have not responded to our request for the native and other files associated with the AutoDock Vina work Dr. Petsko referenced, along with information about that tool that is not provided in the declaration. We are entitled to such files, as they are necessary to his opinions.

Your delays in responding and your refusal to provide the requested files are causing prejudice to Merck, given the tight deadlines we are operating under in the schedule. We thus reiterate our request that you provide the files identified above. Please also provide the spreadsheets that list which colors are used at each position in each of the images that are identified above.

Finally, we have still not been provided any dates for the depositions of your four experts. We made our request on October 1, which included a requested date between October 22 and 30 for Dr. Petsko. Your delay is unexplained, and is causing additional prejudice to Merck. Please provide the deposition dates for your witnesses.

Sincerely,

Jeff

JEFFREY P. KUSHAN

SIDLEY AUSTIN LLP
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From: Lauren Martin <laurenmartin@quinnemanuel.com>
Sent: Friday, October 10, 2025 5:34 PM
To: Kushan, Jeffrey P. <jkushan@sidley.com>; TLIU <TLIU@sternekessler.com>; TPOWERS <TPOWERS@sternekessler.com>
Cc: ELLISON <ELLISON@sternekessler.com>; Jennifer Chagnon <JChagnon@sternekessler.com>; David J. Kappos <dkappos@cravath.com>; Aubrey Haddach <ahaddach@halozyme.com>; DHOLMAN <DHOLMAN@sternekessler.com>; mark.stewart@merck.com; Halozyme PGRs <HalozymePGRs@sidley.com>; Josh Mack <jmack@halozyme.com>; Mark Snyder <msnyder@halozyme.com>; Elliot Choi <elliottchoi@quinnemanuel.com>; Zach Summers <zachsommers@quinnemanuel.com>; Peterson, Leif <leif.peterson@sidley.com>; Engen, Christine <christine.engen@sidley.com>
Subject: RE: Merck v. Halozyme // Schedule Modifications and Deposition Scheduling

Counsel:

Merck's request has changed. In your September 26th email, you requested the pdb file that was used to generate the figures in section X.B. of Dr. Petsko's '600 patent declaration. In response, we extracted the pdb file from PyMOL that was used to generate those figures and sent it to you. Now, you are requesting that we provide PyMOL session files with metadata that correspond to the figures in Dr. Petsko's report. Merck is not seeking information that Dr. Petsko relied upon to form his opinions. Instead, Merck is requesting discovery from counsel via email regarding the preparation of figures in Dr. Petsko's declaration, apparently to be supported with metadata. This is quite different from Dr. Park's spreadsheet.

Dr. Park testified at his deposition that he created a spreadsheet with his analysis and relied on that spreadsheet to form his opinions, and he testified that he sent the spreadsheet to counsel. Because we learned of Dr. Park's spreadsheet for the first time at his deposition, which took place around 10 months after he signed the '600 patent declaration, we requested a copy of the spreadsheet with metadata intact so that we could confirm that we had the correct spreadsheet. By contrast, here, Merck appears to be requesting session files with metadata used in the report-drafting process, so Merck's request raises attorney-client privilege and work product issues.

We note that both Dr. Park's and Dr. Hecht's declarations include figures generated using PyMOL, and Merck has not provided PyMOL session files for those figures. Both Dr. Park and Dr. Hecht testified that they discussed PyMOL session files on zoom calls with counsel, yet none of those session files were produced with their declarations. Nor has Merck produced even a single one of the pdb files that Dr. Park generated using Swiss Model. Dr. Petsko reproduced Dr. Park's PH20 model from scratch using Swiss Model because Merck did not produce it. We see no need to start exchanging PyMOL session files now.

You question whether the pdb file we provided was generated by Swiss Model. The PH20 model was generated by Swiss Model as Dr. Petsko explains in his declaration, but as noted above the pdb file came from PyMOL in an effort to provide what you requested. You did not request the pdb file that Dr. Petsko generated using Swiss Model when he reproduced Dr. Park's model. Merck has Dr. Park's model, and in fact has not provided it to Halozyme, so it is unclear why Halozyme must provide Dr. Petsko's recreation of that model to Merck.

To the extent that you are requesting that we explain how the PH20 model was highlighted to generate the figures in Dr. Petsko's declaration, Dr. Petsko explains that process in his declaration. For example, in paragraph 298 of Dr. Petsko's '600 patent declaration, he states as follows:

I highlighted the PH20 homology model I generated to correspond with the spreadsheet. For example, I colored red residues for which no tested substitutions were tolerated. I colored orange residues for which 30% or fewer of the reported changes were tolerated. I colored green residues for which 60% or more of the reported substitutions were tolerated.

The spreadsheet we provided to you identifies the residues that fall into each category. You should be able to recreate Dr. Petsko's highlighting by selecting those residues from the spreadsheet in PyMOL and then highlighting them. If you would like us to send you the lists of residues that were highlighted red, green and orange for each of the figures so that you can enter the lists into PyMOL, we can do that.

Best,

Lauren

From: Kushan, Jeffrey P. <jkushan@sidley.com>
Sent: Tuesday, October 7, 2025 5:08 PM
To: TLIU <TLIU@sternekessler.com>; TPOWERS <TPOWERS@sternekessler.com>
Cc: ELLISON <ELLISON@sternekessler.com>; Lauren Martin <laurenmartin@quinnemanuel.com>; Jennifer Chagnon <JChagnon@sternekessler.com>; David J. Kappos <dkappos@cravath.com>; Aubrey Haddach <ahaddach@halozyme.com>; DHOLMAN <DHOLMAN@sternekessler.com>; mark.stewart@merck.com; Halozyme PGRs <HalozymePGRs@sidley.com>; Josh Mack <jmack@halozyme.com>; Mark Snyder <msnyder@halozyme.com>; Elliot Choi <elliottchoi@quinnemanuel.com>; Zach Summers <zachsommers@quinnemanuel.com>; Peterson, Leif <leif.peterson@sidley.com>; Engen, Christine <christine.engen@sidley.com>
Subject: RE: Merck v. Halozyme // Schedule Modifications and Deposition Scheduling

[EXTERNAL EMAIL from jkushan@sidley.com]

Tyler,

Thank you for sending the native version of the excel sheet.

The pdb file you sent, however, is not what we requested. The file you sent does not contain the annotations in the "Color-coded PH20 Model" discussed in § X.B of Dr. Petsko's declaration, which is relied on by Dr. Petsko and Dr. Simpson in their declarations. Please send the annotated pdb file (or files) as we had originally requested on September 26. These files would include pymol session files that capture the coloring of the structure, any scripts used to create the colored structure and the like. Please ensure these files maintain their metadata attributes (as you demanded of us).

It also is unclear whether the pdb file that was sent is what was generated by Swiss-Model as described in ¶ 121 of Dr. Petsko's declaration. Please confirm whether that is the case.

Finally, we had requested the annotated pdb files and any input/output files provided to or generated by the AutoDoc Vina tool that was used to create the graphics shown in paragraph 337 of Dr. Petsko's declaration. Please also identify the specific tool that was used (i.e., version number, website (if web-based), etc.). These again are materials that Dr. Petsko relied on in his declaration, and should be provided to us.

We request that you provide all of the requested files by the end of the day tomorrow to avoid any further disruptions.

Finally, please provide dates for the witnesses as we have requested. We need to address logistics (e.g., if not in DC).

Sincerely,

Jeff Kushan

JEFFREY P. KUSHAN

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From: Tyler Liu <TLIU@sternekessler.com>
Sent: Monday, October 6, 2025 11:23 PM
To: Kushan, Jeffrey P. <jkushan@sidley.com>; Trey Powers <TPOWERS@sternekessler.com>
Cc: Eldora L. Ellison <EELLISON@sternekessler.com>; Lauren Martin <laurenmartin@quinnemanuel.com>; Jennifer Chagnon <JChagnon@sternekessler.com>; David J. Kappos <dkappos@cravath.com>; Aubrey Haddach <ahaddach@halozyme.com>; David H. Holman <DHOLMAN@sternekessler.com>; mark.stewart@merck.com; Halozyme PGRs <HalozymePGRs@sidley.com>; Josh Mack <jmack@halozyme.com>; Mark Snyder <msnyder@halozyme.com>; Elliot Choi <elliotchoi@quinnemanuel.com>; Zach Summers <zachsummers@quinnemanuel.com>; Peterson, Leif <leif.peterson@sidley.com>; Engen, Christine <christine.engen@sidley.com>
Subject: RE: Merck v. Halozyme // Schedule Modifications and Deposition Scheduling

Hi Jeff,

Attached please find the native excel sheet used to generate Exhibit 2166 as well the requested pdb file used for the graphics in Dr. Petsko's declaration. Now that we have provided Dr. Petsko's pdf files, please provide Dr. Park's pdb files that were used to create the graphics in his declarations.

We are working to identify options for deposition dates for both Drs. Petsko and Simpson and will follow up under separate cover.

Best,
Tyler

Tyler Liu
Counsel
Sterne, Kessler, Goldstein & Fox P.L.L.C.
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From: Kushan, Jeffrey P. <jkushan@sidley.com>
Sent: Friday, October 3, 2025 12:59 PM
To: Trey Powers <TPOWERS@sternekessler.com>; Tyler Liu <TLIU@sternekessler.com>
Cc: Eldora L. Ellison <EELLISON@sternekessler.com>; Lauren Martin <laurenmartin@quinnemanuel.com>; Jennifer Chagnon <JChagnon@sternekessler.com>; David J. Kappos <dkappos@cravath.com>; Aubrey Haddach <ahaddach@halozyme.com>; David H. Holman <DHOLMAN@sternekessler.com>; mark.stewart@merck.com; Halozyme PGRs <HalozymePGRs@sidley.com>; Josh Mack <jmack@halozyme.com>; Mark Snyder <msnyder@halozyme.com>; Elliot Choi <elliotchoi@quinnemanuel.com>; Zach Summers <zachsummers@quinnemanuel.com>; Peterson, Leif <leif.peterson@sidley.com>; Engen, Christine <christine.engen@sidley.com>
Subject: RE: Merck v. Halozyme // Schedule Modifications and Deposition Scheduling

EXTERNAL EMAIL: Use caution before clicking links or attachments.

Hi Trey and Eldora,

I am writing to follow up on our request that Halozyme provide the materials I identified in my email to you last Friday. Please provide those as soon as possible, given the upcoming depositions of your witnesses.

In addition, per my response earlier this week, can you send me options for deposition dates for at least Drs. Petsko and Simpson as soon as possible, and whether they will be in DC or elsewhere?

Thanks,

Jeff

JEFFREY P. KUSHAN

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From: Trey Powers <TPOWERS@sternekessler.com>
Sent: Monday, September 29, 2025 11:40 AM
To: Kushan, Jeffrey P. <jkushan@sidley.com>; Tyler Liu <TLIU@sternekessler.com>
Cc: Eldora L. Ellison <EELLISON@sternekessler.com>; Lauren Martin <laurenmartin@quinnemanuel.com>; Jennifer Chagnon <JChagnon@sternekessler.com>; David J. Kappos <dkappos@cravath.com>; Aubrey Haddach <ahaddach@halozyme.com>; David H. Holman <DHOLMAN@sternekessler.com>; mark.stewart@merck.com; Halozyme PGRs <HalozymePGRs@sidley.com>; Josh Mack <jmack@halozyme.com>; Mark Snyder <msnyder@halozyme.com>; Elliot Choi <elliotchoi@quinnemanuel.com>; Zach Summers <zachsummers@quinnemanuel.com>; Peterson, Leif <leif.peterson@sidley.com>; Engen, Christine <christine.engen@sidley.com>
Subject: RE: Merck v. Halozyme // Schedule Modifications and Deposition Scheduling

Jeff,

We adjusted dates in the stipulations according to your request. Please don't hesitate to call if there is anything further to discuss. Please return these as soon as practical today, preferably before 3 pm ET.

We will be able to provide the documents you seek for points 1-3 below.

Thanks very much,
Trey

R. Wilson "Trey" Powers III, Ph.D.
Director
Sterne, Kessler, Goldstein & Fox P.L.L.C.
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Direct: 202.772.8876

Administrative Assistant: Cheryl Wagner
Direct: 202.772.8961 **Main:** 202.371.2600

From: Kushan, Jeffrey P. <jkushan@sidley.com>
Sent: Friday, September 26, 2025 6:51 PM
To: Trey Powers <TPOWERS@sternekessler.com>; Tyler Liu <TLIU@sternekessler.com>
Cc: Eldora L. Ellison <EELLISON@sternekessler.com>; Lauren Martin <laurenmartin@quinnemanuel.com>; Jennifer Chagnon <JChagnon@sternekessler.com>; David J. Kappos <dkappos@cravath.com>; Aubrey Haddach <ahaddach@halozyme.com>; David H. Holman <DHOLMAN@sternekessler.com>; mark.stewart@merck.com; Halozyme PGRs <HalozymePGRs@sidley.com>; Josh Mack <jmack@halozyme.com>; Mark Snyder <msnyder@halozyme.com>; Elliot Choi <elliotchoi@quinnemanuel.com>; Zach Summers <zachsummers@quinnemanuel.com>; Peterson, Leif <leif.peterson@sidley.com>; Engen, Christine <christine.engen@sidley.com>
Subject: RE: Merck v. Halozyme // Schedule Modifications and Deposition Scheduling

Hi Trey,

We agree with the proposed changes to Due Date 2 in the -00003 proceeding, and to Due Dates 1 and 2 in the -0004, -0006 and -0009 proceedings.

I think it would make sense to adjust the remaining due dates as we had discussed in these four proceedings so that all the dates are sequential (other than oral hearing date) relative to the current oral hearing date. We've outlined some dates that make that work in the attached excel sheet (dates to change are shaded). We are open to other alternatives you may propose for due dates 3 and later, so we believe you should have no problem filing the stipulations on Monday. We are also open, as I mentioned, to making a joint request to the Board to shift the oral hearing dates back in the two sets of proceedings by 2-3 weeks to better accommodate the briefing schedule, which can discuss independently.

Finally, we request you provide the native files that Dr. Petsko relied on in his declaration. These include:

1. the native excel file that was used to generate Exhibit 2166;
2. the annotated pdb file that was used to create the graphics shown throughout Section X.B of Exhibit 2070; and
3. the annotated pdb file and any other input or output files provided to or generated the AutoDoc Vina tool that was used to create the graphics shown in paragraph 337 of Exhibit 2070. Please also identify the specific tool that was used (i.e., version number, website (if web-based), etc.).

Thanks,

Jeff
JEFFREY P. KUSHAN

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+1 202 736 8914
jkushan@sidley.com

From: Trey Powers <TPOWERS@sternekessler.com>

Sent: Friday, September 26, 2025 6:02 PM

To: Kushan, Jeffrey P. <jkushan@sidley.com>; Tyler Liu <TLIU@sternekessler.com>

Cc: Eldora L. Ellison <ELLISON@sternekessler.com>; Lauren Martin <laurenmartin@quinnemanuel.com>; Jennifer Chagnon <JChagnon@sternekessler.com>; David J. Kappos <dkappos@cravath.com>; Aubrey Haddach <ahaddach@halozyme.com>; David H. Holman <DHOLMAN@sternekessler.com>; Mark Stewart <mark.stewart@merck.com>; Halozyme PGRs <HalozymePGRs@sidley.com>; Josh Mack <jmack@halozyme.com>; Mark Snyder <msnyder@halozyme.com>; Elliot Choi <elliotchoi@quinnemanuel.com>; Zach Summers <zachsummers@quinnemanuel.com>; Peterson, Leif <leif.peterson@sidley.com>; Engen, Christine <christine.engen@sidley.com>

Subject: RE: Merck v. Halozyme // Schedule Modifications and Deposition Scheduling

Jeff,

Please see the attached Joint Stipulations for your review and signature. Please return these Monday morning.

Thanks very much,
Trey

R. Wilson "Trey" Powers III, Ph.D.
Director
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From: Kushan, Jeffrey P. <jkushan@sidley.com>

Sent: Thursday, September 25, 2025 4:21 PM

To: Tyler Liu <TLIU@sternekessler.com>

Cc: Eldora L. Ellison <ELLISON@sternekessler.com>; Trey Powers <TPOWERS@sternekessler.com>; Lauren Martin <laurenmartin@quinnemanuel.com>; Jennifer Chagnon <JChagnon@sternekessler.com>; David J. Kappos <dkappos@cravath.com>; Aubrey Haddach <ahaddach@halozyme.com>; David H. Holman <DHOLMAN@sternekessler.com>; Mark Stewart <mark.stewart@merck.com>; Halozyme PGRs <HalozymePGRs@sidley.com>; Josh Mack <jmack@halozyme.com>; Mark Snyder <msnyder@halozyme.com>; Elliot Choi <elliotchoi@quinnemanuel.com>; Zach Summers <zachsummers@quinnemanuel.com>; Peterson, Leif <leif.peterson@sidley.com>; Engen, Christine <christine.engen@sidley.com>

Subject: RE: Merck v. Halozyme // Schedule Modifications and Deposition Scheduling

Tyler,

I think it may be useful to do a zoom so we can look at the dates together. Also, let me know who will participate on your side and I'll send an invite to that subset of people.

Thanks,

Jeff

JEFFREY P. KUSHAN

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+1 202 736 8914
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From: Tyler Liu <TLIU@sternekessler.com>

Sent: Thursday, September 25, 2025 3:57 PM

To: Kushan, Jeffrey P. <jkushan@sidley.com>

Cc: Eldora L. Ellison <ELLISON@sternekessler.com>; Trey Powers <TPOWERS@sternekessler.com>; Lauren Martin <laurenmartin@quinnemanuel.com>; Jennifer Chagnon <JChagnon@sternekessler.com>; David J. Kappos <dkappos@cravath.com>; Aubrey Haddach <ahaddach@halozyme.com>; David H. Holman <DHOLMAN@sternekessler.com>; Mark Stewart <mark.stewart@merck.com>; Halozyme PGRs <HalozymePGRs@sidley.com>; Josh Mack <jmack@halozyme.com>; Mark Snyder <msnyder@halozyme.com>; Elliot Choi <elliotchoi@quinnemanuel.com>; Zach Summers <zachsummers@quinnemanuel.com>; Peterson, Leif <leif.peterson@sidley.com>; Engen, Christine <christine.engen@sidley.com>

Subject: RE: Merck v. Halozyme // Schedule Modifications and Deposition Scheduling

Hi Jeff,

Yes, we are available at 4:30 PM tomorrow for a call.

Best,
Tyler

Tyler Liu
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Sent: Thursday, September 25, 2025 3:44 PM
To: Tyler Liu <tlui@sternekessler.com>
Cc: Eldora L. Ellison <ELLISON@sternekessler.com>; Trey Powers <TPOWERS@sternekessler.com>; Lauren Martin <laurenmartin@quinnemanuel.com>; Jennifer Chagnon <JChagnon@sternekessler.com>; David J. Kappos <dkappos@cravath.com>; Aubrey Haddach <ahaddach@halozyme.com>; David H. Holman <DHOLMAN@sternekessler.com>; mark.stewart@merck.com; Halozyne PGRs <halozymePGRs@sidley.com>; Josh Mack <jmack@halozyme.com>; Mark Snyder <msnyder@halozyme.com>; Elliot Choi <elliotchoi@quinnemanuel.com>; Zach Summers <zachsummers@quinnemanuel.com>; Peterson, Leif <leif.peterson@sidley.com>; Engen, Christine <christine.engen@sidley.com>
Subject: RE: Merck v. Halozyne // Schedule Modifications and Deposition Scheduling

EXTERNAL EMAIL: Use caution before clicking links or attachments.

Tyler,

Thank you for your email. I think it may make sense to have a call to sort out the scheduling issues you proposed yesterday for the first four proceedings. We need to consult with our client, and would propose we do a call tomorrow afternoon after 4:30 pm. Could you let me know if you all would be available for a call then?

Jeff

JEFFREY P. KUSHAN

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From: Tyler Liu <tlui@sternekessler.com>
Sent: Thursday, September 25, 2025 3:24 PM
To: Kushan, Jeffrey P. <jkushan@sidley.com>
Cc: Eldora L. Ellison <ELLISON@sternekessler.com>; Trey Powers <TPOWERS@sternekessler.com>; Lauren Martin <laurenmartin@quinnemanuel.com>; Jennifer Chagnon <JChagnon@sternekessler.com>; David J. Kappos <dkappos@cravath.com>; Aubrey Haddach <ahaddach@halozyme.com>; David H. Holman <DHOLMAN@sternekessler.com>; mark.stewart@merck.com; Halozyne PGRs <halozymePGRs@sidley.com>; Josh Mack <jmack@halozyme.com>; Mark Snyder <msnyder@halozyme.com>; Elliot Choi <elliotchoi@quinnemanuel.com>; Zach Summers <zachsummers@quinnemanuel.com>; Peterson, Leif <leif.peterson@sidley.com>; Engen, Christine <christine.engen@sidley.com>
Subject: RE: Merck v. Halozyne // Schedule Modifications and Deposition Scheduling

Hi Jeff,

Thank you for your email. We agree with your proposal regarding the scheduling of the -00017 proceeding and any of the subsequent proceedings that may be instituted. To further consolidate the remaining proceedings to the extent they are instituted, we have adjusted the proposed due dates for those proceedings based on your proposal for the -00017 proceeding.

Case Nos.	Institution Decision	Current/ Expected DD1	Proposed DD1	Current/ Expected DD2	Proposed DD2	Current/ Expected DD3	Proposed DD3
PGR2025-00017	9/8/2025	12/1/2025	12/16/2025	2/23/2026	4/6/2026	4/6/2026	5/21/2026
PGR2025-00030	10/17/2025	1/9/2026	12/18/2025	4/3/2026	4/8/2026	5/15/2026	5/25/2026
PGR2025-00024	10/17/2025	1/9/2026	12/22/2025	4/3/2026	4/10/2026	5/15/2026	5/27/2026
PGR2025-00033	10/15/2025	1/7/2026	12/26/2025	4/1/2026	4/13/2026	5/13/2026	5/29/2026
PGR2025-00039	10/15/2025	1/7/2026	12/30/2025	4/1/2026	4/15/2026	5/13/2026	6/1/2026
PGR2025-00042	11/18/2025	2/10/2026	1/5/2026	5/5/2026	4/17/2026	6/16/2026	6/3/2026
PGR2025-00046	11/20/2025	2/12/2026	1/7/2026	5/7/2026	4/20/2026	6/18/2026	6/5/2026
PGR2025-00050	11/20/2025	2/12/2026	1/9/2026	5/7/2026	4/22/2026	6/18/2026	6/8/2026
PGR2025-00053	11/20/2025	2/12/2026	1/12/2026	5/7/2026	4/24/2026	6/18/2026	6/10/2026
PGR2025-00052	11/20/2025	2/12/2026	1/14/2026	5/7/2026	4/27/2026	6/18/2026	6/12/2026

Regarding depositions, as can be seen in the Patent Owner Response in PGR2025-00003, we have withdrawn the testimony of Dr. Barbara Triggs-Raine. As a result, Dr. Triggs-Raine will not be made available for deposition. Instead, we currently intend to offer for deposition Dr. Melanie Simpson, Dr. Gregory Petsko, Dr. Gary Cherr, and Dr. James Moon. Given the substantial overlap in the subject matter for each of these cases, we do not believe any deponent needs to sit for more than the standard 7 hours of cross-examination for the second group of cases addressed above.

Best,
Tyler

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From: Kushan, Jeffrey P. <jkushan@sidley.com>
Sent: Tuesday, September 16, 2025 8:55 AM

To: Tyler Liu <TLIU@sternekessler.com>
Cc: Eldora L. Ellison <ELLISON@sternekessler.com>; Trey Powers <TPOWERS@sternekessler.com>; Lauren Martin <laurenmartin@quinnemanuel.com>; Jennifer Chagnon <JChagnon@sternekessler.com>; David J. Kappos <dkappos@cravath.com>; Aubrey Haddach <ahaddach@halozyme.com>; David H. Holman <DHOLMAN@sternekessler.com>; mark.stewart@merck.com; Halozyme PGRs <HalozymePGRs@sidley.com>; Josh Mack <jmack@halozyme.com>; Mark Snyder <msnyder@halozyme.com>; Elliot Choi <elliottchoi@quinnemanuel.com>; Zach Summers <zachsummers@quinnemanuel.com>; Peterson, Leif <leif.peterson@sidley.com>; Engen, Christine <christine.engen@sidley.com>
Subject: RE: Merck v. Halozyme // Schedule Modifications and Deposition Scheduling

EXTERNAL EMAIL: Use caution before clicking links or attachments.

Hi Tyler,

Thank you for your email last week regarding a proposal to adjust the schedule of the -00017 proceeding, and any of the subsequent proceedings that may be instituted.

In general, we agree that the schedule of the -00017 proceeding should be aligned with the schedule of any of the remaining PGRs that are instituted. The adjustment that you proposed for the -00017 proceeding is a good starting point, but we note that your proposed schedule would result in the bulk of the extended period of the adjusted schedule being included in the period that Halozyme would have to file its patent owner response. We think it would be more equitable to equally divide the overall time made possible by your proposed adjustment to DD3 between the parties. In particular, we propose to have DD1 be set to 12/16/2025 (+15 days), DD2 set as you propose to 4/6/26 (+21 days) and DD3 set as you propose to 5/21/2026 (+6 days). In this manner, both sides would get a total of an additional 21 days total for their respective briefing periods (i.e., 15+6 for Halozyme, 21 for Merck).

Regarding depositions of witnesses, again, in principle we can agree to have the experts relied upon by each party sit for a single deposition for the (up to) 10 proceedings. We also are open to the depositions for Merck's two experts occurring around November 20 (subject to their availability). We likewise could agree to a single deposition of any Merck expert who testifies in support of Merck's Petitioner Reply.

We need, however, certain clarifications.

1. You referred to an expert who supports Halozyme's patent owner responses. Can you please clarify two issues. First, does Halozyme intend to have an expert offer testimony in support of its Patent Owner Responses other than Dr. Triggs-Raine? Second, if a different expert offers testimony to support Halozyme's patent owner response, is it your position that Dr. Triggs-Raine would not be made available for deposition?
2. It is difficult for us to predict what Halozyme's expert(s) may address in their various declarations. By contrast, you are aware of the testimony of Dr. Hecht and Dr. Park have provided in the various proceedings. We thus would condition our general agreement on a single day of deposition(s) to permit us to have the option of at least some portion of a second day of deposition for a Halozyme witness who provides declarations in support of Halozyme's patent owner responses.

Please provide answers to the questions above and provide Halozyme's position on the deposition parameters we propose.

Thanks,

Jeff

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If you are not the intended recipient, please delete the e-mail and any attachments and notify us immediately.

From: Tyler Liu <TLIU@sternekessler.com>
Sent: Tuesday, September 9, 2025 11:35 AM
To: Kushan, Jeffrey P. <jkushan@sidley.com>
Cc: Eldora L. Ellison <ELLISON@sternekessler.com>; Trey Powers <TPOWERS@sternekessler.com>; Lauren Martin <laurenmartin@quinnemanuel.com>; Jennifer Chagnon <JChagnon@sternekessler.com>; Tyler Liu <TLIU@sternekessler.com>; David J. Kappos <dkappos@cravath.com>; Aubrey Haddach <ahaddach@halozyme.com>; David H. Holman <DHOLMAN@sternekessler.com>; mark.stewart@merck.com; Halozyme PGRs <HalozymePGRs@sidley.com>; Josh Mack <jmack@halozyme.com>; Mark Snyder <msnyder@halozyme.com>; Elliot Choi <elliottchoi@quinnemanuel.com>; Zach Summers <zachsummers@quinnemanuel.com>
Subject: Merck v. Halozyme // Schedule Modifications and Deposition Scheduling

Jeff,

In view of the Board's recent Institution Decision and Scheduling Order in PGR2025-00017, we propose extending the deadlines for the briefing in the -00017 proceeding, so that we can consolidate this proceeding with the remaining PGRs to the extent the Board institutes those proceedings in October and November. To move the due dates for PGR2025-00017 closer to the expected due dates for the remaining proceedings, we propose extending Due Date 1 in -00017 by a month and then providing 90 days for Merck to file a Reply (Due Date 2) and 45 days for Halozyme to file a Sur-reply (Due Date 3). In the last five instituted proceedings, the Board has on average given 84 days for Patent Owner to file a Patent Owner Response, 84 days for the Petitioner to file a Reply, and 42 days for Patent Owner to file a Sur-reply. As shown below, the expected due dates for each of the remaining PGRs are calculated from their respective expected institution dates. To keep due dates close together for all remaining proceedings, we propose staggering Due Dates 1-3 by 2-3 days from the proposed dates in -00017 in each of the remaining proceedings.

As shown below, we propose the following schedule for the remaining PGRs (to the extent instituted):

Case Nos.	Institution Decision	Current/ Expected DD1	Proposed DD1	Current/ Expected DD2	Proposed DD2	Current/ Expected DD3	Proposed DD3
PGR2025-00017	9/8/2025	12/1/2025	1/5/2026	2/23/2026	4/6/2026	4/6/2026	5/21/2026
PGR2025-00030	10/17/2025	1/9/2026	1/7/2026	4/3/2026	4/8/2026	5/15/2026	5/25/2026
PGR2025-00024	10/17/2025	1/9/2026	1/9/2026	4/3/2026	4/10/2026	5/15/2026	5/27/2026
PGR2025-00033	10/15/2025	1/7/2026	1/12/2026	4/1/2026	4/13/2026	5/13/2026	5/29/2026
PGR2025-00039	10/15/2025	1/7/2026	1/14/2026	4/1/2026	4/15/2026	5/13/2026	6/1/2026
PGR2025-00042	11/18/2025	2/10/2026	1/16/2026	5/5/2026	4/17/2026	6/16/2026	6/3/2026
PGR2025-00046	11/20/2025	2/12/2026	1/19/2026	5/7/2026	4/20/2026	6/18/2026	6/5/2026
PGR2025-00050	11/20/2025	2/12/2026	1/21/2026	5/7/2026	4/22/2026	6/18/2026	6/8/2026
PGR2025-	11/20/2025	2/12/2026	1/23/2026	5/7/2026	4/24/2026	6/18/2026	6/10/2026

00053							
PGR2025-00052	11/20/2025	2/12/2026	1/26/2026	5/7/2026	4/27/2026	6/18/2026	6/12/2026

Pursuant to the Scheduling Order in PGR2025-00017, the parties are directed to contact the Board by Wednesday, October 8, if there is a need to discuss proposed changes to the Order. As such, the parties should reach agreement on how to extend the briefing schedule for the -00017 proceeding, so that we can contact the Board prior to October 8. Please let us know if Merck is amenable to the proposed schedule for the first three due dates shown above for the remaining PGR proceedings.

Furthermore, for the PGRs listed above, we propose taking a single, one-day deposition each of Merck's experts supporting its Petitions after the expected institution date of the last PGR (institution decision is due by November 20, 2025). We would be amenable to a single deposition for each Petition expert and one additional deposition of any expert supporting Merck's Replies to be used in the above-listed PGRs provided that Merck reciprocally agrees to a single, one-day deposition of any expert supporting Halozyyme's Patent Owner Responses for these same proceedings.

Best,
Tyler



**Sterne
Kessler**
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