BELLWETHER CASES

MASS TORTS

The use of ''random selection'' for selecting bellwether cases in mass tort litigation has many critics. A better method is to draw multiple random samples of bellwether cases and allow each party to eliminate a certain number of bellwether cases through a ''sample veto,'' attorney Matthew A. Holian and economists Dov Rothman, and David Toniatti say. This modified approach is most likely to produce a sample that is ''close to the docket average, while mitigating the risk of a single unrepresentative sample,'' the authors say.

A Modified Approach to Random Selection of Bellwether Cases

BY MATTHEW A. HOLIAN, DOV ROTHMAN, AND DAVID TONIATTI

Mass tort litigation can involve hundreds or thousands of plaintiffs who bring suit against one or more defendants in multiple jurisdictions.

To process these cases efficiently, courts sometimes first try a subset of plaintiffs who are thought to be representative of the other cases in the docket.

The outcomes of these so-called bellwether trials can provide information about the other cases in the docket and the importance of different factors in determining trial outcomes.[1]

When both parties believe that the bellwether cases are representative of the other cases, the outcomes from these trials can be used to resolve the other cases.

However, if one or both parties believe the bellwether cases are stronger or weaker than the other cases, the bellwether cases may not be useful benchmarks.[2]

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[1] The term bellwether comes from the practice of placing a bell around a male sheep, called a wether, to lead the flock.

[2] See *In re Chevron U.S.A. Inc.*, 109 F.3d 1016, 1019 (5th Cir. 1997).

[2] See Fallon, Eldon E., Jeremy T. Grabill, and Robert Pitard Wynne, ''Bellwether Trials in Multidistrict Litigation,'' 82 Tul. L. Rev. 2323, June 2008, p. 2345 (''By identifying the major variables, the transferee court and the attorneys can create sensible and easily ascertainable groupings by which to categorize the entire MDL, providing manageability and order to what may otherwise appear to be a massive, chaotic conglomeration of loosely analogous cases. To put it summarily, these

Courts use different methods to select bellwether cases. In some instances, one or both parties make selections, subject to the court's supervision ("party selection"). In other instances, the court selects cases at random ("random selection") or based on input from the parties ("court selection").

The relative merits of different selection processes have received attention from academics as well as practitioners. Advocates for party selection argue that the parties have the resources and knowledge to select representative cases and, by participating in the selection process, attorneys gain assurance that the bellwether cases are representative of the overall docket through participation in the selection process.[3]

Critics of party selection counter that parties have an incentive to choose cases that are most favorable to them rather than cases that are representative. The parties may be unable to agree on a common set of representative cases, or, when both parties independently select cases, the bellwether sample may provide information only about the "best" and "worst" cases. And while the court may oversee the process, it may be difficult or expensive for the court to gather the necessary information to determine whether the sample is biased in one direction or the other.

Advocates for random selection argue that random selection is "unbiased"—that is, on average, a sample chosen randomly will not favor strong or weak cases. In addition, advocates for random selection argue that given a large enough sample, the random sample will also tend to include cases of varying strength in proportion to how they appear in the docket. Without relying on the judgment of the parties or the court, the distribution of the cases drawn through random selection will tend to look like the distribution of the cases in the overall docket.

Critics of random selection counter that there is no guarantee that a single random sample will include representative cases—that is, random selection leaves open the possibility that bad luck will result in an unrepresentative sample, especially when the sample size is small. And while increasing the size of the random sample decreases the risk of an unrepresentative sample, this option may not always be desirable because of constraints on the resources of the court and the litigants.[4]

In this article, we describe a modified approach to random selection—which we term "random selection with sample veto"—that is intended to address some of the criticisms of random selection and that is designed for situations in which the size of the bellwether sample is constrained. Under the random selection with sample veto process, the court first draws multiple random samples of bellwether cases (preferably an odd number of samples).

Each party is then allowed to eliminate a certain number of *samples* of bellwether cases, though not individual cases within any of the samples. In other words, unlike common veto provisions that are sometimes included in selection models in which parties may eliminate individual cases ("random selection with case veto"),[5] under the random selection with sample veto process, the parties must eliminate entire samples at a time. The court then uses the remaining sample as its bellwether pool.

Benefits of a Modified Random Selection Process

The random selection with sample veto method retains many of the benefits of random selection, while reducing the risk of an unrepresentative sample. The sample veto process provides a way for the parties to eliminate unrepresentative samples, and decreases the risk that the remaining bellwether sample will be unrepresentative in a way that advantages one party over another. This process also increases the probability that the bellwether sample will reflect the average strength of the docket while also ensuring that cases across the spectrum, including very weak and very strong cases, can be included as bellwether cases.

Random selection with sample veto is especially advantageous relative to random selection and random selection with case veto when the size of the bellwether sample is necessarily small. A small bellwether sample carries with it a number of risks.

First, a small sample increases the risk that the average strength of the bellwether sample will not equal the average strength of the docket. Random selection with sample veto reduces this probability by drawing many small samples. Defendants have an incentive to eliminate those bellwether samples that on average are much stronger than the docket average. Similarly, plaintiffs have an incentive to eliminate those bellwether samples that on average are much weaker than the docket average. Those competing incentives will result in a final sample—the one ultimately used for the bellwether pool—being closer to the docket average than a single random sample.

A second risk associated with a small sample is that the sample may not include cases that serve as guide-

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groupings will act as guideposts, focusing the attorneys on the most predominant and important issues in the litigation.").

[3] *Id.,* p. 2349 ("The attorneys are in the best position to know, or ascertain, the true census of the litigation. In addition, they have the most staff resources available. Although there may be some incentive for the attorneys to focus more on selecting cases that will be successful at trial than those that are truly representative, the attorneys, with the transferee court's encouragement, must be mindful that unrepresentative cases, even if they are successful at trial, will do little to resolve the entire litigation and will have little predictive value. Additionally, the transferee court can take steps to curb this behavior by giving the attorneys veto or strike power during the subsequent trial-selection step. Accordingly, of the three possible alternatives, allowing the attorneys to fill the trial-selection pool will likely be the best, if not the only feasible, option.").

[4] The appropriate number of bellwether cases within a group depends on the amount of variation within the group and costs of a trial. *Id.,* pp. 2346-2347 ("In calculating the size of the pool, the transferee court and the attorneys must ensure that the pool is large enough to account for all of the major

variables previously identified, but small enough to be manageable and time-efficient.").

[5] *Id.,* p. 2365 ("Regardless of which method is ultimately employed, a transferee court should consider allowing each side of coordinating attorneys to veto or strike from consideration a predetermined number of cases in the trial-selection pool. No matter how diligently the attorneys or the transferee court fill the trial-selection pool, the possibility will always remain that, after the close of case-specific discovery, an unrepresentative case or a grossly unfavorable case will wind up in the trial-selection pool.").

posts for remaining cases in the docket. Even if the strength of a bellwether sample is close to the docket on average, certain groups of cases in the docket may not be well represented in a small bellwether sample. Random selection with case veto can make this problem worse, because plaintiffs and defendants have an incentive to eliminate weak and strong cases, respectively. If the overall docket includes a substantial number of cases that are much stronger or weaker than the average case in the docket, failing to include at least some of these outlier cases in the bellwether sample may decrease the effectiveness of the bellwether process.

By constraining parties' ability to selectively eliminate cases, random selection with sample veto reduces the risks that a single sample is unrepresentative or that strong or weak cases will not be present in the sample. The plaintiffs, for example, have an incentive to eliminate a bellwether sample that is skewed toward weaker cases, but they have less incentive to eliminate a bellwether sample that includes both weak and strong cases.

Similarly, the defendants have an incentive to eliminate a bellwether sample that is skewed toward stronger cases, but they have less incentive to eliminate a bellwether sample that includes both weak and strong cases. A bellwether sample that includes cases of varying strengths—and, therefore, serves as an effective guidepost for the remaining docket—is a more likely outcome with random selection with sample veto, and therefore offers a substantial advantage over party selection, pure random selection, or random selection with case veto.

Methods for Evaluating Performance of Modified Random Selection Process

To demonstrate the benefits of this approach, we simulate bellwether samples using the docket of plaintiffs and their associated scores in the Chantix product liability litigation, in which we represented Pfizer. In our current analysis, we focus on the selection of six plaintiffs with attempted suicide claims, the size and category for one portion of the bellwether sample determined by the court. We compare the results from 10,000 simulations from the three different selection processes described above: random selection, random selection with case veto, and random selection with sample veto.

We assess the representativeness of the bellwether samples from each selection method based on two objectives. First, we consider the risk of drawing a bellwether sample that is biased in favor of one party ("bias"). To obtain an unbiased sample, the selection method should not produce bellwether samples that are substantially weaker or stronger on average than the remaining cases. To evaluate this objective, we calculate the likelihood that the average score of the bellwether

cases matches the average score of the plaintiffs in the docket.

Second, we consider how well the set of cases in the bellwether sample serve as guideposts for the remaining cases in the docket ("guidepost effectiveness"). The efficient resolution of a case in the docket depends on how relevant the information provided by the bellwether sample is for that particular case. When the bellwether sample includes a case that is close to a group of cases in the docket, the outcome of a bellwether trial likely will be more useful in resolving those cases than if the bellwether pool does not contain a similar case.

To evaluate this objective, we calculate the average distance of a case in the docket to the closest bellwether case, as measured by the case scores. As outlined below, we found that random selection with sample veto outperforms random selection and random selection with case veto according to both the bias and guidepost effectiveness objectives.

Data

In the Chantix MDL, the primary alleged injuries were neuropsychiatric (completed suicides, attempted suicides, and other neuropsychiatric injuries such as depression, suicidal ideation, and aggression). The bellwether process ordered by the court included 28 plaintiffs from three categories: eight completed suicides, six attempted suicide, and 14 suicidal ideation or depression.[6] In our analysis, we focus on the selection of six attempted suicide bellwether plaintiffs from the 1,142 plaintiffs categorized as attempted suicides in the *Chantix* docket.[7]

Using a systematic, objective, and quantitative model, we ranked each attempted suicide case in the docket on a scale from 1 to 40 points, based on observable information such as: (1) the nature of the alleged injury; (2) the labeling period during which the plaintiff first took Chantix; (3) whether the plaintiff first suffered an injury within a certain period of time after the plaintiff last took Chantix; (4) whether the plaintiff filed suit within the applicable statute of limitations; and (5) whether the plaintiff resided in a state that preempts personal injury claims involving U.S. Food and Drug Administration-approved medications. This categorization resulted in 9 separate groups with the following scores: 1, 2, 4, 12, 14, 20, 24, 28, and 40.

Figure 1, below, shows the distribution of the scores. Approximately 25 percent of the plaintiffs have the highest score, 40. The average score is 20.8.

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[6] See Pretrial Order No. 9: Selection of Bellwether Plaintiffs for Discovery and Trial, Doc. No. 206, *In re Chantix (Varenicline) Prods. Liab. Litig.*, MDL No. 2092, Mar. 10, 2011, ¶¶ 3(a), 3(d).

[7] The 28 plaintiffs in the Chantix litigation were determined through party selection.

Figure 1
Distribution of Scores for Attempted Suicide Plaintiffs in Chantix Litigation
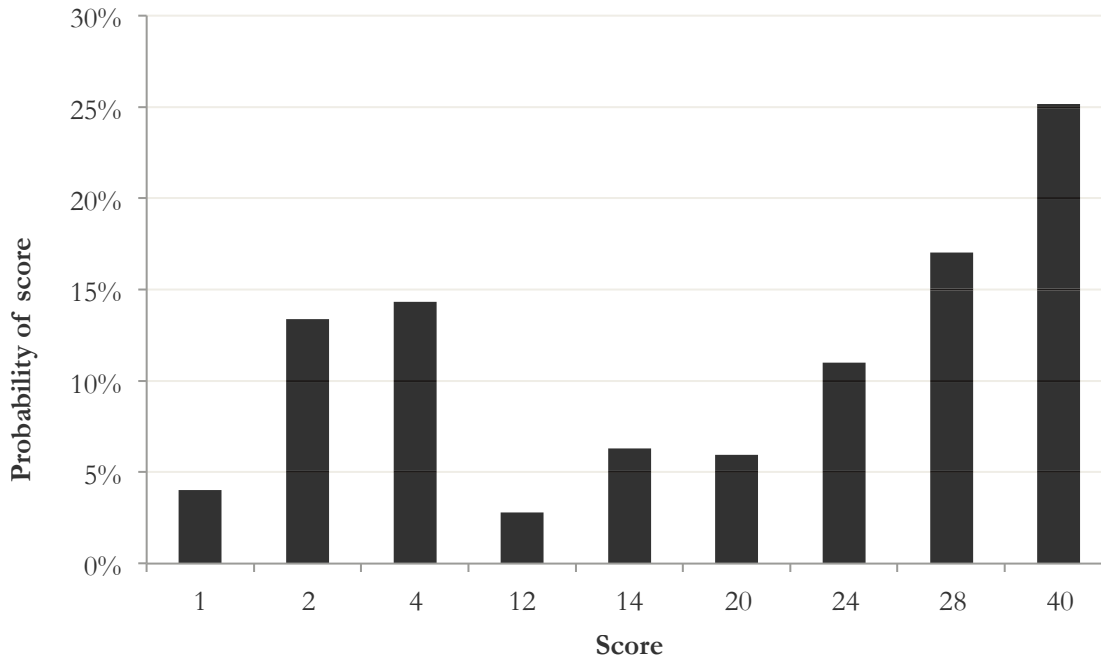
Source:

[1] Pretrial Order No. 9: Selection of Bellwether Plaintiffs for Discovery and Trial, Doc. No. 206, In re: Chantix (Varenicline) Prods. Liab. Litig., MDL No. 2092, Mar. 10, 2011, ¶¶ 3(a), 3(d).

Selection Process Simulations

For each selection process, we take 10,000 random draws of six attempted suicide cases. We use three different methods to select these six cases:

■ Random selection: Six cases are drawn randomly from the 1,142 cases.

■ Random selection with case veto: 14 cases are drawn randomly from the 1,142 cases; plaintiffs veto the four lowest score cases and the defendants veto the four highest score cases; six cases remain.

■ Random selection with sample veto: Six cases are drawn randomly from 1,142 cases. This process is repeated seven times. Plaintiffs veto the three samples with the lowest average score and the defendants veto the three samples with the highest average score; one sample with six cases remains.[8,9]

Results

We first compare the average score in the docket to the average scores from 10,000 simulations of each selection method. Figure 2, below, shows the results.

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[8] A case may not be drawn more than once for the same sample (*i.e.*, we use random sampling without replacement to match an actual bellwether process). In random selection with sample veto, the same case may be included in more than one sample.
[9] In random selection with sample veto, a total of 70,000 random samples are drawn since each selection process requires seven random samples.

Figure 2
Results by Selection Method

	Average of sample average	Std. dev. of sample average
Random selection	20.7	6.0
Random selection with case veto	21.4	5.7
Random selection with sample veto	20.7	2.8
Docket average	20.8	

As expected, the average score across all 10,000 simulations is 20.7, which is very close to the docket average 20.8. Using random selection with sample veto, the average of the average scores is also 20.7. Using random selection with case veto, the average of the average scores is larger, 21.4. This bias occurs because the distribution of scores in the docket is asymmetric. Selectively eliminating lower scores has a larger effect on the sample average than selectively eliminating higher scores. Thus, random selection with sample veto results in samples that are closer to the overall docket

average than random selection with case veto, and not materially different from the average derived through pure random selection.

In addition to being closer to the overall docket average than random selection with case veto, random selection with sample veto also outperforms both random selection with case veto and pure random selection with respect to the concentration of the average scores around the average value of the docket. In other words, random selection with sample veto is more likely to produce samples that were closer to the docket average than the other random selection methods. This is evident in the second column of Figure 2. The standard deviation of the sample average for random selection and random selection with case veto are 6.0 and 5.7, respectively, whereas the standard deviation of the sample average for random selection with sample veto is 2.8.

We also evaluate the three selection methods in terms of how well the distribution of the bellwether sample reflects the distribution of cases in the docket. Since there are nine different score groups and only six plaintiffs, it is not possible that every sub-group will be represented in the bellwether trials. We measure the "guideline effectiveness" based on the average distance from a docket case to the nearest bellwether case.[10] We find that random selection with sample veto performs better than random selection, both of which perform materially better than random selection with case veto. Figure 3, below, illustrates this result.

Figure 3
Average Distance of Docket Case to
Closest Bellwether Case

Random selection	2.6
Random selection with case veto	7.3
Random selection with sample veto	2.0

Finally, to highlight the relative value of random selection with sample veto in small samples, we evaluate the "guidepost effectiveness" for three alternative sample sizes: 3, 9, and 12. Figure 4, below, shows the results of the three alternatives and the original sample size of 6. As before, we allow parties to eliminate four cases when applying random selection with case veto and three samples when applying random selection with sample veto.

As the sample size increases, the differences between random selection and random selection with sample veto disappear. When the sample size is 12, random selection and random selection with sample veto produce bellwether samples that are—on average—close to the cases in the docket. Random selection with case veto, on the other hand, still produces bellwether samples that are far from many of the cases in the docket because parties are able to selectively eliminate the strongest and weakest cases. When the sample size is 3, the differences between random selection and random selection with sample veto are most pronounced.

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[10] When a member of the docket has the same score as a bellwether case, the distance is zero.

Figure 4
Average Distance of Docket Case to
Closest Bellwether Case
Alternative Sample Sizes

	Sample Size			
	3	6	9	12
Random selection	6.5	2.6	1.4	0.8
Random selection with case veto	9.3	7.3	6.6	6.2
Random selection with sample veto	4.8	2.0	1.1	0.7

Conclusion

In this article we describe a modified approach to random selection—which we term "random selection with sample veto"—that is intended to address some of the criticisms of random selection and that is designed for situations in which the size of the bellwether sample is constrained. We show that random selection with sample veto is most likely to produce a sample that is close to the docket average, while mitigating the risk of a single unrepresentative sample. Put another way, random selection with sample veto is unbiased with little variance in the outcome.

By contrast, pure random selection is also unbiased (in the sense that random selection yields samples that are close to the docket average), but there is a higher risk that a single sample may be much stronger or much weaker than the docket average. Random selection with case veto is biased and has substantial variance in the outcome, because the average case selected with that method tends to be stronger than the docket average.[11]

We also shows that with respect to the guidepost effectiveness objective, random selection with sample veto delivers bellwether cases of varying strength in a sample, which more closely matches the distribution of cases in the docket as a whole. By contrast, pure random selection is more likely to deliver bellwether samples in which all the cases are relatively strong or all the cases are relatively weak.

These samples not only do not reflect the docket average, but they also serve as poor guideposts for many of the remaining cases. Random selection with case veto allows parties to selectively remove strong and weak cases from the bellwether sample, making the ultimate sample much less representative. Some of these

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[11] This bias is due to the use of case veto with a disproportionate number of relatively high score cases in the Chantix docket. When weak cases are selected, the plaintiffs veto these cases. When strong cases are selected, the defendant vetoes these cases, but there is a higher probability that the remaining cases are just as strong as the ones vetoed. When the defendant and plaintiffs have an equal number of vetoes, the defendant has less ability to influence the bellwether sample, and this asymmetry increases the average score of the bellwether sample (when there is a disproportionate number of high score cases).

cases are well represented in the Chantix docket and are often not included in the bellwether sample using this method.

Thus, random selection with sample veto addresses several concerns raised about random selection gener-ally and outperforms pure random selection or random selection with case veto, and we hope that these data will persuade courts and litigants to use this method to select bellwether cases.