

MAZIE SLATER KATZ & FREEMAN, LLC

103 Eisenhower Parkway, Suite 207, Roseland, NJ 07068

Phone: (973) 228-9898 - Fax: (973) 228-0303

www.mazieslater.com

David A. Mazie*
Adam M. Slater*°
Eric D. Katz*°
David M. Freeman
Beth G. Baldinger
Matthew R. Mendelsohn°
David M. Estes

*Certified by the Supreme Court of
New Jersey as a Civil Trial Attorney

°Member of N.J. & N.Y. Bars

Karen G. Kelsen°
Cheryll A. Calderon
Adam M. Epstein°
Cory J. Rothbort*°
Michael R. Griffith°
Christopher J. Geddis
Alexander Q. Reynoso
Samuel G. Wildman
Julia S. Slater°

August 26, 2022

VIA ECF

Special Master Joseph A. Dickson, U.S.M.J. (Ret.)
Chiesa Shahinian & Giantomasi PC
One Boland Drive
West Orange, NJ 07052

Hon. Rachelle L. Harz, J.S.C.
Superior Court of New Jersey
Bergen County Justice Center
10 Main Street, Room 359
Hackensack, NJ 07601

Re: ***In re Allergan Biocell Textured Breast Implant Product Liability
Litigation, MDL No. 2921, MCL No. 634***

Dear Judge Harz and Judge Dickson:

Plaintiffs respectfully submit this opposition to Allergan's belated request to implement a search methodology that will inevitably conceal responsive documents from Plaintiffs. Allergan seeks permission to eliminate documents from its review by (1) first removing documents by applying search terms, and (2) then further excluding documents through its use of technology assisted review ("TAR").

This unilateral, untimely, and radical alteration of the parties' agreed methodology would have many impacts, not only triggering disputes on the structure and application of

Honorable Rachelle L. Harz, J.S.C.
Honorable Joseph A. Dickson, U.S.M.J.
August 26, 2022
Page 2

TAR that would cause further delay, but also prejudicing Plaintiffs by preventing the production (or even Allergan's review) of thousands of documents that hit on the parties' agreed search terms. Further, Allergan's proposed protocol is poorly crafted and ensures that Plaintiffs will never see relevant, responsive documents.

A. Allergan's TAR proposal is far too late.

In April 2020 – 28 months ago – Plaintiffs first proposed the use of TAR *instead of* search terms. Allergan declined electing to instead use search terms. The parties reached agreement on search terms on July 25, 2021.¹ On September 22, 2021, after applying the agreed terms, Allergan proposed applying TAR to the document sets already narrowed by search terms. Plaintiffs were willing to discuss the application of TAR to complete custodial files (*i.e.*, those not already narrowed by search terms), but Allergan refused to apply TAR to the full document population and abandoned its intent to proceed with TAR.

Over the following 11 months, Plaintiffs understood that Allergan was proceeding with its review of documents identified by search terms at a pace that would enable it to substantially complete production by Summer 2022, so that Plaintiffs could take corporate depositions in August, September, and October in accordance with the discovery schedule.

On June 13, 2022, however, Allergan disclosed its renewed intent to apply TAR to already-narrowed search-term results. Despite having applied search terms nearly a year

¹ Defense counsel has repeatedly misrepresented to the Court that Plaintiffs “refused to negotiate” on search terms. *See, e.g.*, 7/26/22 Hrg Tr. at 14:15-18. That is false. Allergan accepted Plaintiffs' proposed search terms without proposing modifications. Allergan's present attacks on that deal are due solely to its desire now to make unilateral *post hoc* changes to that deal.

Honorable Rachelle L. Harz, J.S.C.
Honorable Joseph A. Dickson, U.S.M.J.
August 26, 2022
Page 3

earlier and being aware of the resulting scope of documents and staffing necessary for the review, Allergan claimed that without TAR, it would not timely complete production.

The appropriate time to negotiate a TAR protocol was during the parties' negotiations on search methodology in summer 2021. The crafting of a TAR protocol, including identification of an appropriate document corpus, methods for joint sampling and testing, agreed sets of documents to educate the system, and robust cooperative validation, requires significant negotiation and collaboration:

A long line of cases holds that TAR requires, "an unprecedented degree of transparency and cooperation among counsel in the review and production of ESI responsive to discovery requests."

In re Valsartan, 337 F.R.D. 610, 622 (D.N.J. 2020) ("*Valsartan*") (quoting *Progressive Cas. Ins. Co. v. Delaney*, No. 2:11-cv-00678-LRH-PAL, 2014 WL 3563467, at *10 (D. Nev. July 18, 2014)). Allergan's proposal ignores this principle.

B. Allergan's refusal to apply TAR to the entire body of documents is dispositive.

The ESI Order provided Allergan the opportunity to negotiate its preferred search methodology at the outset of the litigation. Dkt. 194. At that time Allergan rejected Plaintiffs' proposal to use TAR and instead requested that Plaintiffs propose search terms. In reliance on Allergan's chosen methodology, Plaintiffs negotiated search terms with the understanding that Allergan would conduct a linear (*i.e.*, document-by-document, attorney-eyes) review of all documents returned by those terms, and produce all responsive, non-privileged documents, as it had agreed to do.

Honorable Rachelle L. Harz, J.S.C.
Honorable Joseph A. Dickson, U.S.M.J.
August 26, 2022
Page 4

Allergan now seeks to abandon its commitment to search terms by applying TAR to the documents already narrowed by search terms. This is patently wrong. Allergan already eliminated *millions* of documents from review by applying search terms to identify responsive documents, and now seeks to withhold millions of the *responsive* documents identified by the search terms.

If TAR is applied at all – it must be applied to the full document set. For example, the court in *Valsartan* rejected a defendant’s attempt to do exactly what Allergan proposes here:

The time to meet and confer with plaintiffs was before the parties and the Court proceeded under the reasonable assumption that a manual search term review would be done, and not on the eve of the due date of the first rolling production

Valsartan, 337 F.R.D. at 618. The court in *Valsartan* found the ESI protocol in that case – that required “openness and transparency” and agreement to any changes in search methodology (as does the ESI Protocol here, *see* Dkt. 194) – controlled over the defendant’s proportionality argument. *Valsartan*, 337 F.R.D. at 616-617.

Likewise, in *Progressive Cas. Ins. Co. v. Delaney*, the court refused to allow the defendant to have a “do-over” and layer TAR on top of a document set already narrowed by search terms. 2014 WL 3563467, at *11-12; *see also id.* at *9 (“Had the parties . . . agreed **at the onset of this case** to a predictive coding-based ESI protocol, the court would not hesitate to approve **a transparent, mutually agreed upon ESI protocol**. However, this is not what happened.”) (emphasis added). The defendant was ordered to produce every

Honorable Rachelle L. Harz, J.S.C.
Honorable Joseph A. Dickson, U.S.M.J.
August 26, 2022
Page 5

document hit by the search terms, including those that the defendant claimed to be non-responsive. *Id.* at *12.

Further, in *In re Mercedes-Benz Emissions Litig.*, No. 2:16-cv-881, 2020 WL 103975 (D.N.J. Jan. 9, 2020), Judge Cavanaugh made clear that where defendants choose to use search terms and not TAR, they cannot be permitted to later upend the process when they have buyer's remorse. *Id.* at *2 ("caution[ing defendants] that the Special Master will not look favorably on any future arguments related to burden of discovery requests, specifically cost and proportionality, when Defendants have chosen to utilize the custodian-and-search term approach....").

Similarly, Allergan chose to proceed with search terms, and Plaintiffs relied on that decision in crafting and negotiating search terms. In *Valsartan*, Judge Schneider gave the defendant a choice: (1) complete the review and production as agreed, or (2) apply the TAR **protocol proposed by the plaintiffs**. *Valsartan*, 337 F.R.D. at 624-625. If the Court believes TAR may be appropriate at this late stage, it should offer Allergan the same choice: complete the agreed review or agree to a protocol developed by Plaintiffs that allows for collaborative training and validation and includes full custodial files.

Notably, Allergan told Plaintiffs that it would abandon its TAR request if the Court requires it to run TAR on the entire document corpus. Because this threshold issue is dispositive, Allergan's request should be denied.

Honorable Rachelle L. Harz, J.S.C.
Honorable Joseph A. Dickson, U.S.M.J.
August 26, 2022
Page 6

C. Allergan’s proposed TAR protocol is flawed for numerous reasons.

Even if Allergan applied TAR to the appropriate corpus of complete custodial files, the training, oversight, and validation requirements present disputes that will drain time and resources from the parties and the Court. Allergan’s inadequate disclosures and overdue productions already present significant ongoing problems. It would not be reasonable to embark on this course at this late stage of the litigation. Furthermore, Allergan’s proposed TAR protocol has numerous substantive shortcomings.

1. Allergan’s recall target is too low and does not take into account its multilayered search methodology.

Allergan’s target for recall is too low. “Recall” measures how many of the relevant documents in a document pool have been found. Allergan proposes an 80% recall target, meaning that at least 1 in 5 relevant and responsive documents will be missed. That is too many.

While an 80% recall might be an adequate measure for some TAR processes (*e.g.*, those applied to the full body of documents, with robust validation protocols in place and the exchange of other review metrics to guide the process) – it is insufficient here. Any recall metric Allergan claims to reach will be deceptively high because it has excluded millions of documents by untested, unvalidated search terms already applied. *See In re Diisocyanates Antitrust Litig.*, No. MC 18-1001, 2021 WL 4295729, at *6 (W.D. Pa. Aug. 23, 2021), report and recommendation adopted, No. MC 18-1001, 2021 WL 4295719 (W.D. Pa. Sept. 21, 2021) (finding it “plainly unreasonable” to calculate estimated recall based on documents which have first been culled by search terms). Even if Allergan claims

Honorable Rachelle L. Harz, J.S.C.
Honorable Joseph A. Dickson, U.S.M.J.
August 26, 2022
Page 7

to reach an 80% recall rate via TAR, the *actual* recall rate will be the product of the recall rate of all three processes Allergan proposes to implement (search terms, TAR, and linear review).² By layering imperfect methodologies on top of each other, and by setting unreasonable completion targets, Allergan's proposal would result in staggeringly low levels of accuracy.³

2. Allergan's proposed confidence level gives too much leeway, allowing for an inadequate search and review.

Allergan has also selected a confidence interval and margin of error that allow too much deviation from the purported target metrics. Allergan's Proposed TAR Protocol, Ex. 1, ¶ 4. Allergan proposes a 95% confidence level and +/- 5% margin of error for elusion.

² Maura R. Grossman, J.D., PH.D. and Gordon V. Cormack, PH.D., *The EDiscovery Medicine Show*, The Ohio State Technology Law Journal, Vol. 18.1 (2021), at 8.

³ The court in *In re Diisocyanates Antitrust Litig.* used the following example to illustrate why such protocol is improper:

Suppose a party collected one million documents, of which 100,000 are responsive. If search terms cull out 600,000 documents, then 400,000 become the TAR Review Set. Suppose further that of the 400,000 documents to which TAR is applied, 70,000 are responsive. That means that the search term portion of the workflow would have left 30,000 responsive documents behind, and the estimated recall for that stage would be 70% (that is, $70,000 \div (70,000 + 30,000)$). Then assume that the TAR review – the only part of the process that the defendants propose to validate – reached their target of 70% recall because 49,000 responsive documents were identified ($49,000 \div (49,000 + 21,000) = 70\%$). The overall estimated recall for the search term and TAR stages would then be the product of the recall for each stage: 49% ($70\% \times 70\%$, or, calculated as “end-to-end recall, $49,000 \div (49,000 + 51,000)$). [...]. **In other words, a defendant would claim a recall rate of 70% when, in fact, it had produced less than half of the responsive documents.**

2021 WL 4295729, at *9 (internal citation omitted) (emphasis added).

Honorable Rachelle L. Harz, J.S.C.
Honorable Joseph A. Dickson, U.S.M.J.
August 26, 2022
Page 8

Id. at ¶¶ 4, 13. The actual margin of error on recall is generally higher than the nominal margin on elusion – perhaps twice as much or more depending on collection richness.⁴ This means, for example, that Allergan’s already inflated 80% recall for TAR alone (setting aside recall for search terms and manual review) may be as low as 70% or even lower. A +/- 2% nominal margin of error on elusion is an appropriate margin of error because it provides a more acceptable level of accuracy. *See, e.g., City of Rockford v. Mallinckrodt ARD Inc.*, 326 F.R.D. 489, 496 (N.D. Ill. 2018) (utilizing 95% confidence level with +/- margin of 2%).

3. Allergan’s protocol does not set forth an adequate exchange of review metrics.

Allergan proposes a recall target without considering (or sharing with Plaintiffs) relevant metrics like precision, richness, elusion, and relevance rate. “Precision” estimates how many reviewed documents are responsive. As in fn. 4, “richness” estimates the number of responsive documents in the document pool. “Elusion” estimates how many documents have been missed by the review. If the elusion or precision rates are high, indicating that responsive documents are being missed, or that most documents being reviewed are responsive, the review should continue even if estimated recall is high. For a proper application of TAR, all key metrics should be shared with Plaintiffs. And Allergan

⁴ “Richness” estimates how many documents in the entire document pool are relevant. It is a crucial metric, along with recall, to inform the evaluation of the margin of error on recall for a given margin of error on elusion. For example, for a collection with 10% richness and a recall estimate of 80%, a 5% nominal margin of error on elusion equates to a 10% margin of error on recall. As richness falls, margins of error – *i.e.*, missed documents – increase.

Honorable Rachelle L. Harz, J.S.C.
Honorable Joseph A. Dickson, U.S.M.J.
August 26, 2022
Page 9

should share separate sets of metrics for each stage of the process (search terms, TAR, manual review) so the overall recall rate of the process can be calculated. These examples demonstrate the complexity of the disputes Allergan is inviting.

4. Allergan’s purported quality control and validation provisions fall short.

Allergan repeatedly refers to a “quality control” procedure that has no apparent substance, and that Allergan has refused to describe. *See, e.g.*, Allergan’s Proposed TAR Protocol, Ex. 1, ¶ 11. The proposal mentions targeted searching and sampling but fails to identify any search terms that will be used and fails to set forth an appropriate sampling procedure.⁵

D. If TAR is applied, it should be done in accordance with a protocol crafted by Plaintiffs.

Plaintiffs’ position has always been that TAR may be an appropriate tool where (1) it is applied to full custodial files; (2) the parties collaborate on training the TAR model; and (3) the parties collaborate on validation, testing, and the stopping-point for the review. Although Plaintiffs raised these three requirements with Allergan in September 2021 and June 2022, Allergan’s protocol does not account for any of them, which is telling. The protocol simply enables Allergan to withhold responsive documents from Plaintiffs.

⁵ Even though Allergan seeks to depart from discovery best practices by implementing both search terms and TAR – which this Court should reject outright – Allergan’s protocol completely disregards validating search terms altogether. That is improper. *E.g., Mercedes-Benz Emissions Litigation*, No. 2:16-CV-881, 2020 WL 103975, at *2 (D.N.J. Jan. 9, 2020) (“case law dictates that appropriate validation be utilized to test search results”).

Honorable Rachelle L. Harz, J.S.C.
Honorable Joseph A. Dickson, U.S.M.J.
August 26, 2022
Page 10

The protocols in *Valsartan* and the 3M MDL provide helpful guidance. The *Valsartan* protocol required application of TAR to the entire set of custodial documents (expressly precluding reduction of the set by search terms) and required robust validation including the production of 5,000 “non-responsive” documents of Plaintiffs’ choosing. (See *Valsartan*, Order 103, Section IV TAR Review Population, pp. 2-3, attached as Ex. 2).

The protocol in the 3M MDL likewise applied to the entire set documents (without reduction by search terms), and sets forth methods for sampling and validation that include the production of an elusion sample to the plaintiffs (Section 5(b)-(d)), and once the validation is completed, the defendant must manually review all documents with a classification score exceeding an established threshold OR all of the proposed unreviewed documents must be produced to the plaintiffs (Section 5(g)). See *In re 3M*, Ex. 3.

Establishment of a protocol here would need to draw heavily from these protocols.

CONCLUSION

Allergan should not be permitted to abandon the parties’ agreed methodology. Its unilateral and opaque TAR proposal is crafted to ensure that relevant documents are never reviewed, let alone produced to Plaintiffs. This approach would shatter the validity of the entire ESI process, grant Allergan an effective “do-over” of ESI protocols, and prejudice Plaintiffs by denying them access to documents that would have been found and produced using the already-agreed review protocol.

Honorable Rachelle L. Harz, J.S.C.
Honorable Joseph A. Dickson, U.S.M.J.
August 26, 2022
Page 11

If TAR were to be implemented at all, it would have to apply to the full body of documents, in accordance with a protocol acceptable to Plaintiffs.

Respectfully,



Adam M. Slater

Plaintiffs' MCL Liaison Counsel

Respectfully,

/s/Shanon J. Carson
Shanon J. Carson
Berger Montague PC

Virginia Buchanan
Levin Papantonio Rafferty Proctor
Buchanan O'Brien Barr Mougey,
P.A.

Elizabeth A. Fegan
Fegan Scott LLC

Jennifer Lenze
Lenze Lawyers, PLC

James E. Cecchi
Carella, Byrne, Cecchi, Olstein,
Brody & Agnello, P.C.

*Plaintiffs' MDL Co-Lead Counsel
and Liaison Counsel*

EXHIBIT 1

UNITED STATES DISTRICT COURT
DISTRICT OF NEW JERSEY

IN RE: ALLERGAN BIOCELL
TEXTURED BREAST IMPLANT
PRODUCTS LIABILITY LITIGATION

Case No.: 2:19-md-02921
MDL No. 2921

JUDGE BRIAN R. MARTINOTTI
JUDGE EDWARD S. KIEL

THIS DOCUMENT RELATES TO: ALL CASES

CASE MANAGEMENT ORDER NO.
(Technology-Assisted Review Protocol)

This Technology-Assisted Review Protocol (“TAR Protocol”) shall govern Defendants Allergan USA, Inc. and Allergan, Inc.’s (“Defendants”) document review, production, and validation process for documents remaining to be reviewed (“Document Population”) in the above captioned case. This TAR Protocol shall amend and serve as a supplement to Case Management Order No. 15, Order Regarding Electronically Stored Information and Hard Copy Documents (ECF No. 194).

Neither Plaintiffs nor Defendants waive any rights or protections pursuant to any privileges, confidentiality or privacy rights, or any objections that they may have. All parties retain the right to withhold from production non-responsive documents and documents subject to any claim of attorney-client privilege, work product protection, or any other applicable privilege.

Software Platform

1. The TAR software to be used is Continuous MultiModal Learning (“CMML”) in Brainspace.
2. The document review and scoring is being conducted in Relativity, with review values and CMML scoring results being passed between the Brainspace and Relativity platforms.
3. CMML Scores:
 - (a) Brainspace uses the values from a single binary input (responsiveness yes/no) to calculate predictive coding ranks.
 - (b) Brainspace creates “CMML Scores” which rank documents from 0.0 to 1.0 based on their likely responsiveness calculated from past classification decisions on the project.
 - (c) Documents with a CMML Score of 0.7 or higher are most likely to be responsive. Documents with CMML Scores of below 0.3 are least likely to be responsive.

4. The production (counting documents produced and documents logged for privilege) will meet a recall level of at least 80% of the document set remaining after application of the agreed search terms. The recall percentage will be confirmed with an elusion test with a margin of error of 5%, and a confidence level of 95%.

TAR Training and Score Generation

5. TAR Training:
 - (a) Initial TAR training will be based on the responsiveness designations of the ongoing document review process, starting with documents that have been through full quality control and quality assurance. The training will be supplemented by documents that attorney reviewers continue to review and classify as the review proceeds.

TAR Review Universe

6. The parties recognize and agree that certain categories of documents within the Document Population that will be subject to this review (“TAR Review Population”) are not appropriate for CMML scoring analysis. Documents falling into this category shall undergo separate analysis (described in Paragraph 9 below).
7. Defendants shall notify Plaintiffs of the volume of the TAR Review Population, as well as the volume of any document specifically excluded from the TAR Review Population as defined in Paragraph 6.

Document Review Workflow

8. Document Review:
 - (a) Following initial training, the Brainspace software prioritizes documents for review based on the CMML Scores.
 - (b) CMML Scoring will automatically be updated on a regular basis, as review of new batches of documents is completed. Classification decisions in Relativity are passed to Brainspace, the CMML model is updated, and CMML Scores are passed from Brainspace into the Relativity CMML Score field.
 - (c) Unreviewed documents will be batched in Relativity in families, prioritizing the highest scoring documents (and their families) first.
 - (d) Documents will be batched in sets of decreasing relevance based on CMML Scores until there is sufficient indication that a recall level over 80% has been achieved. At this time, Defendants shall perform validation to ensure the sufficiency of the document review (described below).
9. Documents that are Unable to be Classified:

- (a) Document populations that Brainspace is unable to classify due to inadequate text or other factors will undergo manual analysis. Common scenarios include documents that are images with no or insufficient text or other document types with no or insufficient text (e.g., “garbage” data, media files, or system files). Excessively large documents may also fall into this category (e.g., large spreadsheets, large CSV files, and databases exported as TXT files).
- (b) Reasonable and appropriate steps will be taken to ensure that potentially responsive documents in such categories are properly reviewed and produced where determined to be responsive. That will include human lawyer review of all documents that hit search terms but cannot be classified by Brainspace, as well as any other document workflows the parties would consider appropriate in a traditional document review for such documents.

Quality Control (“QC”)

- 10. To ensure accurate and consistent coding decisions from the attorney review team, Defendants agree to perform QC throughout the TAR review process.
- 11. Defendants shall continue to conduct QC employing workflows and strategies already being employed as part of the attorney review that is currently ongoing. This includes, but is not limited to, targeted searching, sampling, and other QC steps necessary to help ensure high quality and consistent human review coding decisions.
- 12. Defendants shall also utilize CMML scores to conduct QC, including, but not limited to, review of high-scoring documents that were designated as non-responsive, responsive documents with low CMML scores, as well as monitoring for any other apparent anomalies.

Validation

- 13. After Brainspace statistics suggest that recall exceeding 80% has been achieved, elusion testing will be performed to confirm.
- 14. The Elusion Test Set will consist of a sufficiently-sized random sample of documents to calculate the Elusion Rate with a confidence level of 95% and a margin of error of +/- 5%.
- 15. The Eluded Population is calculated by taking the total volume of unreviewed documents in the TAR Review Population and multiplying it by the percentage of responsive documents identified in the random sample population of the Elusion Test Set.
- 16. Recall is calculated by dividing the volume of responsive documents in the TAR Review Population (based on human review) by the sum of the responsive population and the calculated Eluded Population.
- 17. Should the elusion test fail to confirm that Recall over 80% has been achieved, review of documents will continue for additional rounds.

18. Once elusion testing confirms over 80% Recall, the manual review will be discontinued.
19. Statistics will be provided to plaintiffs, including the calculated Recall, a rank distribution chart, the sample size, and CMML Score breakdown of the Elusion Test Set, and statistics on how many documents were manually reviewed and their responsive/non-responsive breakdown.
20. The parties reserve the right to apply to the Court for a modification of this TAR Protocol if, in their view, circumstances reflect that the protocol is not fulfilling its intended purposes, including helping to accelerate the production of relevant non-privileged documents and helping to ensure that document discovery is reasonable, sufficient, and proportional.

Dated: _____

Hon. Joseph A. Dickson, U.S.M. J. (Ret.)
Special Master

EXHIBIT 2

**THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEW JERSEY
CAMDEN VICARAGE**

IN RE: VALSARTAN, LOSARTAN, AND
IRBESARTAN PRODUCTS LIABILITY
LITIGATION

No. 1:19-md-2875-RBK
Hon. Robert Kugler .
Hon. Joel Schneider
**COURT ORDERED CONSENT
PROTOCOL REGARDING
VALIDATION
OF TECHNOLOGY-
ASSISTED REVIEW (“TAR”)**

This Protocol Regarding Validation of Technology-Assisted Review (“TAR”) (hereinafter, “TAR Validation Protocol”) shall govern Plaintiffs and Teva Pharmaceuticals USA, Inc., Teva Pharmaceutical Industries Ltd., Actavis LLC, Actavis Pharma, Inc., and Arrow Pharm (Malta) Ltd. (collectively, the “Teva Defendants”) in the above-captioned matter, in accordance with the Court’s Order filed December 2, 2020 (Document 647), and this Protocol shall be memorialized in a Court Order. This TAR Validation Protocol shall serve as a supplement to Case Management Order No. 8 (Electronic Discovery Protocol – Stipulated) [Dkt. 127], which shall remain in full force, except to the extent modified or superseded herein.

The Teva Defendants do not waive any rights or protections pursuant to privacy, confidentiality, attorney-client privilege, attorney work product, or any other privileges, protections, or objections to discovery that the Teva Defendants may have (individually, “Privilege”; collectively, “Privileges”). The Teva Defendants preserve all such Privileges. The Teva Defendants reserve the right to redact and/or to withhold from any production any document that contains information subject to any appropriate objections, including, without limitation, any Privilege or Privileges, subject to the Confidentiality and Protective Order entered in this matter on June 26, 2019 [Dkt. 139].

I. THE TAR TOOL

The Teva Defendants represent the following. They intend to use Brainspace Continuous Multimodal Learning (“CMML”) (version 6.2.8), which uses a continuous active learning (“CAL”) process to automatically assign a classification score to each document in the review population, and to rank the documents in the collection from most to least likely to be relevant.¹ The predictive models used to generate these scores are developed through a process referred to as supervised machine learning, meaning that they are built based on the coding of human-reviewed documents. To start the TAR review process, CMML is used to select, for human review,

¹ In the context of this TAR Validation Protocol, the terms “relevant” and “responsive” are used interchangeably. Relevance is defined by (1) the claims and defenses in this action and/or (2) responsiveness to the Third Amended Set of Requests for Production to All API and Finished Dose Manufacturing Defendants, ordered by the Court on December 23, 2019 [Dkt. 328], modulo the Teva Defendants’ responses and objections thereto. In addition, by agreeing to this TAR Validation Protocol, the Parties are not waiving any arguments or objections as to the admissibility of any responsive documents.

a set of documents that are conceptually diverse and representative of the entire dataset. Once the first iteration of classification scores is generated, human reviewers review batches of documents that are deemed the next most likely to be responsive based on their classification scores. The CMML model is updated, iteratively, based on the review of the highest scoring as-of-yet-unreviewed documents, continuously improving the predictive model based on the results of the latest human review. This process is repeated until as many responsive documents as reasonably possible have been identified, as determined by the Review Stopping Criteria set forth below in Section VI. The review process includes and is followed by a validation process in order to seek to identify the maximum number of relevant and responsive documents, and derive an estimate of *recall*, showing the proportion (*i.e.*, percent) of responsive documents in the review population that have been identified through the TAR process, and the estimated proportion and nature (*i.e.*, the uniqueness and importance, or the duplicativeness and marginality) of any documents that have been missed.

II. COOPERATION

For the purposes of avoiding protracted discovery disputes in this proceeding, but without requiring the disclosure of any Privileges, the Teva Defendants have agreed to provide the Plaintiffs with certain non-privileged documents and information set forth below that they would not ordinarily disclose in the course of discovery. Such documents and information shall be subject to the Confidentiality and Protective Order entered in this matter on June 26, 2019 [Dkt. 139].

The Parties agree to meet and confer in good faith to resolve any disputes that may arise in the course of the TAR review process or this TAR Validation Protocol, and if they are unable to do so, they will promptly raise such matters with the Court for resolution.

III. SCOPE OF RELEVANCE

It is important that the Parties agree on the objective of the TAR exercise (*i.e.*, the scope or categories of documents to be included or excluded by the use of CMML). The Parties agree on the scope of relevance, which is governed by both (1) relevance to the claims and defenses in this action, and/or (2) responsiveness to Plaintiffs' discovery requests (modulo the Teva Defendants' responses and objections), which is deemed relevant by definition.

IV. TAR REVIEW POPULATION

The review population to which CMML shall be applied (the "TAR Review Population") shall include the documents of the thirty-six (36) identified custodians (and any others to be added at any point in time) for the time period of January 1, 2012 to present, as previously negotiated and agreed to by the Parties at an in-person conference held on December 11, 2019 and confirmed in the Court's December 23, 2019 Order [Dkt. 328] (for the applicable custodians), and in the Court's November 25, 2019 Order [Dkt. 303] confirming the "macro" discovery arguments argued to the Court at the November 20, 2019 Case Management Conference (for the applicable time period). The Teva Defendants represent that the TAR Review Population is reasonably believed to contain information that is (1) relevant to the claims and defenses in this action and/or (2) responsive to Plaintiffs' requests for production.

The Parties recognize that certain types or categories of documents may not be appropriate for TAR. These include, but are not limited to: photographs or images, chromatograms, mass spectrometry, schematics or drawings, spreadsheets and presentations, audio or video files, documents with handwritten notations, documents with too little text or Optical Character Recognition (“OCR”) quality such as to render the use of TAR ineffective, hard copy documents, contacts, and calendar entries. Such documents will be excluded from the TAR Protocol and will be analyzed for substantive content by human reviewers. The Teva Defendants shall disclose to Plaintiffs the file types and extensions that are excluded from the TAR work flow and subject to manual analysis.

The Teva Defendants may also remove obvious “junk” or non-responsive materials from the TAR Review Population (*e.g.*, identified pools of logos, Amazon.com or ESPN.com emails, etc.) based on sender domain name(s) or address(es), file types, and similar characteristics. The Teva Defendants shall disclose to Plaintiffs the criteria used to identify such obvious “junk” or non-responsive materials.

The Teva Defendants shall not use keywords to cull or otherwise reduce the TAR Review Population, however the TAR Review Population shall be de-duplicated, and email threading shall not be applied to same notwithstanding Case Management Order No. 8 (Electronic Discovery Protocol – Stipulated) [Dkt. 127].

V. TAR TRAINING PROCESS AND REVIEW QUALITY CONTROL (“QC”)

As described in Section I above, following the human review of the initial training set selected by CMML, the TAR tool automatically applies a classification score to each as-of-yet-unreviewed document in the collection and ranks the documents from most to least likely to be relevant. The human reviewers are not provided with any information about CMML’s classification scores for the documents when they review them. The coding of each document that is reviewed by a human is ultimately fed back into CMML and the tool’s predictive model iteratively updates as additional documents are reviewed, improving CMML’s ability to distinguish responsive from non-responsive documents. If a document presented for review cannot be reviewed because of a technical difficulty, it is coded “Technical Difficulty.” The Teva Defendants shall maintain a record of all documents coded as “Technical Difficulty” and shall provide a log of same to Plaintiffs. Documents coded “Technical Difficulty” are not fed back into CMML and are no longer considered as part of the TAR Review Population, and must be manually reviewed.

The Teva Defendants shall utilize Teva’s core discovery documents as training examples (with the exception of portions of the ANDA files to be determined), as soon as practicable. Within ten (10) business days of the execution of this TAR Validation Protocol, Plaintiffs may, but are not required to, provide to the Teva Defendants up to one hundred (100) documents for consideration as additional training examples for CMML (*e.g.* documents produced by Teva, documents produced by other Defendants). Thereafter, Plaintiffs may provide further sets of proposed training examples for CMML, for up to 30 days after this protocol is finalized. Should the Teva Defendants have an objection to any of the proposed training documents, the Parties shall meet and confer and if they are unable to resolve their disagreement within ten (10) business days,

they shall promptly raise the issue with the Court for resolution. Within ten (10) business days after each rolling production is made, the Parties shall meet and confer to discuss any concerns the Plaintiffs may have with the progress of the training of CMML up to that point (if any).

To ensure that the human coding decisions are as accurate and consistent as possible, both the Teva Defendants' vendor and its counsel shall perform continuous Quality Control ("QC") of the human review process, including but not limited to, review of: (i) documents receiving a high classification score by CMML that are coded non-responsive by a human reviewer, (ii) documents receiving a low classification score by CMML that are coded responsive by a human reviewer; (iii) documents that are or appear to be inconsistently coded by human reviewers; and/or (iv) random samples of documents coded by human reviewers. Any document that was coded non-responsive in error, or was otherwise not coded responsive in error, shall be re-coded responsive and fed back into CMML with the proper coding.

With each rolling production, Plaintiffs shall be provided: (1) the number of documents, and percentage of documents, for categories (i), (ii), and (iii); (2) the number of documents where a reviewer coded a document as responsive but the document was not produced (except for documents withheld based on assertion of privilege); (3) the percentage of reviewed documents found to be non-responsive; and (4) the percentage of the entire document set, and number of documents, that has/have not been reviewed.

VI. TAR REVIEW STOPPING CRITERIA

The TAR review process for each rolling production will continue until the Teva Defendants have reviewed at least 15% of the entire document set, and can reasonably conclude that further review is unlikely to yield additional responsive documents with sufficient quantity or materiality to justify continuing. The 15% minimum review requirement will permit a credit for the approximately 740,000 documents that Teva represents it has reviewed as of the November 30, 2020 production deadline, but will require a minimum of 460,000 documents of the highest scoring 15% of the entire document set to be newly reviewed (documents not reviewed previously) before consideration can be given to implementing the Stopping Criteria. This will not occur before the last batch of documents identified by CMML classification score and reviewed by humans contains no more than five percent (5%) responsive documents and none of the responsive documents is novel and/or more than marginally relevant.

At that point, the Teva Defendants will conduct an Elusion Sample to estimate the number of responsive documents that have been missed by CMML in that production. The size of the Elusion Sample shall be four hundred (400) documents drawn at random from the "null set," which is comprised of the documents for which CMML classification scores did not suggest the need for human review (*i.e.*, they received low classification scores). This sample size will provide an estimate of the number of documents missed at the 95% confidence level, with a margin of error of plus or minus five percent (5%). If any of the documents that are found in the Elusion Sample are novel and/or relevant, the TAR process will resume. If the Elusion Sample shows that substantially all relevant documents have been identified (*i.e.*, the recall estimate obtained using

that Elusion Sample is 80% or more), the review process shall cease for that particular rolling production. Plaintiffs will be provided the results of the Elusion Sampling, including copies of any responsive documents identified through the Elusion Sampling process, for any rolling production, which shall be promptly provided. Should the Parties disagree that, for any rolling production, the Teva Defendants have chosen a reasonable stopping point, the Parties shall meet and confer in good faith and if they are unable to resolve their disagreement within ten (10) business days, they shall promptly raise the issue with the Court for resolution.

The same Review Stopping Criteria and Elusion Sampling process shall be applied for each rolling production.

Teva's Review and Elusion Sampling shall be completed, and Plaintiffs will be given Teva's final list of non-responsive documents on or before January 15, 2021, and February 15, 2021, in connection with each rolling production.

VII. VALIDATION PROTOCOL

Once the final rolling production has been made, the Teva Defendants shall engage in the following Validation Protocol to demonstrate that their production is reasonable, made in good faith, and consistent with their obligations under Fed. R. Civ. P. 26(g).

- A. Plaintiffs shall be allotted a budget of five thousand (5,000) documents for the purposes of an audit of the adequacy of the Teva Defendants' entire production (*i.e.*, consisting of all of the rolling productions). This sample of five thousand (5,000) documents shall be referred to as the "Audit Sample," and shall be provided to Plaintiffs. Plaintiffs may use their Audit Sample to test whichever aspect(s) of the Teva Defendants' review process they would like, from the categories set forth below (each an "Audit Category"). By way of example, only, Plaintiffs may request that a random sample of size *n* documents be drawn from certain of the categories set forth below, or they may request a sample of size *n* documents be drawn from the documents after application of a search query of their own choosing. At least ten business days prior to Plaintiffs having to select documents and searches for the Audit Categories, the Teva Defendants shall provide Plaintiffs with a hit count report run across the unreviewed set with the currently agreed to search terms. If requested by Plaintiffs the Parties shall meet and confer regarding the potential need for further reviews and hit count reports prior to initiating the Audit process. The total Audit Sample may be allocated among the following Audit Categories as Plaintiffs see fit, provided that the total Audit Sample shall not exceed five thousand (5,000) documents (including family members, if requested).
 1. ***Audit Category 1*** – A random sample of the documents that were either produced or withheld on the basis of Privilege [***no minimum number of documents***]
 2. ***Audit Category 2*** – A random sample of the documents selected by CMML, reviewed by a human reviewer, and coded as non-responsive [***no minimum***

number of documents]

3. ***Audit Category 3*** – A random sample of the documents excluded by CMML, not reviewed by a human reviewer, and not selected using any search query per the below Audit Categories [***minimum of one thousand (1,000) documents***]
 4. ***Audit Category 4*** – A sample of the documents excluded from review by CMML, not reviewed by a human reviewer, and selected by using the following search query [ABC] (either all of the “hits” if there are less than the number specified, or a random sample of the “hits” if there are more than the number specified) [***no minimum number of documents***]
 5. ***Audit Category 5*** – A sample of the documents excluded from review by CMML, not reviewed by a human reviewer, and selected by using the following search query [DEF], (either all of the “hits” if there are less than the number specified, or a random sample of the “hits” if there are more than the number specified), but not including any documents identified by the search query [ABC] [***no minimum number of documents***]
 6. ***Audit Category 6 et seq.*** – A sample of the documents excluded from review by CMML, not reviewed by human reviewers, and selected by using the following search query [GHI] *et seq.*, (either all of the “hits” if there are less than the number specified, or a random sample of the “hits” if there are more than the number specified), but not including any documents identified by any of the search queries previously employed in any other Audit Category [***no minimum number of documents***]
- B. Plaintiffs shall provide the Teva Defendants with their request for Audit Samples no later than ten (10) business days following the last rolling production on February 15, 2021. The request shall include: (i) specification of the Audit Categories (as described in Paragraph VII.B above); (ii) the search query to be used (if any) for Audit Categories 4 *et seq.*; and (iii) the number of documents to be included in each Audit Category. The Parties shall meet and confer in good faith to resolve any questions or technical issues raised by the Plaintiffs’ request for Audit Samples.
- C. The Teva Defendants shall have their vendor draw the Audit Sample, as specified in Paragraph VII.B by Plaintiffs, and provide the Audit Sample to Plaintiffs within fourteen (14) days after Plaintiffs’ designation. The vendor shall maintain a separate record of which documents were selected for which Audit Categories, and shall place the Audit Sample in a folder that contains no information about the Audit Category or Categories from which the documents came, how the documents were previously coded or whether they were previously produced or withheld and the basis therefor, or the classification score of the documents.

- D. The Teva Defendants shall review and code the Audit Sample and shall provide a certification under oath that the reviewer(s) of its Audit Sample had no knowledge of the Audit Category or Categories from which the documents came, how the documents were previously coded or whether they were previously produced or withheld and the basis therefor, or the classification score of the documents.
- E. The Plaintiffs shall notify the Teva Defendants of any disagreement with the Teva Defendants' coding of any document in the Audit Sample. The Parties shall meet and confer in good faith over any such disagreements. Should the Parties be unable to resolve their disagreements on the coding of any document(s) in the Audit Sample, or any other issue stemming from the Audit Process within ten (10) business days, they shall promptly raise the issue with the Court for resolution.
- F. Within five (5) business days of final agreement on the coding of the Audit Sample, the Teva Defendants shall complete and provide Plaintiffs with a table indicating for each document in the Audit Sample, the Audit Category or Categories to which it belongs, and whether it was: (i) produced in one of the rolling productions as responsive in its own right; (ii) produced in one of the rolling productions as a family member of a responsive document; (iii) withheld from production as privileged; (iv) withheld from production as non-responsive; (v) not identified as potentially responsive by CMML; or (vi) was not produced for any other reason(s), which reason(s) shall be provided, and the classification score of each document. Along with the table, the Teva Defendants shall provide Plaintiffs with a completed copy of the TAR Worksheet (attached hereto as Exhibit A).
- G. The results set forth in the table described in Paragraph VII.G above and in the TAR Worksheet A (including the estimate of recall) should provide the Parties with sufficient information to determine whether the Teva Defendants have made a reasonable, good faith production consistent with their obligations under Fed. R. Civ. P. 26(g). If a problem is identified with respect to the Teva Defendants' production as a whole, or with respect to any particular Audit Category, the Parties shall meet and confer in good faith to determine a suitable remediation procedure, which may involve re-running CMML again using the responsive document(s) identified during the Audit Process as new training documents, establishment of additional Audit Samples in accordance with the process herein, and reviewing the next-most-likely to be relevant documents suggested by CMML to confirm that there are no additional responsive documents, running some additional keyword searches, etc. If the Parties cannot agree on whether the production is adequate or on an appropriate remediation procedure within ten (10) business days, they shall promptly raise the issue with the Court for resolution.
- H. Plaintiffs shall have the right to apply to the Court for further relief within sixty (60) days after the designated non-responsive documents are produced if plaintiffs' review of the documents demonstrates that more than a minimal amount of materially relevant and non-duplicate or cumulative documents were designated as non-responsive, or if there are any alleged deficiencies in Teva's ESI production.

GREENBERG TRAURIG, LLP

/s/ Victoria Davis Lockard

Victoria Davis Lockard, Esq.

Terminus 200

3333 Piedmont Rd., NE

Suite 2500

Atlanta, Georgia 30305

Tel: (678) 553-2103

Fax: (678) 553-2100

*Attorney for Teva Pharmaceuticals USA,
Inc., Teva Pharmaceutical Industries Ltd.,
Actavis LLC, and Actavis Pharma, Inc.*

**MAZIE SLATER KATZ & FREEMAN,
LLC**

/s/ Adam M. Slater

Adam M. Slater

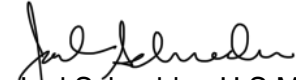
103 Eisenhower Parkway, Suite 207

Roseland, New Jersey 07068

Telephone: 973-228-9898

Attorneys for Plaintiffs

COURT ORDERED:



Joel Schneider, U.S.M.J.

December 22, 2020

EXHIBIT A

TAR WORKSHEET

Audit Category 1: All documents that were either produced or withheld on the basis of Privilege.

Number of documents in category: _____ [no minimum]

Sample size: _____

Number of responsive documents in sample: _____

Estimated number of responsive documents in category (number of responsive documents in sample ÷ sample size × number of documents in category): _____

Audit Category 2: All documents selected by CMML, reviewed by a human review, and coded as non-responsive.

Number of documents in category: _____ [no minimum]

Sample size: _____

Number of responsive documents in sample: _____

Estimated number of responsive documents in category (number of responsive documents in sample ÷ sample size × number of documents in category): _____

Audit Category 3: All documents excluded by CMML, not reviewed by a human reviewer, and not selected using any search query per the below Audit Categories.

Number of documents in category: _____ [minimum of 1,000]

Sample size: _____

Number of responsive documents in sample: _____

Estimated number of responsive documents in category (number of responsive documents in sample ÷ sample size × number of documents in category): _____

[Repeat as necessary]

Audit Category 4: All documents excluded from review by CMML, not reviewed by a human reviewer, and selected by using the following search query [ABC] (either all of the “hits” if there are less than the number specified, or a random sample of the “hits” if there are more than the number specified).

Search query: _____

Number of documents in category: _____ [no minimum]

Sample size: _____

Number of responsive documents in sample: _____

Estimated number of responsive documents in category (number of responsive documents in sample ÷ sample size × number of documents in category): _____

Audit Category 5: All documents excluded from review by CMML, not reviewed by a human reviewer, and selected by using the following search query [DEF], (either all of the “hits” if there are less than the number specified, or a random sample of the “hits” if there are more than the number specified), but not including any documents identified by the search query [ABC].

Search query: _____
Number of documents in category: _____ [no minimum]
Sample size: _____
Number of responsive documents in sample: _____
Estimated number of responsive documents in category (number of responsive documents in sample ÷ sample size × number of documents in category): _____

Audit Category 6 et seq.: All documents excluded from review by CMML, not reviewed by human reviewers, and selected by using the following search query [GHI] et seq., (either all of the “hits” if there are less than the number specified, or a random sample of the “hits” if there are more than the number specified), but not including any documents identified by any of the search queries previously employed in any other Audit Category.

Search query: _____
Number of documents in category: _____ [no minimum]
Sample size: _____
Number of responsive documents in sample: _____
Estimated number of responsive documents in category (number of responsive documents in sample ÷ sample size × number of documents in category): _____

Overall Estimates:

P = Estimated number of responsive documents either produced or withheld on the basis of Privilege: (*estimate from Audit Category 1*): _____

NP = Estimated number of responsive documents not either produced or withheld on the basis of Privilege: (*sum of estimates for Audit Categories 2 et seq.*): _____

Estimated Recall: $P \div (P + NP) \times 100\% =$ _____

I certify under penalty of perjury that (i) the Teva Defendants’ Auditor(s) who coded the documents in the Audit Sample had no knowledge of the Audit Category or Categories from which the documents came, how the documents were previously coded or whether they were previously produced or withheld and the basis therefor, or the classification score of the documents, and (ii) that the answers provided in this TAR Worksheet are complete and correct to the best of my knowledge, information, and belief.

Signature: _____

Name: _____

Title: _____

Date: _____

EXHIBIT 3

**UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF FLORIDA
PENSACOLA DIVISION**

IN RE: 3M COMBAT ARMS
EARPLUG PRODUCTS
LIABILITY LITIGATION

Case No. 3:19md2885

This Document Relates to All Cases

Judge M. Casey Rodgers
Magistrate Judge Gary R. Jones

**PRETRIAL ORDER NO. 12
PROTOCOL RELATING TO USE OF
TECHNOLOGY ASSISTED REVIEW (“TAR PROTOCOL”)**

Plaintiffs and Defendants 3M Company, Aearo Technologies LLC, Aearo Holdings, LLC, Aearo Intermediate, LLC, Aearo, LLC, and any of their related or affiliated entities or individuals named as defendants herein (collectively, “3M Defendants”) submitted the following Protocol to conduct Technology Assisted Review (“TAR”) of certain electronically stored information (“ESI”). The Court hereby adopts the parties’ Protocol as follows.

By agreeing to use TAR in this MDL and to follow this TAR Protocol, the 3M Defendants do not acknowledge or concede that TAR is appropriate, or that they are obligated to use TAR in any other matter, including, without limitation, all earplug-related matters pending in any state courts. Moreover, by agreeing to use TAR in this MDL and to follow this TAR Protocol, the 3M Defendants do not intend to waive any rights or protections pursuant to privacy, confidentiality, attorney-client privilege, attorney work product, and any other privileges, protections, or objections

to discovery (individually, “Privilege”; collectively, “Privileges”). The 3M Defendants preserve all such Privileges.

The 3M Defendants reserve the right to withhold from production and/or to redact any document that contains information subject to any appropriate objections or protections, including, without limitation, any Privilege. The 3M Defendants intend for all information and documents produced pursuant to this TAR Protocol to be subject to the Order Governing Production of Documents and Electronically Stored Information and the Joint Stipulated Order for Preservation of Documents and Electronically Stored Information entered in this MDL.

Except as explicitly set forth herein, nothing in this Order supersedes any rights or obligations of the Parties pursuant to Pre-Trial Order No. 10 (Order Governing Production of Documents and Electronically Stored Information), including Section IV thereof.

1. TAR Tool

The Parties will use Xact Data Discovery’s licensed TAR tool Relativity Active Learning (version 9.5.370.136), herein referred to as Text Classification or TAR Tool. Text Classification leverages machine learning and natural language processing techniques to automatically assign a Classification Score to each document in the review population. The predictive models used to generate these scores are trained through supervised learning, meaning they are built based on the

coding of human-reviewed documents. The TAR tool automatically selects documents likely to be relevant or improve the predictive model and presents those documents to reviewers on an ongoing basis, continually updating the predictive model based on the results of that human review. The updated model is used to recalculate the Classification Scores of the document population, and the process is continually repeated until all likely relevant documents have been reviewed, as determined by a score threshold determined by the Parties, or by an agreed-upon elusion test to validate the accuracy of the model.

2. Corpus

(a) The Corpus shall include populations of (i) documents associated with or related to the custodians reasonably believed to possess relevant information identified by the Plaintiffs or the 3M Defendants, agreed to by the Parties, or ordered by the Court, and (ii) documents from non-custodial sources reasonably believed to possess relevant information identified by the Plaintiffs or the 3M Defendants, agreed to by the Parties, or ordered by the Court.

(b) The Corpus shall not include any documents lacking adequate text to subject them to TAR-based text classification, including Excel documents and non-text based documents, *e.g.*, image files, audio files, video files, CAD files, etc.

(c) The 3M Defendants will disclose to Plaintiffs the total number of documents in the Corpus when created, and a provisional estimate (subject to

updates as may be required to facilitate the parties' conferrals hereunder) of the number of documents being reviewed outside of the TAR process. The 3M Defendants will disclose to Plaintiffs if documents are added to or deleted from the Corpus at a later date, and will disclose to Plaintiffs the number of documents added to or deleted from the Corpus and the reason for the addition or deletion. Defendants will also disclose counts of any documents batch-coded as non-responsive without individual review, and the reasons for any such batch-codings.

3. Sample Set

(a) The Parties' TAR approach will include the use of a Sample Set to help assure that the Parties have a sufficient level of agreement on what constitutes responsiveness and non-responsiveness.

(b) The Sample Set will be created by drawing a simple random sample of 1,750 documents from the Corpus.

(c) The 3M Defendants will conduct the first review of the Sample Set, and code each document as Responsive or Not Responsive and Privileged or Not Privileged. The 3M Defendants will provide Plaintiffs with access to all Non-Privileged documents in the Sample Set with text files and corresponding native files, images and metadata in a format that complies with the entered ESI protocol, and provide a privilege log for any documents withheld for privilege reasons. Documents coded as Privileged will not be removed from the Sample Set for the

purposes of model training. Plaintiffs' Leadership may designate up to five individuals (plus up to three consultants) to aid in the review ("Plaintiffs' Designated Sample Set Reviewers") to be given access to review the Sample Set. This review may take place at such dates and times as the Parties mutually agree (a) at the offices of Kirkland & Ellis, LLP, or at such other location or locations mutually agreed by the Parties, or (b) via a secure web-based viewer. Any documents coded Not Responsive by the 3M Defendants to which Plaintiffs' Designated Reviewers are provided access as part of this review are provided for the limited and sole purpose of raising and resolving disagreements, if any, regarding the coding calls made by the 3M Defendants. Any such disagreements shall be recorded on a TAR Protocol Classification Dispute Log (the "Log"), which shall be in a form agreed upon by the Parties. Once Plaintiffs' Designated Reviewers complete their review of the Sample Set, the Parties shall meet and confer to resolve any differences in coding designation. The Parties' review of the Sample Set, and conferral to resolve any differences in coding designation, shall be completed by July 26, 2019. If resolution cannot be reached, the issue shall be submitted to the Court for resolution.

(d) Plaintiffs' Designated Reviewers shall not remove from the offices of Kirkland & Ellis, LLP, or other location or locations mutually agreed to by the Parties, any documents to which they are provided access in connection with the Sample Set review process, and shall not copy, record, print, image, photograph, fax,

scan, or otherwise capture, transmit or share any document or any information contained therein, in any way, with anyone beyond the other Plaintiffs' Designated Reviewers conducting the review. Any document in native format accessed via secured web browser and opened in a native application by any Plaintiffs' Designated Reviewer will be immediately deleted after it has been viewed in the native application.

4. TAR Training Process

(a) The 3M Defendants will start the TAR tool's active learning process with the Parties' agreed-upon coded documents from the Sample Set, and such other documents as the Parties mutually agree, after which the system will automatically select documents for review based on predicted relevance and also, to allow the TAR tool to learn from all possible definitions of relevance, select for review some non-highly ranked documents and documents about which the TAR tool is uncertain.

(b) Based on the reviewer coding of other documents, each document will eventually receive a score from 0-100 (the "Classification Score"), with documents with a Classification Score closer to zero being predicted as less likely to be relevant and documents with a Classification Score closer to 100 being predicted as more likely to be relevant.

(c) The predictive model the TAR tool uses will update itself continuously without need for human intervention.

(d) The TAR tool may automatically exclude duplicative content from the review queue in order to avoid delays in training the model. These documents will still receive a Classification Score. Suppressed documents above or equal to the lowest score of any document classified as responsive by a reviewer will be reviewed at the end of the process.

5. Classification Cutoff and Validation

(a) Following initial training, the 3M Defendants will continue to review the prioritized review queue, as prioritized and delivered by the Relativity Active Learning tool, consistent with the coding designations agreed to among the Parties with the Sample Set. After sufficient review of the prioritized review queue such that the 3M Defendants believe that further training is unlikely to yield benefit to the TAR model, the 3M Defendants shall notify Plaintiffs that they believe it is appropriate to freeze training and declare a Classification Cutoff. The Parties shall cooperate in the exchange of information and subsequent conferral to determine whether it is appropriate to set a Classification Cutoff at that point.

(b) Upon reasonable agreement of the Parties, the 3M Defendants will conduct an elusion test using the TAR tool as follows:

- (i) The training process shall be frozen.
- (ii) The Classification Cutoff will be set at the lowest score of any document manually classified as responsive.

(iii) A simple random sample of 1,750 documents will be drawn from those un-reviewed documents in the Corpus with a Classification Score below the Classification Cutoff (the “Elusion Test Sample”).

(iv) The Elusion Test Sample will be reviewed by the 3M Defendants to determine the responsiveness of the documents in the Elusion Test Sample.

(c) Once the elusion test has been run, the 3M Defendants will report the following to the Plaintiffs:

(i) The Classification Cutoff that was used in connection with drawing the Elusion Test Sample.

(ii) The estimated elusion rate (the number of responsive documents in the Elusion Test Sample divided by the number of documents in the Elusion Test Sample).

(iii) The number of documents in the Elusion Test Sample.

(iv) The number of documents from the Corpus determined by reviewers to be responsive.

(v) The number of documents from the Corpus determined by reviewers to be non-responsive.

(vi) The number of un-reviewed documents from the Corpus below the Classification Cutoff.

(vii) The number of un-reviewed documents from the Corpus above the Classification Cutoff, if any.

(viii) The number of responsive documents (as determined by manual review) among the 1,000 documents in the prioritized review queue that were reviewed immediately prior to the freezing of training and proposing the Classification Cutoff.

(d) Plaintiffs' Designated Reviewers shall have the opportunity to review all of the documents included in the Elusion Test Sample, without any knowledge of how any individual documents were coded by 3M Defendants, in order to perform a blind comparison of the recall estimates provided.

(e) This review may take place (a) at the offices of Kirkland & Ellis, LLP, or at such other location or locations mutually agreed by the Parties, on a date and time to be agreed to by the Parties, or (b) via a secure web-based viewer on a date and time to be agreed to by the Parties. Any documents coded Not Responsive by the 3M Defendants to which Plaintiffs' Designated Reviewers are provided access as part of this review are provided for the limited and sole purpose of raising and resolving disagreements, if any, regarding the coding calls made by the 3M Defendants. In connection with the Parties conferral, the 3M Defendants shall provide Plaintiffs with the Classification Score for the documents in the Elusion Test Sample. Any such disagreements shall be recorded on a TAR Protocol

Classification Dispute Log (the “Log”), which shall be in a form agreed upon by the Parties. Once Plaintiffs’ Designated Reviewers complete their review of the Elusion Test Sample, the Parties shall meet and confer to resolve any differences in coding designation. If resolution cannot be reached, the issue shall be submitted to the Court for resolution.

(f) If the number of responsive documents, or the character or nature of such documents designated as responsive, in the Elusion Test Sample indicates that the TAR tool’s model of responsiveness was too limited, then Plaintiffs and 3M Defendants will discuss potential remedial action to locate an adequate proportion of the remaining relevant documents in the null set by additional rounds of training by the Parties, including selecting a deeper Classification Cutoff or supplemental and prioritized training of the TAR model. 3M Defendants reserve the right to object to such potential remedial action as inappropriate or unnecessary.

(g) If the elusion test confirms that the review has been sufficiently thorough, then 3M Defendants will review all un-reviewed documents with a predicted relevance at or above the Classification Cutoff (or, if 3M Defendants so elect, produce such documents un-reviewed). For the avoidance of doubt, documents identified for manual review in accordance with Section IV of Pre-Trial Order No. 10 (Order Governing Production of Documents and Electronically Stored Information) shall be reviewed (or, if the 3M Defendants so elect, produced un-

reviewed) without regard to whether the Classification Score assigned to any such document is at or above the Classification Cutoff.

(h) To the extent that the 3M Defendants conduct elusion tests prior to setting the proposed Classification Cutoff, the 3M Defendants shall provide information concerning each such earlier elusion testing, including date/time of the elusion test, the size of the below-cutoff population sampled from, the number of documents in the elusion test sample, and the estimated elusion rate (the number of responsive documents in the elusion test sample divided by the number of documents in the elusion test sample).

6. Rolling Corpus

To the extent that one or more of the Plaintiffs seek to add documents to the Corpus, the 3M Defendants will meet and confer with Plaintiffs regarding that request. If the Parties are unable to reach agreement, the Parties shall submit the matter to the Court for resolution.

7. Additional Considerations

(a) To the extent the 3M Defendants identify any types of documents (e.g., Excel files, image files) within the Corpus that they have reason to believe are not being captured effectively by the TAR model, the 3M Defendants shall meet and confer with the Plaintiffs about the documents. The Parties will meet and confer regarding any dispute related to types of documents they believe are not effectively

being captured by the TAR model.

(b) To the extent that any aspect of this TAR Protocol is not feasible or effective in practice for any reason, including without limitation the low richness of the Corpus and/or the effectiveness of the TAR Tool as applied to a particular category or class of documents, then the Parties shall meet and confer regarding alternative approaches to achieve the objectives of that aspect of this Protocol that is not otherwise feasible or effective, including without limitation the possibility of using search terms or stratifying the collection at appropriate stages of the TAR process. If the Parties are unable to reach agreement regarding any appropriate alternative approach(es), then the Parties may submit the matter to the Court for resolution.

8. Document Review and Productions

(a) The 3M Defendants reserve the right to conduct a manual review of all documents classified by the TAR tool as Responsive to determine whether such documents are in fact responsive to Plaintiffs' requests for production. 3M Defendants will provide Plaintiffs with the number of documents with scores above the Classification Cutoff not being produced or logged as privileged.

(b) The 3M Defendants reserve the right to conduct a manual privilege review of all documents.

(c) Responsive documents that are determined to be privileged will be

listed on a privilege log, unless excluded from the logging requirements or by agreement of the Parties.

(d) The 3M Defendants will produce non-privileged documents determined to be responsive to Plaintiffs' requests for production along with any non-privileged family members in accordance with the Order Governing Production of Documents and Electronically Stored Information entered in the MDL.

(e) When responsive, non-privileged or partially privileged documents subjected to TAR are produced, the production deliverables shall include an additional metadata field populated with a "Y" and labeled "DOCUMENT RECEIVED CLASSIFICATION SCORE," together with the other available metadata delivered for each document, in accordance with the Parties' stipulated Pre-Trial Order No. 10 (Order Governing Production of Documents and Electronically Stored Information) and Exhibit A thereto. When responsive documents that are not subjected to TAR are produced, the "DOCUMENT RECEIVED CLASSIFICATION SCORE" metadata field shall be populated with an "N." Defendants shall retain all information regarding the Classification Scores assigned to each document in the Corpus. Plaintiffs reserve the right to request Classification Scores at a later date, and Defendants reserve the right to object to any

such request.

9. Cooperation and Transparency

The Parties understand that this is a cooperative process. The Parties undertake this process in an effort to obtain relevant documents as efficiently as can be achieved. The Parties agree to cooperate and to meet and confer as necessary to achieve those ends.

DONE and ORDERED, on this 1st day of July, 2019.

M. Casey Rodgers

**M. CASEY RODGERS
UNITED STATES DISTRICT JUDGE**