CERTIFIED FOR PUBLICATION

IN THE COURT OF APPEAL OF THE STATE OF CALIFORNIA

FIRST APPELLATE DISTRICT

DIVISION FOUR

SUSAN JEAN BADER, as Representative, etc.,

Plaintiff and Respondent,

v.

JOHNSON & JOHNSON et al.,

Defendants and Appellants.

A158868

(Alameda County Super. Ct. No. RG18923615)

Patricia Schmitz asserted causes of action for strict products liability, negligence, and fraud against defendants, alleging that their cosmetic talc products were contaminated with asbestos and that her exposure thereto caused her mesothelioma. A jury returned a special verdict in plaintiff's favor.

In this appeal, defendants Johnson & Johnson and Johnson & Johnson Consumer, Inc. (collectively, J&J) argue: (1) the trial court abused its discretion by admitting certain expert testimony; (2) the trial court gave an adverse inference instruction that was unjustified and prejudicial; (3) the trial court erred when it failed

¹ Ms. Schmitz passed away after trial, and her sister, Susan Jean Bader, became the personal representative and named plaintiff.

to grant a mistrial after certain references to talc causing ovarian cancer; (4) the trial court failed to instruct the jury on a critical element of fraudulent concealment; and (5) the trial court erred in entering judgment nunc pro tunc.

Defendant Colgate-Palmolive Company (Colgate) argues: (1) the trial court abused its discretion by admitting certain expert testimony; (2) the jury instructions on causation were erroneous; (3) the evidence was insufficient to support a verdict against Colgate for fraudulent concealment; and (4) the trial court erred in entering judgment nunc pro tunc.

We affirm.

BACKGROUND

The Lawsuit

When Schmitz was a child, she applied J&J's Baby Powder (JBP) to her siblings, and she herself used it from ages 11 to 13. She later applied JBP to her aging father and mother when she cared for them. Schmitz began using Colgate's Cashmere Bouquet on a daily basis from the age of 13 until her late forties.² When she applied Cashmere Bouquet and JBP, they created visible dust that she breathed in. Schmitz also used perfumed talc sold by Avon.

Schmitz was diagnosed with mesothelioma in the summer of 2018. She filed suit against ten defendants, including J&J, Colgate, Avon, and many talc suppliers, alleging that defendants

 $^{^2}$ Colgate stopped selling Cashmere Bouquet in the United States in 1995.

knowingly concealed the presence of asbestos in their products and the health risks the products posed.

The Trial

"Asbestos" generally refers to a group of six minerals—chrysotile, and the five amphiboles of amosite, crocidolite, tremolite, anthophyllite, and actinolite—that, when occurring in an "asbestiform habit," are subject to government regulation.³ Other minerals, such as talc, can form in asbestiform habit but are not regulated as asbestos.

The trial involved a variety of disputed issues, including whether the experts correctly identified various structures as asbestos, whether the talc products Schmitz used contained asbestos, and, if so, whether that use substantially contributed to her risk of developing mesothelioma. As discussed *post*, there was conflicting evidence regarding whether only the six asbestos minerals formed in asbestiform habit are capable of causing mesothelioma, and whether a threshold level of asbestos exposure is required before the risk of mesothelioma increases.

William Longo, Ph.D., who was qualified as an expert in material science, forensic engineering, and asbestos testing and exposure, testified for plaintiff regarding his testing of Cashmere Bouquet and JBP samples. Dr. Longo followed "counting rules" from various analytical methods for microscopy in his testing, and these rules govern what constitutes a regulated asbestos

³ "[H]abit refers to the form, crystal structure and texture in which a mineral is found in nature." (*Strobel v. Johnson & Johnson* (2021) 70 Cal.App.5th 796, 804 (*Strobel*).)

structure. Dr. Longo explained that his laboratory tested 57 container samples and 15 railroad car samples of JBP that were obtained from J&J's historical museum. He found asbestos in 68 percent of these museum samples. He also tested two sets of Cashmere Bouquet samples—one set of 38 provided by various plaintiffs' attorneys, and one set of 20 provided by Colgate's hired defense laboratory. He found asbestos in 30 of 38 of the first set, and in 20 of 20 of the second set. He characterized the amounts of asbestos found in cosmetic talc as trace amounts.

Along with Dr. Longo, plaintiff's microscopy expert Lee Poye tested 16 J&J Shower to Shower samples from the 1970s, 1980s, and 1990s that were produced by J&J's attorneys. He detected asbestos in 11 of the 16 samples. Dr. Longo testified that J&J sourced its talc from Vermont mines for the Shower to Shower product for many years, including in the 1970s.

Pathologist Dr. Jerrold Abraham testified that there is a dose-response concept for mesothelioma such that every asbestos exposure increases a person's risk of getting the disease. He opined that all of Schmitz's exposures contributed to increase the risk, and that there is no known safe level of asbestos exposure. According to Dr. Abraham, people who have had very low or brief exposures are at increased risk of developing mesothelioma.

Dr. Allan Smith, an epidemiologist, testified that the higher the level of asbestos inhalation, the greater the risk of getting mesothelioma, and there is no minimum safe level of exposure to asbestos. If a patient has mesothelioma caused by asbestos, then all the asbestos dust that patient inhaled over the

years was a significant factor increasing the risk of getting cancer. Asked to assume that Schmitz was exposed to JBP up until she was 13, used Cashmere Bouquet for years, and that these products contained asbestos, Dr. Smith opined that Schmitz's mesothelioma was caused by inhalation of asbestos dust over many years. In his view, "Any part of the causal dose is important and meaningful and could be described, then, as a substantial factor."

Dr. Barry Horn, a lung specialist and critical care doctor, testified that mesothelioma is a dose-dependent disease, and the more chemical carcinogen exposure, the greater one's likelihood of developing cancer. He was asked to assume that Schmitz used JBP on herself and her sisters, her family used JBP, she was around the dusty product, she used Cashmere Bouquet for about 30 years, she used some Avon product, and those products contained trace amounts of asbestos. He testified that each of her exposures contributed to the risk of getting mesothelioma.

Dr. Egilman, an occupational and preventive medicine physician and epidemiologist, opined that Schmitz suffered from malignant pleural mesothelioma caused by inhaling asbestos and fibrous talc when she used a variety of cosmetic talc products over her life. He testified that Cashmere Bouquet and JBP historically contained asbestos. With little explanation, he testified that he calculated that Schmitz inhaled between 42 and 61 billion asbestos fibers over her lifetime from the talc products, which was over the allowable OSHA 7 billion fiber lifetime limit for workers, and a significant factor in causing Schmitz's

mesothelioma. He stated the amount of asbestos it takes to cause cancer is "really, really low," and there is no known safe level of exposure. He testified that exposure below threshold limit values does not mean you would not expect to see cancer, and the OSHA threshold produces excess mesotheliomas for workers even though they are taught to minimize dust exposure. He also opined that both fibrous talc and cleavage fragments can cause mesothelioma.

For the defense, Dr. Matthew Sanchez, an expert in minerology, testified that one would not expect to find asbestos in the Italian, North Carolina, or Montana mines that had been used as a talc source for Cashmere Bouquet. He tested Italian talc from the Val Germanasca mines used by both Colgate and J&J as sources of cosmetic talc, and he found no asbestos. He found no asbestos in the talc he tested from the Vermont and Chinese talc mines used for JBP. He found no asbestos in the Cashmere Bouquet samples that he tested. For JBP, he found asbestos in one sample in the first set of 30 samples that he and Dr. Longo tested, but he concluded this sample was contaminated with other materials based on its unusual content. The remaining set of JBP museum samples did not contain asbestos. Based on his expertise and testing, he opined that JBP does not contain asbestos.

Dr. Sanchez discussed asbestos testing techniques, and he explained that x-ray diffraction (XRD) is used to identify the type of mineral. Polarized light microscopy (PLM) allows identification of the gross morphology—i.e., what the particle

shapes and sizes are, and transmission electron microscopy (TEM) (*Strobel*, *supra*, 70 Cal.App.5th at p. 806), allows for identification of smaller particles using a higher magnification. Dr. Sanchez believed that, generally, single particles in a talc powder sample are not sufficient to draw meaningful conclusions about the growth habit in which the particle formed. He opined that Dr. Longo had misidentified some of the minerals present and continually reported asbestos in JBP and Cashmere Bouquet where he was looking at common cleavage fragments.

Pulmonologist Dr. David Weill conceded that asbestos causes pleural mesothelioma but testified that there must be a sufficient dose of exposure, and there is no evidence that exposure to background levels of asbestos elevates the risk of disease. He testified that women are less likely to get pleural mesothelioma than men, and Schmitz's tumor was spontaneous mesothelioma. He opined that cosmetic talc does not cause mesothelioma.

Epidemiologist Suresh Moolgavkar, Ph.D. & M.B.B.S., opined that 80 to 90 percent of mesotheliomas in women are not attributable to asbestos exposure. At exposure to amphibole asbestos at 5 fibers per cc-year, there is an increased risk of cancer. He opined that Schmitz's cancer was caused by "ongoing biological processes" and exposure to talc had nothing to do with it. And he said there is no correlation between cosmetic talc and mesothelioma. Nonetheless, when asked whether there was a level of exposure to an asbestos that is considered safe for human beings, he responded that it "is cautious to assume that no level

of exposure to a toxic substance is safe for human beings to expose themselves to." He also confirmed on cross-examination that he had previously stated that, for amphibole asbestos, he does not know of a bright line or threshold below which there might not be some increased risk of pleural mesothelioma.

Jennifer Sahmel, an industrial hygienist, calculated Schmitz's worst case exposure from Cashmere Bouquet. She explained that there are background levels of asbestos of .00003 fibers per cc to .006 fibers per cc in the air that we breathe. There is no evidence of risk of mesothelioma at background or at OSHA's 1.1 fiber per cc-year limit. From Cashmere Bouquet, Schmitz's cumulative exposure to asbestos was .008 fibers per ccyear, and she stated that no scientific publications or governing agencies list exposure limits in total number of fibers rather than in concentration (i.e., fibers per cc of air). On cross-examination, she conceded that Schmitz's calculated exposure had to be added to background, resulting in a technical cumulative exposure above background, and she was asked only to consider asbestos exposure from Cashmere Bouquet. When asked whether, from her professional standpoint, applying talcum powder with asbestos to babies is acceptable, she conceded it was not.

Brooke Taylor Mossman, Ph.D., testified as an expert in the area of cell biology with an emphasis on the development of mesothelioma. She opined that asbestos causes mesothelioma, and asbestos has many properties that are important in reacting with cells to cause changes that are linked to cancer. According to Dr. Mossman, nonasbestiform cleavage fragments and fibrous talc do not cause mesothelioma because they do not have the ability to generate the chemicals that interact with cells, change DNA, and cause cancer.

The jury returned a verdict for plaintiff against Colgate and J&J on negligence, strict products liability, and concealment. It awarded \$2,003,006 in economic damages, consisting of \$150,000 in past medical expenses, \$75,000 in future medical expenses, \$1,287,552 in past and future lost income, and \$490,454 in past and future household services. It further awarded \$3.5 million in past non-economic damages and \$6.5 million in future non-economic damages, for a total award of \$12,003,006. The jury allocated 40 percent responsibility to Colgate, 40 percent to J&J, and 20 percent to Avon. As to punitive damages, the jury found that plaintiff failed to prove malice, oppression, or fraud as to Colgate, but deadlocked as to J&J.

DISCUSSION

I. Expert Opinion Challenges

Defendants make three arguments with respect to plaintiff's experts' opinions regarding causation. First, they argue that Dr. Egilman did not have a reliable foundation to opine that asbestiform or fibrous talc, uncontaminated by asbestos, causes mesothelioma. Second, Colgate argues that the trial court erred in admitting Dr. Longo's unsound asbestos contamination analysis due to concerns with the chain of custody for the Cashmere Bouquet samples he tested. Finally, both defendants argue that Dr. Longo's exposure opinion should have

been excluded under Sargon Enterprises, Inc. v. University of Southern California (2012) 55 Cal.4th 747, 769 (Sargon), and Colgate argues that certain aspects of Dr. Egilman's opinion should have similarly been excluded. We consider these arguments in turn.

A. Applicable Legal Principles

Trial judges have a "substantial 'gatekeeping' responsibility" to ensure that an expert's opinion is based on both reliable material and sound reasoning. (*Sargon*, *supra*, 55 Cal.4th at p. 769.) Indeed, the trial court has the "duty to act as a 'gatekeeper' to exclude speculative expert testimony." (*Id.* at p. 753.)

The source of this gatekeeping responsibility is Evidence Code sections 801 and 802. Evidence Code section 801 limits expert testimony to opinions that are related to a "subject that is sufficiently beyond common experience that the opinion of an expert would assist the trier of fact," and that are "[b]ased on matter . . . that is of a type that reasonably may be relied upon by an expert in forming an opinion upon the subject to which his testimony relates." (Evid. Code, § 801, subds. (a) & (b).)

Evidence Code section 802 provides that a witness, including an expert, may "state on direct examination the reasons for his opinion and the matter . . . upon which it is based, unless he is precluded by law from using such reasons or matter as a basis for his opinion." In other words, "Evidence Code section 801 governs judicial review of the type of matter; Evidence Code section 802 governs judicial review of the reasons for the opinion." (Sargon,

supra, 55 Cal.4th at p. 771.) Under these provisions, "the trial court acts as a gatekeeper to exclude expert opinion testimony that is (1) based on matter of a type on which an expert may not reasonably rely, (2) based on reasons unsupported by the material on which the expert relies, or (3) speculative." (*Id.* at pp. 771–772.) "[A] court may inquire into, not only the type of material on which an expert relies, but also whether that material actually supports the expert's reasoning." (*Id.* at p. 771.) "[T]he matter relied on must provide a reasonable basis for the particular opinion offered, and . . . an expert opinion based on speculation or conjecture is inadmissible." (*Id.* at p. 770.)

"The trial court's preliminary [or gatekeeping] determination whether the expert opinion is founded on sound logic is not a decision on its persuasiveness. The court must not weigh an opinion's probative value or substitute its own opinion for the expert's opinion. Rather, the court must simply determine whether the matter relied on can provide a reasonable basis for the opinion or whether that opinion is based on a leap of logic or conjecture. The court does not resolve scientific controversies. Rather, it conducts a 'circumscribed inquiry' to 'determine whether, as a matter of logic, the studies and other information cited by experts adequately support the conclusion that the expert's general theory or technique is valid. [Citation.] The goal of trial court gatekeeping is simply to exclude 'clearly invalid and unreliable' expert opinion. [Citation.] In short, the gatekeeper's role is to make certain that an expert, whether basing testimony upon professional studies or personal experience, employs in the

courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field." (*Sargon*, *supra*, 55 Cal.4th at p. 772.) A judge has broad discretion to exclude or admit expert testimony under Evidence Code sections 801 and 802, and we overturn an evidentiary ruling only if we conclude it is arbitrary or irrational. (*Id.* at p. 773.)

B. Asbestiform or Fibrous Talc

1. Additional Background

After defendants filed preliminary "placeholder" motions, Colgate filed motion in limine No. 4A to exclude Dr. Egilman's anticipated testimony on the ground that he had no scientific foundation to opine that fibrous, or asbestiform, talc causes mesothelioma. J&J joined. Plaintiff opposed, arguing that Dr. Egilman had properly opined that fibrous talc causes mesothelioma. Plaintiff's supporting papers included materials from the World Health Organization's International Agency for Research on Cancer (IARC) which, according to plaintiff, characterized talc containing asbestiform fibers as a "Group 1" carcinogen⁴. At the hearing on the motion, Colgate argued there was not a single peer-reviewed article stating that fibrous talc, uncontaminated by asbestos, causes mesothelioma, and plaintiff

⁴ An IARC "Group 1" agent is an agent that is carcinogenic to humans. "This category is used when there is *sufficient evidence of carcinogenicity* in humans. Exceptionally, an agent may be placed in this category when evidence of carcinogenicity in humans is less than *sufficient* but there is *sufficient evidence of carcinogenicity* in experimental animals and strong evidence in exposed humans that the agent acts through a relevant mechanism of carcinogenicity."

disagreed, citing the IARC materials. The court denied Colgate's motion.

At trial, Dr. Egilman testified that it was his opinion that Schmitz's mesothelioma "was caused by inhaling asbestos and fibrous talc when she used a variety of cosmetic talc products over her life." He testified that IARC had published that asbestiform talc is a "Class 1 carcinogen," and that was his opinion as well. He explained that he held this opinion because talc is chemically similar to anthophyllite asbestos; there are transition fibers that are talc on one end and asbestos on the other (either tremolite, actinolite, or anthophyllite); the surface properties of asbestiform talc are the same as anthophyllite with the same chemical structure; and the surface properties are what cause change in DNA and make asbestos carcinogenic.

Dr. Egilman also testified that he was familiar with cleavage fragments. He stated that he would not agree that exposures to cleavage fragments that are "3 to 1 aspect ratio" are not harmful, and he was not aware of scientific literature supporting that proposition.⁵ He testified about case studies where taconite miners were exposed to cleavage fragments that caused a large number of mesotheliomas. When asked to identify the difference between asbestos fibers and cleavage fragments, Dr. Egilman pointed to a picture of a bundle of asbestos fibers and explained that the van der Waals chemical force kept the bundle together. He said that "chemically-the-same asbestos"

 $^{^5}$ "Aspect ratio" refers to the length to diameter ratio. (See Strobel, supra, 70 Cal.App.5th at p. 805.)

has "natural cleavage points" held together by the same van der Waals force, and, if you manipulate the latter, it will split the same as fiber bundles will split, with the resulting product being "the exact size and shape as asbestos." He continued, "And studies comparing the surface properties of those cleavage fragments to asbestos show that they're the same, so that there's no reason to think in the body, they would be handled any differently or cause any different disease, because it's the same size and shape, it's the same chemical composition, and it's the same surface properties. [¶] So there's no reason logically to think that the body would react differently from—from one to another." Dr. Egilman added that a paper published the prior year had looked at an amosite asbestos product and found that most of that product consisted of cleavage fragments, and "there's no question that product causes mesothelioma." Dr. Egilman confirmed that Dr. Mossman had not published anywhere that cleavage fragments of tremolite, actinolite, or anthophyllite do not cause mesothelioma, and he told the jury that, from a public health standpoint, if cleavage fragments are "the same size and shape and chemical composition as asbestos," it was not appropriate to say they were not harmful or that they should not be called asbestos.

At the end of his testimony, the court read the following jury question: "Q. [I]s it your opinion that cleavage fragments of certain size, shape, and structure, even if nonasbestos, are carcinogenic and cause mesothelioma?" Dr. Egilman responded, "No. It has to be chemically asbestos. Or similar. Fibrous talc is

essentially similar. So just a cleavage fragment of some random rock, okay, that's not—would not, in my opinion—there's not data to show that that would cause mesothelioma." He also clarified that OSHA does not require asbestos to be formed in a bundle to be regulated as asbestos, OSHA's "standard is size and shape[,]" and "[a]nything that meets the size and shape and length is—is regulated as asbestos."

2. The Trial Court Did Not Abuse Its Discretion In Admitting Dr. Egilman's Testimony

Defendants argue that Dr. Egilman's opinion lacks a reliable foundation and should have been excluded as speculative under *Sargon* because there is no scientific support for his opinion that fibrous talc causes mesothelioma. In light of the record before the trial court, we find that defendants have failed to establish that the court abused its discretion in admitting Dr. Egilman's opinion.

The record contains a sufficient basis for the trial court's conclusion that Dr. Egilman's testimony was not subject to exclusion under Sargon—in particular, materials from the IARC Monographs and other materials discussed $post.^6$

⁶ Some of Dr. Egilman's statements regarding his supporting materials are vague, and certain of the materials he cites do not appear to provide support for his opinion. For example, Dr. Egilman purported to rely on an article from "V. L. Roggli et al.," but plaintiff submitted only three even-numbered pages from this article. What appears in the submitted pages suggests that the article concludes that, based on the presence of tremolite fibers in the lungs of the mesothelioma patients studied therein, tremolite fibers likely caused the mesothelioma and were not removed from chrysotile during the milling process.

Through its Monographs, the IARC seeks to prepare and publish, with the help of international working groups of experts, critical reviews and evaluations of evidence on the carcinogenicity of a wide range of human exposures. Separate "working groups" develop each IARC Monograph after reviewing "all pertinent epidemiological studies and cancer bioassays in experimental animals," as well as mechanistic and other relevant data. The "agents," or substances, reviewed in the IARC Monographs are characterized based on level of carcinogenicity, and "Group 1" agents are those known to cause cancer in humans.⁷

In her papers opposing defendants' motions to exclude Dr. Egilman's opinion that fibrous talc causes mesothelioma, plaintiff identified specific IARC literature upon which Dr. Egilman relied. Plaintiff pointed to IARC Supplement 7, which listed "talc containing asbestiform fibres" as a "Group 1" agent, mentioning the occurrence of mesothelioma and lung cancers, and listed "talc not containing asbestiform fibres" as a "Group 3" agent.8

Plaintiff also pointed out that Dr. Egilman relied on IARC Monograph 93. That Monograph, published in 2010, included

Plaintiff's attachment of a few pages of an incomplete article is not, by itself, sufficient to establish a reliable, supportive source for Dr. Egilman's opinion.

⁷ "The term 'agent' refers to any entity or circumstance that is subject to evaluation in a *Monograph*," and includes chemicals, groups of related chemicals, complex mixtures, occupational or environmental exposures, cultural or behavioral practices, biological organisms, and physical agents.

⁸ The "Group 3" category "is used most commonly for agents for which the evidence of carcinogenicity is inadequate in humans and inadequate or limited in experimental animals."

review of the agent denominated "talc not containing asbestos or asbestiform fibres." IARC Monograph 93 stated that "talc not containing asbestiform fibres" had previously been reviewed in IARC Supplement 7, and the review in IARC Monograph 93 superseded the prior review. IARC Monograph 93 explained, "The review of talc in Supplement 7 led to evaluations for two agents: talc containing asbestiform fibres and talc not containing asbestiform fibres. The term 'asbestiform fibre' has been mistaken as a synonym for 'asbestos fibre' when it should be understood to mean any mineral, including tale, when it grows in an asbestiform habit. To avoid confusion over the term 'asbestiform fibre', the present Working Group decided that it is scientifically more precise to call the agent 'talc not containing asbestos or asbestiform fibres', and this evaluation supersedes the earlier review of talc not containing asbestiform fibres." (Italics added.) IARC Monograph 93 continued, "The present Working Group also decided to expand the name of the Group-1 agent from 'talc containing asbestiform fibres' to 'talc containing asbestos or other asbestiform fibres'. The present Working Group reviewed the earlier Monograph on talc containing asbestiform fibres and determined that the expanded name is consistent with what had been evaluated in Supplement 7. No update was undertaken for this Group-1 agent."9

⁹ Citing Dr. Egilman's deposition testimony from another case, defendants argue for the first time on appeal that Dr. Egilman's definition of "fibrous talc" differs from IARC's characterization because Dr. Egilman purportedly does not mean talc formed in asbestiform habit. But the record contains

Disagreeing that the IARC classified asbestiform talc as a Group 1 agent, defendants cite to IARC Monograph 100C, published in 2012, which includes an update on asbestos.

Defendants point to the following statement in IARC Monograph 100C: "For talc that contains asbestiform fibres, previous Working Groups assessed studies on talc described as containing asbestiform tremolite and anthophyllite (IARC, 1987a, b). These fibres fit the definition of asbestos, and therefore a separate review of talc containing asbestiform fibres was not undertaken by this Working Group." Defendants assert that the IARC

additional deposition testimony from Dr. Egilman wherein he clarified that he did not believe that platy talc caused mesothelioma, but "fibrous talc," meaning talc that forms as true asbestiform fibers, caused cancer.

¹⁰ The IARC Monograph also points the reader to the "General Remarks." Therein, IARC Monograph 100C states, "The previous IARC Monographs on Talc Containing Asbestiform" Fibres (Volume 42 and Supplement 7, IARC, 1987a, b) concerned talc described as containing asbestiform tremolite and anthophyllite. These fibres fit the definition of asbestos and therefore a separate review of talc containing asbestiform fibres was not undertaken. The studies on talc containing asbestiform fibres were considered when developing the Monograph on asbestos. Talc containing asbestos as well as other mixtures containing asbestos should be regarded as carcinogenic to humans. [¶] In evaluating the carcinogenicity of asbestos fibres. the Working Group evaluated experimental data using the six types of asbestos fibres (Chrysotile, Amosite, Crocidolite, Tremolite, Actinolite and Anthophyllite) and erionite based on in vitro cellular assays and/or cancer bioassays. It should be understood that minerals containing asbestos in any form should be regarded as carcinogenic to humans. The Working Group agreed that the most important physicochemical properties of asbestos fibres relevant for toxicity and carcinogenicity are surface chemistry and reactivity, surface area, fibre dimensions,

never analyzed the effects of talc containing "asbestiform fibres," but not asbestos.

At least based on the information before it, the trial court could reasonably conclude that Dr. Eligman's opinion had some support in materials from the IARC. The IARC Working Group for Monograph 100C reviewed prior Monographs and concluded the Group 1 agent deemed carcinogenic in IARC Supplement 7 was talc with asbestiform tremolite and anthophyllite. In contrast, in its review of IARC Supplement 7, the Working Group for IARC Monograph 93 opined that the studies and Supplement 7 supported the conclusion that the broader agent "talc containing asbestos or asbestiform fibres" was a Group 1 agent, expressly defining "asbestiform fibres" to include talc growing as fibers in an asbestiform habit. Defendants did not address the apparent conflict in how Monographs 93 and 100C construed Supplement 7, nor did they attempt to resolve it. The trial court's gatekeeping role does not involve choosing between competing expert opinions (Sargon, supra, 55 Cal.4th at p. 772), and there was no request for an evidentiary hearing on Dr. Egilman's opinion in motion in limine No. 4A.

In addition, Dr. Egilman relied on a statement made in a published letter to the editor of an academic journal by two doctors who maintained that talc should not be used for

and biopersistence. Extrapolation of toxicity to other crystalline mineral fibres should not be done in the absence of epidemiological or experimental data based on in vitro and in vivo assays." (Italics removed.)

pleurodesis in non-malignant patients because "[e]ven if the product [i.e., the talc] is 'asbestos-free,' the mechanism of cancer induction by asbestos (i.e., metal-catalyzed radical generation) is similarly pertinent to talc and the occurrence of fibrous forms of the sheet silicate itself (Figures EI and E2 in the online data supplement to this letter) raises issues about clearance and long-term safety." The tone of the doctors' letter is cautionary, but its substance reflects two scientists expressing their opinion that the mechanism of cancer induction by asbestos is similarly pertinent to fibrous talc.

Dr. Egilman also cited animal studies that support his opinion. He stated, "Animal studies show that talc, including fibrous talc, is significantly correlated with lung lesions, and talc fibers have repeatedly been found in cancer tissue," and he described one such study. He further stated that Dr. Boorman, an employee of the National Institutes of Environmental Health Sciences, reviewed a National Toxicology Program (NTP) study of talc on rats and mice, and Dr. Boorman found "talc fibers" in "the lungs of exposed rodents, some of whom developed cancer." Dr. Egilman reported that J&J subsequently pressured Dr. Boorman to change the term "talc fiber" to "talc particle" in the published report, and he went on to state, "The NTP study reported a statistically significant association in female rats between all types of lung cancers and the highest levels of talc exposure." On appeal, citing deposition testimony from one of its corporate witnesses admitted at trial, J&J states that the NTP symposium concluded the opposite—that "talc was not a causative effect in

the cancer of any rats that got cancer." But neither defendant offered that testimony or similar evidence at the in limine stage. Finally, Dr. Egilman stated that "[h]uman case reports also support the carcinogenicity of fibrous talc," he named the three supporting case reports, and defendants did not address this material in the trial court.

In sum, the materials plaintiff presented to the trial court in support of Dr. Egilman's fibrous talc testimony, at least some of which defendants failed to address, provided a reasonable basis for the opinion at issue, and we cannot say the court abused its discretion in admitting this testimony. While defendants maintain that the broader consensus of experts do not believe that fibrous talc causes cancer, they sought to exclude Dr. Egilman's testimony under *Sargon*, which does not speak to whether a theory has achieved a consensus in the field sufficient to render it "generally accept[ed]." (Cf. *Sargon*, *supra*, 55 Cal.4th at p. 772, fn. 6, citing *People v. Leahy* (1994) 8 Cal.4th 587, 604 and *People v. Kelly* (1976) 17 Cal.3d 24 [admissibility of evidence obtained by use of a new scientific technique depends upon whether technique is generally accepted as reliable in relevant scientific community].)¹¹ On this record, the court did not abuse

¹¹ To the extent that defendants now contend that the trial court should have excluded Dr. Egilman's fibrous talc opinion because it was a novel theory not generally accepted within the relevant scientific community, we emphasize that their motion to exclude did not challenge his testimony based on *Kelly* and its progeny. We express no view on whether such an argument would have been successful. (Compare *People v. Davis* (2022) 75 Cal.App.5th 694, 711 ["The Kelly test applies only to expert

its discretion in permitting Dr. Egilman to offer his opinion that fibrous talc causes mesothelioma.

3. Any Evidentiary Error Was Harmless

Even if the court erred in allowing Dr. Egilman's fibrous talc theory, the error was not prejudicial. Defendants argue that Dr. Egilman's opinion that fibrous talc could cause mesothelioma was prejudicial because it allowed the jury to sidestep deciding whether the talc products Schmitz used were contaminated with the asbestiform variety of the six relevant minerals. Defendants analogize to a recent New Jersey opinion reversing a plaintiff's verdict in a case involving JBP and another J&J talcum powder where the court found a deficient scientific foundation for expert testimony that non-asbestiform cleavage fragments of the six relevant asbestos minerals can cause mesothelioma. (Lanzo v. Cyprus Amax Minerals (N.J. Sup. 2021) 254 A.3d 691 [467 N.J.Super. 476, 487, 517–518].) As set forth post, in light of our review of the record and Dr. Egilman's introduction of the opinion that Lanzo rejected as unsound—to which defendants here did

testimony "" "based, in whole or in part, on a technique, process, or theory which is new to science and, even more so, to the law" ""; italics added] with *Roberti v. Andy's Termite* (2002) 113 Cal.App.4th 893, 901–902 [reversing trial court's exclusion of expert opinion testimony that pesticide caused plaintiff's autism; "[Plaintiff's experts] did not rely upon any new scientific technique, device or procedure that has not gained general acceptance in the relevant scientific or medical community. Rather it was the theory of causation, that [the pesticide] caused plaintiff's autism, that has not gained general acceptance in the relevant medical community. The *Kelly* test is not applicable even though the proffered evidence presents a new theory of medical causation"], italics added.)

not object—we perceive no prejudice from the admission of his opinion as to fibrous talc. (*Cassim v. Allstate Ins. Co.* (2004) 33 Cal.4th 780, 804 [error in evidence admission is reversible if there is a reasonable probability, or a reasonable chance, appellant would have obtained a more favorable result].)

In opening argument, plaintiff promised to challenge Dr. Mossman's "cleavage fragment hypothesis" that non-fibrous asbestos cleavage fragments do not cause cancer or disease, and plaintiff argued that fibrous talc causes cancer. Defense counsel countered that Dr. Mossman would explain that talc and cleavage fragments do not cause mesothelioma.

During the testimony phase, Dr. Mossman opined that, based on her in vitro experiments, non-asbestos cleavage fragments and fibrous talc do not have the capacity to generate the chemical signals that cause mesothelioma, as asbestos does. Dr. Weill testified the body can destroy cleavage fragments, whereas it cannot do the same for asbestiform particles of the six asbestos minerals, although he conceded the French government released a paper disagreeing with his conclusion. As set forth above, Dr. Egilman testified that cleavage fragments cause mesothelioma, as does fibrous talc. To the cleavage fragment issue, Dr. Abraham added that research suggesting that a tremolite cleavage fragment cannot cause asbestos disease "doesn't make any sense," although he recognized there were no pure cleavage fragment studies showing that such fragments cause mesothelioma. And Dr. Sanchez testified that the particles Dr. Longo identified in the JBP and Cashmere Bouquet samples

he tested were amphibole cleavage fragments that Dr. Longo misidentified as asbestiform fibers.

In closing argument, plaintiff argued she had proven all she had promised in her opening statement, and she argued that case reports were significant to show causation. Plaintiff discredited Dr. Mossman's "cleavage fragment doesn't hurt defense" by arguing that Mossman was biased to the talc industry, and she never tested cosmetic talc. Plaintiff argued that asbestiform talc causes mesothelioma. Defendants, in turn, argued amphibole cleavage fragments are not asbestos; Dr. Mossman's studies show that amphibole cleavage fragments and talc particles do not cause mesothelioma; and Dr. Longo identified cleavage fragments in his testing.

On this record, defendants have not established prejudice. They contend that prejudice was plain because, if the jury believed Dr. Egilman's opinion on fibrous talc, it may have concluded that the asbestiform/non-asbestiform distinction did not matter, and might therefore have reached a verdict without finding defendants' products were contaminated with the asbestiform variety of the six asbestos minerals. But defendants did not object to the introduction of testimony that cleavage fragments cause mesothelioma, this theory was advanced similarly to the fibrous talc theory, and defendants' own expert told the jury that Dr. Longo misidentified amphibole cleavage fragments in defendants' products as asbestiform fibers. Indeed, Colgate concedes in its briefing that Dr. Egilman's views "about

cleavage fragments are indistinguishable from his views about fibrous talc."12

Defendants fail to show prejudice from Dr. Egilman's testimony regarding fibrous talc for the additional reason that they did not object to Dr. Abraham's testimony suggesting that fibrous talc causes mesothelioma. When asked whether it is difficult to answer the question of whether, for example, fibrous talc causes mesothelioma because it co-exists with asbestos fibers in the same mines, Dr. Abraham confirmed that was the case. He did concede that he had not seen any evidence that "nonasbestos fibers" cause mesothelioma, and he had only "attributed mesothelioma to asbestos exposure." Nonetheless, in response to a question about whether he had studied the ability of fibrous talc to cause inflammation and irritation in human cell tissue, Dr. Abraham testified: "Yes. I mean, in the people that have a lot of the fibrous talc exposure, especially with the noncosmetic talc, the industrial talcs, they develop lung fibrosis that looks like asbestosis because there's so much fibrous talc in the—in those mines in some of those industrial talc products. And some of them have developed mesotheliomas as well." Furthermore, without objection, Dr. Abraham confirmed that in a 1997 report in a mesothelioma case allegedly caused by JBP, he wrote that he had "previously reviewed several cases of mesothelioma apparently related to asbestiform talc fibers."

¹² At oral argument, plaintiff's counsel stated that no expert testified that cleavage fragments cause mesothelioma, but the record does not support that assertion.

In sum, defendants fail to show reversible prejudice from the admission of Dr. Egilman's testimony that fibrous talc can cause mesothelioma.

C. Chain of Custody for Cashmere Bouquet Samples

1. Additional Background

Colgate's motion in limine No. 1 attacked the "purported testing of talc by [p]laintiff's testing experts." Colgate asserted that Dr. Longo could not authenticate the 38 samples of Cashmere Bouquet that came from various plaintiffs' attorneys, who in turn obtained them from: the internet or antique shops; Colgate-provided vintage containers collected by employees that were displayed as memorabilia at Colgate facilities; and an asbestos laboratory at the Mount Sinai School of Medicine. Colgate's main argument for excluding the test results for the 38 samples was that an expert cannot reasonably rely on test results of samples that are not adequately shown to reflect or represent the items in question. In a single sentence in its motion, Colgate mentioned that Dr. Longo had recently reported on 20 additional Cashmere Bouquet samples, but Colgate stated that, at that time, it had no information about how those samples were obtained. Plaintiff opposed the motion, arguing there was no physical evidence of tampering on the containers; many of the containers were unopened; and the asbestos types found in the samples were not used commercially, thus refuting a claim of ambient air contamination. The court denied the motion, determining that Colgate's objections went to weight, not admissibility.

On the same day the court heard motion in limine No. 1, Colgate filed motion in limine No. 3A targeting various aspects of Dr. Longo's opinion and including a request for exclusion of his testing of "unauthenticated containers of Cashmere Bouquet." Therein, Colgate repeated its lack of reliability and authentication objections to the 38 Cashmere Bouquet samples discussed in motion in limine No. 1. Colgate also mentioned that Dr. Longo had produced a report on testing of 20 additional Cashmere Bouquet samples the day Colgate filed motion in limine No. 1, and, in a footnote, stated, "Given the timing of [p]laintiff's disclosure of this testing, Colgate hereby incorporates the same challenges to the authenticity of these [20] samples as incorporated in Colgate's Motion in Limine No. 1." (Italics removed.)

At the subsequent hearing on motion in limine No. 3A, Colgate told the court that motion in limine No. 3A was "a really focused motion," and Colgate's concern was with Dr. Longo's extrapolation opinion, not the results of the specific samples that he tested. Colgate's counsel explained: "I don't have a concern with Dr. Longo speaking about the testing that he personally did, but where it becomes problematic is when he attempts to extrapolate from his own handful—subset of testing that he's done to try to say whether or not what the plaintiff used was contaminated and at what levels specifically. . . . [¶] And so, again, I've got no problem with him coming in here and talking about the samples he's tested. It's well within—well within his realm."

2. Analysis

Expert testimony regarding the features of an examined or tested item may be excluded on the basis of a so-called "'chain of custody' claim. (People v. Catlin (2001) 26 Cal.4th 81, 134.) The crux of such a claim is that the expert testimony relies on tests of a sample not adequately shown to reflect or represent the item in question. "In a chain of custody claim, "[t]he burden on the party offering the evidence is to show to the satisfaction of the trial court that, taking all the circumstances into account including the ease or difficulty with which the particular evidence could have been altered, it is reasonably certain that there was no alteration. [¶] The requirement of reasonable certainty is not met when some vital link in the chain of possession is not accounted for, because then it is as likely as not that the evidence analyzed was not the evidence originally received. Left to such speculation the court must exclude the evidence. [Citations.] Conversely, when it is the barest speculation that there was tampering, it is proper to admit the evidence and let what doubt remains go to its weight." [Citations.]" (Id., at p. 134.)

Colgate maintains the trial court abused its discretion by denying motion in limine No. 1 and allowing Dr. Longo to testify that he found asbestos in 38 vintage bottles of Cashmere Bouquet obtained from third-party sources. Assuming, without deciding, that Colgate is correct and that the trial court abused its discretion in denying motion in limine No. 1, for the reasons set forth *post*, Colgate fails to establish reversible prejudice.

In addition to the 38 vintage talc samples, Dr. Longo tested the set of 20 Cashmere Bouquet samples his laboratory obtained from Colgate's defense laboratory, to which defendants have not preserved any evidentiary challenge. (See *People v. Morris* (1991) 53 Cal.3d 152, 190 [a motion in limine is sufficient to preserve objection if it is directed to a particular, identifiable body of evidence; states a specific legal ground for exclusion; and is made at a time before or during trial when the trial court can determine the evidentiary issue in its appropriate context], disapproved on other grounds by *People v. Stansbury* (1995) 9 Cal.4th 824, 830, fn.1; Evid. Code, § 353.) Colgate's first motion, including the rationale for exclusion therein, was directed to the 38 samples. Colgate relegated to a footnote its objections to the second set of 20 samples, which was insufficient to preserve the evidentiary objection. (See Evid. Code, § 353, subd. (a).) And in any event, Colgate waived any such objection to these 20 samples at the hearing on motion in limine No. 3A by stating that it had no concern regarding Dr. Longo telling the jury about the results for the testing that he actually performed.

Contesting waiver, Colgate points to a generic "foundation" objection that it made at trial after Dr. Longo was asked whether Cashmere Bouquet historically included asbestos, considering his historical review of company documents, his review of the scientific literature, and his testing of Cashmere Bouquet. But this too was insufficient to preserve an objection specific to the 20 samples. "[W]here the objection is lack of proper foundation, counsel must point out specifically in what respect the foundation

is deficient." (*People v. Moore* (1970) 13 Cal.App.3d 424, 434, fn. 8.) Colgate's objection did not specifically inform the trial court that it was raising an authenticity objection to the most recent 20 samples Dr. Longo tested, and, up to that point, it had not indicated that it was objecting to Dr. Longo's reliance on those 20 samples.

Dr. Longo detected asbestos in all twenty samples from Colgate's laboratory, and he relied on these results. Furthermore, evidence of asbestos contamination in Cashmere Bouquet was corroborated by certain historical documents upon which Dr. Longo also relied. Accordingly, we cannot conclude, without more, that it is reasonably probable the jury would have reached a different result had Dr. Longo's testimony regarding the set of 38 samples been excluded. (See *Soule v. General Motors Corp.* (1994) 8 Cal.4th 548, 574 (*Soule*).)

D. The Exposure Opinions

Defendants argue that Dr. Longo's exposure opinion should have been excluded, and Colgate makes a similar argument as to Dr. Egilman's exposure calculation. We address these arguments in turn.

1. Dr. Longo

a. Additional Background

As noted above, Colgate filed motion in limine No. 3A to prevent Dr. Longo from opining that Schmitz had substantial exposure to asbestos from Cashmere Bouquet. The thrust of its argument was that Dr. Longo could not opine that Schmitz had substantial exposure to asbestos because he did not perform any

scientific, mathematical, or statistical analysis to support his conclusion that she used contaminated product. Colgate asserted that Dr. Longo did not test the talc Schmitz used, he allegedly conceded there was no generally accepted basis for extrapolating an asbestos concentration in a bulk sample to an airborne concentration, and he did not perform any "actual statistical analysis" to permit him to draw a conclusion about the probability of the products Schmitz used containing asbestos (hence, he was merely guessing).

At the hearing on the motion, which was postponed at Colgate's request and held right before Dr. Longo was set to testify, Colgate represented that its motion was "targeted," and reiterated its claim that Dr. Longo had not done anything "scientifically, whether it's some sort of analysis or calculation, whether it be mathematical or statistical or anything at all, that allows him to make the jump from the small subset of samples that he has tested to the—to the entire product line or even to the products that Ms. Schmitz used. There's simply nothing there [¶] And so if we're going to keep him to—if we are going to keep him in his lane and have him talk about his samples that he has looked at personally, no problem. But as soon as he makes that jump to what Ms. Schmitz used and whether that's appropriate, I think it's not, and I don't think it's supported." J&J joined Colgate's argument.

Plaintiff responded that she assumed Colgate had provided Dr. Longo's exposure report to the court. She argued that Dr. Longo relied on his own testing and the historical documents,

and, under Lyons v. Colgate-Palmolive Co. (2017) 16 Cal.App.5th 463 (Lyons), he could render an opinion without testing the bottles Schmitz used. Colgate responded that nothing in Dr. Longo's background allowed him to make the statistical leap about what Schmitz may have used, and "[h]e, himself, testified at his deposition that the reason he gets from his subset of 58 samples to what Ms. Schmitz used was because he took the number of positives, divided it by the total number of samples he tested, and says, 'Well, that's the percentage. I'm going to be a little bit conservative, because there's some nondetects'—and he tested some samples where he found nothing, by the way—and then he says, 'I'm going to take that percentage and apply it to the universe of products.' [¶] That's—that's not expertise, Your Honor. I could do that for anything." The court denied the motion.

At trial, Dr. Longo opined that, based upon his review of historical company documents, scientific literature, and his laboratory's testing, Cashmere Bouquet and JBP historically included asbestos. The court overruled Colgate's "foundation" objection as Dr. Longo gave this opinion about Cashmere Bouquet. Dr. Longo stated he had evaluated Schmitz's exposure to Cashmere Bouquet and JBP, and it was his opinion that she was exposed to asbestos from the use of both. Later in his testimony, Dr. Longo opined that Schmitz had significant exposure to cosmetic talcum powder from J&J and Colgate, and, using an IARC figure for ambient asbestos, "based on [his] testing, based on historical documents, based on the percentages

that we find positive, it's my opinion that more likely than not, when she used any of these products . . . that she would have had a significant exposure to airborne asbestos—and it's interesting—significantly over background, even though there is no background of tremolite/anthophyllite in the natural environment, unless there is a source." The court overruled J&J's objection that Dr. Longo was not an expert in statistics as he gave this last opinion. Shortly thereafter, over Colgate's "foundation" objection, Dr. Longo testified that Schmitz had significant exposures above background to asbestos from Cashmere Bouquet.

b. Analysis

Colgate argues that the judgment must be reversed for two reasons. First, it contends that Dr. Longo had no basis to extrapolate from his bulk testing of Cashmere Bouquet samples to "any airborne asbestos exposure by Schmitz." Second, citing Sargon, Colgate argues there was too large an analytical gap between Dr. Longo's data sources and his conclusion that Schmitz had significant exposure to asbestos from Cashmere Bouquet. J&J argues that Dr. Longo failed to test the talc Schmitz used and that his opinion regarding Schmitz's exposure to JBP suffers from an insurmountable analytical gap similar to that of his opinion as to Cashmere Bouquet. As set forth post, defendants fail to establish reversible error.

Colgate's first argument lacks merit because Colgate failed to establish that Dr. Longo had no basis to opine on airborne exposure. Colgate mentioned airborne exposure in its motion in limine in one sentence, citing to Dr. Longo's deposition testimony from another case wherein he conceded that no generally accepted basis for extrapolation from bulk testing to an airborne exposure level exists because it depends on what one does with the material. In the submitted material, Dr. Longo also testified that a study could be performed, and he cited one for Cashmere Bouquet done by MVA/Dr. Gordon. Colgate did not submit Dr. Longo's exposure summary for Schmitz with its motion or discuss Dr. Longo's airborne exposure opinion in this case, which, looking to his summary judgment declaration, appeared to include the opinion that background air does not generally contain measurable amounts of anthophyllite or tremolite fibers, so any exposure to these fibers in Cashmere Bouquet would be substantially above background. And Dr. Longo's bulk testing reports from this case cited the Gordon study and MVA materials. Thus, based on the materials before it, the trial court did not abuse its discretion in failing to exclude Dr. Longo's exposure opinion. Furthermore, when Dr. Longo first testified at trial that Schmitz would have had significant, above-background airborne exposure to asbestos from "any of these products," including Cashmere Bouquet, Colgate did not object.

Next, the trial court did not abuse its discretion in rejecting Colgate's argument that Dr. Longo failed to use accepted scientific principles to reach his conclusion that the Cashmere Bouquet products used by Schmitz contained asbestos. In response to Colgate's motion to exclude Dr. Longo's opinion, plaintiff pointed to *Lyons*, *supra*, 16 Cal.App.5th 463, and argued

that Dr. Longo had relied on his own testing and historical documents, and he could render an opinion without testing the bottles Schmitz used.

In Lyons, the appellate court reversed the trial court's grant of summary judgment in a case where plaintiff Lyons developed mesothelioma after using Cashmere Bouquet from the early 1950s to the early 1970s. (Lyons, supra, 16 Cal.App.5th at p. 465.) Lyons presented a declaration from an expert minerologist, Mr. Fitzgerald, reporting positive test results for asbestos in raw talc taken from three talc mines used for Cashmere Bouquet and in bulk testing of Cashmere Bouquet. (Id. at pp. 465–467.) Colgate argued that Fitzgerald's declaration supported nothing more than a possibility of some asbestos in some retail Cashmere Bouquet at some time, which left to conjecture whether the talcum product Lyons used exposed her to asbestos. (*Id.* at pp. 467–468.) Colgate further argued that Fitzgerald had not tested the product Lyons used, and his generally stated opinion as to the presence of asbestos in all Cashmere Bouquet lacked foundation. (*Ibid.*) The appellate court saw no basis for the evidentiary attack. It pointed to Fitzgerald's opinion that "the evidence that talc from all three mines used in the manufacture of Cashmere Bouquet contained asbestos, repeatedly found in multiple tests and studies conducted before, during and after the 1950 to 1970 time period, coupled with plaintiff's use of the product over those 20 years, particularly in the absence of evidence of any other source of the asbestos causing plaintiff's mesothelioma, creates more than an

unsupported possibility." (*Id.* at p. 469.) "Rather, there is a sufficient basis for the 'inference[] reasonably deducible from the evidence' that all or most of the Cashmere Bouquet that plaintiff used almost daily for 20 years contained harmful asbestos." (*Ibid.*)

In Strobel, supra, 70 Cal.App.5th 796, a different panel of this Division similarly found there to be a triable issue of fact regarding causation where the plaintiff alleged that his JBP use from 1951 to 2014 caused mesothelioma. (*Id.* at pp. 800–801, 811.) Expert declarations reported asbestos in the Italian and Vermont talc ore used for JBP, and Mr. Fitzgerald opined that the geology of the Chinese talc mine also used for JBP was such that it would contain asbestos. (Id. at pp. 807–808.) In support of his conclusion that JBP contained asbestos, Fitzgerald relied upon accepted source material in the field—published materials from government agencies, academic articles, and published reports of historical testing, including a 1972 study by Lewin and a 1976 study by Rohl and Langer finding asbestos in JBP, and an FDA report finding asbestos in JBP manufactured from Chinese talc; Fitzgerald also relied on four of five of his own tests showing that JBP before 1951 contained asbestos. (*Id.* at pp. 822–826.) Strobel rejected J&J's argument that there was too great an evidentiary gap between the data and Fitzgerald's opinion. (*Ibid.*) The court found that Fitzgerald "formulated his opinion" based upon principles generally accepted in his area of expertise and . . . applied those principles upon a proper evidentiary foundation," and "fairly dr[ew] the inference . . . that JBP of a

vintage dating from within the exposure period contained asbestos." (*Id.* at pp. 823, 815.)

Considering Lyons, Strobel, and the record before the trial court, Colgate has not established that the court abused its discretion in failing to exclude Dr. Longo's opinion under Sargon. Colgate argued that Dr. Longo could not go beyond his testing because he did not utilize scientific principles to conclude that Schmitz used contaminated product, but plaintiff pointed out that Dr. Longo relied on his testing and historical documents similar to the expert in *Lyons*. And, in the month prior to the hearing on the motion in limine, Dr. Longo had listed some of the materials on which he relied with his summary judgment declaration, including the 1972 Lewin and 1976 Rohl and Langer studies referenced in Strobel. 13 Colgate argued that Dr. Longo's opinion encompassed the entire "universe" of Cashmere Bouquet products, but the deposition testimony Colgate submitted suggested that Dr. Longo had concluded that it was more likely than not the Cashmere Bouquet products for the years he tested contained asbestos. On this record, the court acted within its discretion in rejecting Colgate's request for wholesale exclusion on the basis that Dr. Longo had not used any reliable principles to formulate his opinion that Cashmere Bouquet used by Schmitz contained asbestos.

¹³ Colgate used talc from Italy, North Carolina, and Montana for Cashmere Bouquet. Dr. Longo had positive results from Cashmere Bouquet samples from before 1968 made with Italian talc, and from samples in the 1970s when Colgate was using mixes of North Carolina and Montana talc.

Colgate now argues on appeal that data underlying Dr. Longo's opinion suffered from "serious problems," causing too great an analytical gap between the data and the opinion proffered, but Colgate does not show that it raised any of these specific arguments to the court below. (Evid. Code, § 353, subd. (a) [requiring timely and specific objection].)

Furthermore, to the extent that Dr. Longo's opinion at trial stretched beyond the years represented by the samples he tested, Colgate cannot show prejudice. Toward the end of his direct testimony, the court allowed Dr. Longo to opine over Colgate's "foundation" objection that Schmitz had significant exposures above background to asbestos from Cashmere Bouquet. But this was only after Dr. Longo had testified without objection from Colgate that "based on [his] testing, based on historical documents, based on the percentages that we find positive, it's my opinion that more likely than not, when she used any of these products [Cashmere Bouquet, JBP, and Avon's products] . . . that she would have had a significant exposure to airborne asbestos—and it's interesting—significantly over background, even though there is no background of tremolite/anthophyllite in the natural

¹⁴ Colgate stated in conclusory fashion in motion in limine No. 3A that Dr. Longo "merely guess[ed]" that Schmitz was exposed to asbestos, referencing purported deposition testimony of Dr. Longo where he allegedly admitted that he assumed his samples were representative, but even that reference was unsupported, as the materials submitted with the motion do not contain the alleged testimony.

environment, unless there is a source." Putting aside the generic nature of Colgate's "foundation" objection (*People v. Moore, supra,* 13 Cal.App.3d at p. 434, fn. 8), any failure to exclude the testimony Colgate objected to was harmless in light of the fact that Dr. Longo had already testified that Schmitz would have had significant exposure to airborne asbestos over background when she used *any* of the Cashmere Bouquet, Avon, or JBP cosmetic talc products.

J&J suggests on appeal, as was argued in motion in limine No. 3A, that Dr. Longo's opinion on plaintiff's exposure to asbestos was inadmissible because he did not test the cosmetic talc from bottles Schmitz actually used. But we are not aware of any such burden. (See Lyons, supra, 16 Cal.App.5th at p. 468 ["[t]he absence of the packaging and testing of the very container that plaintiff used is hardly sufficient reason to reject the testimony identifying the product that she used, combined with the expert testimony that all of that product contained 'significant concentrations of airborne asbestos' "]; Strobel, supra, 70 Cal.App.5th at pp. 801, 827 [finding triable issue of fact on causation without evidence of testing of talc containers plaintiff actually used].)

Like Colgate, J&J also attempts on appeal to attack the data set Dr. Longo relied on to render his opinion that Schmitz used JBP contaminated by asbestos. But, as plaintiff points out,

¹⁵ J&J objected to Dr. Longo's qualifications here, stating, "He's not an expert in statistics." It does not pursue a qualification objection on appeal.

J&J's sole objection to Dr. Longo's trial testimony was that he was not an expert in statistics. J&J does not dispute this, instead claiming that its joinder in motion in limine No. 3A was sufficient to preserve its claims for appeal. But Colgate never argued below that there was too large an analytical gap between the JBP samples Dr. Longo tested and his resulting opinion with respect to JBP. J&J has thus not preserved the claim on appeal. (Evid. Code, § 353, subd. (a).)

2. Dr. Egilman

Colgate next argues that the court should have excluded Dr. Egilman's exposure opinion regarding how many asbestos fibers Schmitz inhaled in her lifetime because he simply took the percentage positive from Dr. Longo's testing and assumed the same percentage applied to all the cosmetic talc containers Schmitz used. Even assuming Dr. Egilman should not have been able to testify that Schmitz inhaled 42 to 61 billion asbestos fibers in her lifetime, Colgate does not establish prejudice.

As presented, the thrust of Colgate's prejudice argument is that Egilman's opinion was prejudicial because it provided testimony about Schmitz's substantial exposure to asbestos. But Colgate makes the same argument for Dr. Longo's exposure testimony, and we have found no reversible error in the admission of his testimony, including his testimony that it was more likely than not that, each time Schmitz used defendants' products, she was exposed to asbestos. Furthermore, plaintiff's medical experts opined that there is no known safe level of exposure to asbestos. Drs. Abraham and Egilman testified about

cases where people developed mesothelioma after only one day of asbestos exposure. Dr. Egilman testified that "the amount of asbestos it takes to cause cancer is really, really low," and he rejected defense counsel's suggestion that, if you kept exposure levels below threshold limit values, you would not expect to see cancer. Drs. Horn and Abraham further stated that mesothelioma is dose-dependent, with every inhalation increasing the risk of disease. Plaintiff argued the "no safe exposure" theory, referring to all the doctors' testimony, and the jury's verdict shows that it rejected the defense experts' opinions that there was no increased risk of mesothelioma at the low threshold asbestos exposure levels they expressed in fibers per cc/year. 16 Given this evidence, Colgate does not show that it is reasonably probable the jury would have returned a more favorable result for Colgate in the absence of Dr. Egilman's opinion.

II. Causation Instructions

Colgate next contends that the trial court erred by instructing the jury with negligence, product liability, and concealment instructions that incorporated the asbestos-specific

¹⁶ Dr. Moolgavkar opined that exposure to amphibole asbestos of 5 fibers per cc-year would increase the risk. Dr. Weill opined there is no scientific evidence that exposure to background levels of asbestos elevates the risk of disease, and stated that it would take "several hundred fiber-years" of exposure to chrysotile asbestos contaminated with tremolite or 35 to 75 fiber-years of exposure to tremolite asbestos to increase the risk. Sahmel stated there was no scientific evidence of increased risk of mesothelioma at OSHA's allowable lifetime asbestos exposure limit of 1.1 fiber per cc-year.

standard of proof for causation set forth in *Rutherford v. Owens-Illinois*, *Inc.* (1997) 16 Cal.4th 953 (*Rutherford*). As framed by Colgate, the alleged error was allowing the use of *Rutherford*'s "substantial factor in contributing to the risk" language¹⁷ to describe the burden of proof for causation when *Rutherford* applies only where the theory is that asbestos caused a plaintiff's cancer, not where the theory is that fibrous talc caused mesothelioma.

A. Additional Background

After the parties submitted proposed jury instructions, plaintiff proposed modifications to CACI Nos. 400, 406, 431, 1203, 1205, 1220, 1900 and 1901. J&J filed written objections to these modifications, arguing that plaintiff had incorrectly changed the CACI text requiring that the wrongful conduct be "a substantial factor in causing [plaintiff]'s harm" to a "substantial factor in contributing to Patricia Schmitz's risk of developing mesothelioma."

At the hearing on the objections, J&J highlighted plaintiff's changes and defense counsel pointed out that the parties had agreed on the normal CACI language. Colgate remarked that

¹⁷ CACI No. 435 sets forth this standard and provides, "A substantial factor in causing harm is a factor that a reasonable person would consider to have contributed to the harm. It does not have to be the only cause of the harm. [¶] [Plaintiff] may prove that exposure to asbestos from [name of defendant]'s [product] . . . was a substantial factor causing [plaintiff's] illness by showing, through expert testimony, that there is a reasonable medical probability that the exposure was a substantial factor contributing to [plaintiff's] risk of developing cancer."

plaintiff had introduced a theory that fibrous talc, and not asbestos, caused her harm, so Colgate suggested that the parties give both CACI 430 and 435 and leave the remaining instructions as they normally appear. J&J suggested the same.

Plaintiff responded that the modified versions provided the proper causation standard for two reasons. First, she argued that talc that is formed in an asbestiform habit is asbestos. Second, she argued that the California Supreme Court held in Bockrath v. Aldrich Chemical Co. (1999) 21 Cal.4th 71 (Bockrath), that "in complicated causation standard—complicated causation cases involving cancers where, as in Rutherford, you cannot isolate the 'but for' [cause] of the harm, that the Rutherford causation standard is the appropriate standard." The court elected to give plaintiff's modified jury instructions, stating, "[The] CACI 435 causation standard is what we are looking at in this case, irrespective of [defendants'] argument about whether or not fibrous talc is asbestos or is not asbestos."

B. Rutherford

In *Rutherford*, the court addressed a local court rule that allowed plaintiffs in asbestos cases tried on a products liability theory to request a jury instruction shifting the burden of proof to defendants to prove their products were *not* a legal cause of a plaintiff's injuries, provided the plaintiff first established that the defendant manufactured or sold defective asbestos-containing products to which plaintiff was exposed, and that plaintiff's exposure to asbestos fibers generally was a legal cause of plaintiff's injury. (*Rutherford*, *supra*, 16 Cal.4th at pp. 957–958.)

In rejecting the need for a burden-shifting instruction that ran counter to normal causation principles, *Rutherford* addressed and refined both the plaintiff's burden of proof on causation in "asbestos-related cancer" cases, and the corresponding jury instructions to be given in such cases. (*Id.* at pp. 974–983.)

The court first discussed the limits on the plaintiff's burden of proof, explaining "the medical problems and uncertainties accompanying factual proof of causation" in an asbestos-cancer case. (Rutherford, supra, 16 Cal.4th at p. 974.) "At the most fundamental level, there is scientific uncertainty regarding the biological mechanisms by which inhalation of certain microscopic fibers of asbestos leads to lung cancer and mesothelioma," including whether a single fiber or multiple fibers cause the cancer. (Id. at pp. 974–975.) And there exists an "irreducible uncertainty" regarding "which particular fiber or fibers actually caused the cancer to begin forming." (Id. at p. 975.) The court also observed that, given the long latency period of asbestosrelated cancers, uncertainty exists as to whether the plaintiff was even exposed to the fibers from a particular defendant's product. (*Ibid.*) Further, "at a level of abstraction somewhere between the historical question of exposure and the unknown biology of carcinogenesis," sits the question of whether the risk of cancer created by a plaintiff's exposure to a particular asbestoscontaining product was significant enough to be considered a legal cause of the disease. (*Ibid.*)

Rutherford ultimately concluded that the conceded impossibility of proving the scientifically unknown details of

carcinogenesis, or of tracing the unknowable path of a given asbestos fiber, did not justify shifting the burden to defendants to prove a lack of legal cause. (*Rutherford*, *supra*, 16 Cal.4th at p. 976.) "Instead, we can bridge this gap in the humanly knowable by holding that plaintiffs may prove causation in asbestos-related cancer cases by demonstrating that the plaintiff's exposure to defendant's asbestos-containing product in reasonable medical probability was a substantial factor in contributing to the aggregate dose of asbestos the plaintiff or decedent inhaled or ingested, and hence to the risk of developing asbestos-related cancer, without the need to demonstrate that fibers from the defendant's particular product were the ones, or among the ones, that actually produced the malignant growth." (*Id.* at pp. 976–977, fn. omitted.)

The court then addressed jury instructions, observing that jurors given the standard concurrent causation jury instruction "might well conclude that the plaintiff needed to prove that fibers from the defendant's product were a substantial factor actually contributing to the development of the plaintiff's or decedent's cancer," and, "[i]n many cases, such a burden will be medically impossible to sustain, even with the greatest possible effort by the plaintiff, because of the irreducible uncertainty regarding the cellular formation of an asbestos-related cancer." (*Rutherford*, *supra*, 16 Cal.4th at p. 977.) "We therefore hold that, in the trial of an asbestos-related cancer case, although no instruction 'shifting the burden of proof as to causation' to defendant is warranted, the jury should be told that the plaintiff's or

decedent's exposure to a particular product was a substantial factor in causing or bringing about the disease if in reasonable medical probability it was a substantial factor contributing to plaintiff's or decedent's risk of developing cancer." (*Ibid.*)

"In conclusion, our general holding is as follows. In the context of a cause of action for asbestos-related latent injuries, the plaintiff must first establish some threshold exposure to the defendant's defective asbestos-containing products, and must further establish in reasonable medical probability that a particular exposure or series of exposures was a 'legal cause' of his injury, i.e., a substantial factor in bringing about the injury. In an asbestos-related cancer case, the plaintiff need not prove that fibers from the defendant's product were the ones, or among the ones, that actually began the process of malignant cellular growth. Instead, the plaintiff may meet the burden of proving that exposure to defendant's product was a substantial factor causing the illness by showing that in reasonable medical probability it was a substantial factor contributing to the plaintiff's or decedent's risk of developing cancer. The jury should be so instructed. The standard instructions on substantial factor and concurrent causation (BAJI Nos. 3.76 and 3.77) remain correct in this context and should also be given." (Rutherford, *supra*, 16 Cal.4th at pp. 982–983, fns. omitted.)

C. Analysis

We start with two observations about our high court's precedent. First, *Rutherford* adopted its refined standard of proof for legal causation only for cases involving asbestos-related

cancer. (Rutherford, supra, 16 Cal.4th at p. 983, & fn. 13 [expressly declining to determine whether the "substantial factor contributing to the . . . risk" standard applied to asbestosis cases, as opposed to asbestos-related cancer cases].) Next, while plaintiff contends that Bockrath, supra, 21 Cal.4th 71, which addressed causation pleading requirements in a non-asbestos toxic tort case, held that Rutherford's "substantial factor contributing to the risk" standard is the governing standard of proof for causation in all toxic tort cases, we do not read *Bockrath* so expansively. Rather, *Bockrath* adopted the rule that, "[i]n cases like the one before us, presenting complicated and possibly esoteric medical causation issues, the standard of proof ordinarily required is "a reasonable medical probability based upon competent expert testimony that the defendant's conduct contributed to [the] plaintiff's injury." '" (Id. at p. 79 [citing to different pages of *Rutherford* for the applicable "ordinary" standard of proof and the standard of proof for asbestos-related cancer claims].)18

Despite the above observations, Colgate's claim of instructional error fails. *Rutherford* endorsed the refined standard of proof for causation announced therein because of the

¹⁸ Some courts have commented, without deciding, that *Rutherford*'s refined standard for proving causation "would appear appropriate for toxic torts beyond asbestos." (*Whiteley v. Philip Morris Inc.* (2004) 117 Cal.App.4th 635, 700; see also *Major v. R.J. Reynolds Tobacco Co.* (2017) 14 Cal.App.5th 1179, 1197 [citing *Bockrath* and noting that "subsequent authority has extended *Rutherford* to cancer caused by long-term exposure to multiple different toxins."].)

state of the science and the impossibility of proving whether a particular fiber or fibers from defendant's product caused the cancer. (*Rutherford*, *supra*, 16 Cal.4th at p. 976 [reviewing the impossibility of proving "the scientifically unknown details of carcinogenesis, or [of tracing] the unknowable path of a given asbestos fiber"].) The endorsed standard "bridge[d] this gap in the humanly knowable," (*ibid*.), and on the record before us, we see no reason why *Rutherford*'s rationale for applying a refined standard of proof for causation should not apply to a theory based on fibrous talc.

Dr. Egilman testified that fibrous talc is carcinogenic because its chemical structure is identical or very close to anthophyllite asbestos, and he noted that asbestos fibers can become talc fibers over the course of millions of years. He testified that, when you have fibers of asbestiform talc with the same shape and substantially the same chemical structure as anthophyllite asbestos, the surface properties of the fibers at issue are identical, and the human body cannot tell the difference between the fibers of the asbestos minerals and the talc. Both minerals are indestructible such that the human body's macrophages cannot clear them from the lung. Dr. Egilman explained that the surface properties are what interact with DNA to make the mineral particles carcinogenic, and he testified that both asbestos fibers and fibrous talc cause cancer in the same way. At least in this case, it appears from the testimony that the same challenges inherent in proving causation in asbestosrelated cancer cases apply similarly to plaintiff's theory of fibrous

talc-related mesothelioma—i.e., the "irreducible uncertainty" regarding "which particular fiber or fibers actually caused the cancer to begin forming" and of tracing the unknowable path of a given fiber. (*Rutherford*, *supra*, 16 Cal.4th at p. 975.) As such, we conclude that *Rutherford*'s rationale applies and was properly extended in this case as a refined standard of proof for legal causation.¹⁹

III. Motion for a Mistrial

J&J contends the trial court erred in refusing to grant its motion for a mistrial after plaintiff played for the jury deposition excerpts containing references to talc being linked to ovarian cancer. We conclude that the trial court did not abuse its discretion in denying the motion. (See *People v. Williams* (1997) 16 Cal.4th 153, 210 [denial of mistrial motion reviewed for abuse of discretion].)

A. Additional Background

J&J moved in limine to exclude any reference to talc and ovarian cancer. Plaintiff opposed, arguing that she was entitled to establish J&J's notice of the hazards of talc use, and she referenced a J&J document that discussed finding asbestos and particles consistent with talc in ovarian tissue. The trial court denied the motion, with a caveat: "I think that the right thing to

¹⁹ Colgate's argument is that the trial court's modification of the causation language in CACI Nos. 400, 406, 1202, 1203, 1205, 1900, and 1901 was erroneous solely because a *Rutherford* standard of proof does not apply to fibrous talc. It does not contend that, even if *Rutherford*'s "substantial factor in contributing to the risk" standard of proof applies to fibrous talc, the modified instructions were prejudicially erroneous.

do on this motion is to deny it with an exception to the denial, so—because the demonstration is on the part of the plaintiff to have notice attributed to the defendant as of the date with regard to health consequences and, presumably, subsequent testimony that there was no change in the product following that notice. Nobody said that, but it doesn't make any sense otherwise. [¶] But the reference to the specific disease of ovarian cancer is unnecessary. It's prejudicial. So it's denied, except that ovarian cancer is not something that's going to be brought up as being a consequence. You can just call it a health issue or a health problem. But it's going to be granted only to that extent, and the rest denied."

When the video of the deposition of J&J corporate representative Dr. John Hopkins was played, Dr. Hopkins was questioned about a 1997 letter criticizing the Cosmetic Toiletry and Fragrance Association (CTFA). The letter's author critiqued three CTFA response statements, and, in doing so, the author referenced talc particles having been found in ovarian tissue and studies showing "a statistically significant association between hygienic talc use and ovarian cancer." J&J did not object or ask to stop the video. Afterwards, outside the jury's presence, J&J's counsel inquired of the court whether an objection to references to ovarian cancer had been overruled. The parties had filed pageline designations and objections for video deposition testimony to be played to the jury, and the court explained that it overruled the objections to Dr. Hopkins' deposition because no one specifically objected that it referenced ovarian cancer, and the

court did not notice the reference. Regarding the reference played to the jury, the court stated, "But it's pretty de minim[i]s." J&J's counsel asked that, going forward, there be no further references, and the court agreed.

Later that day, during the video of Mr. Rosolowsky's deposition, he was asked, "Did Johnson & Johnson, when you were in market research, ever do focus groups to understand whether the consumer had concerns about cancer risk after using Johnson & Johnson talcum powder?" He said, "No, sir, not that I can recall." Then, the text of the next question appeared, asking whether J&J had done any research about whether consumers had concerns about ovarian cancer, and it purportedly froze on screen. Although the word "ovarian" was deleted in the audio played, the text appeared on the screen. Rosolowsky responded, "I can't recall that sir. I don't believe so." After the video finished playing, outside the presence of the jury, J&J's counsel told the court, "We had—we had a little issue on the video with 'ovarian cancer,' and I just—I think we should just take 30 seconds tomorrow to talk about that." The court inquired what counsel would like the court to do, and J&J's counsel responded, "That's what I'd like to think about, Your Honor. Maybe we'd want a quick instruction. I don't know. I'd like to think about it, if we could, and discuss it for a second tomorrow."

J&J filed a motion for a mistrial the following week, with one of its arguments being that a mistrial was required because of the ovarian cancer references. At the argument on the motion, J&J requested curative instructions for various other issues raised therein, but not for the ovarian cancer issue. The court denied the motion.

B. Analysis

A trial court has discretion to declare a mistrial "when 'an error too serious to be corrected has occurred.' "(Velasquez v. Centrome, Inc. (2015) 233 Cal.App.4th 1191, 1214.) However, a curative instruction to disregard improper testimony is generally sufficient to cure prejudice. (People v. Navarrete (2010) 181 Cal.App.4th 828, 834, 836.) "The trial court, 'present on the scene, is obviously the best judge of whether any error was so prejudicial to one of the parties as to warrant scrapping the proceedings up to that point.' [Citation.] A trial court should grant a mistrial only when a party's chances of receiving a fair trial have been irreparably damaged." (Velasquez, at p. 1214.)

J&J does not persuade us that this is an exceptional case where the trial court abused its discretion in denying the motion for a mistrial. J&J did not move to correct the allegedly egregious errors until its motion for a mistrial filed a week after the errors occurred. The trial court concluded that the references to ovarian cancer in Dr. Hopkins' transcript were "de minim[i]s," and the record supports that conclusion as these were brief references in the span of a multi-week trial. Furthermore, while the question referencing ovarian cancer apparently froze on screen, the question was only whether J&J had done any research into whether consumers had concerns about ovarian cancer. We thus reject J&J's contention that the trial court abused its discretion in deciding that the brief references to

ovarian cancer were not so prejudicial as to irreparably damage J&J's right to a fair trial.

IV. The Adverse Inference Instruction

The trial court determined there was sufficient evidence to support an adverse inference instruction in this case, and the jury was instructed: "You may consider whether one party intentionally concealed or destroyed evidence. If you decide that party did so, you may decide that the evidence would have been unfavorable to that party." J&J argues the evidence was insufficient to support this instruction, and that the error requires reversal of the judgment. As set forth *post*, we disagree.

"'Spoliation' is '"the destruction or significant alteration of evidence, or the failure to preserve property for another's use as evidence in pending or reasonably foreseeable litigation." '"

(Reeves v. MV Transportation, Inc. (2010) 186 Cal.App.4th 666, 681 [citing federal case law].) One remedy for spoliation is an adverse evidentiary inference—allowing the jury to infer that evidence which one party has willfully destroyed or rendered unavailable was unfavorable to that party. (Evid. Code, § 413; Cedars-Sinai Medical Center v. Superior Court (1998) 18 Cal.4th 1, 11; CACI No. 204.) Such an instruction may be given only if there is evidence of willful suppression, which one appellate court has described as "evidence that a party destroyed evidence with the intention of preventing its use in litigation." (New Albertsons, Inc. v. Superior Court (2008) 168 Cal.App.4th 1403, 1434.)

Even assuming the trial court erred in giving the adverse inference instruction, J&J has not shown that it is reasonably

probable the instructional error affected the jury's verdict. (See *Soule*, *supra*, 8 Cal.4th at pp. 574, 580.) In assessing prejudice, the reviewing court should consider the nature of an instructional error, "including its natural and probable effect on a party's ability to place his full case before the jury," as well as the likelihood of actual prejudice, considering "(1) the state of the evidence, (2) the effect of other instructions, (3) the effect of counsel's arguments, and (4) any indications by the jury itself that it was misled." (*Rutherford*, *supra*, 16 Cal.4th at p. 983.)

Here, J&J argued its full case to the jury, and the instruction did not inform the jury that defendants had intentionally concealed or destroyed evidence. Rather, it merely permitted the jury to consider whether defendants had done so and, if it so found, that it may (but did not have to) decide that the evidence would have been unfavorable to defendants.

Plaintiff did refer to the suppression instruction, arguing in closing that J&J destroyed a document with a code that would show which company's 1976 cosmetic talc products were linked to positive results in CTFA blind asbestos testing, and plaintiff briefly alluded to J&J's destruction of documents before it sold the Vermont talc mine in 1989. Nonetheless, there was abundant evidence that Vermont talc and JBP, during the time J&J used Vermont talc, contained asbestos. Apart from Dr. Longo's and Mr. Poye's testing, there was testimony that in 1991, Alice Blount, Ph.D., documented trace levels of tremolite asbestos in samples of JBP sourced from the Vermont mines in a peer-reviewed and published paper. There was evidence of a number

of historical reports of asbestos in Vermont talc and the JBP derived therefrom. Dr. Sanchez testified there were asbestiform amphiboles in the Vermont mines, although he said they were outside the talc ore body. And Dr. Egilman testified that JBP historically contained asbestos, studies found asbestos in the Vermont talc mine, and six or seven different laboratories found asbestos in JBP in the early 1970s. Plaintiff spent a large amount of time highlighting this evidence in her closing argument as opposed to the brief amount of time she spent on the adverse inference instruction. On this record, J&J has not shown that without the challenged instruction, it is reasonably probable it would have obtained a more favorable result.

V. The Fraudulent Concealment Instruction

J&J raises a final instructional error claim—that it was entitled to correct, nonargumentative jury instructions upon its request, and the court erred in failing to instruct the jury that it had to find the requisite transactional relationship to succeed on a claim for fraudulent concealment. Plaintiff argues the instruction given was appropriate, and both parties cite *Bigler-Engler v. Breg, Inc.* (2017) 7 Cal.App.5th 276 (*Bigler-Engler*), to support their positions. We conclude that, even assuming some error in failing to instruct as J&J requested, it is not reasonably probable that J&J would have received a more favorable result had the jury been instructed under *Bigler-Engler*.

A. Additional Background

When discussing the jury instruction and special verdict form for concealment, J&J took the position that the court should

add a preamble to the beginning of CACI No. 1901, as follows: "That plaintiff, Patricia Schmitz and the defendants, were engaged in a transactional relationship based on direct dealings." The court requested that the parties provide a complete proposed written instruction for its consideration, commenting that what was before it was an outline. The parties do not cite to a proposed instruction in the record, but the reporter's transcript shows that plaintiff sent a proposed instruction for CACI No. 1901 to defendants, and J&J provided a redline. The court elected to give plaintiff's proposed instruction, instructing the jury that, to find concealment, plaintiff had to prove that "defendant directly advertised its products to consumers such as Patricia Schmitz or Patricia Schmitz purchased defendant's product." In closing, J&J's counsel argued that Schmitz never saw advertisements or brochures for JBP, and she never purchased JBP.

B. Governing Law and Standard of Review

The elements of a cause of action for "concealment are:
"(1) the defendant must have concealed or suppressed a material
fact; (2) the defendant must have been under a duty to disclose
the fact to the plaintiff; (3) the defendant must have intentionally
concealed or suppressed the fact with the intent to defraud the
plaintiff; (4) the plaintiff must have been unaware of the fact and
would not have acted as he did if he had known of the concealed
or suppressed fact; and (5) as a result of the concealment or
suppression of the fact, the plaintiff must have sustained

damage."" (Bigler-Engler, supra, 7 Cal.App.5th at pp. 310–311.)

"There are four circumstances in which nondisclosure or concealment may constitute actionable fraud: (1) when the defendant is in a fiduciary relationship with the plaintiff; (2) when the defendant had exclusive knowledge of material facts not known to the plaintiff; (3) when the defendant actively conceals a material fact from the plaintiff; and (4) when the defendant makes partial representations but also suppresses some material facts."'" (Bigler-Engler, supra, 7 Cal.App.5th at p. 311.) Where a fiduciary relationship does not exist between the parties, only the latter three circumstances may apply, and those three circumstances presuppose the existence of some other relationship between the plaintiff and defendant in which a duty to disclose can arise. (Id. at p. 311.) This relationship has been called a "transaction" and may include " ' "seller and buyer, employer and prospective employee, doctor and patient, or parties entering into any kind of contractual arrangement." " (Ibid.)

In *Bigler-Engler*, patient Whitney Engler sued her doctor, the doctor's medical group, and a medical device manufacturer, among others, for numerous torts, including fraudulent concealment causing injury from minor Engler's use of a cold therapy device available by prescription only. (*Bigler-Engler*, *supra*, 7 Cal.App.5th at pp. 285–286.) Engler was injured in high school and obtained the device from her doctor's medical group for use after surgery. (*Id.* at p. 286.) The court reversed the jury's verdict on fraudulent concealment against the

manufacturer "because there was no evidence of a relationship between Engler (or her parents) and [the manufacturer] sufficient to give rise to a duty to disclose." (*Id.* at p. 314.) The court noted that the manufacturer did not transact with Engler or her parents, the manufacturer was not involved "in any way" with Engler or her parents, and the evidence did not show that the manufacturer "directly advertised its products to consumers such as Engler or that it derived any monetary benefit directly from Engler's individual rental of the Polar Care device." (*Ibid.*) Instead, the medical group obtained the device from the manufacturer several years before Engler's surgery and maintained it for rental to its patients. (*Ibid.*)

"A party is entitled upon request to correct, nonargumentative instructions on every theory of the case advanced by him which is supported by substantial evidence." (Soule, supra, 8 Cal.4th at p. 572.) We review de novo whether a jury instruction correctly states the law. (Strouse v. Webcor Construction, L.P. (2019) 34 Cal.App.5th 703, 713.) "[T]here is no rule of automatic reversal or 'inherent' prejudice applicable to any category of civil instructional error, whether of commission or omission. A judgment may not be reversed for instructional error in a civil case 'unless, after an examination of the entire cause, including the evidence, the court shall be of the opinion that the error complained of has resulted in a miscarriage of justice.' [Citation.] . . . [¶] Instructional error in a civil case is prejudicial 'where it seems probable' that the error 'prejudicially affected the verdict.'" (Soule, supra, 8 Cal.4th at p. 580; see also People v.

Watson (1956) 46 Cal.2d 818, 836.) Insofar as relevant, courts should consider (1) the degree of conflict in the evidence on the critical issues; (2) whether the winning side's argument to the jury may have contributed to the instruction's misleading effect; (3) whether the jury requested rereading of the erroneous instruction or related evidence; (4) the closeness of the jury's verdict; and (5) the effect of other instructions in remedying the error. (See *Soule*, at pp. 570–571, 580–581.)

C. Analysis

Even assuming it was error not to tell the jury that they had to find a transaction arising from direct dealings between plaintiff and J&J, J&J has not established prejudice. J&J concludes in its opening brief, with no citations to the record, that the jury's result would have been different without the alleged instructional error. Bigler-Engler, however, discussed the question of whether there was a sufficient transaction or relationship between the defendant and the minor Engler or her parents, with the court noting that there was no evidence of a transaction or relationship between Engler or her parents and the defendant, nor was there evidence that the manufacturer directly advertised its products to consumers such as Engler or derived any monetary benefit directly from Engler's rental of the device at issue. (Bigler-Engler, supra, 7 Cal.App.5th at p. 314.) A proper instruction under *Bigler-Engler* thus would have instructed the jury here to consider whether similar evidence of transactions, advertising, or J&J's direct monetary benefit supported the transactional requirement. (*Id.* at p. 311.)

In contrast to *Bigler-Engler*, the undisputed evidence in this case was that Schmitz lived with her parents growing up, her mom used and kept JBP in the house, and Schmitz used JBP on her siblings as a kid and then on herself from age 11 to about age 13. There was also evidence showing that J&J was involved in retail sales of JBP to consumers and profited therefrom.

On this record, J&J cannot show it is reasonably probable the jury would have found for J&J had it been instructed under *Bigler-Engler* that it had to find a transaction between J&J and Schmitz or her parents. For the same reasons, J&J's conclusory suggestion that the court should have granted its requests for nonsuit and directed verdict fails.

VI. Sufficiency of the Evidence of Concealment

Colgate challenges the trial court's denial of its motion for judgment notwithstanding the verdict on concealment, contending that the evidence is insufficient to show that it knew Cashmere Bouquet contained asbestos. (*Bigler-Engler*, *supra*, 7 Cal.App.5th at p. 311 [reciting intentional concealment as an element of fraudulent concealment]; *Goodman v. Kennedy* (1976) 18 Cal.3d 335, 348 [discussing deficient pleading failing to allege defendant's knowledge of existence and materiality of omitted matter].)

Our standard of review is well established. "A motion for judgment notwithstanding the verdict may be granted only if it appears from the evidence, viewed in the light most favorable to the party securing the verdict, that there is no substantial evidence in support." (Sweatman v. Department of Veterans

Affairs (2001) 25 Cal.4th 62, 68.) "As in the trial court, the standard of review is whether any substantial evidence—contradicted or uncontradicted—supports the jury's conclusion." (*Ibid.*)

Here, substantial evidence supports the jury's verdict. Colgate's policy was that "any indication of the presence of asbestos . . . is unacceptable." Colgate's XRD testing detected tremolite in Italian and North Carolina talc, and tremolite and anthophyllite in Montana talc in 1976. In 1974, McCrone found chrysotile asbestos in North Carolina Regal talc and in Cashmere Bouquet. Dr. Longo confirmed that, with TEM, the 1974 pictures from McCrone showed chrysotile asbestos, and Dr. Sanchez did the same. While Colgate points to a memorandum from Dr. Simko, the head of the analytical group assisting research & development at Colgate at the time, wherein he stated that "it is believed" that the contamination was due to laboratory contamination, the jury was not required to believe that explanation or that Dr. Simko was being truthful. Another 1974 McCrone test of Cashmere Bouquet reported one fiber of tremolite. McCrone stated that it "may well just be stray contamination," but McCrone did not report that it was conclusively stray contamination, and the jury was not required to so conclude.

In 1976, the Mt. Sinai School of Medicine published a study finding that Cashmere Bouquet contained asbestos after testing the product sample with an electron microscope. Colgate knew of Mt. Sinai's findings around the time they came out. Colgate used XRD to test the same sample as Mt. Sinai and identified anthophyllite and possible tremolite therein. The sample was sent to McCrone, and Colgate's corporate representative testified that it came back with pictures, but she could not recall what the pictures depicted.

Also in 1976, records from Cyprus, a potential new talc supplier for Colgate at the time, stated that Colgate "found some tremolite in [its] other talc source and this has really gotten them up in arms." A similar memorandum documented a lunch between Cyprus and Colgate employees, including Dr. Simko, and stated that Colgate was having "quite a few problems with their present [talc] source with respect to asbestos."

In 1984, Colgate sent samples of "finished product" to McCrone for testing, coded 0613BK, 1813AX and 2713EX with a formula of 1 percent magnesium carbonate, 1 percent zinc stearate, and perfume as additives. McCrone detected chrysolite asbestos in these samples. Colgate's corporate representative testified that the samples "could be" Cashmere Bouquet, but then said she remembered Dr. Simko saying they were actually experimental samples for a developing product, although she could not name the experiment. But the formula for these samples matched that for Cashmere Bouquet in 1985 and 1986, and entries in the laboratory testing notebook of Colgate employee Pasquale Briscese identifying Cashmere Bouquet contain similar naming codes, such as 4515EX.

In light of the above, the trial court did not err in failing to grant Colgate's motion for judgment notwithstanding the verdict.

VII. Entry of Judgment Nunc Pro Tunc

Relying on Code of Civil Procedure section 377.34, subdivision (a),²⁰ defendants challenged the award of damages for pain and suffering, contending the court improperly entered judgment nunc pro tunc to a time prior to Schmitz's death. Plaintiff asserts that the enactment Code of Civil Procedure section 377.34, subdivision (b) has mooted this argument, and we agree.

Effective January 1, 2022, Code of Civil Procedure section 377.34, subdivision (b) states, "Notwithstanding subdivision (a), in an action or proceeding by a decedent's personal representative or successor in interest on the decedent's cause of action, the damages recoverable may include damages for pain, suffering, or disfigurement if the action or proceeding was granted a preference pursuant to Section 36 before January 1, 2022, or was filed on or after January 1, 2022, and before January 1, 2026." Given the statute's specific language and the grant of preference in this case before January 1, 2022, the damage awards for pain and suffering were not improper. (Myers v. Philip Morris

²⁰ This subdivision provides, "In an action or proceeding by a decedent's personal representative or successor in interest on the decedent's cause of action, the damages recoverable are limited to the loss or damage that the decedent sustained or incurred before death, including any penalties or punitive or exemplary damages that the decedent would have been entitled to recover had the decedent lived, and do not include damages for pain, suffering, or disfigurement." (Code Civ. Proc., § 377.34, subd. (a).)

²¹ In its opening brief, Colgate discussed future economic loss. In its reply brief, Colgate states that, although the court erred by entering judgment nunc pro tunc, "[T]his reply brief will

Companies, Inc. (2002) 28 Cal.4th 828, 844 [a statute may be applied retroactively only if it contains express language of retroactivity].)

DISPOSITION

The judgment is affirmed.

BROWN, J.

WE CONCUR:

STREETER, ACTING P. J. GOLDMAN, J.

not further address that argument in light of the enactment of subdivision (b) of section 377.34 of the Code of Civil Procedure, which occurred after the filing of Colgate's Opening Brief." Colgate thus appears to have abandoned its argument regarding future economic losses.

STREETER, Acting P. J., Concurring.

I join the opinion in full, but offer some separate views on one aspect of the evidentiary challenges to the expert testimony.

I agree with the conclusion that there was no error under Sargon Enterprises, Inc. v. University of Southern California (2012) 55 Cal.4th 747, in the admission of Dr. Egilman's testimony that fibrous talc causes asbestos. It is not the logic of this opinion that was potentially problematic, but instead its "newness" as an asbestos causation theory and lack of any showing that it is empirically testable. I write briefly to say that, had there been an objection under People v. Kelly (1976) 17 Cal.3d 24—there was not—that was the appropriate way to challenge the admissibility of Dr. Egilman's fibrous talc opinion, not a Sargon objection.

When asked about this at oral argument, counsel for Colgate said that *Kelly* applies to scientific methodologies and techniques. It does, yes, but the Supreme Court's recent formulation of the threshold criteria for applying *Kelly* focuses on whether the challenged expert has used a "'"technique, process, or theory"'" that may be considered new to science and law. (People v. Peterson (2020) 10 Cal.5th 409, 444, italics added [canine scent detection opinion not subject to *Kelly*]; People v. Jackson (2016) 1 Cal.5th 269, 316 [same]; see People v. Cowan (2010) 50 Cal.4th 401, 470 [ballistics testimony].) Recent Court of Appeal formulations of the eligibility criteria for applying *Kelly* seem to be phrased with similar breadth. (See, e.g., People v. Davis (2022) 75 Cal.App.5th 694, 711 ["The *Kelly* test applies

only to expert testimony "based, in whole or in part, on a technique, process, or theory which is *new* to science and, even more so, the law." "].)

For context, the evolution in this area of law over the last few decades is useful to recall. Of course, "gatekeeping" screening for expert testimony has been a highly contested issue since the adoption of a heightened federal standard for expert testimony under Federal Rules of Evidence, rule 702 in *Daubert v. Merrell Dow Pharmaceuticals, Inc.* (1993) 509 U.S. 579. Before that, our *Kelly* standard in California limited such gatekeeping to scientific evidence, and our Supreme Court had not embraced the *Daubert* idea that there ought to be strict "gatekeeping" of the foundation for expert opinion, at least not in a mode that was any more rigorous than the rules of evidence require for opinion testimony in general.

In *People v. Leahy* (1994) 8 Cal.4th 587, a landmark postDaubert opinion cited in our opinion, the California Supreme
Court adhered to *Kelly* and declined to merge *Kelly* into a more
generalized *Daubert*-like screening test. Both before and after
Leahy, it was often stated in *Kelly* cases that its screening rule
does not apply to medical causation opinions outside the context
of new scientific techniques, processes or procedures, arguably a
narrower formulation than we see later in cases like *Peterson* and
Jackson. Roberti v. Andy's Termite & Pest Control, Inc. (2003)
113 Cal.App.4th 893, another case cited in our opinion, is among
the most cited cases for that idea.

But then came Sargon, which changed the landscape by adopting a *Daubert*-like gatekeeping rule for expert testimony in general. After Sargon, we now have two regimes of admissibility rules for expert testimony on scientific topics in California, one under Sargon and one under Kelly. No case has ever explored the interplay between these two regimes. Sargon expressly says it is focused on foundational logic, not scientific validity. And notably, the post-Sargon Kelly cases utilizing the broader formulation (i.e., *Peterson* and *Jackson*) emphasize that the *Kelly* test is not limited to methodological "techniques" or "processes," which suggests that there may be some types of causation opinions i.e., scientific opinions based on untested hypotheses—that are subject to *Kelly*. If that is the case, it seems consistent with the Roberti rule, since Roberti explicitly lays down a caveat for causation opinions that are based on new scientific techniques, processes or procedures.

Having laid out in broad strokes the evolution of the law in this area, I wish to emphasize that I am not suggesting that Dr. Egilman's theory of fibrous talc asbestos causation was necessarily vulnerable to challenge under *Kelly*, and I am certainly not labelling it "junk science." Which is why I agree that we "express no view on whether such an argument would have been successful." (Lead opn., *ante*, at p. 21, fn. 11.) We do not have a sufficient record to evaluate the question raised. But I do think we are dealing with an important legal issue here, one that this case illustrates quite well because the fibrous talc theory can easily be characterized as "new" for *Kelly* purposes.

The bottom line, though, is that because the admissibility of Dr. Egilman's fibrous talc opinion was not subject to a *Kelly* objection, we cannot tell on this record.

In 2016, the President's Council of Advisors on Science and Technology (PCAST) issued a ground-breaking report to the President of the United States on the use of forensic science in the courtroom. (PCAST, Forensic Science in Criminal Courts: Ensuring Scientific Validity of Feature-Comparison Methods (September 2016)²² (PCAST Report).) While the PCAST Report focused on the use of forensic evidence in criminal cases, I believe it lays out some important considerations for the assessment of scientific validity of science-based expert opinion in civil cases as well, and that these considerations ought to be recognized on the *Kelly* side of expert opinion screening in California.

The debate about whether fibrous talc may be considered to have the same pathogenic qualities as asbestos fibers or instead should be placed in the category of benign cleavage fragments, at bottom, implicates one of the most important aspects of assessing what the PCAST Report called "foundational validity"—not just whether the opinion has been subjected to peer review and publication in the scientific community, but whether it is a "scientific theory" that is testable by "empirical demonstration of accuracy." (PCAST Report, at p. 46; *id.* at p. 60 [referring to National Academy of Sciences' definition of a "scientific theory"

²²https://obamawhitehouse.archives.gov/sites/default/files/microsites/ostp/PCAST/pcast_forensic_science_report_final.pdf (as of Dec. 23, 2022).

as a "'comprehensive explanation of some aspect of nature that is supported by a vast body of evidence'"].)

Among the most important criteria for testable empirical accuracy is whether "error rates" have been taken into account, so that conclusions based on mere coincidence and association may be distinguished from reliable conclusions suggesting actual causality. (PCAST Report, at p. 62.) I have no idea how Dr. Egilman's fibrous talc opinion would stand up to scrutiny against such an assessment, but I suspect it may have fallen short, particularly given its apparent "newness" in the field of asbestos causation. The proper vehicle for mounting such a challenge, however, was a *Kelly* objection and a request for an Evidence Code section 402 hearing to assess the scientific foundation for the opinion, not a *Sargon* objection with back-and-forth arguments from lawyers on an undeveloped record about the "logic" of the opinion.

STREETER, Acting P. J.

Bader v. Johnson & Johnson et al. (A158868)

Trial Court: Alameda County Superior Court

Trial Judge: Hon. Frank Roesch

Counsel: Orrick, Herrington & Sutcliffe, Naomi J.

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