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BLOG

Paraquat Litigation Gets in the Weeds of Expert Reliability

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Experts designated in products liability cases continue to face intensifying scrutiny by courts, as recently reflected in the Southern District of Illinois's analysis *In re Paraquat Products Liability Litigation*. In that multidistrict litigation, over 5,000 plaintiffs asserted that they had developed Parkinson's disease because of their exposure to an herbicide called "paraquat." Chief U.S. District Judge Nancy Rosenstengel granted summary judgment in favor of the defendants in four cases following the exclusion of the plaintiffs' expert testimony.[1]

To establish the epidemiological evidence for the causal relationship between paraquat and Parkinson's disease, plaintiffs retained just one expert, Dr. Martin Wells.[2] Both Federal Rule of Evidence 702 and *Daubert v. Merrell Dow Pharmaceuticals*, *Inc.*, 509 U.S. 579 (1993) require that "the [expert's] testimony is the product of reliable principles and methods." The Southern District of Illinois found Dr. Wells had failed to apply the same level of intellectual rigor to his work in [these cases] … that would be required of him and his peers in a non-litigation setting," and thus his testimony did not meet this standard.[3]

Ultimately, it was the flaws in Dr. Wells's methodology, and not his conclusions, that led to the exclusion of his testimony.[4] As detailed in the April 17, 2024 opinion, Dr. Wells initially considered a set of 36 epidemiological studies,[5] but then conducted a meta-analysis of only seven of those studies to prove causation. The court found that Dr. Wells's stated methodology of reviewing the relevant studies "holistically," which "excluded a significant amount of relevant information from his meta-analysis" and did not use objective criteria, lacked clarity.[6] Further, by not establishing a set of predefined rules, he failed to follow generally accepted scientific standards and increased the meta-analysis's vulnerability to bias.[7]

Dr. Wells did employ a recognized "weight of the evidence approach," but he failed to objectively evaluate the studies he ultimately selected for his meta-analysis. He later tried to justify the studies he had chosen for the meta-analysis during deposition, but the court found this "post hoc methodology" to be "the very antithesis of a systematic review," lacking "transparency and scientific objectivity."[8] Put simply, Dr. Wells engaged in cherry-picking.[9] The Court concluded that although there was "no doubt that systematic review and meta-analysis are well-accepted methodological tools of the scientific community … Rule 702 requires more than the label of a reliable methodology."[10]

Finally, the Court found that Dr. Wells's opinion was essentially unsupported by the scientific community. When asked "whether any peer-reviewed publication had found a causal relationship between paraquat exposure and Parkinson's disease," plaintiffs' counsel was only able to identify a single article.[11] Upon review, the court concluded that the article was nothing more than "an advocacy piece, [and] not a scientific analysis of the causal relationship between paraquat exposure and Parkinson's disease."[12] Critical to its analysis, the court noted that this type of "isolation from the scientific community triggers significant reliability concerns,"[13] which "[t]he Seventh Circuit and courts around the country view … as an evidentiary red flag."[14]

Accordingly, the court excluded Dr. Wells's testimony. And because Dr. Wells was the plaintiffs' only expert and provided the only evidence of causation, the court granted the defendant's motion for summary judgment.

This case underscores a growing trend among courts to intensify scrutiny on expert reliability and serves as a cautionary tale for parties navigating the intersection of law and science in complex litigation scenarios. Parties should note the rising costs and time required for thorough vetting of experts and their methodologies for future litigation.

Summer Associate Eliana Marshall also contributed to this blog post.

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[1] *See In re Paraquat Products Liability Litigation*, No. 3:21-MD-3004-NJR, 2024 WL 1659687 (S.D. Ill. Apr. 17, 2024) ("Daubert order"). This order is under appeal. *See Keith Fuller, et al. v. Syngenta Crop Protection, LLC, et al.*, No. 24-1868 (7th Cir. May 17, 2024). Initially, there were six member cases selected for case-specific discovery, but the plaintiffs opted to voluntarily dismiss two of them. *See Walkington et al v. Syngenta AG et al.*, No. 3:21-pq-00601-NJR (Doc. 14); *Marx v. Syngenta Crop Protection LLC et al.*, 3:21-pq-00922-NJR (Doc. 25); *see also In re Paraquat Products Liability Litigation*, No. 3:21-MD-3004-NJR, 2023 WL 10478347, at *2 (S.D. Ill. May 15, 2023).

[2] Daubert Order at *1.

[3] *See generally Daubert v. Merrell Dow Pharms., Inc.,* 509 U.S. 579 (1993); Fed. R. Evid. 702.

[4] Daubert Order at *40.

[5] *Id.* at *10.

[6] *Id.* at *16; *id.* at *26.

[7] *Id.* at *26.

[8] *Id.* at *26.

[9] *Id.* at *37.

[10] *Id.* at *33.

[11] *Id.* at *40.

[12] *Id.*

[13] *Id.* at *41.

[14] *Id.*
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