UNITED STATES DISTRICT COURT NORTHERN DISTRICT OF CALIFORNIA

IN RE: ROUNDUP PRODUCTS LIABILITY LITIGATION

MDL No. 2741

Case No. 16-md-02741-VC

This document relates to:

Bulone v. Monsanto Co., Case No. 20-cv-03719-VC

Caccia v. Monsanto Co., Case No. 20-cv-01915-VC

PRETRIAL ORDER NO. 291: ORDER DENYING MOTIONS TO EXCLUDE EXPERTS BRAUNSTEIN, CLARK, AND SAWYER

Re: Dkt. Nos. 17588, 17589, 17598, 17599

Monsanto's motions to exclude the testimony of Dr. Marc Braunstein in the *Bulone* and *Caccia* cases are denied. So are Monsanto's motions to exclude Dr. William Sawyer in the *Caccia* case and Dr. Clark in the *Bulone* case. This order assumes a familiarity with the Court's prior orders on general and specific causation and the Ninth Circuit's opinion in *Hardeman*. *See generally In re Roundup Products Liability Litigation*, 390 F. Supp. 3d 1102 (N.D. Cal. 2018) (Pretrial Order No. 45, Dkt. No. 1596); *In re Roundup Products Liability Litigation*, 358 F. Supp. 3d 956 (N.D. Cal. 2019) (Pretrial Order No. 85, Dkt. No. 2799); *Hardeman v. Monsanto Company*, 997 F.3d 941 (9th Cir. 2021). It also assumes a familiarity with the record from the *Daubert* hearing on Braunstein that took place on April 24, 2024. *See* Hearing Tr. (Dkt. No. 18297).

I

Dr. Marc Braunstein is Associate Professor of Medicine at NYU Langone Hospital-Long Island, NYU Perlmutter Cancer Center, where he trains hematology/oncology residents and fellows. He is a board-certified hematologist and oncologist. He also has a Ph.D. in molecular

biology. He has clinical experience treating NHL, including the NHL subtypes with which Bulone and Caccia were diagnosed. In both the *Bulone* and *Caccia* matters, Braunstein opines that exposure to Roundup was a substantial factor in causing the plaintiffs' NHL.

Monsanto's attack on Braunstein's presentation in both cases is based on the same two criticisms of his differential etiology. First, Monsanto says Braunstein failed to reliably "rule out" non-Roundup risk factors, most significantly obesity (for Caccia) and exposure to jet fuel (for Bulone). Second, Monsanto says Braunstein failed to "rule out" idiopathy or random mutations as potential causes, and that in doing so he impermissibly relied on certain studies to conclude that Roundup was the cause. This second set of arguments is addressed at greater length in Pretrial Order No. 290, where the Court rejected substantively the same arguments for the exclusion of Dr. Boyd's testimony. *See* Pretrial Order No. 290 (Dkt. No. 18320) at 5–10. The same reasoning applies here, and the Court rejects Monsanto's arguments about Braunstein's way of ruling out idiopathy for the reasons stated in Pretrial Order No. 290. Accordingly, this order focuses on Monsanto's arguments about Braunstein's "ruling out" of non-Roundup risk factors.

In *Bulone*, the plaintiff was exposed to jet fuel—which the parties agree contains certain likely carcinogens, including benzene—during service in the Navy. In isolation, Braunstein's discussion of the jet fuel issue in his expert report or his deposition is not unreliable. Braunstein devotes part of his expert report to a discussion of the literature on jet fuel, in which he discusses scientific literature about its carcinogenicity. And he rules out jet fuel on the grounds that the literature primarily suggests a link between jet fuel and cancers other than NHL. *See* Braunstein Report (*Bulone*) at 6; Braunstein Dep. (*Bulone*) at 54:2–11. But while his *reasoning* has been apparently consistent throughout the litigation, Braunstein's *conclusions* about jet fuel have not been. His initial expert report stated that that jet fuel "cannot be ruled out as [a] contributory factor"; an update to that report changed that conclusion and purported to rule out jet fuel conclusively; then, at this deposition, Braunstein returned to the view that jet fuel could not be entirely ruled out. *See* Hsu Decl., Ex. D, 2022 Braunstein Report (Dkt. No. 17598-5) at 12; Hsu

Decl., Ex. B, 2023 Braunstein Report ("Braunstein Report (*Bulone*)") (Dkt. No. 17598-3) at 6; Hsu Decl., Ex. C, Braunstein Dep. (*Bulone*) at 62:7–9. Braunstein's efforts to explain these inconsistent positions were not entirely convincing. Essentially, he tried to finesse the meaning of his different statements to suggest that they weren't actually incompatible—that in some instances he was talking about whether jet fuel can cause NHL in general, and in other instances he was talking about whether he thought it caused Bulone's NHL. *See* Hearing Tr. at 24:23–26:3. At the hearing, he landed on the conclusion that jet fuel "can't be ruled out with a hundred percent certainty," although it is merely "possible, but not probable" that it played a causal role. *See id.* at 28:13–14; 30:15–18. So, Braunstein said, the risk factor should be given less weight than Bulone's extensive exposure to glyphosate. *See id.* at 29:2–4.

Braunstein's deposition testimony doesn't exactly match the retroactive characterization of his opinions that he gave at the *Daubert* hearing. *See* Braunstein Dep. (*Bulone*) at 54:2–11 ("So I would say that I can't rule it out entirely, but that the majority of the literature, you know, points toward an association with different types of cancers than what he developed. But depending upon the nature of the exposure and the benzene and whether he used any protective gear which I'm not aware, you know, that might impact my opinion, but I can't rule out entirely that benzene exposure from jet fuel could have contributed."). But it is at least true that in the deposition, too, Braunstein took the position that jet fuel exposure "can't be a hundred percent ruled out," but should nevertheless be regarded as a much less serious risk factor than Roundup. *See id.* at 62:1–6.

In the end, Braunstein has not fully explained his changing views, and this is a serious weakness that casts doubt on his credibility. But it isn't so profound a weakness as to warrant his exclusion. Performing a differential diagnosis "do[es] not require that an expert be able to identify the sole cause of a medical condition in order for his or her testimony to be reliable. It is enough that a medical condition be a substantial causative factor." *Messick v. Novartis*Pharmaceuticals Corp., 747 F.3d 1193, 1199 (9th Cir. 2014). So while Braunstein hasn't quite accounted for the discrepancies in his testimony, it is not as if his position has fundamentally

shifted: he has maintained that Roundup is a substantial causative factor, that Bulone's exposure to jet fuel must be considered as part of the differential diagnosis, that Bulone's exposure to jet fuel was relatively minor compared with his exposure to Roundup, and that the jet fuel exposure does not alter Braunstein's conclusion about the likely causes of Bulone's NHL. Braunstein's view of the jet fuel issue is based on reasoned interpretations (uncontroverted by Monsanto) of the scientific literature. A factfinder could certainly determine that the inconsistencies justify giving Braunstein's testimony in *Bulone* less weight, but they do not demand exclusion.

In Caccia, Monsanto argues that Braunstein has failed to reliably rule out obesity. Caccia's current medical records report a BMI of 30, which is just below the mark at which one is considered "obese." But Caccia's BMI has fluctuated throughout his life, sometimes moving above 30 for periods of time. Braunstein nevertheless rules out obesity for what amount to two reasons. First, he says literature associating BMI and NHL show the strongest associations only for BMIs above 30 and, in particular, for morbid obesity, meaning a BMI above 40. Hsu Decl. Ex. C, Braunstein Report (Caccia) (Dkt. No. 17599-4) at 9; Hsu Decl. Ex. D, Braunstein Dep. (Caccia) (Dkt. No. 17793-2) at 37:10-14. On this basis, he says that Caccia's borderline obesity shouldn't be considered a significant risk factor. See Braunstein Report (Caccia) at 14 ("While one may find literature suggesting a relationship between obesity, for example, and NHL, none of these are more likely to have increased Mr. Caccia's risk for DLBCL than his frequent and longstanding exposure to [glyphosate]."). Second, Braunstein pointed out that Caccia was first diagnosed with NHL in 1996, at which time he does not appear to have been obese at all. Hearing Tr. at 33:1–33:9. Braunstein had a second diagnosis in 2019, and it was in the years leading up to this diagnosis that his BMI sometimes fluctuated above 30. See id. at 33:10–34:25. Braunstein's handling of the obesity issue—while again it is certainly subject to some doubt—is not scientifically unreasonable. Braunstein relies on the literature; he has consistently acknowledged that obesity is a risk factor; he accurately characterized Caccia's history of obesity; and he pointed to various aspects of the literature and Caccia's medical history that, together, led him to conclude that obesity could be ruled out as a cause of Caccia's diagnoses.

His ruling out process might be somewhat shaky, but it is admissible.

Braunstein's ruling out of the other risk factors in both cases requires less comment. It is within the bounds of admissible testimony. With respect to risk factors like gender, ethnicity, and geography, Braunstein suggested that he considered these risk factors to be categorically different than toxic exposures or lifestyle traits associated with NHL. He noted, for example, that he regarded being white, male, and living in New York not as potential causes of Bulone's NHL, but as simply putting Bulone "within the demographic spectrum in which CLL is more common." See Braunstein Dep. (Bulone) at 48:24–25; see also Braunstein Report (Bulone) at 6 (opining that other factors are needed to explain the "differences in the geographic distribution of NHL," and that these factors are "uncertain but may include lifestyle, exposures such as infections, and ethnic differences"). Braunstein rules out family history by arguing that, while Bulone and Caccia both had relatives who had cancer, none had a type of cancer that is associated with an increased familial risk of NHL. See Braunstein Report (Bulone) at 6 ("CLL does not occur with a familial pattern outside of rare hereditary syndromes that includes additional cancer types. As such, it is not surprising that Mr. Bulone reported no family history of hematologic malignancies. He does not have family history suggestive of a familial pattern of CLL."). Braunstein considered and ruled out Caccia's exposure to gasoline, which Monsanto asserts contains carcinogenic benzene (like jet fuel). To do so, Braunstein—relying on the opinion of Dr. William Sawyer, a toxicology expert retained by Caccia—reasoned that that the potential benzene exposure from ordinary gasoline or diesel fuels, even over many years, is far too low to register any effect recognized in the literature. DeVoto Decl. Ex. D, Sawyer Dep. at 106:4–109:13. There is nothing inherently suspect about Braunstein's reliance on Sawyer's admissible toxicology opinion. See, e.g., In re Toyota Motor Corp. Unintended Acceleration Mktg., Sales Practices, and Prods. Liab. Litig., 978 F. Supp. 2d 1053, 1066 (C.D. Cal. 2013) ("[E]xpert opinions may find a basis in part on what a different expert believes on the basis of expert knowledge not possessed by the first expert.") (quotation marks omitted). Finally, Braunstein declined to rule in "impaired fasting glucose" as a possible risk factor, since no

literature associates that symptom alone—as opposed to diabetes, with which Caccia was never diagnosed—with NHL. Braunstein's differential diagnosis, although shaky in some respects, is

within the bounds of admissible expert testimony.

II

Monsanto moves to exclude Dr. James Clark, who has prepared a report in the *Bulone* case that discusses the plaintiff's exposure and calculates a range of "exposure days." That analysis is then relied on by Braunstein in part of his specific causation analysis. In substance, Monsanto's attack on Clark is the same as its attack on Dr. Herrick, the exposure days expert in

the Cotter, Nelson, and Canning cases. Clark is admissible for the reasons stated in the order

denying Monsanto's motion to exclude Herrick. See Pretrial Order No. 290 at 1-5.

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Monsanto renews its motion to exclude Dr. William Sawyer, an expert who offers opinions about the plaintiff's exposure to Roundup and other possible carcinogens in the *Caccia* case. The motion is denied, subject to the limitations imposed on Sawyer's testimony in earlier rulings. *See* Pretrial Order No. 201; *accord* Pretrial Order No. 260 (Dkt. No. 14417).

In the absence of settlement, a suggestion of remand will issue in the *Caccia* case roughly two weeks from the date this order is filed.

IT IS SO ORDERED.

Dated: May 6, 2024

VINCE CHHABRIA United States District Judge

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