

**UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF COLUMBIA**

**BRUCE BUNTING, et al.,**

Plaintiffs,

v.

**DISTRICT OF COLUMBIA CVS  
PHARMACY, LLC,**

Defendant.

Civil Action No. 22-cv-766

**MEMORANDUM OPINION**

Plaintiffs Dr. Bruce Bunting and Jessie Brinkley (“Plaintiffs”) bring this suit against Defendant District of Columbia CVS Pharmacy, LLC (“CVS”) for damages arising out of personal injuries that Dr. Bunting allegedly suffered during an incident at CVS’ premises in Northwest, Washington, D.C. (the “CVS Store”). ECF No. 1-1 at 1.

Before the Court is the Plaintiffs’ Motion to Strike All Opinion Testimony of Defendant’s Expert Witness Alexandra Maddox (“Motion”). ECF No. 45. For the following reasons, the Court **DENIES** Plaintiffs’ Motion.

**FACTUAL SUMMARY**

The Plaintiffs allege that on December 24, 2020, Dr. Bunting slipped and fell outside the automatic exit doors at the CVS Store. ECF No. 1-1 at 2. Dr. Bunting claims that he slipped on “slick and wet concrete that resulted from a mixture of salt and water.” *Id.* at 3. The Plaintiffs allege that CVS created the slick surface by “spreading [] the salt on a wet and warm day, which caused it to make the ground unsafe and slippery.” *Id.* at 3. According to the Plaintiffs, the CVS Store was “negligently kept, maintained, and operated, creating an unreasonable risk of injury to invitees,” including Dr. Bunting. *Id.* at 4. As a result of the fall, Dr. Bunting allegedly suffered a

“closed fracture dislocation of his right ankle” that required surgery. *Id.* at 3. The Plaintiffs further allege that CVS’ negligence caused Dr. Bunting to suffer “serious bodily and emotional injuries and damages, including physical pain, suffering, emotional distress, inconvenience, loss of the enjoyment of life, and medical expenses.” *Id.* at 4.

One of CVS’ designated expert witnesses is Alexandra Maddox, a mechanical engineer and biomedical engineer. ECF No. 33 at 4. Maddox’s expert report details her investigation, including slip resistance testing she conducted on January 19, 2023 on the incident walkway surface at the CVS Store, and provides her opinions regarding the slip resistance of the walkway surface. ECF No. 33-5. As part of her slip resistance testing, Maddox used an English XL Variable Incident Tribometer (“VIT”), a device used for slip resistance testing in different environments. *Id.* at 9, 14. A VIT is designed to yield coefficient of friction (“COF”) measurements that correlate to the likelihood of slip incidents occurring on a given surface. *Id.* at 14. Maddox used a VIT that Excel Tribometers, the manufacturer of the English XL VIT, calibrated three days before her field test. *Id.* at 9. Maddox then field calibrated the VIT the day before her field test. *Id.*

According to CVS, Maddox’s VIT was validated and calibrated in accordance with American Society for Testing and Materials (“ASTM”) standard F2508. ECF No. 49 at 1, 2. Maddox also applied American National Standards Institute (“ANSI”) standard A1264.2, which recommends a COF of 0.5 or greater for walking surfaces in the workplace under dry or wet conditions. ECF No. 33-5 at 4, 14. CVS asserts that Maddox “obtained slip resistance measurements under both wet and dry scenarios” pursuant to ANSI A1264.2. ECF No. 49 at 16. Consistent with the VIT device manual, Maddox used only water for the wet testing. *Id.*

Maddox concluded that the walkway surface had a COF of  $0.64 \pm .03$  when dry and  $0.51 \pm .03$  when wet.<sup>1</sup> ECF No. 33-5 at 9. According to Maddox, the salt and water solution that Dr. Bunting described slipping on “is less lubricating than water on a walking surface, and creates greater slip resistance than water alone.” *Id.* at 16. Maddox therefore concluded, among other things, that “the incident walking surface was reasonably safe for pedestrian traffic” and “[t]here is insufficient evidence to support the claim that the incident walkway caused [Dr. Bunting’s] fall.” *Id.*

## **PROCEDURAL HISTORY**

The Plaintiffs filed a Complaint on February 14, 2022 in the Superior Court of the District of Columbia. ECF No. 1 at 1. The Complaint includes three counts: (1) negligence – premises liability; (2) negligence *per se*; and (3) loss of consortium. ECF No. 1-1 at 4–8. The Plaintiffs seek the following relief: (1) compensatory damages in the amount of \$2,000,000; (2) payment of all costs associated with this case; (3) pre- and post-judgment interest; and (4) “such other and further relief as this Court deems proper.” *Id.* at 8. CVS removed the case to this Court on March 21, 2022 based on diversity of citizenship. ECF No. 1.

## **ANALYSIS**

### **I. Standard of Review**

The Plaintiffs seek to exclude all of Maddox’s opinion testimony pursuant to Rule 702 of the Federal Rules of Evidence, *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579 (1993), and *Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. 137 (1999). ECF No. 45 at 1. Under Rule 702, a

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<sup>1</sup> As part of their response to CVS’ Motion for Summary Judgment (ECF No. 47), the Plaintiffs assert that after the close of discovery, CVS produced Maddox’s field notes that show that the area “directly outside the exit door where Dr. Bunting slipped and fell had an average coefficient of friction of 0.49 when wet.” ECF No. 52 at 1.

district court “must determine as an initial matter whether the proffered witness is qualified to give the expert opinion he seeks to offer.” *Moore v. Napolitano*, 926 F. Supp. 2d 8, 16-17 (D.D.C. 2013). The Court may then admit a qualified expert’s testimony only if it is both relevant and reliable. *Id.* at 17.

#### **A. Expert Qualification Under Rule 702 and *Daubert***

As a general matter, “trial courts have broad discretion when deciding whether a witness qualifies as an expert.” 29 Charles Alan Wright & Arthur R. Miller, *Federal Practice and Procedure* (“Wright and Miller”) § 6264.2 (2d ed. 2023). Rule 702 recognizes five specific bases for qualifying an expert: knowledge, skill, experience, training, and education. Fed. R. Evid. 702. Background in just one of these bases is sufficient, but if an expert has some background in multiple bases, the Court may consider the totality of the witness’s background. Wright and Miller § 6264.1. No matter which bases are at issue, the expert’s background must match the subject matter of the expert’s testimony. *Id.* § 6264.2.

A qualified expert may testify “if the proponent demonstrates to the court that it is more likely than not that,” among other things, “the expert’s scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue.” Fed. R. Evid. 702(a). The degree of knowledge, skill, experience, training, or education required to qualify an expert witness “is only that necessary to insure [sic] that the witness’s testimony assist the trier of fact.” *Khairkhwa v. Obama*, 793 F. Supp. 2d 1, 11 (D.D.C. 2011) (internal quotation marks omitted), *aff’d*, 703 F.3d 547 (D.C. Cir. 2012). A trial court may not exclude expert testimony “simply because [it] does not deem the proposed expert to be the best qualified or because the proposed expert does not have the specialization that the court considers most appropriate.” *Heller v. D.C.*, 952 F. Supp. 2d 133, 140 (D.D.C. 2013). To that end, the relevant inquiry with respect to an expert’s qualifications is not her qualifications in the abstract, but

“whether those qualifications provide a foundation for a witness to answer a *specific question*.” *Berry v. City of Detroit*, 25 F.3d 1342, 1351 (6th Cir. 1994) (emphasis added).

In the context of slip-and-fall cases, federal courts have ruled that certified tribometrists are qualified under Rule 702 to offer opinion testimony about the slip resistance of a walkway surface. *See, e.g., Kessler v. NCL (Bahamas) Ltd.*, No. 19-CV-20583, 2019 WL 8128483, at \*4 (S.D. Fla. Dec. 20, 2019); *Ward v. Carnival Corp.*, No. 17-CV-24628, 2019 WL 1228063, at \*4 (S.D. Fla. Mar. 14, 2019); *Michaels v. Taco Bell Corp.*, Civ. No. 10-1051, 2012 WL 4507953, at \*6 (D. Or. Sept. 27, 2012); *Stern v. NCL Bahamas Ltd.*, No. 19-CV-20280, 2020 WL 6820877, at \*5 (S.D. Fla. Sept. 28, 2020).

### **B. Reliability Under Rule 702 and *Daubert***

*Daubert* established the district court’s role as a “gatekeeper[] to exclude unreliable expert testimony.” *U.S. ex rel. Miller v. Bill Harbert Int’l Const., Inc.*, 608 F.3d 871, 894 (D.C. Cir. 2010) (citing *Daubert*, 509 U.S. at 579). In fulfilling its gatekeeper role, a district court has “broad discretion in determining whether to admit or exclude expert testimony.” *Id.* Although district courts may apply various factors to assess reliability, the Supreme Court provided the following five factors to guide the inquiry: (1) whether the technique has been or can be tested; (2) whether the technique has a known or potential rate of error; (3) whether the technique has been subject to peer review and publishing; (4) the existence and maintenance of standards controlling the technique’s operation; and (5) whether the technique has been generally accepted within the relevant scientific community. *Daubert*, 509 U.S. at 593–94. Under *Daubert*, a trial court must focus “solely on principles and methodology, not on the conclusions that they generate.” *Id.* at 595. Further, the Court need only determine whether the expert’s science “has the earmarks of validity” and not whether it is, in fact, scientifically valid. Wright & Miller § 6267.

This Court has stated that “[i]n considering Rule 702 motions, the court assumes only a limited gate-keeping role directed at excluding expert testimony that is based upon subjective belief or unsupported speculation.” *Heller*, 952 F. Supp. 2d at 140 (internal quotation marks omitted). Further, the Court “is supposed to screen the jury from unreliable nonsense opinions, but not exclude opinions merely because they are impeachable.” *Alaska Rent-A-Car, Inc. v. Avis Budget Grp., Inc.*, 738 F.3d 960, 969 (9th Cir. 2013). According to the D.C. Circuit, expert testimony is not reliable when it is based on “guesswork, speculation, and conjecture.” *Joy v. Bell Helicopter Textron, Inc.*, 999 F.2d 549, 568 (D.C. Cir. 1993). This Court has stated that “[e]xpert testimony should be excluded *only* when it is based on ‘guesswork, speculation, and conjecture.’” *United States v. Slough*, 22 F. Supp. 3d 25, 29 (D.D.C. 2014) (quoting *Joy*, 999 F.2d at 568) (emphasis added). To that end, “[t]he presumption under [Rule 702] is that expert testimony is admissible once a proponent makes the requisite threshold showing; further disputes go to weight, not admissibility.” *United States v. Machado-Erazo*, 950 F. Supp. 2d 49, 52 (D.D.C. 2013) (citing *Daubert*, 509 U.S. at 588).

With respect to measuring slip resistance, a VIT is “commonly relied on by experts in slip and fall cases all over the United States.” *Piazza v. Target Corp.*, No. 21-CV-835, 2022 WL 16923867, at \*1 n.1 (M.D. Fla. Nov. 14, 2022). Indeed, numerous federal courts have ruled that VIT testing is reliable under Rule 702. *See, e.g., id.*; *Barnes v. Malinak*, 320 F.R.D. 130, 139 (E.D. Tenn. 2017); *Darby v. Carnival Corp.*, No. 19-21219-CIV, 2021 WL 6428039, at \*10 (S.D. Fla. Nov. 23, 2021), *adopted by*, No. 19-21219-CIV, 2022 WL 112193 (S.D. Fla. Jan. 12, 2022); *Armas v. Costco Wholesale Corp.*, No. 21-cv-01528, 2022 WL 17982239, at \*5 (D. Nev. Nov. 30, 2022); *Feuerstein v. Home Depot, U.S.A., Inc.*, No. 12-cv-01062, 2014 WL 2616582, at \*3 (D. Ariz. June 12, 2014); *Atkinson v. Carnival Corp.*, No. 20-20317-CIV, 2021 WL 8534238, at \*4

(S.D. Fla. Nov. 29, 2021); *Steffen v. Home Depot U.S.A., Inc.*, No. CV-13-199, 2014 WL 1494108, at \*6 (E.D. Wash. Apr. 16, 2014). At least one federal court has based its denial of a Rule 702 motion challenging the reliability of VIT testing in part on the fact that the expert’s VIT passed ASTM F2508 validation. *See Armas*, 2022 WL 17982239, at \*5.

In denying Rule 702 motions that challenge the reliability of VIT testing, federal courts have ruled that any alleged defects in the methodology of VIT testing go to the weight of the expert’s opinion, not its admissibility. *See, e.g., Barnes*, 320 F.R.D. at 139; *Atkinson*, 2021 WL 8534238, at \*4; *Darby*, 2021 WL 6428039, at \*10. For example, although the court in *Barnes* noted that it was “concerned that [the expert] did not use the tribometer as the manufacturer intended and was not certain when the device had been calibrated,” it nonetheless denied the Rule 702 motion because ““vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence.”” 320 F.R.D. at 139 (quoting *Daubert*, 509 U.S. at 596).

## **II. The Plaintiffs’ Motion to Strike**

### **A. Maddox Is Qualified to Offer Opinion Testimony Regarding the Slip Resistance of the Walkway Surface at the CVS Store.**

The Plaintiffs argue that Maddox is not qualified under Rule 702 to provide expert testimony regarding the slip resistance of the walkway surface at the CVS Store. ECF No. 45-1 at 17–19; ECF No. 51 at 1–3. In support of this argument, the Plaintiffs assert that “[a]ccording to her CV, Ms. Maddox is not a licensed professional engineer, a certified safety specialist, a certified Variable Incidence Tribometrist, or even a human factors expert and has no experience in testing or evaluating walking surfaces for slipperiness.” ECF No. 45-1 at 17. The Plaintiffs also assert that Maddox’s ongoing work as a Ph.D. student is not related to walkway surfaces or testing of materials. *Id.* The Plaintiffs further argue that Maddox’s Occupational Safety and Health

Administration (“OSHA”) accreditations in general industry standards do not reflect an expertise in walkway safety because they were minimally focused on walkway safety and fall protection. ECF No. 51-1 at 2.

In support of their argument, Plaintiffs cite a slip-and-fall case in which the expert “was a registered Professional Engineer, Certified Safety Professional, and Certified Variable Incidence Tribometrist, who [held] a [m]aster’s [d]egree in Industrial Safety Engineering and [a] Ph.D. in Interdisciplinary Engineering ‘with a focus on Workplace, Premises, Product Safety, Human Factors, and Industrial Engineering.’” ECF No. 45-1 at 17 (quoting *Ruston v. Office Depot, Inc.*, No. 10-CV-05057, 2011 U.S. Dist. LEXIS 119558, at \*3 (W.D. Mo. Oct. 17, 2011)). The Plaintiffs also cite cases outside the slip-and-fall context in which an expert appeared to be well educated, have extensive experience in a certain field, or both, but nonetheless failed to qualify under Rule 702 because the expert did not possess the requisite knowledge, skill, experience, training, or education in the relevant field. *Id.* at 18–19 (citing *Meridia Products Liability Litigation v. Abbott Laboratories*, 447 F.3d 861, 868–69 (6th Cir. 2006); *Brown v. Raymond Corp.*, 432 F.3d 640, 641, 649–50 (6th Cir. 2005); and *Advanced Med. Optics, Inc. v. Alcon Inc.*, No. 03-1095, 2005 U.S. Dist. LEXIS 5803, at \*13 (D. Del. Apr. 7, 2005)).

CVS argues that Maddox is qualified under Rule 702 to offer expert opinions on the slip resistance and reasonable safety of the walkway surface because, contrary to the Plaintiffs’ assertion, Maddox is a Certified English XL Tribometrist (“CXLT”) and “possesses a valid CXLT Certificate.” ECF No. 49 at 7. This certification process included classroom and field training provided by the device manufacturer and required Maddox to demonstrate proper operational technique of the device in both a written examination and a field proficiency test. *Id.* at 7–8. In light of Maddox’s CXLT certificate, CVS argues that “when the ‘specific question’ relates to the



slip resistance of a walkway surface, the federal district courts are uniform in finding that a certified tribometrist is qualified to offer those opinions.” *Id.* at 9 (citing *Kessler*, 2019 WL 8128483, at \*4; *Michaels*, 2012 WL 4507953, at \*6; *Stern*, 2020 WL 6820877, at \*5). It would be “illogical,” according to CVS, “for this Court to conclude that Ms. Maddox is not qualified to perform slip resistance testing using a VIT when the company that manufactures the very device that she used has certified that she is qualified to do so.” *Id.*

According to CVS, “Rule 702 does not require an expert witness to possess a Ph.D. or to be a certified safety specialist to be qualified to render expert opinions on the slip resistance of a walkway surface.” *Id.* at 8 (internal quotation marks omitted). As a result, Maddox “more than meets the qualifications necessary to testify with respect to the testing she performed with a device she is certified to use, and the conclusions that she reached as a result of her testing and investigation.” *Id.* at 9. CVS also notes that Maddox “has a bachelor’s degree in biomedical engineering, has nearly completed her Ph.D., and has completed two accredited courses in OSHA general industry standards, including walkway safety.” *Id.* at 8.

The Court finds that Maddox is qualified under Rule 702 to offer opinion testimony regarding the slip resistance of the walkway surface at the CVS Store. The Plaintiffs are incorrect to suggest that Maddox is not a CXLT. Maddox obtained her CXLT certification “following classroom and field training provided by” the manufacturer of the VIT that Maddox later used to perform a field test of the walkway surface at the CVS Store. ECF No. 49-4 at 1–3. Maddox then detailed the results of that field test in her expert report and explained why those results led her to conclude, among other things, that the walkway surface “was reasonably safe for pedestrian traffic.” ECF No. 33-5 at 16. Importantly, Maddox’s certification applies not only to her operation of the VIT, but also to her “interpret[ation] of the results obtained in field tests utilizing the VIT.”

ECF No. 49-4 at 2. Given that the slip resistance of the walkway surface at the CVS Store is directly relevant to the Plaintiffs' negligence claims, Maddox's CXLT certification is sufficient to ensure that her testimony will "assist" the trier of fact under Rule 702. *See Khairkhwa*, 793 F. Supp. 2d at 11 (D.D.C. 2011); *see also* ECF No. 48-1 at 22 (providing Plaintiffs' expert's opinion that Dr. Bunting's injury was caused by "a very slippery and an unreasonably unsafe and dangerous walkway surface condition.").

As CVS notes, several federal courts have ruled that a certified tribometrist is qualified under Rule 702 to offer opinion testimony about the slip resistance of a walkway surface. *See, e.g., Kessler*, 2019 WL 8128483, at \*4; *Ward*, 2019 WL 1228063, at \*4; *Michaels*, 2012 WL 4507953, at \*6; *Stern*, 2020 WL 6820877, at \*5. Plaintiffs do not identify any case in which a court has ruled that a certified tribometrist is not qualified to offer opinion testimony about the slip resistance of a walkway surface.

The outcome does not change merely because the experts in cases upon which CVS relies may have had stronger credentials than Maddox in this particular area. For example, the expert in *Michaels* had "substantial experience as a consulting engineer" in addition to being a certified tribometrist. 2012 WL 4507953, at \*6. Similarly, the expert in *Stern* was a certified tribometrist who also specialized in slips, trips, falls, and industrial and premises safety, participated in crash investigations, and completed continuing education courses in accident reconstruction. 2020 WL 6820877, at \*5. This Court may not, however, exclude Maddox's testimony simply because it believes Maddox is not "the best qualified" or because Maddox "does not have the specialization that the court considers most appropriate." *Heller*, 952 F. Supp. 2d at 140. Maddox's status as a CXLT renders her able to help the jury determine the slip resistance of the walkway surface at the

CVS Store and, in turn, whether CVS was negligent in its treatment of the walkway surface. *See* Fed R. Evid. 702(a). Maddox, therefore, meets the qualification standard under Rule 702.

**B. Maddox’s Opinion Testimony Meets the Threshold Requirements for Reliability.**

Plaintiffs also argue that the Court should exclude all of Maddox’s opinion testimony because Maddox’s VIT testing methodology is “[u]nreliable [f]lawed [s]cience.” ECF No. 45-1 at 9. Plaintiffs make several specific arguments regarding reliability. *First*, they argue that ASTM F2508 cannot be used to establish a safe threshold value for a walkway surface because: (1) it is based on VIT measurements from young adults walking in a straight path on a level surface, whereas Dr. Bunting was 73 years old at the time of the incident and was stepping over a door onto a slanted surface; (2) its test subjects walked in shoes that are not representative of all shoes; (3) its use does not imply proper validation and calibration under all combinations of test materials and walkway surfaces; and (4) it does not purport to address all safety concerns associated with its use. ECF No. 45-1 at 10–12.

*Second*, Plaintiffs assert that recent studies and publications, including by ASTM, demonstrate the unreliability of VIT testing. *Id.* at 12–14. *Third*, the Plaintiffs note that, in 2006, ASTM withdrew ASTM F1679—a VIT testing standard that ASTM originally published in 2004—because it lacked precision and bias testing. ECF No. 45-1 at 14–15. According to Plaintiffs, ASTM F1679’s withdrawal illustrates that VIT testing is unreliable. *Id.* at 15. *Fourth*, Plaintiffs assert that Maddox has not demonstrated that she complied with ASTM’s calibration requirements to use a VIT. *Id.* at 16–17. Plaintiffs cite to *Kill v. City of Seattle*, No. 70767-1-I, 2014 Wash. App. LEXIS 2094 (Ct. App. Aug. 25, 2014), in which the court ruled that an expert’s opinion testimony was unreliable because, among other things, the expert’s VIT “was not properly

calibrated under the ASTM F2508 standard at the time of [the expert's] second field test.” *Id.* at \*14; ECF No. 45-1 at 17; ECF No. 51 at 7.

In Maddox’s defense, CVS cites to various federal courts that have ruled that VIT testing is reliable under Rule 702. ECF No. 49 at 10–11. CVS also rejects the Plaintiffs’ suggestion that ASTM F2508 cannot be used to determine the reasonable safety of a walking surface. *See id.* at 11–13. According to CVS, ASTM F2508 “does not purport to establish what does and what does not constitute a safe walking surface.” *Id.* at 12. Instead, it “is a control that governs the . . . operation of tribometers to be able to accurately measure the COF value, which, *in turn*, can be used to evaluate the safety of a walkway surface.” *Id.* at 13 (internal quotation marks omitted).

CVS also argues that the studies upon which Plaintiffs rely to assert that VIT testing is unreliable merely recommend that slip resistance measurements account for variability, as Maddox’s measurements did. *Id.* at 18–19. With respect to the Plaintiffs’ argument about ASTM F1679’s withdrawal, CVS notes that Maddox did not rely on this standard and that a federal court rejected this argument in ruling that VIT testing is reliable. *Id.* at 20–21. CVS also asserts, contrary to the Plaintiffs’ suggestion, that the manufacturer of Maddox’s VIT calibrated the device three days before Maddox’s field test and that Maddox herself field calibrated the same device the day before her field test. *Id.* at 13–14. Further, CVS argues that Maddox performed her testing according to the specifications of the VIT manual and her training, yielding “reliable” and “reproducible” results. *Id.* at 15. More generally, CVS argues that Plaintiffs’ attack on Maddox’s conclusions “is more properly characterized as cross-examination material” and “is not a proper basis to seek to exclude her opinions under Rule 702 and/or Daubert.” *Id.* at 21.

Maddox’s VIT testing meets the threshold reliability requirements under Rule 702 and *Daubert*. Federal courts have often denied Rule 702 motions challenging the reliability of VIT

testing. *See, e.g., Barnes*, 320 F.R.D. at 139; *Piazza*, 2022 WL 16923867, at \*1–2; *Darby*, 2021 WL 6428039, at \*10; *Armas*, 2022 WL 17982239, at \*5; *Feuerstein*, 2014 WL 2616582, at \*3; *Atkinson*, 2021 WL 8534238, at \*4; *Steffen*, 2014 WL 1494108, at \*6. Further, Maddox used an ASTM F2508-validated VIT, which strengthens the reliability of her methodology. ECF No. 33-5 at 14; *see Armas*, 2022 WL 17982239, at \*5. Indeed, Maddox’s methodology appears to be even more reliable than the expert’s methodology in *Barnes*, in which the court denied a Rule 702 motion despite acknowledging that “the Court is concerned that [the expert] did not use the tribometer as the manufacturer intended” and that the expert “was not certain when the device had been calibrated.” 320 F.R.D. at 139. Here, in contrast, Maddox performed her testing in accordance with the manufacturer’s manual, and both the manufacturer and Maddox calibrated the VIT within three days of the field test. ECF No. 33-5 at 9; ECF No. 49-4 at 3, Ex. 6 at 18–21.

Significantly, Plaintiffs do not identify any instance in which a federal court has found VIT testing to be an unreliable methodology. To be sure, Plaintiffs do identify one state court case in which the court excluded an expert’s VIT test results. *Britz v. Aria Resort & Casino*, No. A-18-770380-C, 2020 Nev. Dist. LEXIS 111, at \*4 (Jan. 31, 2020). In that case, however, the court provided no explanation or analysis beyond its conclusion that ANSI A1264.2 “is not a standard but a recommendation” and that English XL testing “is not published or peer-reviewed.” *Id.* Without more, this state court decision is insufficient to overcome the extensive federal decisions rejecting Rule 702 challenges to the reliability of VIT testing.

The various arguments Plaintiffs make regarding VIT testing go to the weight of the evidence, not its admissibility. Once a court determines that an expert is qualified under Rule 702, it “assumes only a limited gate-keeping role directed at excluding expert testimony that is based upon subjective belief or unsupported speculation.” *Heller*, 952 F. Supp. 2d at 140 (internal

quotation marks omitted). In this Circuit, expert testimony is not reliable when it is based on “guesswork, speculation, and conjecture.” *Joy*, 999 F.2d at 568.

Plaintiffs’ argument that Maddox’s reliance on ASTM F2508 renders her methodology unreliable is not persuasive. As noted above, federal courts have consistently ruled that VIT testing is reliable, including when the VIT is validated by ASTM F2508. *E.g.*, *Darby*, 2021 WL 6428039, at \*10, *adopted by*, 2022 WL 112193; *Armas*, 2022 WL 17982239, at \*5. Moreover, ASTM F2508 is an “international standard” that is “intended to establish the procedures for validation, calibration, and certification of [VITs].” ECF 45-4 at 1. Maddox, therefore, relied on a standard that is intended to control the operation of VITs, which weighs in favor of reliability under *Daubert*. 509 U.S. at 594 (directing courts to consider “the existence and maintenance of standards controlling the technique’s operation” when evaluating the reliability of a scientific technique). Even if the Court were to accept the Plaintiffs’ assertions that ASTM F2508 is “based on an unrepresentative sample of humans that are nothing like Dr. Bunting,” it cannot be said that Maddox’s testimony is “based upon subjective belief or unsupported speculation.” ECF No. 45-1 at 11–12; *Heller*, 952 F. Supp. 2d at 140.

Similarly, the studies and publications upon which Plaintiffs rely to raise concerns about VIT testing do not support excluding Maddox’s testimony. These sources discuss the need to consider measurement uncertainty when interpreting VIT testing results. *See, e.g.*, ECF No. 45-5 at 1; ECF No. 45-6 at 12. As CVS points out, however, Maddox accounted for uncertainty by testing the surface at different locations and presenting the slip index values as “mean  $\pm$  standard deviation.” ECF No. 45-1 at 12–14; ECF No. 49 at 19; ECF No. 33-5 at 9. To the extent that Plaintiffs disagree with the extent to which Maddox accounted for uncertainty in her conclusions,

Plaintiffs can address this issue through “vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof.” *Daubert*, 509 U.S. at 596.

Plaintiffs’ remaining arguments are unpersuasive. Plaintiffs argue that ASTM’s decision in 2006 to withdraw ASTM F1679 renders Maddox’s testing unreliable, but Maddox did not rely on ASTM F1679 in her report. ECF No. 45-1 at 14–16. Indeed, Plaintiffs do not suggest that any of the standards upon which Maddox relies have been withdrawn. Finally, Plaintiffs assert that Maddox “failed to demonstrate that she had calibrated her [VIT] correctly,” but as discussed above, the manufacturer calibrated Maddox’s VIT three days before the field test and then Maddox field calibrated her VIT the day before the field test. *Id.* at 16; ECF No. 33-5 at 6. Any potential deficiencies in how the manufacturer or Maddox calibrated the VIT go to the weight of the evidence, not its admissibility. *See Daubert*, 509 U.S. at 596.

### **CONCLUSION**

For the foregoing reasons, the Court **DENIES** Plaintiffs’ Motion, ECF No. 45. A separate order will issue.

**SO ORDERED.**

Date: February 7, 2024

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MOXILA A. UPADHYAYA  
UNITED STATES MAGISTRATE JUDGE