No. 14-1146

IN THE

Supreme Court of the United States

TYSON FOODS, INC.,
Petitioner,

v.

PEG BOUAPHAKEO, *et al.*, individually and on behalf of all other similarly situated individuals,
Respondents.

On Writ of Certiorari to the United States Court of Appeals for the Eighth Circuit

BRIEF OF PUBLIC JUSTICE, P.C. AS *AMICUS CURIAE* IN SUPPORT OF RESPONDENTS

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STATEMENT OF INTEREST[1]

Amicus Public Justice, P.C. is a national public interest law firm dedicated to pursuing justice for the victims of corporate and governmental abuses. It specializes in precedent-setting and socially significant cases designed to advance consumers' and victims' rights, civil rights and civil liberties, occupational health and employees' rights, the preservation and improvement of the civil justice system, and the protection of the poor and the powerless. Public Justice regularly represents employees and consumers in class actions, and in its experience the class action device is often the only meaningful way that individuals can vindicate important legal rights.

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[1] No counsel for a party authored any part of this brief and no counsel or party made a monetary contribution intended to fund the preparation or submission of the brief. Only *Amicus* and its attorneys have paid for the filing and submission of this brief. Pursuant to Supreme Court Rule 37.3(a), all parties consented to the filing of this brief. A copy of that consent is on file with the Court.

INTRODUCTION AND SUMMARY OF ARGUMENT

Amicus respectfully asks this Court to reaffirm that the procedural nature of an action—individual versus class—cannot alter substantive legal rules. And in part because this general principle includes the rule set forth in *Anderson v. Mt. Clemens Pottery Co.*, 328 U.S. 680 (1946), the judgment below should be affirmed.

* * *

Petitioner Tyson Foods, Inc. ("Tyson") effectively asks this Court to render advisory holdings untethered to the facts and claims at issue in this case, and unnecessary to evaluating the judgment below. But this Court does not decide issues "superfluous to the decision in the present case" and "unpredictable in [their] application and consequences." *Waters v. Churchill*, 511 U.S. 661, 686 (1994) (Scalia, J., concurring); *see also U.S. Parole Comm'n v. Geraghty*, 445 U.S. 388, 403 (1980) ("The imperatives of a dispute capable of judicial resolution are sharply presented issues in a concrete factual setting and self-interested parties vigorously advocating opposing positions.").

Specifically, Tyson and many of its *amici* ask this Court to reach out beyond the issues necessary to decision in this particular case to prescribe a series of rules for (and, indeed, largely *pro*scribe) the use of inferential proof, in particular inferential statistics, in *all* class litigation, as distinct from individual litigation. *Cf.* Federal Judicial Center, *Reference Manual on Scientific Evidence* ("Reference Manual")

(3d ed. 2011) (containing guidelines for the use of statistics in *all* litigation). Rendering the expansive ruling Tyson and its *amici* urge would be inappropriate and ill-advised.

Even apart from this Court's institutional restriction against abstract policy-making, it should reject the result Tyson and its *amici* seek. Tyson would have this Court create and impose a *different*, and particularly stringent, set of substantive legal rules applicable, apparently, only in class litigation, that do not apply in individual litigation asserting the very same claim. In so doing, Tyson turns a core principle undergirding the Federal Rules—articulated in the Rules Enabling Act—on its head: a class action "merely enables a federal court to adjudicate claims of multiple parties at once," and "leaves the parties' legal rights and duties intact and the rules of decision unchanged." *Shady Grove Orthopedic Assocs., P.A. v. Allstate Ins. Co.*, 559 U.S. 393, 408 (2010) (Scalia, J.) (plurality opinion) (citing 28 U.S.C. § 2072(b)).

Tyson's jeremiad against the *general* use of inferential proof in class actions, moreover, is impossible to square with the well-considered rule that the probative value of a particular type of evidence *must* be assessed on a case-by-case basis, and in light of the applicable substantive legal principles at issue. *See Int'l Bhd. of Teamsters v. United States*, 431 U.S. 324, 340 (1977) (explaining, with respect to statistical proof, that the usefulness of statistics "depends on all of the surrounding facts

and circumstances" and observing that there are an "infinite variety" of statistics).[2]

A hypothetical variation of the present case highlights the problem with Tyson's attempt to ratchet up the burden of proof here beyond what would be required outside of the class or collective action context. Suppose a group of employees at Tyson's Storm Lake plant filed a multi-plaintiff complaint identical to Ms. Bouaphakeo's actual complaint, but without the class and collective action allegations. And suppose that, as here, the employer violated its duty to maintain appropriate records, utterly failing to keep or preserve the best (and only) source of precise individual evidence. Further suppose that, at trial, those plaintiffs presented both representative testimony and a study demonstrating how much time the average employee spent donning and doffing such gear. Such evidence would unquestionably be permitted as a matter of controlling substantive law: when an employer fails to keep proper records, employees can prove their cases by inference. *See Anderson*, 328 U.S. at 687-88. The same proof in the same circumstances should lead to precisely the same result in a class action. The fact that this is a class and collective action rather than an individual action does not—indeed, *cannot*—alter settled substantive federal and state law. *See Shady Grove*, 559 U.S. at 408 (Scalia, J.) (plurality opinion).

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[2] *Amicus* also disagrees with Tyson's characterizations of the specific evidence in this case, but notes that the sufficiency of evidence is not before the Court.

ARGUMENT

I. THIS COURT DOES NOT ISSUE ABSTRACT POLICY PRONOUNCEMENTS REGARDING THE PERMISSIBILITY OF PARTICULAR TYPES OF EVIDENCE IN LITIGATION.

As a matter of first principles, this Court decides only the case before it. *Geraghty*, 445 U.S. at 403; *accord Princeton Univ. v. Schmid*, 455 U.S. 100, 102 (1982) (per curiam) ("We do not sit to decide hypothetical issues or to give advisory opinions about issues as to which there are not adverse parties before us."). As then-Judge Roberts well put it: "if it is not necessary to decide more, it is necessary not to decide more." *PDK Labs. Inc. v. U.S. DEA*, 362 F.3d 786, 799 (D.C. Cir. 2004) (concurring in part and concurring in the judgment). Tyson and its *amici*, however, ask this Court to issue broad pronouncements regarding class actions and the use of statistics in them. *See, e.g.*, Br. of the Chamber of Commerce of the U.S.A., Bus. Roundtable, & Retail Litig. Ctr., Inc. as *Amici Curiae* in Support of Pet. 15-16 (attacking "statistical analysis for purposes of litigation . . . *particularly [] in connection with class action claims*" (emphasis added)); Br. for DRI—the Voice of the Defense Bar as *Amicus Curiae* Supporting Pet. 27 (asking this Court "to strictly circumscribe, if not outright prohibit," statistical

extrapolation as a means to support class certification).[3]

The scope of these requests is as breathtaking as it is unfounded: they vastly exceed the questions presented by the wage-and-hour litigation before the Court and are not the type of "sharply presented issues in a concrete factual setting" that would allow this Court to evaluate their merits. *Geraghty*, 445 U.S. at 403.

A broad ruling restricting the use of appropriate inferential proof in class litigation, moreover, would unduly impede lower courts' ability to assess the appropriateness of particular evidence in the context of specific cases. *See* Br. of Civ. Pro. Scholars as *Amici Curiae* in Support of Neither Party ("Scholars Br.") 25-36 (arguing same). *Amicus* thus respectfully asks this Court to adhere to its "considered practice not to decide abstract, hypothetical or contingent questions." *United Pub. Workers of Am. (C.I.O.) v. Mitchell*, 330 U.S. 75, 90 n.22 (1947) (internal quotation marks omitted).

II. THE BURDENS OF PROOF IN CLASS LITIGATION ARE THE SAME AS THOSE IN INDIVIDUAL LITIGATION.

Even taken on their own terms, the particular standards of proof Tyson and its *amici* seek should be rejected. Among other things, they seek to impose restrictions on the use of inferential statistics and

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[3] Tyson's other *amici* make similarly broad requests. *See infra* Section III.

other inferential proof in class litigation that simply do not apply to individual litigation. Yet class plaintiffs are required to prove no more (and no less) than are plaintiffs in individual litigation. *See Shady Grove*, 559 U.S. at 406-07 (plurality opinion) ("In the Rules Enabling Act, Congress authorized this Court to promulgate rules of procedure subject to its review, 28 U.S.C. § 2072(a), but with the limitation that those rules 'shall not abridge, enlarge nor modify any substantive right,' § 2072(b)."); *Sibbach v. Wilson & Co.*, 312 U.S. 1, 9-10 (1941) ("Congress has undoubted power to regulate the practice and procedure of federal courts, . . . but it has never essayed to declare the substantive state law, or to abolish or nullify a right recognized by the substantive law of the state where the cause of action arose, save where a right or duty is imposed in a field committed to Congress by the Constitution.") (footnote omitted).

Take, for example, the use of inferential proof to establish damages. As indicated above, Tyson and its *amici* broadly attack well-established inferential, representative, and aggregate forms of proof (what they classify as "averages"). *See, e.g.*, Pet. Br. 9-10 (criticizing the district court for calculating damages based on the average amount of time employees spent donning and doffing rather than investigating precisely how much time was spent by each employee, despite Tyson's unlawfully failing to keep individual records).

Amicus respectfully urges this Court to reject that extreme position, in part because it would establish that class plaintiffs are required to meet an

entirely different burden of proof than are individual plaintiffs. *See Anderson*, 328 U.S. at 687-88; Pet. App. 5a & n.2 (explaining that Iowa and federal claims require the same proof); *cf., e.g.*, *Shady Grove*, 559 U.S. at 408 (plurality opinion) (explaining that class plaintiffs and individual plaintiffs must meet the same standard of proof); *Deposit Guar. Nat'l Bank v. Roper*, 445 U.S. 326, 332 (1980) ("[T]he right of a litigant to employ Rule 23 is a procedural right only, ancillary to the litigation of substantive claims.").

Tyson's demand for some higher level of precision of proof in all cases (or, at least, all *class* cases), moreover, is foreign to our legal system. As Judge Higginbotham well explained for an en banc Fifth Circuit:

> In countless areas of the law weighty legal conclusions frequently rest on methodologies that would make scientists blush. The use of such blunt instruments in examining complex phenomena and corresponding reliance on inference owes not so much to a lack of technical sophistication among judges, although this is often true, but to an awareness that *greater certitude frequently may be purchased only at the expense of other values*.

League of United Latin Am. Citizens v. Clements, 999 F.2d 831, 860 (5th Cir. 1993) (en banc) (emphasis added); *see also Kansas v. Nebraska*, 135 S. Ct. 1042, 1059 (2015) ("Truth be told, we cannot be sure why

the Master selected the exact number he did . . . . But then again, any hard number reflecting a balance of equities can seem random in a certain light.").

Of particular relevance here, no jurisdiction requires an individual to prove her damages with the precision Tyson seeks. *See* Appendix A (containing citations from all fifty states and the District of Columbia for the proposition that damages need not be proven with precision under all circumstances). This is so in part because, under the Seventh Amendment, damages are "a matter so peculiarly within the province of the jury that the Court should not alter it." *Atl. Sounding Co. v. Townsend*, 557 U.S. 404, 409 (2009) (Thomas, J.); *see also Gasperini v. Ctr. for Humanities, Inc.*, 518 U.S. 415, 453 (1996) (Scalia, J., dissenting) (same); *BCS Servs., Inc. v. Heartwood 88, LLC*, 637 F.3d 750, 758-60 (7th Cir. 2011) (Posner, J.) (accepting "statistical, probabilistic" proof to establish liability and explaining fundamental rule that "broad latitude is allowed in quantifying damages, especially when the defendant's own conduct impedes quantification" (internal quotation marks omitted)).

Similarly, as plaintiffs "need not make [a Rule 23] showing to a degree of absolute certainty," *Messner v. Northshore Univ. HealthSystem*, 669 F.3d 802, 811 (7th Cir. 2012), there can be little doubt that they can use statistics and other inferential proof to help demonstrate that class certification is appropriate. That showing requires, at most, a

preponderance of the evidence.[4] And, of course, once a class has been certified, plaintiffs need only prove their claims by a preponderance of the evidence. *See, e.g.*, *Shady Grove*, 559 U.S. at 408 (plurality opinion).

The above principles not only support the lower court's judgment in this particular case, but also underscore that this Court should reaffirm that class and individual plaintiffs are held to the same standards of proof.

III. WHETHER INFERENTIAL PROOF IS APPROPRIATE TURNS ON A CAREFUL ASSESSMENT OF THE LAW AND FACTS OF A PARTICULAR CASE.

A. Inferential statistics are essential in numerous areas of the law, in both class and individual actions, where the facts and law render them probative.

Tyson and its *amici* attempt to turn the battle over the use of a specific methodology in *this* case into a war over the propriety of using sampling, representative testimony, and other inferential proof

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[4] *See, e.g.*, *id.*; *Brown v. Nucor Corp.*, 785 F.3d 895, 931-32 (4th Cir. 2015); *In re Nexium Antitrust Litig.*, 777 F.3d 9, 27 (1st Cir. 2015); *In re U.S. Foodservice Inc. Pricing Litig.*, 729 F.3d 108, 117 (2d Cir. 2013); *Carrera v. Bayer Corp.*, 727 F.3d 300, 306 (3d Cir. 2013). Some courts have indicated that an even *lower* standard may apply. *See, e.g.*, *Gooch v. Life Investors Ins. Co. of Am.*, 672 F.3d 402, 418 (6th Cir. 2012). It does not appear that any court has ever suggested it could be higher.

both writ large and, in particular, in class actions. To that end, they urge this Court to, among other things, "remind the lower courts that use of statistical sampling to satisfy class certification requirements is improper," Br. of the Prod. Liab. Advisory Council, Inc. as *Amicus Curiae* in Support of Pet. 12; "instruct the lower courts and litigants about the dangers inherent in statistical methods," Br. of Trans Union LLC as *Amicus Curiae* in Support of Pet. 15 (capitalization altered); and dramatically expand this Court's ruling in *Wal-Mart Stores, Inc. v. Dukes*, 131 S. Ct. 2541 (2011), to hold that any extrapolation from the average of a sample to help determine a defendant's liability is inherently "flawed," Br. *Amicus Curiae* of Atl. Legal Found. and the Int'l Ass'n of Def. Counsel in Support of Pet. 22.[5]

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[5] *See also* Br. of Wal-Mart Stores, Inc. as *Amicus Curiae* in Support of Pet. 5 (asking the Court to "hold expressly that the use of extrapolation, sampling, and averaging to relieve individual class members of their burdens of proof and to foreclose the litigation of individualized defenses is incompatible with due process"); Br. for Ass'n of Am. R.R.s as *Amicus Curiae* in Support of Pet. 20 (advocating for adoption of a radical standard for class certification requiring that all "individualized rebuttal evidence can be excluded as irrelevant or repetitive"); Br. *Amicus Curiae* of the Equal Emp't Advisory Council in Support of Pet. 14 (asking the Court to hold that, without a "precise" measure of damages, class certification "typically is improper in similar wage and hour cases"); Br. for the Dow Chem. Co. as *Amicus Curiae* in Support of Pet. 18 (urging the elimination of statistical averaging to show the propriety of class certification); Br. of *Amici Curiae*

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In other words, Tyson and its *amici* would have this Court abandon its prior jurisprudence and condemn the use of the "infinite variety" of statistical evidence the Court has long embraced, *Teamsters*, 431 U.S. at 340, in one broad stroke. The Court should refrain from making any such generalized (and incorrect) pronouncement, and instead adhere to its longstanding measured and

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Nat'l Ass'n of Mfrs., All. of Auto. Mfrs., Ass'n of Home Appliance Mfrs., Am. Tort Reform Ass'n, Am. Petroleum Inst., and Metals Serv. Ctr. Inst. in Support of Pet. 10 n.2 ("The use of statistical modeling in particular can be a clear signal that the proposed class is simply not suitable for class treatment."); Br. *Amicus Curiae* of Pac. Legal Found. in Support of Pet. 15 ("Even in mathematics, where they are a helpful tool, statistical models are, at best, easily misinterpreted, and at worst, easily manipulated." (citation omitted)).

These attacks are all the more remarkable given that corporations often use statistical techniques internally to resolve important factual issues and to make precise pricing and marketing decisions. *See, e.g.*, James Guszcza & John Lucker, *Irrational Expectations: How statistical thinking can lead us to better decisions* (2009), *available at* http://dupress.com/articles/irrational-expectations-statistical-thinking-for-better-decisions/; Thomas H. Davenport & Jeanne G. Harris, *Competing on Analytics: The New Science of Winning* 28 (2007) (quoting CEO of Capital One Financial Corporation: "It's all about collecting information on 200 million people you'd never meet, and on the basis of that information, making a series of very critical long-term decisions about lending them money and hoping they would pay you back.").

case-specific approach to assessing the propriety of statistical evidence.

Such assessments should not, moreover, turn on whether a case is a class or non-class action. Rather, they must turn on (i) what the statistical or other inferential evidence is being offered to show and (ii) the governing law with respect to the claims at issue (the importance of which is particularly manifest in this context, where substantive law for decades has provided for exactly the type of proof required given exactly the type of burdens at issue in this wage-and-hour case).

1. Statistics play a critical role in enforcement of employment law.

This Court has "emphasized the useful role that statistical methods can have" in demonstrating an adverse impact or a pattern of discrimination in Title VII cases. *Watson v. Ft. Worth Bank & Trust*, 487 U.S. 977, 995 n.3 (1988). Indeed, "[o]nce the employment practice at issue has been identified," the plaintiff "*must* offer statistical evidence of a kind and degree sufficient to show that the practice in question has caused the exclusion of applicants for jobs or promotions because of their membership in a protected group." *Id.* at 994 (emphasis added). Further, the appropriateness of using statistical evidence reflects, at least in part, the nature of the alleged wrongdoing. In "many" employment-discrimination cases, "the *only* available avenue of proof is the use of racial statistics to uncover clandestine and covert discrimination by the employer or union involved." *Teamsters*, 431 U.S. at

339 n.20 (emphasis added) (internal quotation marks omitted).[6]

Inferential proof in the form of statistics can also be used in individual employment discrimination cases. In *McDonnell Douglas Corp. v. Green*, 411 U.S. 792 (1973), for instance, the Court established "the order and allocation of proof in a private, non-class action challenging employment discrimination." *Id.* at 800. In discussing how the plaintiff could show that the employer's stated reason for the adverse employment action was pretextual, the Court explained that potentially relevant evidence could include the company's "general policy and practice with respect to minority employment," and noted "statistics as to [defendant]'s employment policy and practice may be helpful to a determination of whether [defendant]'s refusal to rehire [plaintiff] in this case conformed to a general pattern of discrimination against blacks." *Id.* at 804-05. As a leading treatise explains, "[s]tatistics may be used in an attempt to establish or rebut a prima facie case of disparate impact discrimination or classwide intentional or pattern-

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[6] *See also, e.g.*, *Brown*, 785 F.3d at 903-04. In *Brown*, plaintiffs' expert developed "an alternative benchmark" for showing a policy of discrimination for part of the class period. This benchmark used a statically appropriate sample of certain representative evidence because the employer had not kept the actual data. The Fourth Circuit explained that the statistical evidence was "methodologically sound while yielding results that satisfy *Wal-Mart*'s heightened requirement of commonality." *Id.* at 903.

or-practice discrimination, or to assist in showing that the defendant's articulated reasons for an individual employment decision are pretextual . . . . It can be useful, but generally is not determinative on the question of discriminatory intent in individual cases." Barbara T. Lindemann, Paul Grossman, C. Geoffrey Weirich, *Employment Discrimination Law* 35.II (5th ed. 2012).

2. Statistics are vital to the enforcement of antitrust law.

In the antitrust arena, too, statistics often play a critical role in proving elements of the claim, as well as damages. *See, e.g.*, *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585, 606 (1985) (in non-class case, evidence included "statistical measures of consumer preference"); *Resco Prods., Inc. v. Bosai Minerals Grp.*, No. 06-235, 2015 U.S. Dist. LEXIS 124930, at *12 (W.D. Pa. Sept. 18, 2015) ("multiple regression analysis—when performed properly—is a mainstream tool in economic study and an accepted method of estimating damages in antitrust litigation").

Inferential proof is also used to satisfy Rule 23's requirements. *See, e.g.*, *Messner*, 669 F.3d at 808 (vacating order denying class certification where plaintiffs offered "economic and statistical methods" to demonstrate predominance with respect to antitrust impact of subject merger, and rejecting district court's determination that plaintiffs' proposed methodology "required proof that defendant raised its prices at uniform rates affecting all class members to the same degree"); *In re*

Processed Egg Prods. Antitrust Litig., No. 08-md-2002, 2015 U.S. Dist. LEXIS 125540, at *83-84 (E.D. Pa. Sept. 18, 2015) (certification of proposed subclass was warranted where, *inter alia*, plaintiffs "laid a sufficient foundation for the inferential finding that the impact reflected in the single average overcharge was shared by virtually every class member"); *cf. Comcast Corp. v. Behrend*, 133 S. Ct. 1426, 1433 (2013) (indicating models are appropriate to show antitrust damages at the class-certification stage and at trial, so long as they are "consistent with [plaintiff]'s liability case").[7]

3. Statistics allow investors to show causation and damages in securities fraud litigation.

Statistical analysis is also often critical to investors' ability to prove causation and damages under the Securities Exchange Act of 1934 and SEC Rule 10b-5. Event studies, "regression analyses that seek to show that the market price of the defendant's stock tends to respond to pertinent publicly reported events," typically play a key role in determining whether plaintiffs can invoke the "fraud-on-the-

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[7] *See also In re Chocolate Confectionary Antitrust Litig.*, 289 F.R.D. 200, 222-25 (M.D. Pa. 2012) (holding that plaintiffs proffered sufficient classwide damages methodology using "econometric models," and rejecting defendants' assertion that damages could not be measured on a classwide basis "because highly individualized inquiries [we]re necessary to calculate the vagaries of trade spend (which materially affects the actual net price paid by each class member)").

market" presumption, which rests on the premise "that the price of stock traded in an efficient market reflects all public, material information—including material misstatements." *Halliburton Co. v. Erica P. John Fund, Inc.*, 134 S. Ct. 2398, 2405, 2415 (2014); *see also Basic Inc. v. Levinson*, 485 U.S. 224, 241-50 (1988) (adopting the presumption); Madge S. Thorsen, *et al.*, *Rediscovering the Economics of Loss Causation*, 6 J. Bus. & Sec. L. 93, 109 (2006).

If successfully invoked, the presumption serves as "a replacement for person-specific proof of reliance and causation." *Schleicher v. Wendt*, 618 F.3d 679, 682 (7th Cir. 2010) (Easterbrook, C.J.). Both class and non-class plaintiffs can avail themselves of the presumption, so long as its prerequisites—primarily market efficiency—are established. *See Amgen Inc. v. Conn. Ret. Plans & Trust Funds*, 133 S. Ct. 1184, 1193 (2013) (observing that "fraud on the market is a substantive doctrine of federal securities-fraud law that can be invoked by any Rule 10b-5 plaintiff" and that the theory also "facilitates class certification by recognizing a rebuttable presumption of classwide reliance on public, material misrepresentations when shares are traded in an efficient market").

Courts often rely on such expert regression analysis in assessing market efficiency.[8] Indeed,

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[8] *See, e.g.*, *In re DVI, Inc. Sec. Litig.*, 639 F.3d 623, 634-35 (3d Cir. 2011) (upholding district court's finding of causal relationship based on an event study conducted by plaintiffs' expert, which showed 60% and 65% correlations between news releases and price changes in DVI stock and notes), *abrogated in part on other grounds*

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"[a]n event study that correlates the disclosures of unanticipated, material information about a security with corresponding fluctuations in price has been considered *prima facie* evidence of the existence of such a causal relationship." *Teamsters Local 445 Freight Div. Pension Fund v. Bombardier Inc.*, 546 F.3d 196, 207-08 (2d Cir. 2008). Further, defendants themselves often provide competing expert analyses to attempt to demonstrate a *lack* of market efficiency. *See, e.g.*, *Erica P. John Fund, Inc. v. Halliburton Co.*, No. 3:02-CV-1152-M, 2015 U.S. Dist. LEXIS 97464, at *33 (N.D. Tex. July 25, 2015) (whether lack of price impact had been shown "largely turn[ed] on the competing methodologies of the parties' experts").

Statistical analyses are also often employed as proof of other elements of Rule 10b-5 claims—"loss causation," *i.e.*, "that a misrepresentation that affected the integrity of the market price *also* caused a subsequent economic loss," *Erica P. John Fund, Inc. v. Halliburton Co.*, 131 S. Ct. 2179, 2186 (2011) (emphasis in original), and damages. *See FindWhat*

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by Amgen Inc. v. Conn. Ret. Plans & Trust Funds, 133 S. Ct. 1184 (2013); *Schleicher*, 618 F.3d at 682-88 (affirming grant of class certification where, *inter alia*, "[a] financial economist concluded, in an expert report that the district judge credited, that the market for Conseco's shares was efficient, as *Basic* employs that term"); *In re Xcelera.com Sec. Litig.*, 430 F.3d 503, 512-18 (1st Cir. 2005) (upholding grant of class certification where plaintiffs' expert "presented the results of a sophisticated event study analyzing how Xcelera stock price reacted to company-specific events").

Investor Grp. v. FindWhat.com, 658 F.3d 1282, 1313 (11th Cir. 2011) ("As acknowledged by the Defendants' expert, event studies are a common method of establishing loss causation, used routinely in the academic literature to determine whether the release of particular information has a significant effect on a company's stock price." (internal quotation marks omitted)); *In re DVI, Inc. Sec. Litig.*, No. 03-5336, 2014 U.S. Dist. LEXIS 129136, at *22 (E.D. Pa. Sept. 15, 2014) ("generally, expert testimony is required to establish 'both the fact of damage and the appropriate method of calculation'" (quoting *Sowell v. Butcher & Singer, Inc.*, 926 F.2d 289, 301 (3d Cir. 1991)).

4. The importance of statistics goes beyond employment, antitrust, and securities law.

Litigants use statistics to prove causation and damages in various other legal contexts. *See, e.g.*, *In re Neurontin Mktg. & Sales Practices Litig.*, 712 F.3d 21, 42 (1st Cir. 2013) (Lynch, C.J., Lipez, Souter, JJ.) ("[C]ourts have long permitted parties to use statistical data to establish causal relationships"), *cert. denied sub nom. Pfizer Inc. v. Kaiser Found. Health Plan, Inc.*, 134 S. Ct. 786 (2013). And, as in the decisions discussed above, courts have accepted statistical evidence as probative in both class and non-class cases. *See, e.g.*, *id.* at 29; *United States v. Valencia*, 600 F.3d 389, 427 (5th Cir. 2010) (per curiam) (observing that multiple-regression analysis "is a powerful tool when the trier of fact must

determine whether a causal link exists").[9] *See generally* Reference Manual at 214 ("[M]ost statistical methods relied on in court are described in textbooks or journal articles and are capable of producing useful results when properly applied.").

In *Neurontin*, for example, the First Circuit affirmed a verdict of more than $140 million for the insurance company Kaiser, which had been the victim of drug-maker Pfizer's fraud relating to off-label marketing. *See* 712 F.3d at 25. In affirming the verdict, the court of appeals noted that Kaiser's "primary evidence" on causation consisted of an expert's use of "aggregate data and statistical approaches to link patterns in promotional spending to patterns in prescribing for the drug." *Id*. at 29. (internal quotation marks and footnote omitted). The court of appeals also rejected Pfizer's argument that "the aggregate statistical evidence presented by [Kaiser's expert] was . . . insufficient to show causation (or injury) as a matter of law, and . . . inadmissible." *Id.* at 41-45.

The frequent use of statistical evidence across numerous areas of the law, in both class and non-class cases, furthers *Amicus'* point that courts should evaluate such evidence under two guiding principles: first, a class plaintiff's burden of proof is no more stringent than it would be in an individual action, *Shady Grove*, 559 U.S. at 406-407; and second, there is no "one-size-fits-all" rule or test that could account for the "infinite variety" of statistics, *Teamsters*, 431

[9] For a compilation of other contexts in which statistics are used, *see* Scholars Br. 28-30.

U.S. at 340, and the numerous ways in which they can appropriately be utilized. Accordingly, this Court should limit its ruling to the specific methodologies employed in *this* case, and reject Tyson's call for expansive pronouncements concerning aggregate proof, such as statistical evidence. And, when assessing the methodologies of proof employed by plaintiffs in this case, this Court should not apply a more stringent standard than it would if the Tyson employees were (for example) in a multi-plaintiff case.[10]

B. This Court should likewise adhere to its consistent reluctance to adopt specific methodologies or degrees of precision governing the use of statistical evidence.

Amicus respectfully submits that, just as this Court should refrain from making broad, generalized, or abstract statements regarding statistical evidence, it should likewise maintain its historical reluctance to adopting specific methodologies or endorsing particular quantitative or qualitative standards that statistical evidence must satisfy in order to be deemed probative. The Court's existing jurisprudence strongly favors such a circumspect approach.

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[10] In such a case, like the class and collective action here, those plaintiffs would rely, appropriately, on the settled law that, once the employer failed to keep appropriate time, they were relieved of their burden to prove precisely how much they worked. *See Anderson*, 328 U.S. at 687-88.

The Court's opinion in *Bazemore v. Friday*, 478 U.S. 385 (1986), is instructive.[11] That case addressed alleged racial discrimination in employment and provision of services by the North Carolina Agricultural Extension Service. *See id.* at 398. Plaintiffs "relied heavily on multiple regression analyses designed to demonstrate that blacks were paid less than similarly situated whites." *Id.* at 398. Specifically, an expert "prepared multiple regression analyses relating to salaries" for three years, and certain of those regressions "used four independent variables—race, education, tenure, and job title." *Id.* The regressions "purported to demonstrate that in 1974 the average black employee earned $331 less per year than a white employee with the same job title, education, and tenure, and that in 1975 the disparity was $395" (the regression for 1981 showed a smaller, not statistically significant, disparity). *Id.* at 399 (citations omitted). The district court rejected that evidence as proof of discrimination, and the Fourth Circuit affirmed "because the plaintiffs' expert had not included a number of variable factors the court considered relevant," including "across the board and percentage pay increases which varied from county to county." *Id.* (internal quotation marks omitted).

This Court reversed, holding that the court of appeals' determination with respect to the statistical evidence "was erroneous in important respects." *Id.* at 400; *see also id.* ("A plaintiff in a Title VII suit

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[11] To be precise, *Amicus* cites Justice Brennan's concurrence, which was joined by all Members of the Court, when discussing *Bazemore*.

need not prove discrimination with scientific certainty. . . [but merely] by a preponderance of the evidence."). The Court explained that a regression analysis is not "unacceptable as evidence of discrimination" simply because it does "not include *all* measurable variables thought to have an effect on salary level." *Id.* (internal quotation marks omitted). While such an omission might render an "analysis less probative than it otherwise might be, it can hardly be said, absent some other infirmity, that an analysis which accounts for the major factors must be considered unacceptable as evidence of discrimination." *Id.* (internal quotation marks omitted). The Court further explained that "[w]hether, in fact, such a regression analysis does carry the plaintiffs' ultimate burden *will depend in a given case on the factual context of each case in light of all the evidence presented by both the plaintiff and the defendant*." *Id.* (emphasis added).

The Court's reasoning in *Bazemore* accords with its refusal in other cases to endorse limiting principles with respect to when, and in what manner, statistical evidence can be employed. *See, e.g.*, *Berghuis v. Smith*, 559 U.S. 314, 330 n.4 (2010) (declining Michigan's invitation "to adopt the absolute-disparity standard for measuring fair and reasonable representation and to requir[e] proof that the absolute disparity exceeds 10% to make out a prima facie fair-cross-section violation" (alteration in original; internal quotation marks omitted)); *Watson*, 487 U.S. at 995 n.3 (observing that "we have not suggested that any particular number of 'standard deviations' can determine whether a plaintiff has made out a prima facie case in the complex area of

employment discrimination" and that "our formulations . . . have never been framed in terms of any rigid mathematical formula"); *Basic*, 485 U.S. at 248 n.28 (explaining that, in adopting the fraud-on-the-market presumption, "we do not intend conclusively to adopt any particular theory of how quickly and completely publicly available information is reflected in market price"); *Anderson*, 328 U.S. at 687-88 (holding that an employee need only produce[] sufficient evidence to show the amount and extent of work as a matter of just and reasonable inference").

At bottom, this Court has long adhered to a case-specific approach to assessing the value of statistical evidence and other inferential proof. *See Teamsters*, 431 U.S. at 340. It should do so again here.

CONCLUSION

The standard of proof in class litigation is—and must be—no different than that in individual litigation. Tyson and its *amici* wrongly seek to unduly restrict, or eliminate, the use of inferential proof in class litigation even when that very same evidence would be sufficient in an individual case. *Amicus* respectfully asks this Court to affirm the judgment below and reaffirm that the procedural nature of an action does not alter substantive legal principles.

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APPENDIX

Appendix A

No jurisdiction requires a plaintiff to establish damages with complete precision.

(internal citations omitted)

State	Case
Alabama	*Long-Lewis, Inc. v. Webster*, 551 So. 2d 1025, 1027 (Ala. 1989) "[T]he amount of damages must be established with reasonable certainty. However, reasonable certainty is sufficient to support an award of damages; and absolute certainty is not required."
Alaska	*Cameron v. Chang-Craft*, 251 P.3d 1008, 1021 (Alaska 2011) In breach of contract actions a "plaintiff must present to the jury evidence sufficient to calculate the amount of the loss caused by the breach." In other words "the law does not require absolute precision, it requires only a reasonable basis for the award."

State	Case
Arizona	*Atkinson v. Marquart*, 541 P.2d 556, 558-59 (Ariz. 1975) [W]e must start from the proposition that once the fact of damage is established, proof of the amount thereof may be established with some lesser degree of certainty.
Arkansas	*Shelton v. Shelton*, 752 S.W.2d 758, 761 (Ark. 1988) In *Wasp Oil, Inc. v. Arkansas Oil & Gas, Inc.,* we noted that in some instances damages cannot be proved with exactness, and in those cases we do not reverse if the cause and existence of damages have been shown despite the inability to prove precisely what the plaintiff has lost.
California	*Lewis Jorge Constr. Mgmt., Inc. v. Pomona Unified Sch. Dist.*, 102 P.3d 257, 266 (Cal. 2004) Not only must such damages be pled with particularity, but they must also be proven to be certain both as to their occurrence and their extent, albeit not with "mathematical precision."

State	Case
Colorado	*Giampapa v. Am. Family Mut. Ins. Co.,* 64 P.3d 230, 244 (Colo. 2003) Any doubts regarding the certainty of non-economic damages are resolved against the party in breach, and the court may consider circumstances such as willfulness in deciding whether to require a lesser degree of certainty, giving greater discretion to the jury's findings.
Connecticut	*Naples v. Keystone Bldg. & Dev. Corp*., 990 A.2d 326, 335 (Conn. 2010) "The plaintiff has the burden of proving the extent of the damages suffered . . . . Although the plaintiff need not provide such proof with [m]athematical exactitude . . . the plaintiff must nevertheless provide sufficient evidence for the trier to make a fair and reasonable estimate . . . ."
Delaware	*Beebe Med. Ctr., Inc. v. Bailey,* 913 A.2d 543, 557 (Del. 2006)

State	Case
District of Columbia	*Campbell v. Fort Lincoln New Town Corp.,* 55 A.3d 379, 387-88 (D.C. 2012) A plaintiff must "establish both the fact of damages and the amount of damages with reasonable certainty." The proof need not be mathematically precise, however; what is required is "some evidence which allows the trier of fact to make a reasoned judgment" rather than an award based on "speculation or guesswork."
Florida	*Shulgasser-Parker v. Kennedy Trinley & Santino, P.L.,* 71 So. 3d 152, 153 (Fla. Dist. Ct. App. 2011) "If damages have been suffered, lack of precise proof as to the exact amount will not be fatal so long as the proof supports the monetary loss determined by the finder of fact and is not merely speculative."

State	Case
Georgia	*John Thurmond & Associates, Inc. v. Kennedy,* 668 S.E.2d 666, 672 (Ga. 2008) "Regardless of the measure of damages, however, the fair market value of the property must be proven, and, although exact figures are not necessary, the trier of fact must be able to 'reasonably estimate (the fair market value) without resort to guess-work.'"
Hawaii	*Bachran v. Morishige,* 469 P.2d 808, 810-11 (Haw. 1970) [W]e held that the court should instruct the jury "that if it is unable to determine by a preponderance of the evidence how much of the plaintiff's damages can be attributed to the defendant's negligence, it may make a rough apportionment", and "that if it is unable to make even a rough apportionment, it must apportion the damages equally among the various accidents."

State	Case
Idaho	*Mueller v. Hill*, 345 P.3d 998, 1004 (Idaho 2015), *reh'g denied* (Apr. 13, 2015) "[E]vidence is sufficient if it proves the damages with reasonable certainty."
Illinois	*Lovewell v. Schlick*, 171 N.E.2d 99 (Ill. App. Ct. 1960)
Indiana	*Remington Freight Lines, Inc. v. Larkey,* 644 N.E.2d 931, 942 (Ind. Ct. App. 1994) The law is well settled that, in a tort action, it is not necessary that the verdict reflect precise mathematical certainty.
Iowa	*Pavone v. Kirke*, 801 N.W.2d 477, 495 (Iowa 2011) [I]f the uncertainty merely lies in the amount of damages sustained, "'recovery may be had if there is proof of a reasonable basis from which the amount can be inferred or approximated.'"
Kansas	*Huffman v. Thomas,* 994 P.2d 1072, 1078 (Kan. Ct. App. 1999) Kansas law is clear that the plaintiff does not need to prove the amount of pecuniary damages to any level of mathematical certainty.

State	Case
Kentucky	*Middleton v. PNC Bank, NA*, 2014 WL 5510872, at *5 (Ky. Ct. App. 2014) "Kentucky law does not require [a plaintiff] to provide exact calculations of its damage—an estimation may suffice if it proves damages with 'reasonable certainty.'"
Louisiana	*Daigle v. City of Shreveport*, 78 So. 3d 753, 770 (La. Ct. App. 2011) The plaintiff bears the burden of proving special damages by a preponderance of the evidence. In meeting her burden of proof on the issue of future medical expenses, the plaintiff must show that, more probably than not, these expenses will be incurred and must present medical testimony that they are indicated and the probable cost of these expenses.
Maine	*Estate of Hoch v. Stifel*, 16 A.3d 137, 151 (Me. 2011) We will disturb an award of damages "only when it is plain that there is no rational basis upon which the amount of the award may be supported, that is, when there is no competent evidence in the record to support the award."

State	Case
Maryland	*Carter v. Wallace & Gale Asbestos Settlement Trust*, 96 A.3d 147, 157 (Md. 2014) "The Maryland cases are in accord with the prevailing rule elsewhere: that if compensatory damages are to be recovered, they must be proved with reasonable certainty, and may not be based on speculation or conjecture[.]"
Massachusetts	*Don v. Soo Hoo,* 912 N.E.2d 18, 23 (Mass. App. Ct. 2009) Although "proof of damages does not require mathematical precision, it must be based on more than mere speculation."
Michigan	*Hannay v. Dep't of Transp.,* 860 N.W.2d 67, 87 (Mich. 2014) This Court does not . . . "preclude recovery [of damages] for lack of precise proof" or "require a mathematical precision in situations of injury where, from the very nature of the circumstances, precision is unattainable," particularly in circumstances in which the defendant's actions created the uncertainty.

State	Case
Minnesota	*Holb-Gunther, LLC v. Van Tech Corp.*, 2009 WL 2746176, at *5 (Minn. App. 2009) A plaintiff bears the burden of proving the existence of lost profits "to a reasonable certainty" and the amount of those damages "to a reasonable probability."
Mississippi	*Par Indus., Inc. v. Target Container Co.,* 708 So. 2d 44, 50 (Miss. 1998) "'[A] reasonable basis for computation and the best evidence which is obtainable under the circumstances of the case, and which will enable the trier to arrive at a fair approximate estimate of loss is sufficient proof.'"
Missouri	*Gateway Foam Insulators, Inc. v. Jokerst Paving & Contracting Inc.,* 279 S.W.3d 179, 185-86 (Mo. 2009) Because lost profits are of a character that defies exact proof, the trial court had a greater degree of discretion to weigh the lost-profits award based on common experience demonstrating that a substantial pecuniary loss has occurred.

State	Case
Montana	*Tractor & Equip. Co. v. Zerbe Bros.,* 199 P.3d 222, 231 (Mont. 2008) [W]hile a damages judgment "must be supported by substantial evidence that is not mere guess or speculation," "mathematical precision is not required."
Nebraska	*Lesiak v. Cent. Valley Ag Co-op., Inc.*, 808 N.W.2d 67, 76-77 (Neb. 2012) [D]amages are not required to be proved with mathematical certainty, "'but the evidence must be sufficient to enable the trier of fact . . . to estimate with a reasonable degree of certainty and exactness the actual damages . . . .'"
Nevada	*Bhan v. Das,* No. 60896, 2013 WL 7158500, at *1 (Nev. Nov. 1, 2013) Das was not required to 'prove [his] damages with mathematical precision; [he] need only establish a reasonable basis for ascertaining those damages.'

State	Case
New Hampshire	*Palazzi Corp. v. Stickney*, 619 A.2d 1001, 1004 (N.H. 1992) Palazzi cites *Peter Salvucci & Sons Inc. v. State* for the proposition that '[t]he use of a formula . . . can be an acceptable method of proving damages.' Such use of a formula, however, is not acceptable when it is based on unsupported numbers and when precise measurement of damages is possible[.]
New Jersey	*Iliadis v. Wal-Mart Stores, Inc.,* 922 A.2d 710, 722 (N.J. 2007) [T]he proposed class asserts violations of the Wage and Hour Law, which directs employers to compensate employees who work in excess of forty hours a week with an overtime rate of "1 ½ times" the employees' regular hourly wage. Uncertainty regarding damages does not foreclose such claims.

State	Case
New Mexico	*Sunnyland Farms, Inc. v. Cent. New Mexico Elec. Co-op., Inc.,* 301 P.3d 387, 396 (N.M. 2013) The majority of jurisdictions allow unestablished business plaintiffs to collect lost profit damages if they can prove with reasonable certainty the fact of lost profits . . . . The dollar amount of lost profit damages, however, does not require the same level of proof.
New York	*Kenford Co. v. Erie Cnty.,* 493 N.E.2d 234, 235 (N.Y. 1986) [T]he alleged loss must be capable of proof with reasonable certainty.
North Carolina	*Sunbelt Rentals, Inc. v. Head & Engquist Equip., L.L.C.,* 620 S.E.2d 222, 231 (N.C. Ct. App. 2005) Plaintiffs must prove damages to a reasonable certainty. In cases where a claim for damages from a defendant's misconduct are shown to a reasonable certainty, the plaintiff should not be required to show an exact dollar amount with mathematical precision.

State	Case
North Dakota	*Johnson v. Monsanto Co.,* 303 N.W.2d 86, 93 (N.D. 1981) We believe that Johnson's proof on these items of damage failed in [part because t]he amount of these damages was not proved with a reasonable degree of certainty . . . . We realize that the amount of the damages does not require proof to a degree of mathematical precision; however, the jury must have some factual basis for fixing damages.
Ohio	*Schulke Radio Prods., Ltd. v. Midwestern Broad. Co.,* 453 N.E.2d 683, 686 (Ohio 1983) The nonbreaching party must establish the fact of damage and then sustain its burden of proof as to the amount of damage by proof on any reasonable basis.

State	Case
Oklahoma	*Johnson v. Ford Motor Co.,* 45 P.3d 86, 91 (Okla. 2002) Rather than require the plaintiff to prove precisely and exactly those injuries which are attributable to the accident and those which are attributable to the alleged design defect, we determined that: 1) the plaintiff should be required to prove by a preponderance of the evidence the extent of the enhanced injuries resulting from the defect; and 2) the manufacturer is liable for damages only for injuries which resulted from the defect.
Oregon	*N. Pac. Lumber Co. v. Moore,* 551 P.2d 431, 435 (Or. 1976) It is well settled that plaintiff is not required to prove the amount of his damages with mathematical certainty. He need only establish the fact of damage and evidence from which a satisfactory conclusion as to the amount of damage can be reached.

State	Case
Pennsylvania	*E. Coast Paving & Sealcoating, Inc. v. N. Allegheny Sch. Dist.,* 111 A.3d 220, 233 (Pa. Commw. Ct. 2015) The law does not require mathematical precision when calculating damages . . . "The law simply requires the claim be supported by a reasonable basis for the calculation."
Rhode Island	*Banville v. Brennan,* 84 A.3d 424, 432 (R.I. 2014) While damages need not be proven "with mathematical exactitude," they should be "based on reasonable and probable estimates."
South Carolina	*Bishop Logging Co. v. John Deere Indus. Equip. Co.,* 455 S.E.2d 183, 193 (S.C. Ct. App. 1995) [M]athematical precision is not required in the proof of loss . . . .

State	Case
South Dakota	*Husky Spray Serv., Inc. v. Patzer,* 471 N.W.2d 146, 153 (S.D. 1991) The amount of damages does not require proof to a degree of mathematical precision, and difficulty in computing the damages does not defeat one's right to prejudgment interest if it is susceptible of being made certain by mathematical calculation from known factors.
Tennessee	*Memphis Light, Gas & Water Div. v. Starkey,* 244 S.W.3d 344, 354 (Tenn. Ct. App. 2007) The primary goal of a compensatory damage award is to make the injured party whole[.]
Texas	*Phillips v. Carlton Energy Grp., LLC,* No. 12-0255, 2015 WL 2148951, at *9 (Tex. May 8, 2015) With respect to the recovery of lost profits as consequential damages, the law is well-settled: lost profits can be recovered only when the amount is proved with reasonable certainty. Proof need not be exact, but neither can it be speculative.

State	Case
Utah	*Austin v. Bingham*, 319 P.3d 738, 743-44 (Utah Ct. App. 2014) Proof of damages may therefore "be based upon approximations, if . . . the approximations are based upon reasonable assumptions or projections." This is because once the fact of damages has been established, any uncertainty in the amount of damages must be borne by the wrongdoer.
Vermont	*Shahi v. Madden*, 949 A.2d 1022, 1031 (Vt. 2008) Difficulty in calculating damages with precision does not defeat a jury award . . . .
Virginia	*Manchester Oaks Homeowners Ass'n, Inc. v. Batt*, 732 S.E.2d 690, 699 (Va. 2012)
Washington	*Clayton v. Wilson*, 227 P.3d 278, 285 (Wash. 2010) "Evidence of damage is sufficient if it affords a reasonable basis for estimating loss and does not subject the trier of fact to mere speculation or conjecture."

State	Case
West Virginia	*Checker Leasing, Inc. v. Sorbello,* 382 S.E.2d 36, 39 (W. Va. 1989) We have always held that damages need not be proved with precise exactitude.
Wisconsin	*Mgmt. Computer Servs., Inc. v. Hawkins, Ash, Baptie & Co.,* 557 N.W.2d 67, 80 (Wis. 1996) [D]amages must be proven with reasonable certainty. However, this does not mean that a plaintiff must prove damages with mathematical precision; rather, evidence of damages is sufficient if it enables the jury to make a fair and reasonable approximation.
Wyoming	*Goforth v. Fifield,* 352 P.3d 242, 250 (Wyo. 2015) "In Wyoming, damages must be proven with a reasonable degree of certainty, but proof of exact damages is not required."