UNITED STATES DISTRICT COURT DISTRICT OF CONNECTICUT

HELMUT ERHARDT, *Plaintiff*,

v.

No. 3:18-cv-1327 (VAB)

BMW OF NORTH AMERICA, LLC, et al., *Defendants*.

RULING AND ORDER ON MOTIONS TO PRECLUDE EXPERT TESTIMONY AND FOR SUMMARY JUDGMENT

Helmut Erhardt ("Plaintiff") has filed suit and seeks damages for his diagnosis of peritoneal epithelioid mesothelioma ("mesothelioma"), allegedly caused by exposure to asbestos, under the Connecticut Product Liability Act ("CPLA"), Conn. Gen. Stat. § 52-572m et seq., for strict liability, negligence, failure to warn and breach of warranty for injuries ("Count I"), as well as recklessness ("Count II"). Compl., Erhardt v. Am. Honda Motor Co., et al., Docket No. FBT-cv-18-6076553-S (Conn. Super. Ct. July 10, 2018); Notice of Removal, Ex. 1, ECF No. 1 (Aug. 9, 2018).1

In support of his claims, Mr. Erhardt relies on the proffered expert testimonies of Drs. Arthur Frank and David Zhang, who opined that Mr. Erhardt's exposure to asbestos during his employment at an automobile shop caused his current condition of mesothelioma. *See* Pl.'s Expert Witness Disclosure at 15-17, 21-24, ECF No. 135 (Aug. 1, 2019) ("Pl.'s Expert Witness Disclosure"). Additionally, Mr. Erhardt relies on the proffered expert testimony of William

¹ Citations to "Compl." refer to the internal pagination of the Complaint included within the Notice of Removal.

Ewing, who opined that Mr. Erhardt's level of exposure to asbestos at the automobile shop increased his risk of developing mesothelioma. *See id.* at 12-14.

BMW of North America, LLC ("BMW NA" or "Defendant") has moved to preclude the testimonies of all three experts and has moved for summary judgment as to all of Mr. Erhardt's claims. Mot. to Preclude Reports and Testimony of William Ewing and for Summ. J., ECF No. 216 (Aug. 7, 2020) ("BMW NA Mot. Ewing"); Mem. in Supp. of Mot. to Preclude Reports and Testimony of Ewing and Summ. J., ECF No. 217 (Aug. 7, 2020) ("BMW NA Mem. Ewing"); Mot. to Preclude Reports and Testimonies of Drs. Frank and Zhang, and to Preclude the Decl. of Dr. Testa and Mot. for Summ. J., ECF No. 232 (Aug. 7, 2020) ("BMW NA Mot. Frank & Zhang"); Mem. in Supp. of Mot. to Preclude Reports and Testimonies of Drs. Frank, Zhang, and to Preclude Decl. of Dr. Testa and Mot. for Summ. J., ECF No. 233 (Aug. 7, 2020) ("BMW NA Mem. Frank & Zhang").

For the reasons stated below, BMW NA's motions to preclude expert testimonies are **DENIED**² and its motion for summary judgment also is **DENIED**.

I. FACTUAL AND PROCEDURAL BACKGROUND

A. Factual Background³

From 1968 to 1990, Helmut Erhardt worked for Ridgefield European Motors in Ridgefield, Connecticut. Pl.'s SMF at 23 ¶ 2. While there, Mr. Erhardt served as "the parts

² BMW NA has also moved to preclude the testimony of Dr. Testa. *See* BMW NA Mot. Frank & Zhang; BMW NA Mem. Frank & Zhang. The Court finds the testimonies of Dr. Frank, Dr. Zhang, and Mr. Ewing are a dmissible irrespective of the testimony of Dr. Testa, and therefore his testimony is not a ddressed by this opinion.

³ Unless otherwise noted, the relevant facts are taken from BMW NA's Local Rule 56(a)1 Statement and Exhibits (ECF Nos. 234, 234-1-10) (Aug. 7, 2020) ("BMW NA SMF") and Plaintiff's Local Rule 56(a)2 Statement and Exhibits filed in response to BMW NA (ECF Nos. 244, 244-1–21) (Aug. 28, 2020) ("Pl.'s SMF"). See D. Conn. L. Civ. R. 56(a)(1) ("A party moving for summary judgment shall file . . . a concise statement of each material fact as to which the moving party contends there is no genuine issue to be tried."); D. Conn. L. Civ. R. 56(a)(2)(i) ("A

manager between 1970 [and] 1972." *Id.* at 24 ¶ 6 (citing Oral Dep. of Helmut Erhardt, Ex. 4, at 95:16-23, 99:5-9, 12-16, 109: 20-24, dated Dec. 5, 2017, ECF No. 234-4 (Aug. 7, 2020) ("Erhardt Dep.")).⁴ He also served as the "[s]ales [m]anager from 1971 [to] 1980," and "[g]eneral [m]anager from 1980 [to] 1990." BMW NA SMF at 2 ¶¶ 10, 11 (citing Erhardt Dep. at 147:6-8, 158:3-9).

Mr. Erhardt "never worked as a[n] [automobile] mechanic" during his time at Ridgefield European Motors. *Id.* at 2 ¶ 4. Instead, "Mr. Erhardt worked near technicians performing automotive work that included brake work and clutch work during which they scuffed brakes, pads and removed the glaze." Pl.'s SMF at 16 ¶ 54. He also "ordered brake pads and removed pads from packaging and gave the brake pads to the technicians and compared the products. At the end of the work-day, [he] swept the dust and debris from the work areas." *Id.* at 16 ¶ 53. Mr. Erhardt claims that his exposure to asbestos occurred during his time at Ridgefield. BMW NA SMF at 16 ¶ 25.

"[Mr. Erhardt]'s brother, Eric Erhardt, owned [Ridgefield] and passed away at age 76 from mesothelioma." Pl.'s SMF at 23 ¶ 3 (citing Erhardt Dep. at 55:4-7, 56:9-14). "In 2014," Mr. Erhardt "was diagnosed with malignant mesothelioma." *Id.* ¶ 1.

Mr. Erhardt alleges that a possible cause of peritoneal epithelioid mesothelioma is exposure to asbestos. Compl. at 4 ¶ 4 ("The plaintiff was exposed to various asbestos containing products Such exposure in Connecticut contributed in part or totally to the plaintiff's contraction of asbestos-related mesothelioma and other asbestos-related pathologies."); see also

party opposing a motion for summary judgment shall file and serve with the opposition papers a document entitled 'Local Rule 56(a)2 Statement of Facts in Opposition to Summary Judgment.").

⁴ BMW NA SMF includes the full transcript of Mr. Erhardt's deposition held on December 5, 2017, whereas the file referenced in Pl.'s SMF provides a truncated version of the same transcript. *See* Oral Dep. of Helmut Erhardt, Ex. B, dated Dec. 5, 2017, ECF No. 244-2 (Aug. 28, 2020). Accordingly, the Court cites to the full transcript throughout this opinion.

BMW NA Mem. Frank & Zhang at 13 ("In asbestos litigation, two causation issues arise: the general causation inquiry addresses whether exposure to a substance can cause a particular disease, and the specific causation inquiry addresses whether the plaintiff's level of exposure is comparable to the levels of exposure that cause the disease in question Plaintiff's actual level of exposure is therefore key in carrying his burden of proof.").

Mr. Erhardt also alleges that the Defendant "produced, manufactured or distributed asbestos and/or asbestos products." Compl. at 2 ¶ 2. As stated, he has identified Drs. Arthur Frank and David Zhang as causation experts and William Ewing, Certified Industrial Hygienist ("CIH"), as an industrial hygiene expert. *See* Pl.'s Expert Witness Disclosure at 12-17, 21-24.

"Dr. [Arthur] Frank is a licensed medical doctor and has been board-certified for more than forty (40) years by both the American Board of Internal Medicine and the American Board of Preventive Medicine." Pl.'s Opp'n to Def. BMW NA Mots. to Preclude and Opp'n to Mot. for Summ. J., ECF No. 243 at 6 (Aug. 28, 2020) ("Pl.'s Opp'n Frank & Zhang"). "Dr. Frank also holds a Ph.D. in the field of biomedical sciences" and has "published and/or reviewed" various papers relevant to "asbestos disease, occupational lung disease, preventive and environmental medicine, and genetics." *Id.* at 6-7.

Dr. Frank reviewed a variety of records related to Mr. Erhardt, including "an exposure history, pathology reports, medical records, the report of Mr. Ewing of May 7, 2018, interrogatories, Mr. Erhardt's deposition transcripts, Social Security records, and a report of Dr. Zhang." Letter from Arthur L. Frank to Amy Fair, Ex. 7, ECF No. 135-7 at 1 (Aug. 1, 2019) ("Frank Letter").

Dr. Frank noted that Mr. Erhardt worked "with and around original equipment, brakes, clutches, and gaskets made, sold, or distributed by . . . BMW." *Id.* Dr. Frank also noted that Mr.

Erhardt had been "often present when technicians sanded new asbestos brakes and clutches prior to their installation, and they used compressed air to remove asbestos debris." *Id.* Dr. Frank reported that Mr. Erhardt had been "known to sweep up in the service areas, adding to his exposures to chrysotile asbestos from brakes, clutches, and gaskets." *Id.* From Mr. Ewing's report, Dr. Frank then noted that Mr. Ewing had "detail[ed] the regularity, frequency, and proximity of Mr. Erhardt's exposures to asbestos." *Id.* Based on his review of Mr. Erhardt's medical records, Dr. Frank noted that Mr. Erhardt had "abdominal pain," a "diagnosis of a malignant peritoneal mesothelioma," a diagnosis confirmed by Dr. Zhang, and had started "chemotherapy." *Id.* at 2.

From a review of these various materials, Dr Frank opined that Mr. Erhardt (1) had "developed asbestos-related pleural disease" or "pleural asbestosis" and (2) "ha[d] developed a malignant peritoneal mesothelioma as a result of his exposures to asbestos." *Id.* In Dr. Frank's view, Mr. Erhardt's "cumulative exposures . . . to asbestos, from any and all products, containing any and all fiber types, would have contributed." *Id.* And "the BMW and Mazda parts would have been contributory." *Id.* "All of these exposures would have been at levels above background, would have been medically significant, and therefore medically causative of Mr. Erhardt's two asbestos-related conditions." *Id.*

With respect to Dr. Frank's views on the risks of asbestos exposure and their subsequent correlation with mesothelioma, Dr. Frank provided a 216-page affidavit from another case detailing them. Aff. of Arthur L. Frank, M.D., Ph.D., Ex. A, ECF No. 292-1 (Dec. 21, 2020) ("Frank Aff."). Relying on various scientific studies and research, Dr. Frank opined that "inhalation of asbestos fibers of any type, from any source or product, causes mesothelioma (in

⁵ The Court cites to the internal pagination of this document.

all known locations), lung cancer, asbestosis, pleural plaques, and other cancers." *Id.* at 3 ¶ 1. Dr. Frank defined mesothelioma as "a tumor of the serosal linings of the chest (the pleura), the abdomen (peritoneum), the heart (pericardium), and testes (tunica vaginalis)." *Id.* at 9 ¶ 10. He opined that "[I]ung cancer and mesothelioma occur when asbestos fibers . . . cause genetic errors in epithelial cells lining the airways, or in mesothelial cells that form the lining of the pleural and peritoneal cavities." *Id.* at 212 ¶ 408. When a person is diagnosed as having cancer, he noted, "multiple mesothelial cells have accumulated a series of genetic errors over years until one of those cells, with the required set of mutations for that individual, loses control of normal growth and grows out as a clone into a deadly malignant mesothelioma." *Id.* at 212 ¶ 410. He noted that "[a]ll exposures to asbestos contribute to the development of the disease process, be it lung scarring, lung cancer, or mesothelioma." *Id.*

Dr. Frank then explained that "[a]sbestos exposures as short in duration as a few days have caused mesothelioma in humans. Every occupational exposure to asbestos can cause injury of disease; every occupational exposure to asbestos contributes to the risk of getting an asbestos related disease." *Id.* at 10 ¶ 13 (citing to the Occupational Safety & Health Administration ("OSHA"), *Safety and Health Topics – Asbestos*, https://www.osha.gov/SLTC/asbestos (last visited Jan. 6, 2021)); *see also* Frank Aff. at 41 ¶ 90 (noting that "[t]he concept that there is no safe exposure to a carcinogen is neither a new nor novel opinion in the industrial hygiene, medical and scientific communities; rather[,] the historical scientific literature is loaded with physicians and scientists reaching that opinion"). And that "[c]umulative asbestos exposure, either directly or para-occupational, remains the most common factor related to the development of mesothelioma." Frank Aff. at 15 ¶ 18 (quoting S. Christopher N. Frontario et al., *Primary Peritoneal Mesothelioma Resulting in Small Bowel Obstruction: A Case Report and Review of*

Literature, 16 Am. J. Case Reps. 496-599 (2015)). In Dr. Frank's view, "[r]adiographic or other evidence of asbestos exposure, such as asbestosis, is not required to link mesothelioma or lung cancer to asbestos exposure; a history of exposure is sufficient." Id. at 19 ¶ 28 (citing, inter alia, Murray M. Finkelstein, Absence of Radiographic Asbestosis and the Risk of Lung Cancer Among Asbestos-Cement Workers: Extended Follow-Up of a Cohort, 53 Am. J. Indus. Med. 1065-69 (2010); Henrik Wolff et al., Consensus Report: Asbestos, Asbestosis, and Cancer, the Helsinki Criteria for Diagnosis and Attribution 2014: Recommendations, 41 Scand J. Work Env't Health 5 (2015); David Egilman et al., Lung Cancer and Asbestos Exposure: Asbestosis is Not Necessary, 30 Am. J. Indus. Med. 398-406 (1996)).

Dr. Frank further suggested that there is a link between the presence of asbestos in automotive repair work, particularly related to work on automobile brakes, and the occurrence of mesothelioma. See id. at 63 ¶ 154 (citing Brian Loggie et al., Prospective Trial for the Treatment of Malignant Peritoneal Mesothelioma, 67 Am. Surgeon 999-1003 (2001) (noting "two cases of peritoneal mesothelioma in 'mechanics with occupational to asbestos' from brake linings") and María Luisa Ruiz-Tirado et al., Mesothelioma Peritoneal Maligno — In forme de un Caso y Revision de la Lituratura, 49 Rev. Med. Inst. Mex. Seguro Soc. 79-84 (2011) (noting a "case of mesothelioma of the peritoneum in a patient living with an auto brake mechanic").6 He later discussed the possibility of brake shoes made from chrysotile asbestos resulting in mesothelioma and refers to the findings of several studies of "mesothelioma patients whose sole exposure to asbestos was from working with asbestos brakes." Id. at 93 ¶ 210; see id. at 103 ¶ 224 (citing Richard A. Lemen, Asbestos in Brakes: Exposure and Risk of Disease, 45 Am. J. Ind. Med. 229-37 (2004) (finding that "based on a review of the published literature relating to brakes, more

⁶ Dr. Frank's affidavit relies on a variety of published scientific articles, but, given their length, the Court does not cite to them all.

than two hundred cases of mesothelioma in people exposed to chrysotile asbestos from brakes.")); *id.* at 155 ¶ 307 (citing Environmental Protection Agency ("EPA"), *Guidance for Preventing Asbestos Disease Among Auto Mechanics*, EPA-560-OPTS-86-002 (June 1986) for the proposition that "[f]riction materials, such as brake linings and clutches, often contain asbestos [and] [m]illions of asbestos fibers can be released during brake and clutch servicing" and that "[a]sbestos released into the air lingers around the garage long after a brake job is done and can be breathed in by everyone inside a garage, including customers [and that] [w]hile lowering exposure lowers the risk, there is no known safe level of exposure to asbestos below which health effects do not occur" (alterations in original)); *id.* at 166 ¶ 322 (opining that "auto brake mechanics are known to be especially at risk of developing asbestos-related diseases").

Dr. Frank noted that "unlike many other cancers for which there are multiple, well-documented causal factors, mesothelioma is overwhelmingly caused by asbestos." *Id.* at 101 ¶ 221; *see also id.* ("Mesothelioma is a rare cancer with one major etiologic exposure, therefore surveillance using each case as a sentinel event might seem more reasonable for this disease than for cancers with multi-factorial causation.") (quoting Kay Teschke et al., *Mesothelioma Surveillance to Locate Sources of Exposure to Asbestos*, 88 Can. J. Pub. Health 163-68 (1997)). In his view,

because the epidemiological and all of the other scientific evidence that chrysotile asbestos causes mesothelioma is so strong that the mainstream scientific community has concluded, and I am able to conclude, that a mesothelioma in a patient exposed to dust from chrysotile asbestos brakes or clutches (or any other source of chrysotile asbestos) was caused, in whole or in part, by that dust.

Id. at 156 ¶ 309.

Dr. Frank, however, acknowledged the challenges of precisely identifying the degree of exposure for any one individual in a workplace, and stated that "it is usually difficult, if not

impossible, to quantify the amount of exposure." Id. at $114 \ \ 243$. Dr. Frank claimed that "[e]valuation of lifetime cumulative exposure, from an occupational history, is the best method for ascribing causation of asbestos related disease." Id. at $126 \ \ 257$. In his view, this methodology, "the analysis of cumulative asbestos exposure in order to ascribe causation[,] has been performed by scientists in hundreds of peer-reviewed, published epidemiological studies, case series, and case reports." Id. In support of this view, Dr. Frank noted the inability of "medical science . . . to identify a threshold or minimum amount of asbestos exposure required to cause mesothelioma." Id. at $130 \ \ 268$ (internal citations omitted).

As a result, Dr. Frank opined, "it is not necessary to numerically quantify an occupational or para-occupational exposure to asbestos before concluding that it caused or contributed to cause a mesothelioma. Rather, it is generally accepted that qualitative evaluation of the exposure as compared to background is sufficient." *Id.* at 209 ¶ 401. In his view, "[t]he cumulative exposure that a mesothelioma patient has received in their lifetime has caused impact to the lungs, has overwhelmed the body's defense mechanisms, brought about genetic changes, and has caused mesothelioma or other cancers at whatever site it develops." *Id.* at 215 ¶ 417.

Dr. David Zhang has held several positions, including "Professor in the Departments of Pathology and Oncological Sciences and Associate Professor of Preventive Medicine at the Mount Sinai School of Medicine." Pl.'s Expert Witness Disclosure at 21. He "specializes in anatomic pathology, clinical pathology, cytopathology, and molecular genetic pathology, as well as occupational and environmental medicine." Pl.'s Opp'n Frank & Zhang at 9. Dr. Zhang also offered both general and specific causation opinions on this case.

Generally, his report "place[d] Mr. [] Erhardt's disease in the larger context of the current knowledge concerning asbestos and asbestos-related diseases." Report of David Y. Zhang, M.D.,

Ph. D., MPH, Ex. 12, ECF No. 135-12 at 3 (Aug. 1, 2019) ("Zhang Report"). He defined asbestos as "a group of naturally occurring, fibrous mineral silicates of magnesium and iron," *id.*, and noted that the "six asbestos mineral types," as defined by the Environmental Protection Agency, are all "known to be human carcinogens," *id.* at 3-4. Chrysotile asbestos "has been used in a wide variety of products," including "gaskets" and "brake linings." *Id.* at 4.

Dr. Zhang claimed that "[e]pidemiologic evidence has unequivocally shown that all asbestos fiber types, including the most commonly used form of asbestos, chrysotile, causes lung cancer and mesothelioma in humans." *Id.* (citing World Health Organization (WHO)

International Agency for Research on Cancer (IARC) Monographs on the Evaluation of Carcinogenic Risks to Humans (2012); Enrico Pira et al., *Mortality from Cancer and Other Causes in the Balangero Cohort of Chrysotile Asbestos Miners*, 66 Int'l J. Occupational & Env't Med. 805-809 (2009)). To the extent that mesothelioma is caused by asbestos, it is a consequence of breathing in the asbestos fibers. *Id.* ("Breathing asbestos fibers can cause pleural plaque and lung asbestosis, leading to loss of lung function and progressing to disability and death. Asbestos also causes cancer of the lung and mesothelioma of the pleura, peritoneum, pericardium, and tunica vaginalis testis, which is a fatal malignant tumor."). Dr. Zhang later noted that "airborne asbestos fibers" are "only visible collectively as dust by the naked eye." *Id.* at 13.

Dr. Zhang defined mesothelioma as "a rare form of cancer that develops from cells of the mesothelium, the protective lining that covers many of the internal organs of the body." *Id.* at 5 (citation omitted). As he further defined it:

The most common anatomical site for mesothelioma is the pleura (the outer lining of the lungs and internal chest wall), but it can also arise in the peritoneum (the lining of the abdominal cavity), the pericardium (the sac that surrounds the heart), or the tunica vaginalis (a sac that surrounds the testis). The malignant cells usually grow along the mesothelial lining of the organ (along the surface) causing encasement of the organ. The tumor can invade nearby structures including lung, chest wall, rib or vertebra if the tumor involves the pleura, or liver and intestine if the tumor involves the peritoneum.

Id. (citation omitted). "The clinical diagnosis of asbestos-related diseases is based on a detailed interview of the patient and occupational data on asbestos exposure, signs, and symptoms, radiological and lung physiology findings, and selected cytological, histological and other laboratory studies." *Id.* at 11 (emphasis omitted).

In assessing the occupational source of asbestos, Dr. Zhang opined that the following must be considered: (1) the "great majority of mesotheliomas are due to asbestos exposure"; (2) "[m]esotheliomas can occur in cases with low asbestos exposure"; (3) "[a]bout 80% of mesothelioma patients have had some occupational exposure to asbestos, and therefore a careful occupational and environmental history should be taken"; (4) "[e]ven a brief or low-level exposure should be considered sufficient for mesothelioma to be designated as occupationally related"; (5) "[a] minimum of 10 years from the first exposure is required to attribute the mesothelioma to asbestos exposure, though in most cases the latency interval is longer"; and (6) "[s]moking has no influence on the risk of mesothelioma." *Id.* at 11; *see id.* at 11-13 (citing to various studies, including, *inter alia*, E. Skammeritz et al., *Asbestos Exposure and Survival in Malignant Mesothelioma: A Description of 122 Consecutive Cases at an Occupational Clinic*, 2 Int'l J. Occupational & Env't Med. 224-36 (2011), where the records of malignant mesothelioma patients were examined and of 122 patients, 111 of them, or 94.3%, had some asbestos exposure).

In Dr. Zhang's view, "unlike many other cancers, for which there are multiple, well-documented causal factors, mesothelioma is overwhelmingly caused by only one agent,

asbestos." *Id.* at 14. As a result, "an occupational history of brief or low-level exposure should be considered sufficient for mesothelioma to be designated occupationally related to asbestos exposure." *Id.*

More specifically, as to Mr. Erhardt, Dr. Zhang opined that his disease should be placed "in the context of the current knowledge concerning asbestos and peritoneal malignant mesothelioma in individuals who have been exposed to asbestos while performing work with or in the vicinity of other workers performing on automotive materials in automotive shops, and sheetrock and spackle in renovation." *Id.* at 14. From these "multiple environments," Dr. Zhang opined that "Mr. Erhardt inhaled a significant amount of asbestos fibers." *Id.* at 18.

As a result, Dr. Zhang concluded that "[b]ased on Mr. Erhardt's history of asbestos exposure, clinical presentation, radiological findings and histological diagnoses, it is [his] opinion to a reasonable degree of medical certainty that Mr. Erhardt has asbestos-related malignant mesothelioma." *Id.* at 22. Dr. Zhang also concluded that "taken together, the evidence and the scientific information regarding the causal relation between asbestos and mesothelioma provides more than sufficient evidence to allow one to conclude within a reasonable degree of medical and scientific certainty that Mr. Erhardt's mesothelioma was caused by that asbestos exposure." *Id.* at 22-23.

In reaching these opinions, in addition to reliance on and review of related scientific literature, Dr. Zhang reviewed case material, including interrogatory answers and deposition transcripts of Mr. Erhardt and others, medical records, pathology reports, medical slides and digital images, as well as the report of Mr. Ewing. *Id.* at 17-22.

Both Drs. Frank and Zhang testified that Mr. Erhardt's condition could have been caused by any of the Defendants. *See* BMW NA SMF at 6 ¶ 46 (citing Dep. of Arthur L. Frank, M.D.,

Ph.D., Ex. 3, at 129: 29-131:16, dated May 8, 2020, ECF No. 234-3 (Aug. 7, 2020) ("Frank Dep.") ("[T]o the extent that Mr. Erhardt had exposures to asbestos-containing products from those four brands . . . they would have been a significant contributing cause of his developing his peritoneal mesothelioma.")); Zhang Report at 22 ("Mr. Erhardt's malignant mesothelioma is related to significant levels of asbestos exposure and the cumulative exposure of each asbestos-containing product significantly contributed to the development of malignant mesothelioma").

"William Ewing is recognized as a Certified Industrial Hygienist [] by the American Board of Industrial Hygiene." Pl.'s Mem. in Opp'n to Def. BMW NA's Mot. to Preclude and Opp'n to Mot. for Summ. J., ECF No. 245 at 1 (Aug. 28, 2020) ("Pl.'s Opp'n Ewing"). Mr. Ewing holds a Bachelor of Science Degree in Biology and "has received specialized training in asbestos." *Id.* at 1. He is "certified as an inspector, management planner, and project designer/supervisor [under] the United States Environmental Protection Agency (USEPA)-Asbestos Hazard Emergency Response Act (AHERA)." *Id.* at 2.

Mr. Ewing described "[i]ndustrial hygiene" as "the field of identification, evaluation, and control of occupational and environmental health hazards." Report of William M. Ewing, CIH, Ex. 5, dated May 7, 2018, ECF No. 135-5 at 1 (Aug. 1, 2019) ("Ewing Report"). He has "practiced industrial hygiene for 40 years with the emphasis on asbestos exposures in facilities." *Id.* He has "conducted asbestos investigations in over 2000 industrial, commercial, institutional, and governmental buildings," and has "measured asbestos exposures to workers in the building trades and have researched the published literature, and unpublished reports and studies, to understand the historical exposures workers experienced." *Id.* He is "familiar with the standards,

guidelines and regulations applicable to workers' exposure to asbestos," and has "conducted sampling for asbestos and analyzed such samples over the course of [his] career." *Id*.

His experience includes having served as "the director of the [EPA-]sponsored Asbestos Information Center at the Georgia Tech Research Institute," technical advisor to the EPA "during the Brake Mechanics' Education Program," and as "Chair of the EPA-sponsored Asbestos Brake Conference in 1987." *Id.* Mr. Ewing also has "published approximately 20 articles on the subject of asbestos exposure." *Id.*

For this case, Mr. Ewing reviewed Mr. Erhardt's deposition transcripts, as well as discovery documents, and Mr. Erhardt's Social Security Earnings Record. *Id.* at 1-2. He also learned about and compiled information about Mr. Erhardt's "work and personal history from which [he] [] formed opinions." *Id.* at 2. He determined that: "[t]here was no evidence reviewed to indicate [Mr. Erhardt] had significant exposures to asbestos during his childhood or from family members while growing up, or from his early employments." *Id.* at 2. But from 1968 to 1990, Mr. Erhardt worked at Ridgefield European Motors, and during the course of that employment, he "handled many brake shoes, brake pads, and clutches, but did not perform brake or clutch jobs," *id.* at 3; spent a good amount of time in the [repair] shop" from 1971 to 1980, *id.*; and from 1980 to 1990, while he did not do the work personally, he "handled the brakes, clutches, gaskets; and was often in the vicinity of the technicians as they did their work," usually "within 5-10 feet," *id* at 4. In performing brake jobs, the technicians "used compressed air to clean out brake wear dust" and "sometimes used sandpaper to rough up the surface of the friction." *Id.*

Based on "[p]ublished studies in the scientific literature," Mr. Ewing opined that "significant airborne asbestos exposures occur when performing brake work where compressed

air is used to clean out the brake assembly." *Id.* at 5-6. As he described it:

Some brake wear dust collects in the brake drum and on the brake components as the brake lining wears down. When this dust is subject to the force of compressed air, the dust disperses into the air and is inhaled by the mechanic and others in the area. This entrainment of the dust is recognized as a source of asbestos exposure among vehicle mechanics, and even sweeping of the dust has been shown to cause exposures in the range of less than 0.1 to 1.7 f/cc. These exposures have been shown to pose a health risk to workers.

Id. at 6 (citations omitted). "The hand sanding of the asbestos-containing friction surfaces (brakes) would also have produce[d] elevated exposures." Id. at 9. In Mr. Ewing's view, "Mr. Erhardt was exposed to asbestos when handling the old asbestos-containing brake shoes/pads and unpacking the new asbestos-containing shoes/pads," id. at 10, and "was exposed to asbestos at times when he handled asbestos-containing gaskets and sometimes when others were working with asbestos-containing gaskets on vehicles," id. at 11.

Even if his exposure was as "a bystander to work done by others," *id.*, in Mr. Ewing's view, Mr. Erhardt remained at risk. "For example, if Mr. Erhardt was about 5-10 feet from a mechanic doing a brake job, his exposure was likely about 35% of what the mechanic experienced." *Id.* at 12. Finally, although Mr. Erhardt did some drywall and drywall finishing work on his house in or about 1974 to 1975, it "was extremely rare to find drywall with commercially added asbestos," and "[t]here is no significant exposure [to asbestos] during the actual application of the wet joint compound to the wallboard." *Id.*

B. Procedural History

On July 10, 2018, Mr. Erhardt filed suit in the Superior Court for the State of Connecticut, Judicial District of Fairfield at Bridgeport. *Helmut Erhardt v. Am. Honda Motor Co., et al.*, Docket No. FBT-cv-18-6076553-S (Conn. Super. Ct. July 10, 2018).

On August 9, 2018, Mercedes-Benz USA LLC removed this case from the Superior Court of Connecticut. Notice of Removal.

On August 16, 2018, Porsche Cars North America, Inc. ("Porsche"), Worldpac, Inc. ("Worldpac"), TMD Friction Inc. ("TMD"), Genuine Parts Co., Certain-Teed Corp., BMW NA, Kelsey-Hayes Co., Dana Cos. LLC, TRW Automotive U.S., LLC ("TRW"), Borgwarner Morse, TEC, LLC, ZF North American, Inc. ("ZF"), Standard Motor Products, Inc. ("Standard Motor"), and Pneumo Abex LLC ("Pneumo Abex") filed Answers, variously setting forth affirmative defenses and cross claims. Answers, ECF Nos. 24, 25, 26, 27, 40, 42, 43, 44, 46, 48, 49, 51, 52 (Aug. 16, 2018).

On August 21, 2018, Union Carbide Corp. (individually and as successor to Amchem and Benjamin Foster) filed an Answer with affirmative defenses and special defenses, and crossclaims against all Defendants. Answer, ECF No. 68 (Aug. 21, 2018).

On August 22, 2018, General Electric Co. filed an Answer with affirmative defenses and cross-claims against all Defendants. Answer, ECF No. 70 (Aug. 22, 2018).

On August 30, 2018, American Honda Co., Inc. ("Honda"), Toyota Motor Sales USA, Inc. ("Toyota"), Volkswagen Group of America, Inc. ("VW"), Audi of America, LLC ("Audi"), and Nissan North America, Inc. ("Nissan") filed Answers, variously setting forth affirmative defenses and answers to cross-claims. Answers, ECF Nos. 72, 74, 75, 76, 77 (Aug. 30, 2018).

On September 18, 2018, Federal-Mogul Asbestos Personal Injury Trust filed an Answer and a cross-claim against all Defendants. Answer, ECF No. 79 (Sept. 18, 2018).

On October 18, 2018, Mazda Motor of America, Inc. ("Mazda"), filed an Answer with affirmative defenses. Answer, ECF No. 88 (Oct. 18, 2018).

On November 1, 2018, BWDAC Inc., f/k/a BWD Automotive Corp., filed an Answer with affirmative defenses, cross-claims against all Defendants, and an Answer to cross-claims and third-party claims. Answer, ECF No. 97 (Nov. 1, 2018).

On November 7, 2018, the Court conducted a status conference. Status Conf., ECF No. 104 (Nov. 7, 2018).

On November 30, 2018, Fiat USA, Inc. and Luk Aftermarket Service LLC filed Answers to the Complaint with affirmative defenses, cross-claims against all Defendants, and Answers to cross-claims and third-party claims. Answers, ECF Nos. 110, 111 (Nov. 30, 2018).

On February 11, 2019, Mr. Erhardt moved to dismiss Federal-Mogul Asbestos Personal Injury Trust from the case. Mot. to Dismiss, ECF No. 118 (Feb. 11, 2019).

On February 26, 2019, Union Carbide Corp. filed a stipulation of dismissal. Stipulation of Dismissal, ECF No. 119 (Feb. 26, 2019).

On February 27, 2019, the Court granted Mr. Erhardt's motion to dismiss Federal-Mogul Asbestos Personal Injury Trust with prejudice. Order, ECF No. 120 (Feb. 27, 2019).

On the same day, the Court granted the stipulation of dismissal of Union Carbide Corp., with prejudice and without costs as to that Defendant. Order, ECF No. 121 (Feb. 27, 2019).

On April 18, 2019, Mercedes-Benz USA, LLC filed a stipulation of dismissal. Stipulation of Dismissal, ECF No. 122 (Apr. 18, 2019).

On April 22, 2019, the Court granted the stipulation of dismissal of Mercedes-Benz USA, LLC, with prejudice and without costs as to that Defendant. Order, ECF No. 123 (Apr. 22, 2019).

On April 29, 2019, Mr. Erhardt moved to dismiss Toyota, Honda, Audi, Worldpac, and TMD from the case. Mot. to Dismiss, ECF No. 124 (Apr. 29, 2019).

On May 6, 2019, Mr. Erhardt moved to dismiss Certain-Teed Corp., Dana Cos. LLC; Kelsey-Hayes Co., Nissan, TRW and ZF from the case. Mot. to Dismiss, ECF No. 125 (May 6, 2019).

On June 5, 2019, Mr. Erhardt moved to dismiss Porsche from the case. Mot. to Dismiss, ECF No. 127 (June 5, 2019).

On June 20, 2019, the Court issued a single order granting Mr. Erhardt's motions to dismiss Honda, Audi, TMD, Toyota, Worldpac, Certain-Teed Corp., Dana Cos. LLC; Kelsey-Hayes Co., Nissan, TRW, ZF, and Porsche, with prejudice, from the case. Order, ECF No. 131 (June 20, 2019).

On August 1, 2019, Mr. Erhardt filed his proposed witness list. Pl.'s Expert Witness Disclosure.

On September 3, 2019, Standard Motor, Parker-Hannifin Corp. and Mr. Erhardt jointly moved to dismiss those defendants from the case. Mot. to Dismiss, ECF No. 145 (Sept. 3, 2019).

On September 13, 2019, Mr. Erhardt moved to dismiss CBS Corp. from the case. Mot. to Dismiss, ECF No. 146 (Sept. 3, 2019).

On March 10, 2020, the Court issued a single order granting the joint motions to dismiss Standard Motor and Parker-Hannifin Corp., and the motion to dismiss CBS Corp., with prejudice. Order, ECF No. 191 (Mar. 10, 2020).

On July 1, 2020, Borgwarner Morse, TEC, LLC filed a stipulation of dismissal. Stipulation of Dismissal, ECF No. 192 (July 1, 2020).

On July 7, 2020, General Electric Co. filed a stipulation of dismissal. Stipulation of Dismissal, ECF No. 193 (July 7, 2020).

On July 9, 2020, Mr. Erhardt moved to dismiss Metropolitan Life Insurance Co. from the case. Mot. to Dismiss, ECF No. 196 (July 9, 2020).

On July 10, 2020, the Court granted the motion to dismiss Metropolitan Life Insurance Co. Order, ECF No. 198 (July 10, 2020).

On July 13, 2020, Borgwarner Morse, TEC, LLC filed a stipulation of dismissal of cross-claims. Stipulation of Dismissal, ECF No. 199 (July 13, 2020).

On August 7, 2020, the deadline for the submission of dispositive motions, there was considerable activity in the case.

Both Luk Aftermarket Service LLC and Fiat USA, Inc. filed stipulations of dismissal. Stipulation of Dismissal, ECF No. 200 (Aug. 7, 2020); Stipulation of Dismissal, ECF No. 201 (Aug. 7, 2020).

Mr. Erhardt filed various motions for summary judgment. Notice of Statement of Material Facts, ECF No. 202 (Aug. 7, 2020); Omnibus Mot. for Summ. J., ECF No. 203 (Aug. 7, 2020); Mem. in Supp. of Omnibus Mot. for Summ. J., ECF No. 204 (Aug. 7, 2020); Mot. for Summ. J., ECF No. 205 (Aug. 7, 2020); Mem. in Supp. of Mot. for Summ. J., ECF No. 206 (Aug. 7, 2020); Statement of Material Facts, ECF No. 207 (Aug. 7, 2020).

Genuine Parts Co. moved for summary judgment. Mot. for Summ. J., ECF No. 208 (Aug. 7, 2020). Genuine Parts Co. also filed a motion to and to preclude the reports and testimonies of Plaintiff's experts Dr. Arthur Frank and Dr. David Zhang. Mot. to Preclude Reports and Testimonies of Drs. Frank and Zhang, ECF No. 209 (Aug. 7, 2020), and to preclude the reports and testimony of Plaintiff's expert William Ewing. Mot. to Preclude Reports and Testimony of William Ewing, ECF No. 210 (Aug. 7, 2020).

Pneumo Abex moved for summary judgment. Mot. for Summ. J., ECF No. 211 (Aug. 7, 2020). Pneumo Abex also filed a motion to preclude the reports and testimonies of Plaintiff's experts Dr. Arthur Frank and Dr. David Zhang, Mot. to Preclude Reports and Testimonies of Drs. Frank and Zhang, ECF No. 221 (Aug. 7, 2020), and to preclude the reports and testimony of Plaintiff's expert William Ewing, Mot. to Preclude the Reports and Testimony of William Ewing, ECF No. 215 (Aug. 7, 2020).

VW moved for summary judgment. Mot. for Summ. J., ECF No. 212 (Aug. 7, 2020); Statement of Material Facts, ECF No. 213 (Aug. 7, 2020). VW also moved to preclude the reports and testimonies of Plaintiff's experts Dr. Arthur Frank and Dr. David Zhang. Mot. to Preclude Reports and Testimonies of Drs. Frank and Zhang, ECF No. 223 (Aug. 7, 2020); Mem. in Supp. of Mot. to Preclude Reports and Testimonies of Drs. Frank and Zhang, ECF No. 224 (Aug. 7, 2020). VW also moved to preclude the reports and testimony of Plaintiff's expert William Ewing. Mot. to Preclude Reports and Testimony of William Ewing, ECF No. 225 (Aug. 7, 2020); Mem. in Supp. of Mot. to Preclude Reports and Testimony of William Ewing, ECF No. 226 (Aug. 7, 2020).

Mazda moved for summary judgment. Mot. for Summ. J., ECF No. 219 (Aug. 7, 2020); Statement of Material Facts, ECF No. 220 (Aug. 7, 2020); Mem. in Supp. of Mot. for Summ. J., ECF No. 222 (Aug. 7, 2020). Mazda also moved to preclude the reports and testimonies of Plaintiff's experts Dr. Arthur Frank and Dr. David Zhang. Mot. to Preclude Reports and Testimonies of Drs. Frank and Zhang, ECF No. 228 (Aug. 7, 2020); Mem. in Supp. of Mot. to Preclude the Reports and Testimonies of Drs. Frank and Zhang, ECF No. 229 (Aug. 7, 2020), Mazda also moved to preclude the reports and testimony of Plaintiff's expert William Ewing. Mot. to Preclude Reports and Testimony of William Ewing, ECF No. 230 (Aug. 7, 2020); Mem.

in Supp. of Mot. to Preclude Reports and Testimony of William Ewing, ECF No. 231 (Aug. 7, 2020).

BMW NA moved to preclude the reports and testimonies of Plaintiff's experts Dr. Arthur Frank and Dr. David Zhang, the declaration of Dr. Testa, and for summary judgment. BMW NA Mot. Frank & Zhang; BMW NA Mem. Frank & Zhang; BMW NA SMF. BMW NA also moved to preclude the testimony of Plaintiff's expert William Ewing and for summary judgment. BMW NA Mot. Ewing; BMW NA Mem. Ewing; Statement of Material Facts, ECF No. 227 (Aug. 7, 2020).

On August 10, 2020, the Court granted the stipulation of dismissal of Luk Aftermarket Service LLC, terminating it as a defendant, dismissing all cross-claims by Luk Aftermarket Service LLC against co-defendants; and dismissing cross-claims against it by seven co-defendant signatories. Order, ECF No. 235 (Aug. 10, 2020).

On August 10, 2020, the Court also granted the stipulation of dismissal of Fiat USA Inc., terminating it as a defendant, dismissing all cross-claims by Fiat USA Inc. against co-defendants; and dismissing cross-claims against it by seven co-defendant signatories. Order, ECF No. 236 (Aug. 10, 2020).

On August 26, 2020, Pneumo Abex filed two stipulations of dismissal of cross-claims. Stipulation of Dismissal, ECF No. 237 (Aug. 26, 2020); Am. Stipulation of Dismissal, ECF No. 238 (Aug. 26, 2020).

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⁷ Seven co-defendants signed the joint stipulation of dismissal: Fiat USA, Inc., BMW NA, Mazda, VW, Genuine Parts Co., BWDAC Inc., and Pneumo Abex. *See* Order, ECF No. 235 (Aug. 10, 2020).

⁸ The co-defendants to this joint stipulation of dismissal were: Luk Aftermarket Service LLC, BMW NA, Mazda, VW, Genuine Parts Co., BWDAC Inc., and Pneumo Abex. *See* Order, ECF No. 236 (Aug. 10, 2020).

On August 27, 2020, Mr. Erhardt filed a notice withdrawing his omnibus motion for summary judgment. Notice of Withdrawal, ECF No. 239 (Aug. 27, 2020).

On August 27, 2020, the Court granted the stipulation of dismissal of all cross-claims asserted by Defendants/Cross-Claims Plaintiffs BMW NA, Genuine Parts Co., and Pneumo Abex, without prejudice, and noted that the dismissal would not affect claims or causes of actions asserted by Plaintiff, Mr. Erhardt. Order, ECF No. 240 (Aug. 27, 2020).

On August 28, 2020, there were again various filings in the case.

Mr. Erhardt filed a memorandum in opposition to BMW NA's motion for summary judgment. Mem. in Opp'n, ECF No. 241 (Aug. 28, 2020).

BMW NA filed a response to Mr. Erhardt's Statement of Material Facts. BMW NA Resp. to Statement of Facts, ECF No. 242 (Aug. 28, 2020).

Mr. Erhardt filed a memorandum in opposition to BMW NA's motion to preclude the reports and testimonies of Plaintiff's experts Dr. Arthur Frank and Dr. David Zhang, and the declaration of Dr. Testa. Pl.'s Opp'n Frank & Zhang.

Mr. Erhardt filed another Statement of Material Facts in opposition to BMW NA's motion for summary judgment. Pl.'s SMF.

Mr. Erhardt filed a memorandum in opposition to BMW NA's motion to preclude the reports and testimony of Plaintiff's expert William Ewing and for summary judgment. Pl.'s Opp'n Ewing; Statement of Material Facts, ECF No. 246 (Aug. 28, 2020).

Mr. Erhardt filed a memorandum in opposition to VW's motion to preclude the reports and testimonies of Plaintiff's experts Dr. Arthur Frank and Dr. David Zhang, and the declaration of Dr. Testa. Mem. in Opp'n, ECF No. 247 (Aug. 28, 2020).

Mr. Erhardt also filed a memorandum in opposition to VW's motion to preclude the reports and testimony of Plaintiff's expert William Ewing and for summary judgment. Mem. in Opp'n, ECF No. 248 (Aug. 28, 2020).

Mr. Erhardt also filed a Statement of Material Facts in opposition to VW's motion for summary judgment. Statement of Facts, ECF No. 249 (Aug. 28, 2020).

Mr. Erhardt filed a memorandum in opposition to Mazda's motion to preclude the reports and testimony of Plaintiff's expert William Ewing and for summary judgment. Mem. in Opp'n, ECF No. 250 (Aug. 28, 2020). Mr. Erhardt also filed a memorandum in opposition to Mazda's motion to preclude the reports and testimony of Plaintiff's experts Dr. Arthur Frank and Dr. David Zhang. Mem. in Opp'n, ECF No. 253 (Aug. 28, 2020). Mr. Erhardt also filed a Statement of Material Facts in opposition to Mazda's motion for summary judgment. Statement of Facts, ECF No. 254 (Aug. 28, 2020).

On September 9, 2020, Genuine Parts Co. withdrew its motions for summary judgment and to preclude the reports and testimonies of Dr. Arthur Frank, Dr. David Zhang, and William Ewing. Notices of Withdrawal, ECF Nos. 255, 256, 257 (Sept. 9, 2020).

On September 11, 2020, there were again various filings in the case.

Mr. Erhardt filed a response to VW's Statement of Material Facts. Resp., ECF No. 258 (Sept. 11, 2020).

VW filed a reply to Mr. Erhardt's memorandum in opposition to its motion to preclude the reports and testimonies of Plaintiff's experts Dr. Arthur Frank and Dr. David Zhang, and the declaration of Dr. Testa. Mem. in Opp'n, ECF No. 259 (Sept. 11, 2020). VW also filed a reply to Mr. Erhardt's memorandum in opposition to its motion preclude the reports and testimony of

Plaintiff's expert William Ewing and for summary judgment. Mem. in Opp'n, ECF No. 260 (Sept. 11, 2020).

Mr. Erhardt also responded to Mazda's Statement of Material Facts. Resp., ECF No. 261 (Sept. 11, 2020).

Mazda replied to Mr. Erhardt's memorandum in opposition to its motion to preclude the reports and testimonies of Plaintiff's experts Dr. Arthur Frank and Dr. David Zhang, and the declaration of Dr. Testa. Mem. in Opp'n, ECF No. 262 (Sept. 11, 2020). Mazda also replied to Mr. Erhardt's memorandum in opposition to its motion preclude the reports and testimony of Plaintiff's expert William Ewing and for summary judgment. Mem. in Opp'n, ECF No. 263 (Sept. 11, 2020).

Mr. Erhardt filed a reply memorandum in support of his motion for summary judgment. Reply Mem. in Supp. of Mot. for Summ. J., ECF No. 265 (Sept. 11, 2020).

BMW NA replied to Mr. Erhardt's memorandum in opposition to its motion preclude the reports and testimony of Plaintiff's expert William Ewing and for summary judgment. Mem. in Opp'n, ECF No. 266 (Sept. 11, 2020) ("Reply to Pl.'s Opp'n Ewing"). BMW NA also filed a statement of material facts in support of its motion to preclude the reports and testimony of Plaintiff's expert William Ewing and for summary judgment. BMW NA Statement of Material Facts, ECF No. 267 (Sept. 11, 2020). BMW NA replied to Mr. Erhardt's memorandum in opposition to its motion to preclude the reports and testimonies of Plaintiff's experts Dr. Arthur Frank and Dr. David Zhang and the declaration of Dr. Testa. Mem. in Opp'n, ECF No. 268 (Sept. 11, 2020). BMW NA also filed a statement of material facts in support of its motion preclude the reports and testimonies of Plaintiff's experts Dr. Arthur Frank and Dr. David Zhang

and the declaration of Dr. Testa, in response to Mr. Erhardt's statements in his statements of material facts. Statement of Material Facts, ECF No. 269 (Sept. 11, 2020).

On September 17, 2020, the Court dismissed as moot Genuine Parts Co.'s motions for summary judgment and to preclude the reports and testimonies of Drs. Frank and Zhang, and Mr. Ewing, based on the Notices of Withdrawal filed by Genuine Parts Co. Order, ECF No. 272 (Sept. 17, 2020).

On December 3, 2020, Genuine Parts Co. filed a stipulation of dismissal. Stipulation of Dismissal, ECF No. 278 (Dec. 3, 2020).

On December 4, 2020, the Court terminated Genuine Parts Co. from the case. Order, ECF No. 289 (Dec. 4, 2020).

On December 14, 2020, Mazda filed a notice of settlement in principle. Notice, ECF No. 279 (Dec. 14, 2020).

On the same day VW also filed a notice of settlement in principle. Notice, ECF No. 280 (Dec. 14, 2020).

On December 16, 2020, the Court dismissed as moot various motions, including the VW Mot. to Preclude Reports and Testimonies of Drs. Frank and Zhang, VW Mot. to Preclude Reports and Testimony of William Ewing, and VW Mot. for Summ. J., under the Notice of Settlement in Principle, Order, ECF Nos. 281, 282, 283 (Dec. 16, 2020); the Mazda Mot. to Preclude Reports and Testimonies of Drs. Frank and Zhang, Mazda Mot. to Preclude Reports and Testimony of Mr. Ewing, and Mazda Mot. for Summ. J., Order, ECF Nos. 284, 285, 286 (Dec. 16, 2020); and the Plaintiff's Omnibus Mots. for Summ. J., Order, ECF Nos. 287, 288 (Dec. 16, 2020).

On December 16, 2020, the Court held oral argument by videoconference on Pneumo Abex's and BMW NA's pending motions for summary judgment and to preclude Plaintiff's experts. Min. Entry, ECF No. 290 (Dec. 17, 2020). On the day of oral argument, Pneumo Abex informed the Court that it had reached a settlement in principle with Mr. Erhardt and would not be participating in oral argument. *Id*.

On December 18, 2020, the Court issued an Order requesting that the Plaintiff provide all expert reports and related documents previously provided by Dr. Frank, Dr. Zhang, and Mr. Ewing, as exhibits to a separate and supplemental filing. Order, ECF No. 291 (Dec. 18, 2020).

On December 21, 2020, Mr. Erhardt filed these supplemental documents. Notice of Suppl. Filings, ECF No. 292 (Dec. 21, 2020).

II. STANDARD OF REVIEW

A. Summary Judgment Motions

In a motion for summary judgment, the burden is on the moving party to establish that no genuine issues of material fact remain in dispute and that it is entitled to judgment as a matter of law. Fed. R. Civ. P. Rule 56(a). A fact is "material" if it "might affect the outcome of the suit under the governing law" and is "genuine" if "a reasonable jury could return a verdict for the nonmoving party" based on it. *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986).

When a motion for summary judgment is supported by documentary evidence and sworn affidavits and demonstrates "the absence of a genuine issue of material fact," the party opposing the motion "must come forward with specific evidence demonstrating the existence of a genuine dispute of material fact." *Robinson v. Concentra Health Servs., Inc.*, 781 F.3d 42, 44 (2d Cir. 2015) (citations omitted). In doing so, the non-moving party may not merely rely on "conclusory allegations or unsubstantiated speculation." *Id*.

In reviewing the record, the court must "construe the evidence in the light most favorable to the non-moving party and to draw all reasonable inferences in its favor." *Gary Friedrich Enters., LLC v. Marvel Characters, Inc.*, 716 F.3d 302, 312 (2d Cir. 2013) (citations omitted). If there is any evidence in the record from which a reasonable factual inference could be drawn in favor of the opposing party on the issue on which summary judgment is sought, summary judgment is inappropriate. *See Sec. Ins. Co. of Hartford v. Old Dominion Freight Line Inc.*, 391 F.3d 77, 83 (2d Cir. 2004); *Anderson*, 477 U.S. at 250 (summary judgment is proper only when "there can be but one reasonable conclusion as to the verdict").

B. Motions to Preclude Expert Testimony

Expert opinions must be both reliable and relevant to the issues in a given case before they can be presented to the trier of fact. *See Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579 (1993) ("[U]nder the [Federal] Rules [of Evidence] the trial judge must ensure that any and all scientific testimony or evidence admitted is not only relevant, but reliable."); Fed. R. Evid. 702, Advisory Committee Notes, 2000 Amendments (noting that trial judges have "the responsibility of acting as gatekeepers to exclude unreliable expert testimony"). Evidence is relevant if the testimony "has any tendency to make the existence of any fact that is of consequence to the determination of the action more probable or less probable than it would be without the evidence." *Amorgianos v. Amtrak Nat'l R.R. Passenger Corp.*, 303 F.3d 256, 264 (2d Cir. 2002) (alteration omitted).

If expert testimony is relevant, the trial court must then determine "whether the proffered testimony has a sufficiently 'reliable foundation' to permit it to be considered" by the trier of fact. *Id.* at 265 (quoting *Daubert*, 509 U.S. at 597). An expert's testimony is reliable if: (1) it is based upon sufficient facts or data, (2) it is the product of reliable principles and methods, and

(3) if the witness has applied the principles and methods reliably to the facts of the case. *See* Fed. R. Evid. 702.

Generally, when an expert reliably utilizes scientific methods to reach a conclusion, any asserted lack of textual support for these methods goes "to the weight, not the admissibility" of his or her testimony. *Amorgianos*, 303 F.3d at 267 (internal quotation mark omitted). A "contrary requirement," the Second Circuit has noted, would "be at odds with the liberal admissibility standards of the federal rules and the express teachings of *Daubert*." *Id*. At the same time, "nothing in either *Daubert* or the Federal Rules of Evidence requires a district court to admit opinion evidence that is connected to existing data only by the *ipse dixit* of the expert." *Id*. (quoting *Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 146 (1997)) (alteration omitted). A district court's assessment of expert testimony thus requires a case-specific and "rigorous" consideration of the "facts on which the expert relies," the expert's "method," and how he or she "applies the facts and methods to the case at hand." *Id*. at 267.

III. DISCUSSION

Mr. Erhardt's claims are brought under the Connecticut Product Liability Act ("CPLA"), the exclusive remedy for any product defect action brought under Connecticut law, which includes all actions related to the "harm caused by a product." Conn. Gen. Stat. § 52–572n(a); see also Allard v. Liberty Oil Equip. Co., 253 Conn. 787, 800 (2000) ("It is now beyond dispute that [§ 52–572n(a)] provides the exclusive remedy for a claim falling within its scope[.]" (internal quotation marks omitted)); Winslow v. Lewis-Shepard, Inc., 212 Conn. 462, 462, (1989) (stating the same); Daily v. New Britain Mach. Co., 200 Conn. 562, 571 (1986) ("The [CPLA] provides an exclusive remedy and the plaintiffs cannot bring a common law cause of action for a claim within the scope of the statute."). The elements of a CPLA claim are that:

(1) the defendant was engaged in the business of selling the product; (2) the product was in a defective condition unreasonably dangerous to the consumer or user; (3) the defect caused the injury for which compensation was sought; (4) the defect existed at the time of the sale; and (5) the product was expected to and did reach the consumer without substantial change in condition.

White v. Mazda Motor of Am., Inc., 313 Conn. 610, 622 (2014) (internal quotation marks omitted); see also Bray v. Ingersoll-Rand Co., No. 3:13-cv-1561 (SRU), 2015 WL 728515, at *4 (D. Conn. Feb. 19, 2015) (enumerating the five elements of a CPLA claim).

Mr. Erhardt alleges that (1) he was engaged in the automobile industry, Compl. at $4 \P 4$; (2) "asbestos and asbestos-containing products were hazardous to the health and safety of the plaintiff and other human beings," id. at $5 \P 10$; (3) he was "exposed to and . . . inhale[d] and/or ingest[ed] asbestos dust, fibers, and particles [that] came from the [Defendants'] . . . products," id. at $4 \P 5$; (4) "[D]efendants have since the 1930's had numerous workers' compensation claims filed against them by former asbestos workers/employees," id. at $5 \P 12$, but still, $inter\ alia$, "manufactured," "designed," "fabricated," and "delivered" "asbestos-containing products," id. at $4 \P \P 5$, 6; and (5) "the asbestos products . . . reached the plaintiff without any substantial change in their condition from the time they were sold," id. at $5 \P 9$.

"[E]xpert [causation] testimony is unnecessary in cases where jurors are as capable of comprehending the primary facts and of drawing correct conclusions from them as are witnesses possessed of special or peculiar training." *Wills v. Amerada Hess Corp.*, 379 F.3d 32, 46 (2d Cir. 2004) (internal quotation marks omitted). But when a plaintiff's theory of causation "would not be obvious to the lay juror, expert evidence is often required to establish the causal connection between the accident and some item of physical or mental injury." *Id.* (internal quotation marks and alteration omitted).

The issue of whether exposure to asbestos could have caused Mr. Erhardt's mesothelioma would not be considered "obvious to the lay juror." *Id.*; *see also id.* ("In a case such as this, where an injury has multiple potential etiologies, expert testimony is necessary to establish causation."); *see also Zelle v. Bayer Healthcare, LLC*, No. 08-094019435, 2012 WL 753796, at *8 (Conn. Super. Ct. Feb. 16, 2012) ("A finding of a defect in the drug is not within the common knowledge of an ordinary person."). As a result, admissible expert testimony will be necessary to support Mr. Erhardt's claims. *See, e.g., K.E. v. GlaxoSmithKline LLC*, No. 14-cv-1294 (VAB), 2017 WL 440242, at *19 (D. Conn. Feb. 1, 2017) ("In the absence of expert opinion on specific causation, no reasonable fact finder could come to the conclusion that Paxil caused K.E.'s injury.").

Although in slightly different ways and from slightly different vantage points, the testimonies of Dr. Frank, Dr. Zhang, and Mr. Ewing are all used to support three propositions: (1) exposure to asbestos is a leading cause of mesothelioma, the disease suffered by Mr. Erhardt; (2) exposure to asbestos fibers from car parts, particularly brake pads – a product in abundance where Mr. Erhardt worked for many years – can result in mesothelioma; and (3) exposure to asbestos fibers over time from working at Ridgefield European Motors, including from BMW NA products, is the cause of Mr. Erhardt's illness. *See e.g.*, Frank Letter at 2; Zhang Report at 22-23; Ewing Report at 3-6.

BMW NA argues that the experts' testimony is inadmissible. In its view, Dr. Frank's "theory of cumulative causation (that any exposure is causative, regardless of the dose), is untested and based largely on his own beliefs." BMW NA Mem. Frank & Zhang at 2. Similarly, BMW NA argues that "Dr. Zhang also holds the novel and unsupported opinion that a causal

exposure analysis is unnecessary because virtually all mesotheliomas are caused by asbestos exposure." *Id*.

BMW NA also argues that "Dr. Frank testified in this case that he previously opined that 'each and every exposure above background contributes to cause someone's[] mesothelioma." *Id.* at 6 (quoting Frank Dep. 68:15-24). BMW NA suggests that "[Dr. Frank] testified that he changed his language based upon court rulings that excluded the 'each and every' theory." *Id.* (quoting Frank Dep. 69:6-70:5), and Dr. Frank's "cumulative exposure" analysis is "without regard to fiber type, fiber size, fiber source, and without regard to which defendant's product the fiber came from." *Id.* (citing Frank Dep. 71:15-71:20). BMW NA asserts that Dr. Frank has "conclude[d] that because one cannot exclude any of the exposures, they are all included." *Id.* (citing Frank Dep. 74:12-14).

In BMW NA's view, Mr. Ewing does not have sufficient information to determine their individual effect on Mr. Erhardt and his subsequent illness. *See e.g.*, Reply to Pl.'s Opp'n Ewing at 2 ("Mr. Ewing...did not create a causal connection between plaintiff's injuries and his exposure, if any, to the BMW product." (emphasis omitted)).

In response, Mr. Erhardt argues that "Dr. Frank points out specifically in his affidavit that he subscribes to the broad consensus in the scientific community that it is an 'irrefutable scientific fact' that 'each exposure to asbestos contributes to the total dose and increases a person's probability of developing mesothelioma or other cancers," Pl.'s SMF at 30 ¶ 52, and "it is the *cumulative effect* of all asbestos exposures which causes mesothelioma, and that all such exposures increase the *risk* of mesothelioma," *id.* at 30 ¶ 55 (emphasis in original) (citing

Frank Dep. 22:21-25, 69:13-15, 74:24-75:7, 131:18-25).9

Mr. Erhardt also argues that "Dr. Frank explained during his deposition that the cumulative exposure model is the generally accepted model in the world of science," and "Dr. Zhang was in accord, testifying that the cumulative exposure model reflects the 'current understanding of how asbestos causes mesothelioma." Pl.'s Opp'n Frank & Zhang at 21-22 (citing Pl.'s SMF at 30 \P 51-52, 33 \P 70). Mr. Erhardt argues that:

> Dr. Frank opined to a reasonable degree of medical certainty that based on Mr. Erhardt's direct testimony regarding his regular exposure to BMW NA's asbestos-containing brakes and clutches throughout his career at Ridgefield European Motors that BMW NA's brakes and clutches were a substantial contributing factor in causing Mr. Erhardt's mesothelioma. In Dr. Frank's professional medical opinion, to the extent that Mr. Erhardt's exposures to BMW NA's asbestos exceeded background levels, these exposures are medically significant and medically causative of his mesothelioma.

Id. at 7 (citing Pl.'s SMF at 29-30 ¶¶ 49-51).

In response to BMW NA's arguments regarding the testimony of Mr. Ewing, Mr. Erhardt argues that "Mr. Ewing relies upon the facts of this case including Plaintiff's deposition testimony, interrogatory answers, and other records to form his opinion within a reasonable degree of scientific certainty." Pl.'s Opp'n Ewing at 6. Furthermore, in Mr. Erhardt's view, Mr. Ewing has

> applie[d] known numerical ranges for asbestos exposures, expressed in asbestos fibers per cubic centimeter of air or 'f/cc,' based on repeatable laboratory studies of asbestos work practices substantially similar to those experienced by Mr. Erhardt at Ridgefield European Motors, which is the kind of scientific analysis upon which medical causation experts routinely

transcript provided by BMW NA.

⁹ BMW NA SMF includes the full transcript of Dr. Frank's telephonic deposition held on May 8, 2020, whereas the file referenced in Pl.'s SMF provides a truncated version of the same transcript. Dep. of Arthur L. Frank, M.D., Ph.D., Ex. O, dated May 8, 2020, ECF No. 244-15 (Aug. 28, 2020). Accordingly, the Court cites to the full

Id. at 6-7. Mr. Erhardt also explains how Mr. Ewing's testimony is grounded in his own expertise in the subject matter as well as his careful study of the particular facts of this particular case. *See id.* at 7 ("Mr. Ewing also discusses Mr. Erhardt's exposure as a bystander to work done by others and cites to literature containing data regarding the amount of exposure from the source as a bystander.").

The Court thus will address the qualifications of these three experts, the admissibility of their expert testimony, and whether there is a genuine issue of material fact for trial.

A. The Qualifications of Mr. Erhardt's Experts

As a preliminary matter, expert opinion testimony is permitted only if the witness "is qualified as an expert by knowledge, skill, experience, training, or education," and the expert's "scientific, technical or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue." Fed. R. Evid. 702. "District courts have broad discretion to determine whether an expert is qualified and may determine that an expert is qualified to testify outside of his or her formal training or specialty." *K.E.*, 2017 WL 440242, at *8 (citing *McCullock v. H.B. Fuller Co.*, 61 F.3d 1038, 1042-43 (2d Cir. 1995)). There does not appear to be a question as to whether Drs. Frank and Zhang and Mr. Ewing can be qualified as experts. In their given fields. *See Pl.*'s Expert Witness Disclosure at 12 ("William Ewing is a certified industrial hygienist who has conducted extensive research on the hazards of asbestos and is the Technical Director for Compass Environmental, Inc."); *id.* at 15 ("Dr. Arthur Frank is board certified in internal and preventive medicine"); *id.* at 21-22 ("Dr. Zhang was a Professor in the Departments of Pathology and Oncological Sciences and Associate Professor of Preventive

¹⁰ BMW NA has not challenged the qualifications of Dr. Frank, Dr. Zhang, and Mr. Ewing.

Medicine, Mount Sinai School of Medicine . . . [and] is licensed to practice medicine in the states of New York, New Jersey and Florida.").

Accordingly, Dr. Frank, Dr. Zhang, and Mr. Ewing can be qualified as expert witnesses.

B. The Admissibility of the Expert Testimony of Dr. Frank, Dr. Zhang, and Mr. Ewing

"[T]o establish causation, [the plaintiff] must offer admissible expert testimony regarding both general causation, i.e., that [] exposure [to the product] can cause the type of ailments from which [the plaintiff] claims to suffer; and specific causation, i.e., that [] exposure [to the product] actually caused his alleged [ailments]." *Amorgianos*, 303 F.3d at 268. Under Federal Rule of Evidence 702,

[a] witness who is qualified as an expert ... may testify in the form of an opinion or otherwise: if (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 upon sufficient facts or data; (c) the testimony is the product of reliable principles and methods; and (d) the expert has reliably applied the principles and methods to the facts of the case.

Fed. R. Evid. 702. The Court thus turns to whether the proffered expert testimonies of Dr. Frank, Dr. Zhang, and Mr. Ewing are admissible to establish both general and specific causation.

As to general causation, Drs. Frank and Zhang, as well as Mr. Ewing, have provided admissible expert testimony that exposure to asbestos can cause mesothelioma, and that the car products available at Ridgefield European Motors contained asbestos during the time period Mr. Erhardt worked there. Dr. Frank opined that the "inhalation of asbestos fibers of any type, from any source or product, causes mesothelioma (in all known locations), lung cancer, asbestosis, pleural plaques, and other cancers," Frank Aff. at 3 ¶ 1, and on the link between the presence of mesothelioma and exposure to asbestos from car brakes, *see id.* at 63 ¶ 154 (noting "cases of peritoneal mesothelioma in mechanics with occupational exposure to asbestos from brake lining"

(internal quotation marks omitted)). Dr. Zhang opined that the "great majority of mesotheliomas are due to asbestos exposure," Zhang Report at 11, and that "unlike many other cancers, for which there are multiple, well-documented causal factors, mesothelioma is overwhelmingly caused by only one agent, asbestos," *id.* at 14. He further opined that the presence of mesothelioma should be placed "in the context of the current knowledge concerning asbestos and peritoneal malignant mesothelioma in individuals who have been exposed to asbestos while performing work with or in the vicinity of other workers performing on automotive materials in automotic shops " *Id.* Finally, Mr. Ewing opined that "significant airborne asbestos exposures occur when performing brake work where compressed air is used to clean out the brake assembly," Ewing Report at 5-6, and "[t]hese exposures have been shown to pose a health risk to workers," *id.* at 6.

These opinions of general causation are "based upon sufficient facts or data," are "the product of reliable principles and methods," and their "principles and methods" have been applied "reliably to the facts of the case," as required by Rule 702. *See*, *e.g.*, *In re Asbestos Litig.*, 911 A.2d 1176, 1201 (Del. Super. Ct. 2006) ("Proponents do not need to demonstrate to the judge by a preponderance of the evidence that the assessments of their experts are correct, they only have to demonstrate by a preponderance of the evidence that their opinions are reliable."); *Schmidt v. Conagra Foods, Inc.*, No. 3:14-cv-1816 (SRU), 2020 WL 7027445, at *4 (D. Conn. Nov. 30, 2020) ("In assessing the reliability of a proffered expert's testimony, a district court's inquiry under *Daubert* must focus, not on the substance of the expert's conclusions, but on whether those conclusions were generated by a reliable methodology."); *see also Daubert*, 509 U.S. at 597 (noting that trial judges are "assign[ed]" "the task of ensuring that an expert's testimony both rests on a reliable foundation and is relevant to the task at hand. Pertinent

evidence based on scientifically valid principles will satisfy those demands"). In deciding this issue, this Court "does not choose between competing scientific theories, nor is it empowered to determine which theory is stronger." *In re Asbestos Litig.*, 911 A.2d at 1201. Instead, "the trial court determine[s] whether the proponent of the evidence has demonstrated that scientific conclusions have been generated using sound and reliable approaches." *Id.* Here, on this record, BMW NA has not shown "a significant 'analytical gap' between the experts' opinions and the studies on which they relied in reaching their conclusions, [requiring the] exclusion of plaintiffs' experts' testimony because it was not grounded in science." *Amorgianos*, 303 F.3d at 270.

In concluding that there is a causal link between asbestos and mesothelioma, and the exposure to asbestos in automotive repair work and the occurrence of mesothelioma, these proffered experts rely on published scientific articles and various studies, as well as guidance from federal agencies. *See e.g.*, Ewing Report at 6 (citing to several sources, *inter alia*, Richard A. Lemen, *Asbestos in Brakes: Exposure and Risk of Disease*, 45 Am. J. Ind. Med. 229-37 (2004), when stating, "Th[e] entrainment of dust is recognized as a source of asbestos exposure among vehicle mechanics These exposures have been shown to pose a health risk to workers."); Frank Aff. at 4-5 ¶ 4 (citing to several sources, including, *inter alia*, Leslie Stayner et al., *The Worldwide Pandemic of Asbestos-Related Disease*, 34 Ann. Rev. Public Health 4.1-4.12 (2013), when stating, "There are numerous epidemiology, registry and case studies clearly linking all types of asbestos, including chrysotile asbestos, to mesothelioma of all sites); Zhang Report at 14 (citing to several sources, including, *inter alia*, María Fernanda Cely-García et al., *Personal Exposures to Asbestos Fibers During Brake Maintenance of Passenger Vehicles*, 56 Ann. Occupational Hygiene 985-99 (2012), when stating, "[D]ata obtained on asbestos

exposure of garage mechanics during brake lining maintenance and repair work showed that fiber concentrations . . . in excess of regulated limits were common.").

Specifically, Dr. Frank cited to the EPA's Guidance for Preventing Asbestos Disease Among Auto Mechanics for the proposition that "[f]riction materials, such as brake linings and clutches, often contain asbestos [and] [m]illions of asbestos fibers can be released during brake and clutch servicing" and that "[a]sbestos released into the air lingers around the garage long after a brake job is done and can be breathed in by everyone inside a garage, including customers." Frank Aff. at 155 (alterations in original). Dr. Zhang cited to a variety of studies and sources, including the World Health Organization, to support the proposition that "[e]pidemiologic evidence has unequivocally shown that all asbestos fiber types, including the most commonly used form of asbestos, chrysotile, causes lung cancer and mesothelioma in humans." Zhang Report at 4. Mr. Ewing also relied on "[p]ublished studies in the scientific literature," in opining on the connection between asbestos and car brake repair work, and the related health risks as a result. Ewing Report at 5.

As a result, nothing in this record suggests that the general causation testimony of these experts should not be admitted. *Cf. In re Asbestos Litigation*, 911 A.2d at 1203 ("[T]he Court is satisfied that plaintiffs have demonstrated a sufficient basis to allow their experts to rely upon the body of scientific data that has been developed regarding the link between the exposure to unrefined chrysotile and an increased risk to develop mesothelioma, lung cancer, and asbestosis."); *id.* at 1205-06 ("Dr. Frank's approach reflects a sound methodology consistent with *Daubert's* 'reliability' component.").

As to specific causation, while a closer question, the proffered testimony of these experts, that exposure to BMW NA's products caused Mr. Erhardt's mesothelioma, is admissible as well.

Dr. Frank opined that not only did Mr. Erhardt have both "pleural asbestosis" and "malignant peritoneal mesothelioma," Frank Letter at 2, but his "cumulative exposures" to automobile parts "containing any and all fiber types," including BMW NA's products contributed to and were "medically significant, and therefore medically causative of Mr. Erhardt's two asbestos-related conditions." *Id.* Dr. Zhang opined that "[b]ased on Mr. Erhardt's history of asbestos exposure, clinical presentation, radiological findings and histological diagnosis, it is [his] opinion to a reasonable degree of medical certainty that Mr. Erhardt has asbestos-related malignant mesothelioma," Zhang Report at 22, and that "within a reasonable degree of medical and scientific certainty that Mr. Erhardt's mesothelioma was caused by that asbestos exposure." *Id.* And Mr. Ewing opined that "Mr. Erhardt was exposed to asbestos when handling the old asbestos-containing brake shoes/pads and unpacking the new asbestos-containing shoes/pads," Ewing Report at 10, and "at times when he handled asbestos-containing gaskets and sometimes when others were working with asbestos-containing gaskets on vehicles," *id.* at 11.

These opinions of specific causation also are "based upon sufficient facts or data," are "the product of reliable principles and methods," and their "principles and methods" have been applied "reliably to the facts of the case," as required by Rule 702. See, e.g. In re Asbestos Litig., 911 A.2d at 1201 ("Proponents do not need to demonstrate to the judge by a preponderance of the evidence that the assessments of their experts are correct, they only have to demonstrate by a preponderance of the evidence that their opinions are reliable."); see also Daubert, 509 U.S. at 597 (noting that trial judges are "assign[ed]" "the task of ensuring that an expert's testimony both rests on a reliable foundation and is relevant to the task at hand. Pertinent evidence based on scientifically valid principles will satisfy those demands."). Once again, in deciding this issue, this Court "does not choose between competing scientific theories, nor is it empowered to

determine which theory is stronger." *In re Asbestos Litig.*, 911 A.2d at 1201. Instead, "the trial court determine[s] whether the proponent of the evidence has demonstrated that scientific conclusions have been generated using sound and reliable approaches." *Id.* As with the general causation opinions, on this record, "a significant 'analytical gap' between the experts' opinions and the studies on which they relied in reaching their conclusions [requiring their] exclusion because it was not grounded in science," *Amorgianos*, 303 F.3d at 270, has not been shown.

Dr. Frank stated that his methodology for specific causation, "the analysis of cumulative asbestos exposure in order to ascribe causation," Frank Aff. at 126 \ 257, has been used "by scientists in hundreds of peer-reviewed, published epidemiological studies, case series, and case reports." Id. (citing Jacques Ameille, et al., Asbestos-Related Diseases in Automobile Mechanics, 56 Ann. of Occupational Hygiene 55-60 (2012); Murray M. Finkelstein et al., Malignant Mesothelioma Among Employees of a Connecticut Factory that Manufactured Friction Materials Using Chrysotile Asbestos, 54 Ann. of Occupational Hygiene 692-696 (2010); Marty S. Kanarek, Mesothelioma from Chrysotile Asbestos: Update, 21 Ann. Epidemiology 688-97 (2011)). He further stated that: "it is generally accepted that qualitative evaluation of the exposure as compared to background is sufficient." *Id.* at 209 ¶ 401 (referencing Lorenzo Tomatis et al., The Role of Asbestos Fiber Dimensions in the Prevention of Mesothelioma, 13 Int'l J. Occupational Env't Health 64 (2007)). In reaching his opinion on specific causation, Dr. Frank not only relied upon the studies in his affidavit, but also various case-specific records, including "pathology reports, medical records, the report of [Mr.] Ewing... . interrogatories, Mr. Erhardt's deposition transcripts, Social Security records, and a report of Dr. Zhang." Frank Letter at 1.

As stated, Dr. Zhang also grounded his opinions in relevant scientific literature. See e.g., Zhang Report at 10 (citing Jiang et al, Hand-spinning Chrysotile Exposure and Risk Of Malignant Mesothelioma: A Case-Control Study in Southeastern China, 142 Int'l J. Cancer 514-23 (2018); Richard A. Lemen, Chrysotile Asbestos as a Cause of Mesothelioma: Application of the Hill Causation Model, 10 Int'l J. Occupational Env't Health 233-39 (2004); Klaus Rödelsperger et al., Asbestos and Man-made Vitreous Fibers as Risk Factors for Diffuse Malignant Mesothelioma: Results from a German Hospital-based Case-control Study, 39 Am. J. Ind. Med. 262-75 (2001)). In addition, after providing an extensive description of asbestosis, its origins and different forms, as well as how it has historically affected the health of workers, Dr. Zhang "reviewed a case file on Mr. [] Erhardt that included . . . interrogatory answers, deposition[s] . . ., medical records, pathology reports . . . stained slides . . . and [] digital images" Zhang Report at 17. Dr. Zhang then listed the locations and years in which Mr. Erhardt was likely exposed to asbestos, concluding, "It was in these multiple environments [that] Mr. Erhardt inhaled a significant amount of asbestos fibers." Id. at 18.

In addition to a review of the case material, Mr. Ewing relied on both his experience working for the EPA, and the scientific literature. *See* Ewing Report at 1-2 (detailing documents reviewed); *id.* at 6 (detailing various literary sources). For example, in opining that Mr. Erhardt's exposure to asbestos at Ridgefield European Motors could have occurred as "a bystander to work done by others," *id.* at 11, Mr. Ewing relied on the scientific literature that has estimated the impact of asbestos exposure when someone is within a certain range, *id.* at 12 (citing Ellen Donovan et al., *Evaluation of Bystander Exposures to Asbestos in Occupational Settings: A Review of the Literature and Application of a Simple Eddy Diffusion Model*, 41 Critical Rev. Toxicology, 52-74 (2010); Irving J. Selikoff et al., *Asbestos Exposure and Neoplasia*, 188 J. Am.

Med. Ass'n, 142-46 (1964)). Likewise, with respect to his opinion dismissing the relationship between Mr. Erhardt's mesothelioma and his dry wall work, Mr. Ewing based this opinion on industry knowledge of the availability of commercially added asbestos in drywall. *Id.* at 12-13.

And after discussing the conditions of Mr. Erhardt's employment with Ridgefield European Motors, Mr. Ewing explained that "[t]he asbestos-containing brakes used by Ridgefield European Motors likely contained 40-50 percent chrysotile asbestos (20-80 percent asbestos)." *See id.* at 7. Mr. Ewing then connected Mr. Erhardt's asbestos exposure to BMW NA, and noted, based on Mr. Erhardt's testimony, that "[a]bout 60% of the brake jobs [at Ridgefield] were done on BMWs with the remainder done on VWs, Porsches, Peugeots, Renaults, Datsuns, and other makes of vehicles." *Id.* at 3. In reaching their respective opinions on specific causation, both Drs. Frank and Zhang relied on Mr. Ewing's findings. *See* Frank Letter at 1; Zhang Report at 18-19.

BMW NA argues that using the "cumulative exposure" theory to demonstrate specific causation is nothing more than a thinly veiled version of the theory that "each and every" exposure to asbestos is the direct cause of the alleged harm, a theory found wanting under the *Daubert* analysis applied by many courts. BMW NA Mem. Frank & Zhang at 18-20 (collecting cases); *see*, *e.g.*, *Anderson v. Ford Motor Co.*, 950 F. Supp. 2d 1217, 1225 (D. Utah 2013) (noting that "a growing number of courts have determined that the theory is not proper under *Daubert* and Rule 702, expressing the opinion that the any exposure theory is, at most, scientifically-grounded speculation: an untested and potentially untestable hypothesis") (internal quotation marks omitted)).

But a number of courts – including a growing number of district courts in this Circuit – have rejected this argument. *See e.g.*, *Berman v. Mobil Shipping & Transp. Co.*, No. 14-cv-

10025 (GBD), 2019 WL 1510941, at *11 (S.D.N.Y. Mar. 27, 2019) ("Courts have found that such a cumulative exposure theory is sufficiently reliable to meet the admissibility standard of Rule 702." (internal quotation marks omitted)); Ralyea v. Borg Warner Corp., No. 12-cv-3564 (DLC), 2015 WL 5567034, at *2 n.2 (S.D.N.Y. Sept. 22, 2015) (finding that a "cumulative exposure" theory, or that "any exposure above background" level "increases [a] person's risk of developing mesothelioma," is "not . . . a 'rewording' of the 'every exposure counts' theory." (first alteration in original)); Gore v. Air & Liquid Sys. Corp., No. 5:16-cv-716 (BR), 2018 WL 4558182, at *10 (E.D.N.C. Sept. 21, 2018) (finding that the expert's opinion that the "multiple cumulative exposures to gaskets, packing, and pumps, and valves, caused [the plaintiff's] mesothelioma [was] not based upon the 'each and every exposure' theory''); 11 see also Phelps v. CBS Corp., 17-cv-8361 (AJN), 2020 WL 7028954, at *12 (S.D.N.Y. Nov. 30, 2020) (slip op.) (finding that "with due consideration of the *Daubert* standard for admissibility," the "cumulative exposure" theory can be "a sufficiently reliable methodology to satisfy the *Daubert* threshold for admissibility"). This Court does too. As noted above, and consistent with these decisions, the admissibility of the specific causation testimony of Mr. Erhardt's experts is based on, as noted above, a specific review and determination of the reliability of the expert's methods, as reflected in the scientific literature and their application here.

BMW NA also provides a list of calculations that, Dr. Frank, Dr. Zhang, and Mr. Ewing, respectively, did not make, and otherwise argues that any of Mr. Erhardt's asbestos exposure cannot be sufficiently linked to it. *See* BMW NA Mem. Frank & Zhang at 5 ("Dr. Frank performed no calculations as to the amount of exposure plaintiff may have had in total . . . [or] a

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¹¹ In *Gore*, the court acknowledged the rejection of the proposition that "each and every" instance of exposure to asbestos will cause mesothelioma. Yet, the court found the plaintiff's experts' testimonies were a dmissible because they each concluded that "every exposure above a background exposure level is part of the cumulative exposure which can cause mesothelioma." *Id.* at *11.

fiber year exposure measurement "); *id.* at 8-9 (stating, *inter alia*, "Dr. Zhang did not attempt to determine the dose of asbestos to which plaintiff was exposed from any of the products or types of products in question . . . [and] did not calculate a fiber year exposure "); BMW NA Mem. Ewing at 8 ("Mr. Ewing never sought to calculate the plaintiff's total lifetime dose of asbestos inhalation, or plaintiff's potential for exposure to any particular brand of vehicle.").

But the trial "judge should not exclude evidence simply because he or she thinks that there is a flaw in the expert's investigative process which renders the expert's conclusions incorrect." *In re Paoli R.R. Yard PCB Litig.*, 35 F.3d 717, 746 (3d Cir. 1994). Rather, the trial "judge should only exclude the evidence if the flaw is large enough that the expert lacks 'good grounds' for his or her conclusions." *Id.* The Supreme Court "assign[ed]" trial judges "the task of ensuring that an expert's testimony both rests on a reliable foundation and is relevant to the task at hand. Pertinent evidence based on scientifically valid principles will satisfy those demands." *Daubert*, 509 U.S. at 597. While BMW NA may have criticisms of the methodologies of these three experts in reaching their conclusions on specific causation, BMW NA has not shown that these opinions are scientifically invalid.

Instead, BMW NA's arguments go to the weight to be given this expert testimony, not its admissibility. *See Berman*, 2019 WL 1510941, at *9 ("Only if the expert's opinion is so fundamentally unsupported that it can offer no assistance to the jury must such testimony be excluded." (quoting *U.S. Bank Nat'l Ass'n v. PHL Variable Life Ins. Co.*, 112 F. Supp. 3d 122, 134 (S.D.N.Y. 2015))); *Lassen v. Hoyt Livery, Inc.*, No. 13-cv-1529 (VAB), 2016 WL 7165716, at *7 (D. Conn. Dec. 8, 2016) ("Disputes as to the strength of [a proposed expert witness's] credentials, faults in his . . . methodology, or lack of textual authority for his opinion, go to the weight, not the admissibility, of his testimony." (quoting *McCullock*, 61 F.3d at 1044 (alterations

in original))); see also Walashek v. Air Liquid Sys. Corp., No. 14CV1567 BTM(BGS), 2016 WL 614030, at *7 (S.D. Cal. Feb. 16, 2016) (holding "that a causation expert's inability to identify a precise threshold for safe exposure goes to weight not admissibility of the expert's testimony").

Ultimately, the issues raised by BMW NA may carry the day at trial, and a jury may find the evidence presented through the testimony of Dr. Frank, Dr. Zhang, and Mr. Ewing insufficient to prove that exposure to BMW NA's products caused Mr. Erhardt's mesothelioma. But that is a factual matter for the jury to decide, not a judgment for this Court to make, given the appropriateness of admitting this expert testimony, as discussed above. *See Daubert*, 509 U.S. at 596 ("Vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence."); *see also Howard v. Walker*, 406 F.3d 114, 127-128 (2d Cir. 2005) (noting that when the "reliability of certain facts accepted by the expert is questionable," the court can rely on "the exercise and process of cross-examination [to] allow a [party] to bring any such factual disputes to the attention of the jury"). As a result, their testimony will not be precluded.

Accordingly, BMW NA's motions to preclude the testimony of Dr. Frank, Dr. Zhang, and Mr. Ewing will be denied.

C. THE REVIEW OF WHETHER GENUINE ISSUES OF MATERIAL FACT REMAIN FOR TRIAL

Summary judgment is proper only when "there can be but one reasonable conclusion as to the verdict." *Anderson*, 477 U.S. at 250. A reviewing court must "construe the evidence in the light most favorable to the non-moving party and to draw all reasonable inferences in its favor." *Gary Friedrich Enters.*, *LLC.*, 716 F.3d at 312. If there is any evidence in the record from which a reasonable factual inference could be drawn in favor of the opposing party on the issue

on which summary judgment is sought, summary judgment is inappropriate. *See Old Dominion Freight Line Inc.*, 391 F.3d at 83.

BMW NA's motion for summary judgment is premised largely, if not exclusively, on the admissibility of the expert testimony of Dr. Frank, Dr. Zhang, and Mr. Ewing. *See* BMW NA Mem. Frank & Zhang at 23 ("Lacking expert testimony (or any other relevant evidence), plaintiff cannot show causation – that is, he cannot meet his burden of proving that any alleged exposure by plaintiff to an asbestos-containing product for which BMW NA may be responsible caused plaintiff's alleged asbestos-related injuries."). In BMW NA's view, absent "such expert testimony, plaintiff cannot meet his burden of proof in a product liability action under Connecticut law." *Id.* at 23-24.

Having determined that the general and specific causation opinions of Dr. Frank, Dr. Zhang, and Mr. Ewing will be admissible, however, there is a genuine issue of fact as to whether exposure to BMW NA's products caused Mr. Erhardt's mesothelioma, an "alleged asbestos-related injur[y]." BMW NA Frank & Zhang at 23. As noted above, their testimony stands for three propositions, at least: (1) exposure to asbestos is a leading cause of mesothelioma, the disease suffered by Mr. Erhardt; (2) exposure to asbestos fibers from car parts, particularly brake pads – a product in abundance where Mr. Erhardt worked for many years, can result in mesothelioma; and (3) the "cumulative exposure" of asbestos fibers over time from working at Ridgefield European Motors, including from BMW NA products, is the cause of Mr. Erhardt's illness.

This evidence, along with all of the evidence in the record construed "in the light most favorable to" Mr. Erhardt, and drawing "all reasonable inferences" from it "in his favor," creates a genuine issue of material fact as to BMW NA's liability. See. e.g., Phelps, 2020 WL

7028954 at *13 ("[A]fter drawing all reasonable inferences in Plaintiff's favor, and in light of Plaintiff's showing that there are facts genuinely in dispute as to whether Crane Co.'s valves contributed to Grimes's mesothelioma and Plaintiff's averment that Dr. Zhang at trial will present an opinion as to specific causation, the Court concludes that there is a genuine issue of material fact sufficient to preclude summary judgment on this point."); *id.* at 14 ("Grimes's testimonial evidence and Plaintiff's experts' testimony thus raise a genuine issue of material fact as to whether Grimes was exposed to asbestos due to his work in boiler rooms and engine rooms while on these ships."); *Berman*, 2019 WL 1510941 at *8 ("Because Plaintiff's experts' testimony, coupled with additional evidence discussed above, raises a triable issue of fact as to whether exposure to asbestos on the Subject Vessels was a substantial factor in causing Plaintiff's injury, Defendant is not entitled to summary judgment on the grounds that Plaintiff cannot establish causation").

Accordingly, BMW NA's motion for summary judgment will be denied.

V. CONCLUSION

For the reasons discussed above, BMW NA's motion to preclude the expert testimony of Dr. Arthur Frank and Dr. David Zhang is **DENIED**, and BMW NA's motion to preclude the expert testimony of William Ewing also is **DENIED**. Given the admissibility of this expert testimony, summary judgment also is **DENIED**.

SO ORDERED at Bridgeport, Connecticut, this 18th day of January, 2021.

/s/ Victor A. Bolden
VICTOR A. BOLDEN
UNITED STATES DISTRICT JUDGE