UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

In re Elysium Health-ChromaDex Litigation	Civil Case No. 1:17-cv-07394

MEMORANDUM OF LAW IN SUPPORT OF ELYSIUM HEALTH INC.'S MOTION TO EXCLUDE CHROMADEX INC.'S EXPERT REPORTS AND TESTIMONY

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I. INTRODUCTION

ChromaDex Inc. ("ChromaDex") disclosed four expert witnesses: Lance Gunderson (damages); Steven Weisman (FDA regulation); Kurt Hong (clinical studies); and Bruce Isaacson (survey). Each expert's proffered opinion and the bases for them contain numerous shortcomings that render the majority of the opinions inadmissible. In particular, Gunderson premised his damages analysis on assumptions and conclusions that have no factual support and are at odds with the Lanham Act's legal framework for calculating damages. Weisman's opinions are legal conclusions, recitations of ChromaDex's allegations on which Weisman has no specialized knowledge, or unsupported by facts or data. Hong similarly recites ChromaDex's factual allegations without offering any specialized knowledge or expertise, or offers opinions that are not the product of reliable principles and methods. Isaacson's conclusions regarding his surveys do not support any claim or defense in this case, while his materiality survey is so riddled with flaws that it is wholly unreliable.

Accordingly, Elysium respectfully requests that the Court grant its motion to exclude these inadmissible expert opinions.

II. LEGAL STANDARD

Federal Rule of Evidence 702 requires that an expert be qualified to testify on the basis of scientific, technical or other specialized knowledge on a subject matter that "will assist the trier of fact to understand the evidence or to determine a fact in issue." Expert testimony must be excluded if it addresses "lay matters which a jury is capable of understanding and deciding without the expert's help." *Andrews v. Metro N. Commuter R.R. Co.*, 882 F.2d 705, 708 (2d Cir. 1989).

Further, expert testimony must be (1) based on sufficient facts or data, (2) the product of reliable principles and methods, and (3) reliably applied to the facts of the case. *See* Advisory Committee Note to the 2000 Amendment to Evidence Rule 702 (stating intent to codify *Daubert v. Merrell Dow Pharmaceuticals, Inc.* 509 U.S. 579 (1993)). Under *Daubert*, the district court performs a gatekeeping function to ensure that challenged expert testimony "is not only relevant, but reliable." 509 U.S. at 589. The ultimate inquiry for the district court 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." *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 151 (1999). The court should exclude opinion evidence where there is "too great an analytical gap between the data and the opinion proffered." *Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 146 (1997).

The proponent of the expert testimony must prove by a preponderance of the evidence that it is reliable. *Daubert*, 509 U.S. at 592 n.10. "[I]n assessing admissibility, the trial court must determine whether the proffered expert testimony is relevant, *i.e.*, whether it 'ha[s] any tendency to make the existence of any fact that is of consequence to the determination of the action more probable or less probable than it would be without the evidence,' and whether the proffered testimony has a sufficiently 'reliable foundation' to permit it to be considered[.]" *Campbell ex rel. Campbell v. Metro. Prop. & Cas. Ins. Co.*, 239 F.3d 179, 184 (2d Cir. 2001) (quoting F.R.C.P. 401).

III. ARGUMENT

A. Lance Gunderson's Damages Analysis Should be Excluded in its Entirety

Lance Gunderson conducted an incorrect damages analysis. [redacted] Gunderson's improper and unsupported assumptions do not constitute "sufficient facts or data" and he does not apply a reliable method under F.R.E. 702 or *Daubert*. Gunderson's proffered damages analysis should, therefore, be excluded.

1. Gunderson Improperly Assumed 100% Causation

It is well established that a successful plaintiff in a false advertising case is only entitled to damages caused by the violation (*Burndy Corp. v. Teledyne Indus.*, 748 F.2d 767, 771 (2d Cir. 1984)) and that "it is a plaintiff's burden to demonstrate causation between the misleading advertisements and resulting damages." *Dependable Sales & Serv., Inc. v. TrueCar, Inc.*, 311 F. Supp. 3d 653, 656 (S.D.N.Y. 2018). [redacted]

[1] Gunderson's methodology purports to rely on the factors identified in *Panduit Corp. v. Stahlin Bros. Fibre Works, Inc.*, 575 F.2d 1152 (6th Cir. 1978). Gunderson Report at 25. *Panduit*, however, is a 6th Circuit patent case that, to Elysium's knowledge, has never been applied to a false advertising damages analysis. In fact, at least one court expressly refused to apply *Panduit* to a false advertising case. *See Pound v. Airosol Co.*, No. CIV.A.02-2632, 2005 WL 6429719, at *3 (D. Kan. Mar. 31, 2005).

Gunderson's improper and unsupported assumption of [redacted] undermines his entire analysis, which must be grounded in the methods and procedures of scientific, technical, or other specialized knowledge, and must be based on more than subjective belief or speculation. *Daubert*, 509 U.S. at 589-90. In this regard, the *TrueCar* case is instructive. In *TrueCar*, the court excluded plaintiff's expert where—[redacted]—he "failed to demonstrate that 100% of sales made through [defendant] were caused by [the challenged] advertisements" and instead relied on speculation. *Id.*, 311 F. Supp. 3d at 661-662 (excluding expert's opinion on causation and damages). Other courts have similarly excluded testimony where an expert assumed, without analysis, that plaintiff would have made every one of defendant's sales. *See Compania Embotelladora Del Pacifico, S.A. v. Pepsi Cola Co.*, 650 F. Supp. 2d 314, 319 (S.D.N.Y. 2009) (excluding expert testimony that "in a 'but for' world," plaintiff "would have made each and every one of [the] sales that were made by bottlers or distributors other than [plaintiff]"); *Am. Home Prod. Corp. v. Johnson & Johnson*, 682 F. Supp. 769, 771 (S.D.N.Y. 1988) (dismissing false advertising claim where theory of injury relied on the "highly questionable premise[ ]" that a product's entire sales decline "is attributable to false and misleading advertising by [defendant]"); *Verisign, Inc. v. XYZ.com LLC*, 848 F.3d 292, 300-01 (4th Cir. 2017) (upholding exclusion of expert testimony where expert's market share allocation "assume[d] rather than demonstrate[d]" that every lost sale was the result of the alleged false advertising). Gunderson's alternative disgorgement analysis fails for this same reason. *See Salon Fad v. L'Oreal USA, Inc.*, No, 10 Civ. 5063, 2011 WL 4089902, at *11 (S.D.N.Y. Sept. 14, 2011) (requiring plaintiffs to demonstrate "link between the defendants' profits from diversion and the injury" to invoke remedy of disgorgement).

Gunderson attempts to salvage this fatal flaw by claiming that his [redacted] assumption is supported by the report of ChromaDex's survey expert, Bruce Isaacson. Gunderson Tr. at 45:24-50:18. Isaacson's report, however, does not support Gunderson. Isaacson—who surveyed four specific statements (far less than all of the Challenged Statements)—did not examine whether or conclude that there would have been no sales of Basis absent the Challenged

Statements. *See* Caterina Decl., Ex. C ("Isaacson Report") at ¶¶ 18, 129-30 (stating Isaacson's conclusions). In fact, contrary to Gunderson's assumption, Isaacson's survey found that many consumers would be *more likely* to purchase Basis without the Challenged Statements. *See* Caterina Decl., Ex. D ("Isaacson Tr.") at 78:16-79:11.

By assuming causation, Gunderson also ignored factors other than the Challenged Statements that may have caused Elysium's sales of Basis. In particular, Gunderson admitted [redacted] Yet, Elysium sold Basis in 2015 and 2016—[redacted] *See TrueCar*, 311 F. Supp. 3d at 662 (finding expert conclusion that 100% of sales were due to allegedly false statement unsupported where there was "no discernable difference in sales numbers associated with either the commencement or termination of the [] promotion").

[redacted] Rather than overcome Gunderson's fatal flaw, these oversights further render his methodology unreliable. *See Israel v. Springs Indus.*, No. 98 Civ. 5106, 2006 WL 3196956, at *5 (E.D.N.Y Nov. 3, 2006)

("[W]hile an expert need not rule out every potential cause in order to satisfy *Daubert*, the expert's testimony must at least address obvious alternative causes and provide a reasonable explanation for dismissing specific alternate factors identified by the defendant."), *aff'd*, 2007 WL 9724896 (E.D.N.Y. July 30, 2007).

[redacted] Gunderson's opinion is unreliable and should be excluded. *See Nikkal Indus. v. Salton, Inc.*, 735 F. Supp. 1227, 1233 (S.D.N.Y. 1990) (excluding under *Daubert* expert opinion on lost profits in false advertising case that failed to "provide for the impact of other significant factors" which could have affected profits).

2. Gunderson Assumed that 100% of Basis Sales Must be Apportioned to Others as a Penalty

[redacted] The Lanham Act, however, explicitly states that a plaintiff's recovery—whether based on the defendant's profits or plaintiff's damages—"shall constitute compensation ***and not a***

penalty." 17 U.S.C. § 1117(a) (emphasis added); *see also Lyons P'ship, L.P. v. AAA Ent. Inc.*, No. 98 Civ..0475, 1999 WL 1095608, at *10 (S.D.N.Y. Dec. 3, 1999) ("An award of profits under the federal trademark statute constitutes compensation and not a penalty.") (internal quotation omitted).

[redacted] Because Gunderson's methodology rested on these faulty assumptions and improperly punished Elysium, his opinion is inadmissible.

3. Gunderson Assumed that All Basis Customers Would Have Purchased Another NR Product

[redacted] Basis competes with many products outside of the NR market. *See* Caterina Decl., Ex. E ("Alminana Tr.") at 113:20-116:10. ChromaDex did not even consider itself to be solely in the NR supplement market. *See* Caterina Decl., Ex. F (CDX_00127994-138184) at CDX_00138000 (ChromaDex referred to its relevant market as the "anti-aging" market in its SEC

filings). Isaacson, [redacted] also defines the relevant consumer—and thus the marketplace—more broadly, identifying potential consumers of Basis and TruNiagen as those who had or were looking to purchase dietary supplements "to improve cellular health, provide energy, increase endurance, or promote healthy aging, or as likely to purchase such supplements in the next 12 months." Isaacson Report at 19.

[redacted] Gunderson's speculative assumption of why consumers purchase Basis further invalidates his opinion. *See TrueCar*, 311 F. Supp. 3d at 663 (excluding expert testimony that did not account for other competitors in market).

For all the reasons above, Gunderson's entire opinion should be excluded.

B. Steven Weisman's Expert Report Should Be Excluded in Its Entirety

[redacted] Weisman's opinions on these subjects are either legal conclusions, mere recitation of ChromaDex's allegations of which Weisman has no specialized knowledge, or mere speculation not supported by facts or data. In each instance, Weisman's proffered testimony is inadmissible.

1. Weisman Merely Offers Legal Conclusions on FDA Regulations on Dietary Supplements

In Sections III.A through E of his report, Weisman offers testimony consisting entirely of legal conclusions [redacted] *See* Caterina Decl., Ex. G ("Weisman Report") at 3-14. This is not the proper subject for expert testimony. "As a general rule an expert's testimony on issues of law is inadmissible." *United States v. Bilzerian*, 926 F.2d 1285, 1294 (2d Cir.), *cert. denied*, 502 U.S. 813 (1991). "[T]he Court will exclude any . . . pure legal conclusions, such as when [the expert] only interprets the applicable law itself." *Congregation Rabbinical Coll. of Tartikov, Inc. v. Vill. of Pomona*, 138 F. Supp. 3d 352, 400 (S.D.N.Y. 2015), *aff'd sub nom. Congregation Rabbinical Coll. of Tartikov, Inc. v. Vill. of Pomona, NY*, 945 F.3d 83 (2d Cir. 2019); *see also Jones v. Midland Funding, LLC*, 616 F. Supp. 2d 224, 227 (D. Conn. 2009) ("An expert should not be permitted to express an opinion that is merely an interpretation of federal statutes or regulations, as that is the sole province of the [c]ourt.").

2. Weisman's Testimony on Niagen's and Basis's Regulatory Pathways Is Inadmissible

(a) Weisman's Report Largely Restates ChromaDex's Factual Allegations

Sections III.F through H of the Weisman Report consist of factual narrative relating to ChromaDex's allegations regarding Niagen's and Basis's FDA regulatory paths. Weisman Report at 14-20. [redacted]

[redacted] This is not proper expert testimony. *See Haritatos v. Hasbro, Inc.*, No. 6:05 Civ. 930, 2007 WL 3124626, at *2 (N.D.N.Y. Oct. 23, 2007) (precluding expert testimony in false advertising case where, in addition to inadmissible recitations of the law, the remaining "proposed testimony consists of recitations of plaintiff's version of the facts, conclusions based on her application of plaintiff's version of the facts to her version of the law, and various unsupported legal conclusions"). Similarly, Weisman's testimony regarding Basis is inadmissible because it "does no more than counsel for [ChromaDex] will do in argument, *i.e.*, propound a particular interpretation of [Elysium's] conduct." *In re Rezulin Prod. Liab. Litig.*, 309 F. Supp. 2d 531, 551 (S.D.N.Y. 2004) (internal quotation omitted).

(b) Weisman Withdrew His Opinion About the Propriety of Elysium's GRAS for NR

In Section III.I.1 of his report, Weisman opines: [redacted]

[redacted]

Weisman's "opinions are, at best, unhelpful, and, at worst, unfairly prejudicial, because they rest on a faulty assumption" regarding Elysium's advertising. *LVL XIII Brands, Inc. v. Louis Vuitton Malletier S.A.*, 209 F. Supp. 3d 612, 641 (S.D.N.Y. 2016), *aff'd sub nom. LVL XIII Brands, Inc. v. Louis Vuitton Malletier SA*, 720 F. App'x 24 (2d Cir. 2017); *see also Loyd v. United States*, No. 08 Civ. 9016, 2011 WL 1327043, at *5 (S.D.N.Y. Mar. 31, 2011) ("an opinion that rests 'on a faulty assumption' may not be based on 'good grounds' and, therefore, may render the opinion unreliable, ergo inadmissible").

(c) Weisman's Opinions Regarding Elysium's GRAS for PT are Irrelevant

Weisman offers unsubstantiated and irrelevant opinions regarding [redacted] Expert

testimony is properly excluded when the "opinion would not assist the trier of fact in determining the pertinent issue in this case[.]" *LVL XIII Brands*, 209 F. Supp. 3d at 643.

(d) Weisman Merely Speculates Regarding Elysium's Manufacturer Changes and cGMP Compliance

Weisman briefly notes that [redacted]

"Admission of expert testimony based on speculative assumptions is an abuse of discretion." *Boucher v. U.S. Suzuki Motor Corp.*, 73 F.3d 18, 22 (2d Cir. 1996). Weisman's testimony must be excluded as pure speculation and "[b]ecause the danger of confusion substantially outweighs any trifling probative value" of Weisman's proffered opinion. *LVL XIII Brands*, 209 F. Supp. 3d at 643; *see also Tchatat v. City of New York*, 315 F.R.D. 441, 447 (S.D.N.Y. 2016) (excluding expert testimony couched in "tentative" terms such as "may" because little probative value was "far outweighed by the danger that the jury would accord too much weight to such opinions because they come from the mouth of [an expert]").

None of Weisman's purported expert opinions, therefore, satisfy the F.R.E. 702 admissibility requirements.

C. <u>Kurt Hong's Expert Report Should Be Excluded in Its Entirety</u>

Dr. Kurt Hong purports to offer opinions regarding: [redacted]

[redacted] As discussed further below, each of these opinions suffers from one or more critical defects, rendering them inadmissible.

1. Hong's Recitation of NR, PT, and Resveratrol History is Inadmissible

In Sections IV.A and B of his report, Hong offers inadmissible narrative testimony [redacted] Hong's testimony is not "knowledge" under F.R.E. 702 because it relates to factual matters that do not implicate Hong's expertise or first-hand experience and would invade the province of the jury by presenting a narrative that advocates ChromaDex's version of the facts.

As noted above, where expert testimony "simply rehash[es] otherwise admissible evidence about which [the expert] has no personal knowledge, such evidence—taken on its own—is inadmissible." *Highland Capital Mgmt., L.P. v. Schneider*, 379 F. Supp. 2d 461, 468-469 (S.D.N.Y. 2005); *see also Taylor v. Evans*, No. 94 Civ. 08425, 1997 WL 154010, at *2 (S.D.N.Y. Apr. 1, 1997) (excluding portions of expert report which "present[ed] a narrative of the case which a lay juror is equally capable of constructing"); *Haritatos*, 2007 WL 3124626, at *2.

[redacted] Factual information about clinical data or studies, however, "constitutes lay matter that the fact-finder can understand without the assistance of experts, regardless of much experience these witnesses have with clinical trials." *Rezulin Prod. Liab. Litig.*, 309 F. Supp. 2d at 549; *see also Fujifilm Corp. v. Motorola Mobility LLC*, No. 12 Civ. 03587, 2015 WL 757575, at *27 (N.D. Cal. Feb. 20, 2015) (factual narratives by experts are "not excused from this rule merely because [they] involved matters 'technical in nature'"). Such testimony is inadmissible because it "does no more than

counsel [] will do in argument, *i.e.*, propound a particular interpretation[,]" and "is properly presented through percipient witnesses and documentary evidence," not through expert testimony. *Rezulin*, 309 F. Supp. 2d at 551.

Hong, in fact, acknowledged that [redacted] *See LinkCo, Inc. v. Fujitsu Ltd.*, No. 00 Civ. 7242, 2002 WL 1585551, at *1-*2 (S.D.N.Y. July 16, 2002) (where expert's report was based on document review, the "testimony by fact witnesses familiar with those documents would be far more appropriate . . . and renders [the expert witness'] secondhand knowledge unnecessary for the edification of the jury") (citation and internal quotation marks omitted) (alterations in original).

[redacted] rendering this opinion inadmissible "subjective belief or unsupported speculation." *Daubert*, 509 U.S. at 590; *see also Troublé v. Wet Seal, Inc.*, 179 F. Supp. 2d 291, 302-03 (S.D.N.Y. 2001) (excluding expert testimony regarding likelihood of confusion where expert did not have requisite experience because "[w]ithout such experience, his opinion on confusion is merely conjectural").

2. Hong Reaches Several Unsupported Conclusions Regarding Elysium's Studies

Hong's conclusions regarding Elysium's clinical studies lack support. *See* Hong Report at 13-18. [redacted]

[redacted] Dr. Guarente, Elysium's Chief Scientist, did not predict NR and PT to have a synergistic effect on NAD+ levels. Rather, the hypothesized synergistic effect pertains to combining the two ingredients to increase the overall effectiveness of Basis in supporting healthy cellular aging process. As stated in the Dellinger Study (which Hong purportedly reviewed):

> Based on these considerations, the combination of NR and pterostilbene is predicted to synergistically support metabolic health through ***NR providing NAD+*** to all seven sirtuins and ***pterostilbene providing additional activation of SIRT1***. Sirtuins are known to mediate responses to nutritional and environmental signals including the beneficial health effects of calorie restriction.

Caterina Decl., Ex. K ("Dellinger Study") at 2 (emphasis added).

Hong's failure to recognize the predicted synergistic effect renders his opinion regarding the scientific studies relating to such synergy unreliable and, therefore, inadmissible. *Loyd*, 2011 WL 1327043, at *5 (an opinion that rests "on a faulty assumption" is unreliable).

3. Hong's Opinions Regarding Basis Safety Concerns are Unreliable

(a) Impact of PT on LDL Cholesterol

Hong opines that [redacted] His opinion is flawed and unreliable for several

[2] As a preliminary matter, Elysium never claimed that there is a clinically proven synergistic effect between NR and PT. Rather, Dr. Guarente stated "[w]e ***expect*** a synergistic effect [from] combining them," and further explained that it would require decades to be tested and established through clinical trials in humans. *See* Dkt No. 139-24.

reasons. [redacted] In performing its gatekeeping function, the Court should ensure "(1) that the testimony is grounded on sufficient facts or data; (2) that the testimony 'is the product of reliable principles and methods'; and (3) that 'the witness has applied the principles and methods reliably to the facts of the case.'" *Amorgianos v. Nat'l R.R. Passenger Corp.*, 303 F.3d 256, 265 (2d Cir. 2002) (quoting F.R.E. 702). Here, Hong's opinion is not the product of reliable principles and methods because [redacted] In fact, the scientists who conducted and published the Riche Study (which was sponsored by ChromaDex) concluded that "Pterostilbene is generally safe for use in humans up to 250 mg/day." Caterina Decl., Ex. M ("Riche 2013 Study") at 4.

Second, Hong failed to consider facts that demonstrate even ChromaDex does not agree with his opinion, including that: (1) ChromaDex sold PT from April 2010 through July 2018; (2) ChromaDex engaged an independent expert panel that determined that PT was "generally recognized as safe" (GRAS); and (3) ChromaDex relied upon the Riche Study as evidence of PT's safety in its marketing materials (stating "there was no effect of pterostilbene on safety outcomes"). Caterina Decl., Ex. N (ELY_0122972-123047) at 122976, Dkt No, 139-27, Caterina Decl., Ex. O (CDXCA_00017543-71), Caterina Decl., Ex. P (CDX_00006917-20). *See Loyd*, 2011 WL 1327043, at *6 (where absence of infection was central to plaintiff's theory, failure to consider that patient developed pneumonia rendered expert opinion unreliable).

Third, Hong makes an unsupported analytical leap. Although there was a statistically significant increase in LDL levels among certain participants taking Basis, the increase was within normal daily fluctuations and not *clinically* significant. In particular, neither study reported any serious adverse events or any significant differences in non-serious adverse events. *See* Caterina Decl., Exs. K, M. Hong's reliance on these results as the sole basis for his opinion that the LDL increase indicated "significant safety concerns" is unsupported and unreliable. Caterina Decl., Ex. I at 17. "A court may conclude that there is simply too great an analytical gap between the data

and the opinion proffered." *Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 146 (1997) ("Trained experts commonly extrapolate from existing data. But nothing in either *Daubert* or the Federal Rules of Evidence requires a district court to admit opinion evidence that is connected to existing data only by the *ipse dixit* of the expert.").

Fourth, Hong did not apply the same scientific rigor to this opinion as he would in his clinical practice. He did not consider [redacted] Hong's failure to "employ[] in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field" further invalidates his opinion. *Kumho Tire*, 526 U.S. at 152.

Fifth, Hong's opinion [redacted] Hong's personal opinion about what consumers believe is not admissible. *See Playtex Prods., Inc. v. Procter & Gamble Co.*, No. 02 Civ. 8046, 2003 WL 21242769, at *10 (S.D.N.Y. May 28, 2003), *aff'd*, 126 F. App'x 32 (2d Cir. 2005) (expert opinion based on "own experience as a practicing and teaching" gynecologist and "anecdotal conversations" with patients, but "not on any survey or scientific study," was excluded as unreliable).

(b) Proposition 65

California's Proposition 65 is a regulation listing approximately 1,000 chemicals, including aloe vera and aspirin, and identifying permissible "no significant risk levels" (NSRL) for certain chemicals. *See* Cal. Off. of Env't Health Hazard Assessment, The Proposition 65 List (updated March 19, 2021), https://oehha.ca.gov/proposition-65/proposition-65-list. [redacted]

[redacted] In addition to his lack of expertise, Hong's opinion is hypothetical, and therefore inadmissible, because there is no evidence that Elysium ever sold Basis containing acetamide in California. *See Boucher*, 73 F.3d at 22 (expert testimony excluded as pure speculation).

Accordingly, for the reasons set forth above, Hong's opinions are inadmissible.

D. Bruce Isaacson's Expert Report Should Be Excluded in Part

The Isaacson Report purports to use a consumer survey to test whether four different Challenged Statements were likely to deceive consumers or were material to consumers' purchasing decisions (the "Isaacson Survey"). Isaacson Report at 1. Yet, Isaacson does not offer any conclusions regarding deception or materiality that would assist the trier of fact. Instead, he offers conclusions in Paragraphs 18 and 129 of the Isaacson Report that are untethered from any particular Challenged Statement and that, as a result, are irrelevant to this proceeding.

Further, the extensive flaws in the section of the Isaacson Survey designed to test the materiality of the four Challenged Statements (the "Materiality Survey") render that section unreliable and more prejudicial than probative. Thus, the portion of the Isaacson Report discussing the results of the Materiality Survey (Paragraphs 18(ii)-(iii), 99-120, 121-130 (pertaining to materiality)) (the "Materiality Report") should be excluded.

1. Isaacson's Conclusions in Paragraphs 18 and 129 Are Irrelevant

An expert opinion is irrelevant when it does not assist the trier of fact to understand the evidence or determine a fact in issue. *Kumho Tire*, 526 U.S. at 147-49. In false advertising cases, consumer perception surveys assist the trier of fact when they provide conclusions as to what message consumers take away from the marketing statement at issue and/or as to the materiality of that statement, *i.e.* whether it is likely to impact consumers' purchasing decisions. *See, e.g.*, *Johnson & Johnson v. Smithkline Beecham Corp.*, 960 F.2d 294, 297-98 (2d Cir. 1992) (recognizing need for survey evidence to determine what messages consumers take away from the

allegedly false advertisement, particularly for false advertising claims); *Merck Eprova AG v. BrookStone Pharms, LLC*, 920 F. Supp. 2d 404, 418 (S.D.N.Y. 2013) ("[T]he success of a plaintiff's implied falsity claim usually turns on the persuasiveness of a consumer survey that shows that a substantial percentage of consumers are taking away the message that the plaintiff contends the advertising is conveying.") (citation omitted). Where no such conclusions are provided, expert opinions are irrelevant to the matter at hand and should be excluded.

Here, the Isaacson Survey is comprised of four separate surveys, with four separate, non-overlapping sets of respondents, that purport to determine whether four separate Challenged Statements (1) deceive consumers into believing a particular, allegedly false message about Elysium's product and (2) are material to consumers' purchasing decisions. *See* Isaacson Report, at ¶¶ 12-17. Isaacson, however, refused to opine on whether the alleged deception or materiality of any one of the Challenged Statements is substantial. *See* Isaacson Tr. at 24:1-25:22; Isaacson Report, ¶¶ 18, 129-30. In lieu of an opinion as to whether any of the survey results showed a substantial percentage of consumers were deceived by any of the Challenged Statements tested or believed that any of those Challenged Statements would impact their purchasing decisions, Isaacson lumps all of the separate surveys together to conclude only that:

- "A substantial percentage of respondents indicated that the materials they were shown communicates or implies *certain messages*." Isaacson Report, ¶¶ 18(i), 129(i) (emphasis added);
- "A substantial percentage of respondents answered that, if they learned that a *certain statement* is not true, it would not change their likelihood of purchasing the supplement." *Id.* ¶¶ 18(ii), 129(ii) (emphasis added); and
- "A substantial percentage of respondents answered that, if they learned that a *certain statement* is not true, they would be less likely to purchase the supplement." *Id.* ¶¶ 18(iii), 129(iii) (emphasis added).

Isaacson confirmed that these conclusions as to "certain messages" and "certain statements" do not apply individually to the specific Challenged Statements surveyed; rather, they

apply to them "as a whole." Isaacson Tr. at 30:1-6; 32:4-15. Yet, Isaacson provides no justification for considering the statements together or, when asked at deposition, refusing to opine on whether the percentages pertaining to any particular statement are substantial. *Id.* at 25:14-22. He also does not opine on whether the individual statements are related to each other. *Id.* at 184:5-10. And he admits that there is no evidence that all of the statements, which were made in different years and places,[3] were ever encountered by a single consumer. *Id.* at 182:2-8.

Moreover, any suggestion that it is the sole province of the Court to reach conclusions regarding whether the results for any individual Challenged Statement were substantial is belied by Isaacson's other expert reports. Isaacson regularly provides conclusions in his reports on consumer surveys as to whether the net percentages in those surveys were substantial, significant, or indicated that the statement tested was likely to confuse or deceive. *See, e.g., Akiro LLC v. House of Cheatham, Inc.*, 946 F. Supp. 2d 324, 332 (S.D.N.Y. 2013) (discussing Isaacson opinion that confusion percentages in a consumer perception survey "fall below levels that are typically considered significant"); *OraLabs, Inc. v. Kind Grp.*, No. 13 Civ. 00170, 2015 WL 4538442, at *2 (D. Colo. Jul. 28, 2015) ("Dr. Isaacson concluded that his survey indicated a 'significant likelihood of confusion between the eos and OraLabs trade dress.'"); *Dominguez v. UAL Corp.*, 666 F.3d 1359, 1362 (D.C. Cir. 2012) ("Dr. Isaacson concluded that 'a high percentage of respondents would consider using a feature allowing them to legally sell or give away airline tickets they are unable to use.'").

Regardless, Isaacson's opinions in Paragraphs 18 and 129 that, when viewing the four statements as a whole, a "substantial percentage" of respondents took away "certain messages" or, if they learned that a "certain statement is not true," would have changed their purchasing decisions, are meaningless. They are neither specific nor relevant to assist the trier of fact in determining whether any one of the Challenged Statements tested is deceptive or material.

[3] The Challenged Statements tested were from a page on the 2017 version of Elysium's website, a page on the 2019 version of Elysium's website, a May 2019 Facebook Post, and an undated post on an unspecified social media platform. Isaacson Report, ¶ 4.

Accordingly, they should be excluded as irrelevant and, at a minimum, more prejudicial than probative. *See, e.g., Gucci Am., Inc. v. Guess?, Inc.*, 831 F. Supp. 2d 723, 739 (S.D.N.Y. 2011) ("[A] survey should be excluded under Rule 702 when it is invalid or unreliable, and/or under Rule 403 when it is likely to be insufficiently probative, unfairly prejudicial, misleading, confusing, or a waste of time").

2. The Materiality Survey's Many Flaws Render It Unreliable

While minor methodological flaws in a survey typically affect the weight afforded it, where there are numerous flaws, their cumulative effect renders the survey unreliable and requires exclusion. *See Louis Vuitton Malletier v. Dooney & Bourke, Inc.*, 525 F. Supp. 2d 558, 563 (S.D.N.Y. 2007) (collecting cases); *Tokidoki, LLC v. Fortune Dynamic, Inc.*, No. 07 Civ. 1923, 2009 WL 2366439, at *8-9 (C.D. Cal. July 28, 2009) (discrediting Isaacson survey as unreliable and not probative of confusion because of multiple serious flaws, including leading questions, bias, and improper control). Here, Isaacson's Materiality Survey suffers from so many serious flaws that any conclusions concerning the materiality of the Challenged Statements tested are unreliable and should be excluded.

Biased & Leading. Numerous aspects of the Materiality Survey likely led respondents to the answer supporting materiality, either because the survey design was biased or created demand effects—that is, likely signaled how the survey sponsor wanted them to answer and caused respondents to give the perceived "correct" answer.

First, the two materiality questions—Q4 and Q5[4]—asked respondents their opinion on whether a particular Challenged Statement would impact purchasing decisions if they learned a message conveyed by it were not true. Respondents, however, were asked Q4 and Q5 only *after* being asked Q3, which asked respondents whether that specific message was conveyed by that

[4] In pertinent part, Q4 asked "If you learned that the state below is not true, would that change your likelihood of purchasing this supplement?" and Q5 asked "If you learned that the statement below is not true, would you be more likely or less likely to purchase the supplement." Isaacson Report, ¶¶ 54, 57.

Challenged Statement. *See* Declaration of Brian Sowers, dated June 4, 2021 ("Sowers Decl."), Ex. A ("Sowers Rebuttal") ¶¶ 57, 60. In other words, Q3 focused respondents on a specific message that they might not have noticed but for the fact that Q3 highlighted it. Then, with their attention focused on that message, Q4 and Q5 asked how they would react if they learned the message was untrue. This series of questions artificially increased the likelihood respondents said they would change their purchasing behavior if the statement was not true both because the question led them to the "correct" answer and because they were more likely to care about the "untruth" of something they were specifically asked to notice. *See Saxon Glass Tech. v. Apple Inc.*, 393 F. Supp. 3d 270, 291 (W.D.N.Y. 2019), *aff'd*, 824 F. App'x 75 (2d Cir. 2020) (findings from survey with leading questions were of "limited evidentiary value"); *Procter & Gamble Co. v. Ultreo, Inc.*, 574 F. Supp. 2d 339, 352 (S.D.N.Y. 2008) (discounting survey results based on "'filter questions' that were in fact leading questions").

Second, because respondents were told in Q4 that the Challenged Statements were not true before they were asked if they would change their purchasing behavior, the survey suffered from focalism, a phenomenon that causes consumers to pay more attention to a product attribute than they would during the purchasing process and, thus, increases the relative subjective value they place on that attribute. Here, respondents were more likely to place more value on the purported "untruth" than they otherwise would have during the purchasing process, likely skewing the results in favor of consumers caring about the Challenged Statement. *See Townsend v. Monster Beverage Corp.*, 303 F. Supp. 3d 1010, 1049-50 (C.D. Cal. 2018) (discrediting consumer study suffering from focalism bias).

Third, because the materiality control statements were different from the Challenged Statement tested and from the distractor statements in the earlier deception section, respondents who recognized that the only consistent statement between the two sections was the Challenged Statement would have been able to discern the purpose of the survey and, therefore, were more likely to identify and select the "correct" answer, *i.e.* that their purchasing behavior would change if they learned the Challenged Statement were untrue. Sowers Rebuttal, ¶ 61. *See Kargo Glob.*,

Inc. v. Advance Mag. Pubs, No. 06 Civ. 550, 2007 WL 2258688, at *10 (S.D.N.Y. 2007) (criticizing leading survey design); *CKE Rest. v. Jack in the Box, Inc.*, 494 F. Supp. 2d 1139, 1144-45 (C.D. Cal. 2007) (giving little weight to survey that allowed respondents to anticipate the answers plaintiffs wanted).

The multiple leading aspects of the Materiality Survey, including the creation of demand effects and focalism, likely caused more respondents to indicate that they would change their purchasing behavior than is true of actual consumers in the marketplace, rendering the Materiality Survey unreliable. *See Saxon*, 393 F. Supp. 3d at 287 (excluding survey with leading questions and demand effects as unreliable and not probative).

Improper Controls. The controls and method of control likely created further bias and were insufficient to account for both the normal survey noise and the excess noise created by the other flaws in the survey design. As noted above, unlike the Challenged Statements, respondents were not asked in Q3 about the control statements during the deception portion of the survey and did not take away a message about the Materiality Survey control statement before they were told in Q4 that the impression they formed was untrue. Sowers Rebuttal, ¶ 62. As a result, respondents were less likely to feel deceived when answering the whether the control statements were likely to impact their purchasing decisions, rendering the control incapable of accounting for the number of respondents who indicated they would change purchasing behavior only because they felt deceived, rather than because the subject matter of the statement tested was important to them. *See THOIP v. Walt Disney Co.*, 690 F. Supp. 2d 218, 240-41 (S.D.N.Y. 2010) (finding a survey inadmissibly unreliable when its control did not sufficiently account for background noise); *Cumberland Packing Corp. v. Monsanto Co.*, 32 F. Supp. 2d 561, 574-6 (E.D.N.Y. Jan. 12, 1999) (criticizing survey where controls did not fairly measure confusion unrelated to the claims at issue).

Further, by Isaacson's own admission, the controls were innocuous statements—things consumers were *not* likely to care about. Isaacson Report, ¶ 61; Isaacson Tr. at 49:1-19. This caused an artificially inflated net percentage, because respondents were more likely to respond that they would change their purchasing decisions as to the Challenged Statements than they would as

to the control statements. *See Nat'l Distillers Prods. Co. v. Refreshment Brands, Inc.*, 198 F. Supp. 2d 474, 484 (S.D.N.Y. 2002) (criticizing study's reliability when control artificially highlighted senior mark, and thus inflated confusion); *Conopco, Inc. v. Cosmair, Inc.*, 49 F. Supp. 2d 242, 255 (S.D.N.Y. 1999) (criticizing survey that exacerbated respondents' confusion by virtue of its design).

Vague Questions. Each of the Challenged Statements tested contained multiple "facts," making it impossible to identify which "fact" caused respondents to indicate changed purchasing decisions, if the fact were untrue. For example, for the Facebook Page and Video, the Challenged Statement tested was "The company described on the Facebook page and video conducted 25 years of research on aging." Yet, for those respondents who indicated they would change their purchasing decisions if they learned the statement was untrue, it is not clear why they gave this answer—whether it was because they thought another company did *some* of the research, another company did *all* of the research, there was no research, there was only *20 years* of research, the research did not pertain to aging—because they simply did not like being deceived, or something else entirely. Because ChromaDex is not claiming in this action that the entire statement is deceptive, the survey data cannot be relied upon to identify what, if anything, about the test statements is material to consumer behavior. *See Tran v. Sioux Honey Assoc.*, 471 F. Supp. 3d 1019, 1028-29 (C.D. Cal. July 13, 2020) (dismissing false advertising claim when relied-upon survey asked overly generic, binary questions that did not target relevant inquiry); *In re Century 21-RE/MAX Real Estate Ad. Claims Lit.*, 882 F. Supp. 915, 924 (C.D. Cal. 1994) (finding materiality survey unpersuasive where it measured advertisement as a whole and not specific language alleged to be deceptive).

Improper Universe. With respect to the Facebook Page and Video and the Social Media Post, which tested age-related statements, the universe of respondents was over-inclusive because 22% of the respondents who viewed the Facebook Page and Video and 26% of respondents who viewed the Social Media Post did not indicate in the screening portion of the survey that they were past or prospective purchasers of dietary supplements for "healthy aging." Sowers Rebuttal, ¶¶

18-26. Thus, these respondents' states of mind were irrelevant to the questions asked, and likely skewed the results. *See* J. Thomas McCarthy, McCarthy on Trademarks and Unfair Competition § 32:161 (5th ed. 2017); *see also Universal City Studios, Inc. v. Nintendo Co., Ltd.*, 746 F.2d 112, 118 (2d Cir. 1984) (discrediting survey where survey did not rely on potential consumers of the products in question); *Medisim Ltd. v. BestMed LLC*, 861 F. Supp. 2d 158, 178-79 (S.D.N.Y. 2012) (excluding a survey for using an improper and overly broad universe).

Contradicting Data. Finally, given the numerous substantial flaws in survey design, it is unsurprising that the survey data does not support Isaacson's conclusions that a "substantial percentage" of respondents would change their behavior if a statement were untrue. Indeed, a majority of respondents *did not* say they would change their purchasing behavior if the Challenged Statements were untrue. Sowers Rebuttal, ¶ 73. Further, of those who said they would change their purchasing behavior, either roughly the same percentage or more said they were *more likely* to purchase the product, despite the purported untruth. Sowers Rebuttal, ¶ 74. These results do not support any conclusion that consumers would be less likely to purchase Elysium's products if the Challenged Statements were untrue. At a minimum, they underscore that the multiple flaws in the Materiality Survey render it unreliable and more prejudicial than probative. *Cumberland Packing Corp. v. Monsanto Co.*, 32 F.Supp.2d 561, 574-75 (E.D.N.Y. 1999) (criticizing a survey whose response data itself demonstrated the survey's flaws).

Isaacson's Materiality Report should, therefore, be excluded in its entirety.

IV. CONCLUSION

For the reasons set forth above, Elysium respectfully requests the Court grant its motion to exclude ChromaDex's proffered expert testimony.

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