

UNITED STATES DISTRICT COURT
MIDDLE DISTRICT OF FLORIDA
TAMPA DIVISION

JUANA GUERRERO,
*Personal Representative of the Estate
of Ezequiel Caraballo-Pache,*

Plaintiff,

v.

Case No: 8:20-cv-0263-KKM-JSS

BP EXPLORATION & PRODUCTION
INC., and BP AMERICA PRODUCTION
COMPANY,

Defendants.

ORDER

Decedent Ezequiel Caraballo-Pache worked for four months on clean-up efforts related to the BP Deepwater Horizon Oil Spill. Through that experience, he was exposed to oil and other hydrocarbons that were released from the rig explosion. Eight years later, Caraballo-Pache was diagnosed with pancreatic cancer that ultimately led to his death. Plaintiff Juana Guerrero, personal representative of Caraballo-Pache's estate, brings this lawsuit under the Back-End Litigation Option provisions of the Deepwater Horizon Medical Benefits Class Action Settlement Agreement (MSA). *See* Am. Compl. (Doc. 58).

To prove that Caraballo-Pache's exposure to oil, other hydrocarbons, and other harmful substances released from the spill caused his pancreatic cancer, Guerrero must set forth expert testimony proving legal causation. Guerrero proffers a sole medical causation expert: Dr. Alfred I. Neugut. BP seeks to exclude Neugut's testimony, contending that Neugut fails to satisfy the requirements for testimony on both general and specific causation. Mot. to Exclude (Doc. 141). BP also moves for summary judgment, arguing that without Neugut's testimony, Guerrero fails to satisfy her burden of establishing causation. (Doc. 146). Guerrero opposes both motions. (Docs. 173–74). I agree that Neugut's testimony is unreliable and should be excluded. Accordingly, I grant summary judgment in favor of BP because Plaintiff cannot establish legal causation.

I. BACKGROUND

The BP Deepwater Horizon Oil Spill occurred on April 20, 2010. Am. Compl. ¶ 14. The spill “occurred [due to] the blowout of the Macondo Well which was drilled by the Deepwater Horizon Rig (DHR) on the outer continental shelf in the Gulf of Mexico, approximately 130 miles southeast of New Orleans, Louisiana.” *Id.* ¶ 13. “Crude oil and other hydrocarbons were released following the [DHR] explosion.” *Id.* ¶ 17. The “crude oil contained benzene and other volatile organic compounds such as ethylbenzene, toluene, xylene and naphthalene, polycyclic aromatic hydrocarbons (“PAHs”), diesel fumes and heavy metals such as aluminum, cadmium, nickel, lead, and zinc.” *Id.* ¶ 18.

In response to the oil spill, clean-up workers, including Decedent Ezequiel Caraballo-Pache, conducted response activities. *Id.* ¶¶ 2, 20. Caraballo-Pache worked as a clean-up worker from July 2010 to October 2010. *Id.* ¶¶ 2, 25. During this four-month period, Caraballo-Pache worked “seven days a week for up to ten hours on a typical workday” and “was housed on a floating platform or ‘flotilla’ near Hopedale, LA and Venice, LA.” *Id.* ¶ 26. Caraballo-Pache “received continuous exposure to BP’s toxic substances through his oil spill clean-up and response work activities and due to being housed on or proximate to the water of the Gulf of Mexico by BP.” *Id.* ¶¶ 26–27. Specifically, Caraballo-Pache “came into contact with oil, other hydrocarbons, chemical dispersants, and other substances when his eyes, nose, mouth, and skin, and airways were exposed.” *Id.* ¶ 28.

Following the oil spill, BP stipulated to fault and entered into the MSA. *Id.* ¶¶ 2, 16. The MSA stipulates that clean-up workers “were ‘exposed’ to oil, and other hydrocarbons, and other substances released from the [DHR].” *Id.* ¶ 23. The MSA “pertains to class members who allege that exposure to substances released in the spill or used in connection with response activities caused them to suffer physical injuries first diagnosed after April 16, 2012.” *In re Deepwater Horizon BELO Cases*, No. 20-14544, 2022 WL 104243, at *1 (11th Cir. Jan. 11, 2022) (per curiam). Put differently, under the MSA, BP is “responsible for any and all damages that were proximately caused as a result

of [the oil spill], including, but not limited to any and all damages caused to class members who allege a ‘Latter Manifested Physical Condition.’ ” Am. Compl. ¶ 16. Under the terms of the MSA, “these class members can sue BP in federal court in what is called the ‘Back-End Litigation Option’ (‘BELO’).” *In re Deepwater Horizon BELO Cases*, 2022 WL 104243, at *1. Caraballo-Pache qualifies as a class-member of the MSA. Am. Compl. ¶ 2.

On April 4, 2018, Caraballo-Pache “was diagnosed with Pancreatic Adenocarcinoma,” commonly known as pancreatic cancer. *Id.* ¶ 29. Guerrero alleges that Caraballo-Pache’s exposure during his time as a clean-up worker “was a substantial contributing cause of” his pancreatic cancer that ultimately led to his death on March 6, 2021. *Id.* Based on these events, Guerrero initiated this BELO action against BP for wrongful death. *Id.* ¶¶ 11, 30–31.

II. LEGAL STANDARDS

Federal Rule of Evidence 702 governs expert testimony, providing:

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if the proponent demonstrates to the court that it is more likely than not that:

- (a) the expert’s scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
- (b) the testimony is based on sufficient facts or data;
- (c) the testimony is the product of reliable principles and methods; and

(d) the expert's opinion reflects a reliable application of the principles and methods to the facts of the case.

FED. R. EVID. 702. Because “expert testimony may be assigned talismanic significance in the eyes of lay jurors,” the “courts must take care to weigh the value of such evidence against its potential to mislead or confuse.” *United States v. Frazier*, 387 F.3d 1244, 1263 (11th Cir. 2004). Thus, federal courts “act as ‘gatekeepers’” of expert testimony, screening out unreliable opinions. *Kilpatrick v. Breg, Inc.*, 613 F.3d 1329, 1335 (11th Cir. 2010) (citing *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579, 597 n.13 (1993)).

The party seeking to introduce the expert at trial bears the burden of establishing qualification, reliability, and helpfulness. *Frazier*, 387 F.3d at 1260. An expert can be qualified to testify about certain matters based on his scientific training, education, or experience in the field. *Id.* at 1260–61.

To determine whether an expert’s methodology is reliable, courts consider “(1) whether the expert’s theory can be and has been tested; (2) whether the theory has been subjected to peer review and publication; (3) the known or potential rate of error of the particular scientific technique; and (4) whether the technique is generally accepted in the scientific community.” *Id.* at 1262 (citation omitted). Courts consider these four factors, which come from *Daubert*, along with others tailored to the facts of the case. *See Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 149–50 (1999). In assessing reliability, the district court’s sole focus is on the expert’s “principles and methodology, not on the conclusions

that they generate.” *Seamon v. Remington Arms Co., LLC*, 813 F.3d 983, 988 (11th Cir. 2016) (quoting *Daubert*, 509 U.S. at 595).

Expert testimony generally helps the trier of fact to understand evidence or decide a fact at issue if the testimony “concerns matters that are beyond the understanding of the average lay person.” *Frazier*, 387 F.3d at 1262. Expert testimony generally will not help the trier of fact if “it offers nothing more than what lawyers for the parties can argue in closing arguments.” *Id.* at 1262–63. And, of course, simply because expert testimony meets the *Daubert* standard does not mean that the testimony is automatically admitted. *See id.* at 1263. Instead, courts must still consider whether that expert testimony satisfies the other Federal Rules of Evidence. *See id.*

The *Daubert* analysis for toxic tort cases like this one includes both plaintiff-specific questions of causality and general questions of “whether the drug or chemical *can* cause the harm plaintiff alleges.” *McClain v. Metabolife Int’l, Inc.*, 401 F.3d 1233, 1239 (11th Cir. 2005). Put differently, the expert in this case “must offer reliable opinions about” the general toxicity of petroleum and PAHs for the harm alleged—pancreatic cancer—and that the exposure in fact caused Caraballo-Pache’s cancer. *Id.*

III. ANALYSIS

BP moves to exclude Neugut’s testimony on the basis that his testimony is unreliable as to both general and specific causation. (Doc. 141). To prevail, Guerrero must establish

medical causation “through admissible, reliable expert testimony.” *In re Deepwater Horizon BELO Cases*, 2022 WL 104243, at *2 (citing *McClain*, 401 F.3d at 1239). Medical causation includes both general and specific causation, which is necessary to link Caraballo-Pache’s pancreatic cancer to his exposure to petroleum and PAHs. *Id.*

A. General Causation

“General causation refers to the ‘general issue of whether a substance has the potential to cause the plaintiff’s injury.’” *Chapman v. Procter & Gamble Distrib., LLC*, 766 F.3d 1296, 1306 (11th Cir. 2014) (quoting *Guinn v. AstraZeneca Pharms. LP*, 602 F.3d 1245, 1248 n.1 (11th Cir. 2010) (per curiam)). “General causation is concerned with whether an agent increases the incidence of disease in a group and not whether the agent caused any given individual’s disease.” *McClain*, 401 F.3d at 1239 (quotations omitted). In this case, the inquiry is whether petroleum and PAHs exposure increase the incidence of pancreatic cancer.

The Eleventh Circuit has recognized three primary methodologies deemed reliable for establishing general causation: (1) “dose-response relationship”; (2) “epidemiological evidence”; and (3) the “background risk of the disease.” *Chapman*, 766 F.3d at 1306–07. Ordinarily, “epidemiology is the best evidence of causation in cases involving toxic substances.” *Id.* at 1307 (cleaned up). The main methodology at issue in this case is epidemiological evidence.

“[E]pidemiology is a well-established of science” “that studies the incidence, distribution, and etiology of disease in human populations.” Michael D. Green et al., *Reference Guide on Epidemiology*, in FED. JUD. CTR., REFERENCE MANUAL ON SCIENTIFIC EVIDENCE 549, 551, 553 (3d ed. 2011) (hereinafter, “Ref. Man.”). It is a field concerned “with finding the casual nexus between external factors and disease.” *Rider v. Sandoz Pharms. Corp.*, 295 F.3d 1194, 1198 (11th Cir. 2002). The first step in utilizing epidemiological evidence to establish general causation is to assess “whether an association exists between exposure to the agent and disease.” Ref. Man. at 566. To minimize error in assessing whether an association exists, experts should rely on reports whose results are statistically significant and relevant. *See id.* at 573; *see, e.g., Rider*, 295 F. 3d at 1198 (explaining that the litigants did not present epidemiological studies with statistically significant results and thus the evidence was inconclusive); *In re Deepwater Horizon Belo Cases*, No. 19-cv-963, 2020 WL 6689212, at *12 (N.D. Fla. Nov. 4, 2020), *aff’d sub nom. In re Deepwater Horizon BELO Cases*, No. 20-14544, 2022 WL 104243 (11th Cir. Jan. 11, 2022) (deeming an expert unreliable who failed to identify epidemiological literature with relevant statistically significant associations to explain her opinion). Only once an association is identified does an expert reach the second step. Ref. Man. at 597.

The second step requires the expert to determine “whether the association reflects a true cause-effect relationship.” *Id.* To conduct this inquiry, an expert applies the Bradford

Hill factors to determine whether a casual inference is appropriate. *Id.* at 599–600. (explaining that the Bradford Hill factors, proposed by Sir Austin Bradford Hill in 1965, “guide epidemiologists in making judgment about causation”). The Bradford Hill factors include: “(1) [t]emporal relationship, (2) [s]trength of the association, (3) [d]ose-response relationship, (4) [r]eplication of the findings, (5) [b]iological plausibility (coherence with existing knowledge), (6) [c]onsideration of alternative explanations, (7) [c]essation of exposure, (8) [s]pecificity of the association, and (9) [c]onsistency with other knowledge.” *Id.* at 600; *see also In re Abilify (Aripiprazole) Prods. Liab. Litig.*, 299 F. Supp. 3d 1291, 1307 (N.D. Fla. 2018); *Vandestreek v. Lockheed Martin Corp.*, No. 21-cv-1570, 2023 WL 6396087, at *3 (M.D. Fla. Sept. 27, 2023). These factors should not be rigidly applied but instead serve as guidance in the inferential process; “judgment and searching analysis” is key in determining causation. *See* Ref. Man. at 600 (explaining one or more factors “may be absent even when a true casual relationship exists” but that “the existence of some factors does not ensure that a casual relationship exists”).

Guerrero designates Nuegut as her sole expert on general causation. Nuegut is a professor of cancer research and a professor of medicine and epidemiology at Columbia University. Nuegut Rep. (Doc. 141-1) at 1. Nuegut received his M.D. and a Ph.D in Pathobiology in 1977 and his M.P.H. in Epidemiology at Columbia in 1983. *Id.* at 1–2. No one disputes Nuegut’s qualifications. As set forth in his report, Nuegut offers the

following opinion on general causation using an epidemiological methodology: “[I]t is my expert opinion within a reasonable degree of medical certainty that there is a casual association between [exposure to petroleum and exposure PAHs] and pancreatic cancer.” *Id.* at 21. This opinion is based off Neugut’s review of the fourteen studies described in his report that he “weigh[ed] . . . in the light of the Bradford Hill criteria.” *Id.*

BP contends that a careful review of Neugut’s report reveals that the methodology Neugut employed is unreliable. Mot. to Exclude at 9–19. I agree. Neugut’s identification of a statistically significant association between petroleum and PAHs exposure and pancreatic cancer is flawed. And his reliance on certain studies is curious and unexplained. These combined deficiencies are sufficient to deem Neugut’s report unreliable.

1. Contrary to His Report, a Majority of Neugut’s Cited Studies Do Not Show a Statistically Significant Association Between Petroleum and PAHs Exposure and Pancreatic Cancer

Neugut’s report suffers a defect at step one of the epidemiological method. Neugut relies on four studies for his conclusion that there is an association between petroleum and PAHs exposure and pancreatic cancer: Boonhat (2021), Ojajärvi (2000), Santibañez (2010), and Pickle (1980). *See* Neugut Dep. (Doc. 173-1) at 61:9–62:12, 113:8–114:14. But three of the reports did not conclude that there was a statistically significant association between petroleum and PAHs exposure and pancreatic cancer. *See* Boonhat 2021 Study (Doc. 141-5) at 116; Santibañez Study (Doc. 141-7) at 727; Ojajärvi Study (Doc. 141-6)

at 318. All four of the reports Neugut relies on assess the “rate ratio,” which is “the ratio of the incidence rate (often referred to as incidence) of disease in exposed individuals to the incidence rate in unexposed individuals.” Ref. Man. at 566. This figure is also called the relative risk. *Id.*

“If the relative risk equals 1.0, the risk in exposed individuals is the same as the risk in unexposed individuals.” *Id.* at 567. Thus, only “[i]f the relative risk is greater than 1.0,” are exposed individuals more likely to contract the disease, which in turn might imply a causal relationship. *Id.* Three of the four studies upon which Neugut relies have relative risk values greater than 1.0: Boonhat (relative risk value of 1.3); Santibañez (relative risk value of 1.71); and Ojajärvi (relative risk value of 1.5). *See* Boonhat 2021 Study at 116; Santibañez Study at 727; Ojajärvi Study at 318. But the Pickle study relied on by Neugut reports that the odds ratio associated with crude oil exposure and pancreatic cancer was 1.0. Pickle Study (Doc. 141-8) at 257; *see also* Neugut Dep. at 206:4–207:20 (explaining that he relied on the study’s findings concerning crude oil and pancreatic cancer in Table 1).¹ Thus, Neugut’s reliance on this study to support his conclusion that there is a positive association between exposure to crude oil and pancreatic cancer is questionable. *See* Neugut Dep. at 59:14–18, 60:22–62:14. In fact this study indicates the opposite concerning crude

¹ To the extent that Neugut relies on the Pickle study’s findings concerning individuals who worked in oil refining manufacturing jobs, which has a relative risk value of 2.11, those results are not statistically significant due to the confidence interval, 0.86-5.20. Neugut concedes these results are not statistically significant. *See* Neugut Dep. 208:21–209:6.

oil exposure. *See Allison v. McGhan Med. Corp.*, 184 F.3d 1300, 1315 n.16 (11th Cir. 1999) (“A relative risk of 1.0 means that the agent has no causative effect on incidence.”). This error calls into question the reliability of Neugut’s entire report, which does not explain these discrepancies. *See Williams v. Mosaic Fertilizer, LLC*, 889 F.3d 1239, 1246 (11th Cir. 2018) (explaining that an expert’s reliance on studies that contradict his opinion signals a methodological problem warranting exclusion unless the differing conclusions are adequately explained).

Although the other studies Neugut relies on have relative risks greater than 1.0, not all the results of those studies are statistically significant. This fact too calls into question Neugut’s opinion that relies upon them. *See In re Deepwater Horizon Belo Cases*, No. 19-cv-963, 2022 WL 17721595, at *16 (N.D. Fla. Dec. 15, 2022) (collecting cases excluding experts as unreliable who rely on studies that are not statistically significant), *report and recommendation adopted sub nom. In re Deepwater Horizon BELO Cases*, No. 19-cv-963, 2023 WL 2711573 (N.D. Fla. Mar. 30, 2023). A relative risk ratio is statistically significant if the confidence interval for the study does not contain the value 1.0 or less. Ref. Man. 579–80. “Calculation of a confidence interval permits a more refined assessment of appropriate inferences about the association found in an epidemiological study” and essentially provides a margin of error for the study’s findings. *Id.* at 579. The studies conducted by Santibañez, and Ojajärvi have confidence intervals containing the

value 1.0 or less. Ojajärvi's study concluded that the relative risk for PAHs exposure to pancreatic cancer was 1.5 with a confidence interval of 0.9-2.5. Neugut Rep. at 18; Ojajärvi Study at 318. And Santibañez's study reported a relative risk ratio of 1.71 with a confidence interval of 0.49 to 5.95. *See* Santibañez Study at 727; *see also* Neugut Dep. at 201:7-202:13 (admitting that none of the results in the Santibañez study are statistically significant). Additionally, the confidence interval of both studies is quite broad, signaling that the results of the studies are not statistically stable. *See* Ref. Man. at 580 (explaining that "the width of the interval reflects random error" and that "[t]he narrower the confidence interval, the more statistically stable the results of the study"); *see also* Neugut Dep. at 194:14-22, 200:11-24 (conceding that the Santibañez study has a wide confidence interval which means its results "should be looked at skeptically").

Generally, the reliability of an expert's opinion should be seriously questioned when the expert fails to point to any evidence showing a statistically significant increased risk of disease. *See, e.g., In re Seroquel Prods. Liab. Litig.*, No. 06-md-1769, 2009 WL 3806434, at *12 (M.D. Fla. June 18, 2009) (collecting cases). Here, Neugut can point to only one study with statistically significant results: the Boonhat 2021 study with a confidence interval not containing the value 1.0. *See* Boonhat 2021 Study at 116 (reporting confidence interval of 1.21-1.42). But this study concerns residential exposure to a petroleum facility, not occupational exposure to petroleum. Neugut fails to explain why this study is relevant

to his analysis despite the difference in the kinds of exposure. *See* Neugut Dep. at 116:16–118:17, 157:1–21. Thus, the soundness of his methodology in relying on this study cannot be thoroughly assessed. *See McClain*, 401 F.3d at 1245 (explaining that an expert’s failure “to show the reliability of each of his steps” in his analysis is a “fatal defect” that “renders the analysis unreliable”).

Guerrero argues that Neugut’s identification of an association in the literature need not be statistically significant. Resp. (Doc. 173) at 7–8. For support, Guerrero cites to *Matrixx Initiatives, Inc. v. Siracusano*, 563 U.S. 27 (2011). *Matrixx* is inapposite. That case addressed whether a plaintiff could state a claim for securities fraud against a company for failing to disclose reports of adverse health problems associated with a drug. *Id.* at 38–41; *see also* Reply (Doc. 185) at 4 n.10. The Supreme Court held that adverse event reports were still material even if the reports do not reveal a statistically significant increased risk of adverse events from a product’s use, and thus the plaintiff could allege that their omission was material for purposes of stating a claim under § 10(b) of the Securities Act. *Matrixx*, 563 U.S. at 40–41. *Matrixx* did not concern general causation expert testimony in a toxic tort case. *See In re Deepwater Horizon Belo Cases*, 2022 WL 17721595, at *16 n.24 (rejecting the argument that *Matrixx* applies in toxic tort cases to mean that experts are not required to provide statistically significant associations), *report and recommendation*

adopted sub nom. In re Deepwater Horizon BELO Cases, No. 19-cv-963, 2023 WL 2711573 (N.D. Fla. Mar. 30, 2023).

In sum, three of the four reports that Neugut relied on either do not show an association between exposure and pancreatic cancer *at all* or the association is not statistically significant. Neugut fails to discuss the statistical significance of the studies' findings in his report and his conclusory reliance on these studies casts doubt on the soundness of Neugut's epidemiological methodology.

2. Neugut's Process of Gathering Data and Forming His Opinion is Unreliable

BP also contends that Neugut selectively relied on certain reports while excluding others without adequate scientific explanation. Mot. to Exclude at 12–19. I agree.

First, Neugut does not consider eighteen of the twenty-two reports he reviewed in preparing his report assessing whether there was an association between exposure and pancreatic cancer. Mot. to Exclude at 13–14; Reply (Doc. 185) at 4–5; *see also* Neugut Dep. 128:23–129:7 (stating that “[t]here were probably another half dozen or five occupational cohort studies that [he] didn’t even include” that are like the eighteen and that he “[didn’t] know why [he] didn’t include” them). Neugut sets aside eighteen studies finding no association between petroleum exposure and pancreatic cancer. To justify this move, Neugut points to the “healthy worker effect,” which he contends skewed the findings of the studies. Neugut Rep. at 7–8, 15–18. But Neugut fails to explain how the healthy

worker effect specifically affects pancreatic cancer studies in his report or his deposition. And he fails to provide a scientific justification for ignoring eighteen studies that contradict his finding that there is an association between exposure and pancreatic cancer. *See* Neugut Dep. at 142:20–143:25 (“**Q:** [D]o you have any literature to support a conclusion about how much the healthy worker effect would apply? **A:** No. . . . **Q:** [C]an you cite any authority for the proposition that studies impacted by the healthy worker effect should be disregarded entirely? **A:** No.”). This conclusory move also calls the soundness of Neugut’s methodology into question.

Second, Neugut fails to include in his report his evaluation of the soundness of the studies he elected to rely upon. *See* Mot. to Exclude at 15 n.28. At his deposition, Neugut admitted that he did a poor job of explaining the methodological soundness of the studies he relied upon and their relevance to this case. Neugut Dep. 114:23–115:9 (“I did a lousy job in terms of, shall we say, explicating the studies.”); *see McClain*, 401 F.3d at 1245 (explaining an expert opinion is unreliable if that expert fails to explain the reasoning undergirding his conclusions). And Neugut concedes that he failed to even include in his report two of the four studies upon which he based his opinion. *Id.* at 115:8–9 (“[T]wo papers [I relied on,] I didn’t even put in the report.”). Another example is Neugut’s reliance on the Pickle and Boonhat 2021 studies that focus on residential exposure, not occupational exposure, without explanation of why he found those relevant to the opinion offered in this

case. *See generally* Neugut Rep. (lacking explanation regarding why he relied on specific studies); Neugut Dep. at 116:16–118:17, 157:1–21 (revealing uncertainty as to his reliance on residential exposure studies that were not known to be applicable for Caraballo-Pache).

Third, Neugut’s reliance on the Boonhat 2021 study is even more questionable because Neugut was unable to say for certain whether Caraballo-Pache would qualify to be a member of the study. *See* Mot. to Exclude at 16–17. At his deposition and in his report, Neugut acknowledged that “in order to apply the results of a published study to an individual,” the individual would in theory need to have been eligible to participate in the study. Neugut Dep. at 116:1–15; Neugut Rep. at 23. But at the deposition, Neugut was unable to definitively say that, in theory, Caraballo-Pache would have been eligible to participate in the Boonhat study. *See* Neugut Dep. at 116:16–118:17, 157:1–21. That equivocation is understandable because the study focused on petroleum exposure due to *residential* proximity to a petroleum facility, not occupational exposure like the kind Caraballo-Pache experienced. *See* Neugut Dep. at 116:1–118:17. Although this point in Neugut’s report is not dispositive of reliability, it nonetheless adds to the already questionable soundness of Neugut’s methodology.

* * *

In sum, a careful review of Neugut’s report reveals that his methodology on general causation lacks the reliability necessary to survive a *Daubert* inquiry and challenge under

Rule 702. Neugut’s conclusions regarding the association between petroleum and PAHs exposure and pancreatic cancer overstate what the studies bear out—thus his misplaced reliance on them calls his entire methodology into question. As discussed above, Neugut’s conclusions are unsupported by the studies he cites in his report. Such errors warrant excluding Neugut’s opinion as unreliable. *See, e.g., Hendrix ex rel. G.P. v. Eventflo Co.*, 609 F.3d 1183, 1197 (11th Cir. 2010) (affirming district court’s exclusion when “the literature overall d[id] not provide the necessary support” for the expert’s opinion); *Vandestreek*, 2023 WL 6396087, at *7 (striking as unreliable an expert who repeatedly relied on “statistically insignificant findings to extrapolate conclusions” and made the “repeated choice not to cite studies that contradict those conclusions”).²

² Neugut’s report does not identify the dose exposure that is capable of causing pancreatic cancer in the general population. Thus, Neugut cannot rely on the dose-response method to establish general causation. But the parties contest whether an expert is required to identify the dose of exposure capable of causing the disease to satisfy general causation requirements even when an expert does not employ the dose-response method. *Compare* Mot. to Exclude at 2, 9–11, *with* Resp. at 5. There appears to be a split of opinion amongst the district courts in the Eleventh Circuit concerning whether an expert is *required* to do so to satisfy general causation. *Compare In re BELO Cases*, 2022 WL 17721595, at *6-8 (rejecting argument that harmful dose is not required “unless the expert is proceeding under the dose-response method”), *with Vandestreek*, 2023 WL 6396087, at *4-5 (finding that “dose-response evidence” “is a specific causation question,” not a dispositive requirement of general causation). I need not opine on this dispute because, regardless of whether dose-response evidence is required when utilizing epidemiological methodology for general causation, Neugut’s methodology is unreliable and methodologically flawed for other reasons.

B. Specific Causation³

Specific causation concerns whether an individual was exposed to a toxin, whether the individual was “exposed to enough of the toxin to cause” the disease, and whether the toxin in fact caused the disease in question. *McClain*, 401 F.3d at 1239. To demonstrate specific causation, Neugut is required “to perform or rely upon a methodologically sound dose-response assessment specifically relevant to [Caraballo-Pache].” *Pinares v. Raytheon Techs. Corp.*, No. 19-14831, 2023 WL 2661521, at *5 (11th Cir. Mar. 28, 2023) (quoting *Williams*, 889 F.3d at 1245 n.2). Put differently, for Neugut’s opinion to be admissible, Neugut must have “reliably calculate[d] whether [Caraballo-Pache] was ‘exposed to enough of the toxin to cause the alleged injury.’ ” *Williams*, 889 F.3d at 1245 n.2 (quoting *McClain*, 401 F.3d at 1239).

Guerrero also designates Nuegut as her sole expert on specific causation. As set forth in his report, Neugut offers the following opinion on specific causation:

[I]t is my opinion, to a reasonable degree of medical certainty, that Mr. Caraballo-Pache’s pancreatic cancer was caused and/or substantially contributed to by his exposure to oil and solvents. As I described in detail in this report, these items have been linked casually to the etiology of pancreatic

³ Generally, courts need not analyze specific causation once an expert is deemed to have failed to satisfy the general causation requirements for establishing legal causation. *See Evans v. Matrixx Initiatives, Inc.*, No. 3:07-cv-357, 2009 WL 2914252, at *9 (M.D. Fla. Feb. 18, 2009) (collecting cases that decline to address specific causation when general causation is not established); *Knight v. Kirby Inland Marine Inc.*, 482 F.3d 347, 351 (5th Cir. 2007) (“Evidence concerning specific causation in toxic tort cases is admissible only as a follow-up to admissible general-causation evidence.”); *cf. Rink v. Cheminova, Inc.*, 400 F.3d 1286, 1295 (affirming a district court that treated a physician’s testimony as irrelevant when necessary, foundation testimony was deemed unreliable). But for the sake of completeness, I explain why Neugut’s opinion also fails to satisfy the specific causation requirements.

cancer. As a result of his exposure to the BP spill, he clearly had substantial and more than significant exposure for several months and thus it is reasonable to infer that his tumor was an outcome of that exposure.

Neugut Rep. at 25.

BP contends that Neugut’s specific causation opinion is unreliable for three reasons. First, BP argues that Neugut’s failure to quantify Caraballo-Pache’s dose of exposure to any substance is dispositive of admissibility. Mot. to Exclude at 20–22. Second, BP asserts that Neugut’s opinion is unreliable because it is inconsistent with the latency period of pancreatic cancer. *Id.* at 22–23. And third, BP contends that Neugut failed to adequately account for other potential causes of Caraballo-Pache’s pancreatic cancer. *Id.* at 23–24. I agree with BP’s first and third arguments and conclude they alone suffice to exclude Neugut’s specific causation opinion. I do not address BP’s second argument.

1. Neugut Fails to Determine Caraballo-Pache’s Level of Exposure

Neugut’s opinion is unreliable as a matter of law because he fails to calculate or rely upon a sound dose-response assessment of Caraballo-Pache’s exposure to petroleum or PAHs. The Eleventh Circuit has repeatedly held that to satisfy specific causation in toxic tort cases an expert must determine “the amount of the [harmful] chemical to which the plaintiff was exposed.” *Taylor v. Mentor Worldwide LLC*, 940 F.3d 582, 595 (11th Cir. 2019); *see also Pinares*, 2023 WL 2661521 at *3; *Williams*, 889 F.3d at 1245 n.2. True, an expert is not required “to ‘give precise numbers about a dose-response relationship,’ ” but

the expert must still “lay a ‘reliable groundwork for determining the dose-response relationship,’ ” not ignore the dose-response relationship completely. *Pinares*, 2023 WL 2661521 at *3 (quoting *Williams*, 889 F.3d at 1248). “The expert who avoids or neglects [the dose-response] principle of toxic torts without justification casts suspicion on the reliability of his methodology.” *Kilpatrick*, 613 F.3d at 1339 (alteration in original) (quoting *McClain*, 401 F.3d at 1242).

Here, Neugut’s report did not calculate or rely on another calculation of the dose-response relationship for Caraballo-Pache. *See* Neugut Dep. at 226:10–15 (conceding that he does not know the exact amount of exposure Caraballo-Pache had to PAHs); Resp. at 17–18 (conceding that Neugut did not calculate Caraballo-Pache’s dose of exposure but instead opined on the “intensity and duration of [his] exposure”). This error is dispositive in finding Neugut’s specific causation opinion unreliable. Although Neugut’s supplemental citation to the Boonhat 2023 study states that this study “concluded that there was a dose-response relationship for PAHs” and pancreatic cancer, Neugut Supp. Rep. (Doc. 141-3) at 4, Neugut could not have relied on this study in forming his specific causation opinion because he was unaware of the study until after he submitted his report and the study’s results are inapplicable to Caraballo-Pache, *id.* at 3. The Boonhat 2023 study undermines Neugut’s specific causation analysis. That study found no relevant or statistically significant association between exposure and pancreatic cancer for individuals

exposed for less than one year. Mot. to Exclude at 17–19; Boonhat 2023 Study (Doc. 173-2) at 213, 217; Neugut Supp. Rep. at 5 (stating that the Boonhat 2023 study’s results indicate that risk of pancreatic cancer increases after being exposed for at least one year). Caraballo-Pachce’s time as a clean-up worker spanned only four months. Thus, Neugut’s conclusion that the Boonhat 2023 study supports his findings is somewhat misleading.

Guerrero argues that Neugut was not required to offer a dose-response relationship opinion because he supported his specific causation opinion with differential etiology. Resp. at 17–18. But the Eleventh Circuit has already rejected that argument in the context of toxic tort cases. In *Pinares*, the Eleventh Circuit made clear that “a differential diagnosis will not usually overcome the fundamental failure of laying a scientific groundwork for the general toxicity of the [chemical] and that it can cause the harm the plaintiff suffered” because to show specific causation, “an expert must still ‘reliably calculate’ whether a plaintiff was ‘exposed to enough of the toxin to cause the alleged injury.’” *Pinares*, 2023 WL 2661521, at *5 (quoting *Williams*, 889 F.3d at 1245 n.2). Put differently, if a specific causation expert cannot point back to a sound dose-response assessment that a general causation expert sets forth, or calculate a dose-response assessment themselves, the expert cannot prove specific causation. *Id.*

In sum, Neugut’s opinion lacks the dose of exposure Caraballo-Pache had to petroleum or PAHs. Instead, Neugut summarily concludes that, due to Caraballo-Pache’s

time as a clean-up worker, Caraballo-Pache must have had at least some exposure and thus his exposure caused or substantially contributed to his pancreatic cancer. Neugut Rep. at 24–25. That clearly fails any *Daubert* inquiry for specific causation in the toxic tort context.

2. Neugut Failed to Account for Other Potential Causes of Caraballo-Pache’s Pancreatic Cancer

An expert setting forth an opinion on specific causation must “meaningfully rule out other potential causes” of the disease. *Williams*, 889 F.3d at 1248. This includes considering other relevant contributory factors such as a person’s age, obesity, lifestyle, and genetic disposition. *Id.* at 1249. If an expert fails “to offer an explanation for why [a] proffered alternative cause was ruled out,” “a district court is justified in excluding” that expert’s testimony. *Hendrix*, 609 F.3d at 1197 (alterations accepted) (quotations omitted).

BP argues that Neugut’s failure to adequately evaluate “Caraballo-Pache’s age, obesity, and diabetes” in determining whether Caraballo-Pache’s exposure to petroleum and PAHs caused his pancreatic cancer renders his report unreliable. Mot. to Exclude at 23–24. Specifically, BP contends that Neugut should have “explain[ed] how much weight he assigned to these [potential factors].” *Id.* at 24; *see also* Neugut Dep. at 69:23–71:22 (agreeing that Caraballo-Pache’s age, obesity, and diabetes were risk factors for pancreatic cancer). In BP’s view, this flaw is yet another reason to find Neugut’s report unreliable. I agree.

In his report and deposition, Neugut mentions Caraballo-Pache's age, previous occupation, obesity, and diabetes as risk factors for pancreatic cancer. *See* Neugut Dep. at 69:23–71:22; *see also* Neugut Rep. at 14–15, 22–23. Nonetheless, Neugut concludes that “the presence of another known cause for pancreatic cancer would, in all probability, lead to a multiplicative risk” of pancreatic cancer. Neugut Rep. at 23. Although it is permissible for Neugut to conclude that multiple factors worked together to cause a disease, he is still required to provide some analysis as to why he concluded Caraballo-Pache's exposure was the *substantial* contributor to his pancreatic cancer. *See Guinn*, 602 F.3d at 1255. Neugut fails to provide any such analysis or demonstrate serious consideration of Caraballo-Pache's risk factors or how much weight to assign their contributory cause. *See generally* Neugut Rep. at 24–25. Accordingly, his specific causation opinion is unreliable for this reason too.

IV. CONCLUSION

Neugut's report is excluded as unreliable under Rule 702. Accordingly, Guerrero is left without an expert on legal causation. Legal caution is a “necessary element” of a BELO case arising under the MSA. *See In re Deepwater Horizon BELO Cases*, 2022 WL 104243, at *2–3 (citing *McClain*, 401 F.3d at 1239); *see also McGill v. BP Expl. & Prod., Inc.*, 830 F. App'x 430, 434 (5th Cir. 2020) (per curiam) (affirming district court's grant of summary judgment to BP in the light of the exclusion of plaintiff's expert as unreliable). A moving party is entitled to summary judgment if the nonmoving party “fail[s] to make a

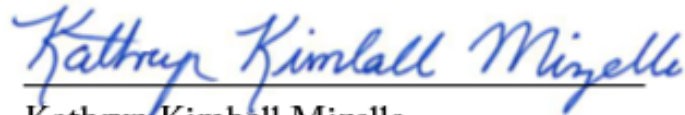
sufficient showing on an essential element of her case with respect to which she has the burden of proof.” *Celotex Corp. v. Catrett*, 477 U.S. 317, 323 (1986). Accordingly, because Guerrero fails to set forth expert testimony creating a dispute of fact as to legal causation, BP is entitled to summary judgment. *See, e.g., In re Deepwater Horizon BELO Cases*, 2022 WL 104243, at *3 (“Appellants were unable to establish general causation, a necessary element of their claims. Because Appellants did not establish a material issue of fact concerning general causation, we must likewise conclude that the district court did not err in granting summary judgment in favor of BP.”).

Accordingly, the following is **ORDERED**:

1. BP’s Motion to Strike Dr. Alfred I. Neugut (Doc. 141) is **GRANTED**.
2. BP’s Motion for Summary Judgment (Doc. 146) is **GRANTED**. The Clerk is directed to enter **JUDGMENT** in favor of Defendants BP Exploration & Production Inc. and BP America Production Company.
3. Guerrero’s Motion for Daubert Hearing (Doc. 181) is **DENIED AS MOOT**.
4. BP’s Motions to Strike Ranajit Sahu, Paul Montagna, and Albert Robbat, Jr. (Docs. 144, 145, 166) are **DENIED AS MOOT**.

5. Guerrero's Motions to Strike Damian Shea, Ranjit Machado, Robert Cox, Christopher L. Wolfgang, John Spencer, and Certain BP Experts (Docs. 147, 148, 149, 151, 152, 155) are **DENIED AS MOOT**.
6. Guerrero's Motion for Leave to File Supplemental Expert Reports (Doc. 134) is **DENIED AS MOOT**.
7. The Clerk is directed to terminate any deadlines and to **CLOSE** this case.

ORDERED in Tampa, Florida, on March 20, 2024.



Kathryn Kimball Mizelle
United States District Judge