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UNITED STATES COURT OF APPEALS

FOR THE SIXTH CIRCUIT

IN RE: OHIO EXECUTION PROTOCOL.

ANGELO FEARS, et al.,

Plaintiffs,

No. 17-3076

GARY OTTE; RONALD PHILLIPS; RAYMOND TIBBETTS,

Plaintiffs-Appellees,

v.

DONALD MORGAN, et al.,

Defendants-Appellants.

Appeal from the United States District Court
for the Southern District of Ohio at Columbus.
No. 2:11-cv-01016—Michael R. Merz, Magistrate Judge.

Argued: March 7, 2017

Decided and Filed: April 6, 2017

Before: MOORE, KETHLEDGE, and STRANCH, Circuit Judges.

COUNSEL

ARGUED: Eric E. Murphy, OFFICE OF THE OHIO ATTORNEY GENERAL, Columbus, Ohio, for Appellants. Erin G. Barnhart, OFFICE OF THE FEDERAL PUBLIC DEFENDER FOR THE SOUTHERN DISTRICT OF OHIO, Columbus, Ohio, for Appellees. **ON BRIEF:** Eric E. Murphy, Peter T. Reed, Hannah C. Wilson, Thomas E. Madden, Jocelyn K. Lowe, Katherine E. Mullin, OFFICE OF THE OHIO ATTORNEY GENERAL, Columbus, Ohio, for Appellants. Erin G. Barnhart, Allen L. Bohnert, Adam M. Rusnak, OFFICE OF THE FEDERAL PUBLIC DEFENDER FOR THE SOUTHERN DISTRICT OF OHIO, Columbus, Ohio, James A. King, PORTER, WRIGHT, MORRIS & ARTHUR LLP, Columbus, Ohio, Vicki

Werneke, FEDERAL PUBLIC DENDER, Cleveland, Ohio, Timothy F. Sweeney, LAW OFFICE OF TIMOTHY FARRELL SWEENEY, Cleveland, Ohio, Lisa M. Lagos, OFFICE OF THE OHIO PUBLIC DEFENDER, Columbus, Ohio, Mark E. Haddad, Joshua E. Anderson, Alycia A. Degen, Katherine A. Roberts, Collin P. Wedel, SIDLEY AUSTIN LLP, Los Angeles, California, for Appellees.

MOORE, J., delivered the opinion of the court in which STRANCH, J., joined. STRANCH, J. (pp. 31–32), delivered a separate concurring opinion. KETHLEDGE, J. (pp. 33–44), delivered a separate dissenting opinion.

OPINION

KAREN NELSON MOORE, Circuit Judge. Ohio’s current execution protocol allows for execution by lethal injection using a three-drug combination of (1) midazolam; (2) either vecuronium bromide, pancuronium bromide, or rocuronium bromide, which are paralytics; and (3) potassium chloride, which stops the heart. R. 667-1 (Ohio DRC Execution Protocol, 01-COM-11 at 2) (Page ID #19813). The purpose of the first drug is to ensure that the person being executed is insensate to the pain that the second two drugs cause. It is undisputed that if the first drug does not “render the prisoner unconscious,” then “there is a substantial, constitutionally unacceptable risk of suffocation . . . and pain” from the second two drugs. *Baze v. Rees*, 553 U.S. 35, 53 (2008) (plurality op.). The ultimate question in this case is whether use of midazolam as the first drug in this three-drug protocol “entails a substantial risk of severe pain” as compared to “a known and available alternative.” *Glossip v. Gross*, 135 S. Ct. 2726, 2731 (2015). The question before us at this preliminary stage, however, is much narrower. We ask only whether the district court abused its discretion by granting a preliminary injunction to allow for further litigation regarding midazolam’s efficacy before Ohio executes Ronald Phillips, Raymond Tibbetts, and Gary Otte. For the reasons discussed below, we **AFFIRM** the judgment of the district court granting the preliminary injunction.

I. BACKGROUND

A. Procedural history

The litigation challenging the constitutionality of Ohio's lethal injection procedures spans several years, and we will not attempt to outline the entire procedural history. We do note that this litigation has involved different versions of Ohio's lethal injection protocol. In 2009, Kenneth Biros, among others, challenged a three-drug protocol consisting of thiopental sodium, pancuronium bromide, and potassium chloride. In November 2009, Ohio changed from that three-drug protocol to a one-drug protocol consisting of a five-gram dose of thiopental sodium. At that time, Ohio represented to the district court and this court that the State would no longer use pancuronium bromide or potassium chloride for executions. This court held that Biros's challenge to the old three-drug protocol was moot. *See Cooley v. Strickland*, 588 F.3d 921 (6th Cir.), *reh'g en banc denied*, 588 F.3d 924 (6th Cir. 2009). Ohio executed Biros using its new one-drug protocol.

At a December 9, 2009 district court hearing, at the court's suggestion, the parties agreed that they would withdraw their pending motions, that the condemned inmates would file amended complaints addressing the new protocol, and that the State would not challenge the amended complaints on statute of limitations or other procedural grounds. R. 966-10 (Dec. 9, 2009 Hr'g Tr. at 44–46) (Page ID #34472–74). But after adopting the one-drug protocol, Ohio encountered difficulty obtaining the designated single drug, thiopental sodium. On October 7, 2016, the State adopted a new execution protocol. R. 667-1 (Ohio DRC Execution Protocol, 01-COM-11 at 2) (Page ID #19813). That protocol is the subject of this appeal.

The protocol at issue in this appeal provides for execution by lethal injection using a three-drug combination of (1) midazolam; (2) either vecuronium bromide, pancuronium bromide, or rocuronium bromide, which are paralytics; and (3) potassium chloride, which stops the heart. *Id.* (Page ID #19813). Plaintiffs allege that the first drug, midazolam, does not render the person being executed insensate to pain, and, as a result, death by this lethal injection protocol is excruciatingly painful. They raise several challenges to the new protocol. Most relevant here, they raise an Eighth Amendment challenge under *Baze* and *Glossip*, and they also

argue that Defendants are judicially estopped from using pancuronium bromide or potassium chloride.

In the district court, the parties unanimously consented to the jurisdiction of Magistrate Judge Merz, giving him the authority to rule on Plaintiffs' dispositive motion for a preliminary injunction. Magistrate Judge Merz held a five-day evidentiary hearing beginning on January 3, 2017, after which he enjoined Defendants from executing Phillips, Tibbetts, or Otte using "the three-drug protocol embodied in the October 7, 2016, version" of the Ohio execution protocol or "any lethal injection method which employs either a paralytic agent or potassium chloride." Decision & Order at 118. The magistrate judge held that although Plaintiffs were not likely to succeed on their Eighth Amendment "*Wilkerson/Kemmler* Claim," Eighth Amendment "Evolving Standards of Decency/Devolution Claim," Equal Protection Claim, or Judicial Admissions Claim, *see* Decision & Order at 8–9, 111, 115, Plaintiffs were likely to succeed on their Eighth Amendment "*Baze/Glossip* Claim" and their Judicial Estoppel Claim, *see id.* at 105, 107, 114. Defendants timely appealed the preliminary injunction, arguing that Plaintiffs are not likely to succeed on either their *Baze/Glossip* claim or their judicial estoppel claim. We have jurisdiction over the appeal pursuant to 28 U.S.C. § 1292(a)(1).

B. Evidence presented at five-day evidentiary hearing

Over the course of the five-day hearing, the district court heard testimony from four experts: Dr. Craig Stevens, PhD., a Professor of Pharmacology at Oklahoma State University who testified as an expert witness for Plaintiffs; Dr. Sergio Bergese, M.D., a Professor of Anesthesiology and Neurological Surgery and practicing anesthesiologist at The Ohio State University Wexner Medical Center who testified as an expert witness for Plaintiffs; Joseph Antognini, M.D., a retired anesthesiologist and faculty member at University of California, Davis who testified as an expert witness for Defendants; and Dr. Daniel Buffington, Pharm.D, a pharmacologist in private practice who testified as an expert witness for Defendants. The district court also heard testimony from: Edwin Voorhies, the Managing Director of Operations for the Ohio Department of Rehabilitation and Correction; Gary Mohr, the Director of the Ohio Department of Rehabilitation and Correction; and two Ohio Department of Rehabilitation and Correction Execution Team members (who testified anonymously). A reporter, Alan Johnson,

testified as an eyewitness to the execution of Dennis McGuire by the State of Ohio. Five legal professionals testified as eyewitnesses to out-of-state executions in which midazolam was part of a multi-drug execution protocol.

In its 119-page Decision and Order Granting in Part and Denying in Part Plaintiffs' Motions for Preliminary Injunction, the district court discussed this testimony and set out its findings of fact. First, the district court discussed the testimony of three eyewitnesses to Ohio's execution of Dennis McGuire: ODRC Director Gary Mohr, Execution Team Member No. 10, and reporter Alan Johnson. All three testified that after McGuire appeared to be unconscious, McGuire's stomach began repeatedly to knot up and then relax, and McGuire began to snort. Decision & Order at 20–21. According to Johnson, "McGuire began coughing, gasping, choking in a way that I had not seen before at any execution." *Id.* at 21. Johnson also testified that McGuire gasped "in a way that almost seemed to be choking," clenched and unclenched his hands, and "attempted to kind of lift up off the table." *Id.* Johnson testified that McGuire gasped fifteen or sixteen times, and that the gasping or choking went on for twelve to thirteen minutes. *Id.* Johnson has witnessed twenty Ohio executions, and had never previously seen anything like the intensity or duration of McGuire's reaction. *Id.* Mohr has overseen eleven executions, and testified that he had not previously seen a reaction like McGuire's. *Id.* at 20.

Next, the district court discussed the testimony of five eyewitnesses to midazolam-involved executions that took place outside of Ohio. We focus first on testimony about the two out-of-state executions that occurred after the Supreme Court's *Glossip* decision. Spencer Hahn, an Assistant Federal Defender in the Capital Habeas Unit in the Middle District of Alabama, witnessed the December 8, 2016 execution of Ronald Smith by the State of Alabama. Like Ohio's current execution protocol, the protocol used to execute Smith called for 500 milligrams of midazolam. It also called for a 600-milligram dose of a paralytic drug, and 240 milliequivalents of potassium chloride. Decision & Order at 22. Hahn testified that "[t]here were two periods in which [Smith] appeared to rest somewhat briefly" but then he began "coughing, heaving, flailing, or attempting to flail arms, clenching and unclenching of fists, movement of lips . . . and then doing this asthmatic cough, barking-type cough." *Id.* at 22. Terry Alang, an attorney employed as an investigator in the Capital Habeas Unit in the Middle District

of Alabama, witnessed the January 20, 2016 execution of Christopher Brooks by the State of Alabama. Alabama used the same execution protocol that it used in the Smith execution, most notably 500 milligrams of midazolam. According to Alang's testimony, after the execution team members administered midazolam, Brooks began heaving. *Id.* at 24.

The district court also discussed testimony about three executions that occurred before the Supreme Court's *Glossip* decision. *Id.* at 22. First, Sonya Rudenstine, a Florida lawyer who specializes in capital post-conviction work, witnessed the execution of Paul Howell by the State of Florida. Like Ohio's current execution protocol, the protocol used to execute Howell called for 500 milligrams of midazolam in two separate injections of 250 milligrams each. *Id.* at 23. The protocol then called for 200 milligrams of vecuronium bromide in two 100-milligram injections, followed by 240 milliequivalents of potassium chloride. *Id.* Rudenstine observed Howell open his eyes after the consciousness check. *Id.*

Second, Dale Baich, a supervisor in the Federal Defender Capital Habeas Unit in Arizona, witnessed the execution of Joseph Wood by the State of Arizona. *Id.* The protocol used to execute Wood called for injection of a mixture of 50 milligrams of midazolam and 50 milligrams of hydromorphone. *Id.* During Wood's execution, the State injected this mixture fifteen separate times. *Id.* "Wood continued to gasp and try to breathe until his death almost two hours after the process began." *Id.* In a settlement agreement entered on December 19, 2016, Arizona agreed to "never again use midazolam, or any other benzodiazepine, as part of a drug protocol in a lethal injection execution." R. 976-2 (Stipulated Settlement Agreement at 2) (Page ID #36214); *see also id.* at 23.

Third, Dean Sanderford, an Assistant Federal Defender in Colorado, witnessed the execution of Clayton Lockett by the State of Oklahoma. Decision & Order at 24. The protocol used to execute Lockett called for 100 milligrams of midazolam followed by a paralytic agent and potassium chloride. *Id.* According to Sanderford, three or four minutes after the administration of the paralytic, Lockett began writhing and attempted to speak. *Id.*

The district court then discussed, at great length, the testimony of the four expert witnesses. We summarize very briefly. Dr. Stevens discussed sedation and general anesthesia.

He explained that there are different levels of sedation: minimal sedation (i.e., the sedation that would be appropriate for a root canal); moderate sedation; and deep sedation. General anesthesia is beyond the deepest level of sedation, and is the state appropriate for surgery. Only at the state of general anesthesia is someone unconscious. Dr. Stevens explained that midazolam can bring someone to the state of deep sedation, but not to general anesthesia or unconsciousness. Decision & Order at 78. Similarly, Dr. Bergese testified that he would never use midazolam alone as an anesthetic. He also testified that when midazolam is used as an anesthetic, it is for relatively minor procedures, such as colonoscopies, as opposed to more invasive surgeries. *Id.* at 47.

To explain why midazolam cannot render someone unconscious, Dr. Stevens explained midazolam's ceiling effect. *Id.* at 31–32. Midazolam acts on a receptor called GABA_A (GABA is short for gamma-aminobutyric acid), and can decrease neural activity only when GABA_A is present. Once there is no GABA_A left for midazolam to act on, midazolam cannot decrease neural activity anymore and the drug reaches its maximum potency, or ceiling. At this point, administering more midazolam does not increase midazolam's effect.

Dr. Stevens explained that midazolam's reliance on GABA_A, and consequential ceiling effect, is a distinction between benzodiazepines like midazolam and barbiturates like thiopental sodium. *Id.* at 31–32. Although both benzodiazepines and barbiturates work on the central nervous system and can be used as sedatives, barbiturates can decrease neural activity without GABA_A present. According to Dr. Stevens, because barbiturates do not depend on GABA, they do not have a ceiling effect. Dr. Bergese agreed generally that midazolam has a maximum impact, but he emphasized that his main concern is that midazolam is simply the wrong drug. *Id.* at 87.

In response to Dr. Stevens's discussion of ceiling effects, Dr. Antognini testified that midazolam's ceiling effect is not germane. In his view, a 500-milligram dose of midazolam is sufficient to render a person unconscious. Whatever ceiling effect midazolam may have beyond the amount necessary to render someone unconscious is irrelevant. Decision & Order at 70. He also testified that data on midazolam's ceiling effect is unclear. *Id.* at 71. Taking an entirely different tack, Dr. Buffington disputed that midazolam has a ceiling effect at all. *Id.* at 93.

However, he also testified that when midazolam is used alone, it is usually in situations where general anesthesia is not required, such as resetting bones, vasectomies, or placement of tubes or implanted devices. *Id.* at 92.

Dr. Antognini and Dr. Stevens disagreed strongly about whether midazolam possesses any analgesic (painkilling) properties. Dr. Antognini testified that midazolam does possess some analgesic properties, at least in massive doses. Dr. Stevens, by contrast, was adamant that midazolam does not treat pain. Decision & Order at 75. Dr. Bergese agreed with Dr. Stevens. *Id.* at 47. Without addressing midazolam's analgesic properties, Dr. Buffington said that midazolam would sedate someone sufficiently to render them insensate to the pain caused by a paralytic and potassium chloride. *Id.* at 94. Dr. Antognini testified that the risk that someone would experience pain after receiving a 500-milligram dose of midazolam is "very, very low." *Id.* at 66. Dr. Stevens, by contrast, concluded that "'the use of midazolam as the first drug in a three-drug protocol is highly likely to cause intolerable pain and suffering,' stemming from the administration of the second and third drugs." *Id.* at 40. Again, Dr. Bergese agreed with Dr. Stevens. *Id.* at 47.

II. DISCUSSION

A. Legal Standards

"A plaintiff seeking a preliminary injunction must establish that he is likely to succeed on the merits, that he is likely to suffer irreparable harm in the absence of preliminary relief, that the balance of equities tips in his favor, and that an injunction is in the public interest." *Glossip*, 135 S. Ct. at 2736. "The preliminary injunction posture of the present case thus requires petitioners to establish a likelihood that they can establish both that [Ohio's] lethal injection protocol creates a demonstrated risk of severe pain and that the risk is substantial when compared to the known and available alternatives." *Id.* at 2737.

An appellate court must review a district court's decision granting or denying a preliminary injunction for an abuse of discretion. *Ashcroft v. Am. Civil Liberties Union*, 542 U.S. 656, 664 (2004). "Under this standard, the court reviews the district court's legal conclusions de novo and its factual findings for clear error." *Babler v. Futhey*, 618 F.3d 514,

520 (6th Cir. 2010); *see also Glossip*, 135 S. Ct. at 2739. “[A] finding is ‘clearly erroneous’ when although there is evidence to support it, the reviewing court on the entire evidence is left with the definite and firm conviction that a mistake has been committed.” *Anderson v. City of Bessemer City*, 470 U.S. 564, 573 (1985). The clearly erroneous standard “plainly does not entitle a reviewing court to reverse the finding of the trier of fact simply because it is convinced that it would have decided the case differently.” *Id.* “In particular, when a trial judge’s finding is based on his decision to credit the testimony of one of two or more witnesses, each of whom has told a coherent and facially plausible story that is not contradicted by extrinsic evidence, that finding, if not internally inconsistent, can virtually never be clear error.” *Id.* at 575. “[I]f the underlying constitutional question is close,” an appellate court “should uphold the injunction and remand for trial on the merits.” *Ashcroft v. Am. Civil Liberties Union*, 542 U.S. at 664–65.

B. Eighth Amendment *Baze/Glossip* Claim

1. Likelihood of success on the merits

The district court found that Plaintiffs were likely to succeed on the merits of their Eighth Amendment *Baze/Glossip* claim because they had satisfied both prongs of *Baze* and *Glossip*—first, that use of midazolam as the first drug in a three-drug protocol created a substantial risk of severe pain, and, second, that Plaintiffs identified a known and available alternative.

a. Substantial risk of severe pain

Under *Glossip*, to establish that a method of execution violates the Eighth Amendment, prisoners must “establish that the method presents a risk that is *sure or very likely* to cause serious illness and needless suffering, and give rise to sufficiently *imminent* dangers. To prevail on such a claim, there must be a substantial risk of serious harm, an objectively intolerable risk of harm.” *Glossip*, 135 S. Ct. at 2737 (internal quotation marks omitted) (emphasis in original). Moreover, “prisoners cannot successfully challenge a State’s method of execution merely by showing a slightly or marginally safer alternative. Instead, prisoners must identify an alternative

that is feasible, readily implemented, and in fact significantly reduce[s] a substantial risk of severe pain.” *Id.* (internal quotation marks omitted) (alteration in original).¹

The district court found that Plaintiffs were likely to succeed on their claim that the use of midazolam as the first drug in a three-drug protocol creates a substantial risk of severe pain. Decision & Order at 104. There is no dispute that the suffocation caused by the paralytic and the intense burning sensation caused by potassium chloride are excruciatingly painful, just as in *Baze* it was “uncontested that . . . there is a substantial, constitutionally unacceptable risk of suffocation from the administration of pancuronium bromide and pain from the injection of potassium chloride” if a proper dose of an effective anesthetic is not administered first. *Baze*, 553 U.S. at 53 (plurality op.). This case, like *Baze*, “hinges on” the efficacy of the first drug in the three-drug protocol. *Id.* The district court’s finding that Plaintiffs are likely to succeed on their claim that there is a substantial risk that midazolam does not effectively anesthetize against this pain was not clearly erroneous.

Defendants have made two separate arguments for why we should not credit the district court’s factual findings. During oral argument, Defendants denied that the district court found facts at all. They argued that the district court made an ultimate legal conclusion that use of midazolam creates a substantial risk of severe pain but did not make any factual findings to support that (purported) legal conclusion. They urged us to review the district court’s finding under a less deferential standard of review. Oral Argument at 1:45–2:58. This argument fails

¹The Dissent argues that by focusing on the phrase “substantial risk of serious harm” we do “not even apply the relevant legal standard” because the relevant legal standard is whether “the method of execution is *sure or very likely* to cause serious pain.” Dissent at 36 (emphasis in original). To the extent that the Dissent’s point is that *Glossip* uses the language “*sure or very likely* to cause serious illness and needless suffering,” to emphasize that the standard for Eighth Amendment claims is rigorous, we agree. *Glossip*, 135 S. Ct. at 2737 (emphasis in original). To the extent that the Dissent’s argument is that we are not considering the relevant legal standard, we do not agree. The Supreme Court uses the phrases “substantial risk of serious harm” or “substantial risk of severe pain” repeatedly throughout its opinion when discussing the standard for Eighth Amendment claims. *Id.* at 2731 (stating, in the second paragraph, “For two independent reasons, we also affirm. . . . Second, the District Court did not commit clear error when it found that the prisoners failed to establish that Oklahoma’s use of a massive dose of midazolam in its execution protocol entails a *substantial risk of severe pain.*”) (emphasis added); *see also id.* at 2737 (“To prevail on such a claim, there must be a *substantial risk of serious harm* [and] . . . prisoners must identify an alternative that is feasible, readily implemented, and in fact significantly reduce[s] a *substantial risk of severe pain.*”) (internal quotation marks omitted) (second alteration in original) (emphasis added); *id.* at 2740 (“Accordingly, an inmate challenging a protocol bears the burden to show, based on evidence presented to the court, that there is a *substantial risk of severe pain.*”) (emphasis added).

because its premise is false. In *Glossip*, the Supreme Court states that the Oklahoma district court “*did not commit clear error when it found that the prisoners failed to establish that Oklahoma’s use of a massive dose of midazolam in its execution protocol entails a substantial risk of severe pain.*” *Glossip*, 135 S. Ct. at 2731 (emphasis added). This statement indicates that the determination about whether midazolam entails a substantial risk of severe pain is a finding of fact because clear error is the standard of review applicable to findings of fact, not legal conclusions. Moreover, the Supreme Court’s statement is explicit that the district court’s determination as to whether midazolam entails a substantial risk of severe pain must be reviewed for clear error. *Id.* Based on this instruction, we must review for clear error the district court’s determination that midazolam entails a substantial risk of severe pain, and we must follow the Supreme Court’s instruction to review the district court’s determination for clear error even if the determination is an ultimate legal conclusion rather than a finding of fact.

We agree, and Plaintiffs concede, *see* Oral Argument at 47:20–48:50, that ideally the district court would have made more specific findings of fact. Yet while we recognize that the district court could have been more specific, we are also mindful that the State of Ohio has pushed for this litigation to move as quickly as possible. The district court’s opinion noted that the State has a valid interest in proceeding expeditiously, and the magistrate judge currently presiding over the case appears to have made every effort to ensure that the case does proceed expeditiously. Decision & Order at 117–18. Its effort to proceed expeditiously likely explains why the district court’s 119-page opinion, which it issued about two weeks after the five-day hearing, does not painstakingly lay out each finding of fact at the level of detail all would prefer. Most importantly, we reiterate that any imperfections in the district court opinion do not amount to a total failure to find facts.

In their briefs, Defendants make a separate argument for why we should set aside the district court’s findings of fact. They argue that the district court clearly erred because they believe that *Glossip* held that the use of midazolam as the anesthetic drug in a multi-drug execution protocol is *per se* constitutional. Appellant Br. at 22. In support of this argument, Defendants posit that in *Glossip*, the Supreme Court decided “legislative facts” rather than “adjudicative facts” because the efficacy of midazolam is “a matter of legislative fact involving a

medical judgment.” *Id.* at 22. Defendants further posit that this is significant because “[l]ower courts accept the Supreme Court’s legislative fact findings because of our hierarchical judicial system.” *Id.* at 21. As a result, Defendants’ argument continues, because *Glossip* did not invalidate Oklahoma’s execution protocol, the district court in this case was forbidden from finding that Ohio’s three-drug protocol created a substantial risk of severe pain and from issuing its preliminary injunction, and we are forbidden from affirming the district court’s findings. *Id.* at 23.

Putting aside their language about the distinction between legislative facts and adjudicative facts, Defendants’ general point is that the Supreme Court sometimes issues broad rulings rather than narrow ones, and that, when the Supreme Court issues broad constitutional rulings, all state and federal courts are bound by those broad rulings. This point, while undoubtedly correct, is also irrelevant to the operative question in this case, which is how broad the Supreme Court’s ruling in *Glossip* actually is.

The answer is that the *Glossip* ruling is narrow, or at least much narrower than Defendants suggest. In *Glossip*, the Supreme Court went out of its way to emphasize the deferential standard of review applicable to the district court’s findings of fact, and that the Court’s decision was based on these findings. *See Glossip*, 135 S. Ct. at 2731, 2739–40. The Supreme Court did not say that use of midazolam is per se constitutional such that no district court may ever conduct fact-finding and find otherwise. *Id.* Defendants’ argument that “*Glossip* decided legislative facts,” established a per se rule, and consequently precludes any district court from ever finding that use of midazolam creates a substantial risk of severe pain, Appellant Br. at 22, is unpersuasive.

The implications that would flow from viewing *Glossip* as having established a per se rule also undermine Defendants’ argument. If *Glossip* were to have established a per se rule, every other district court in the country—as well as every federal appellate court, all state courts, and the Supreme Court itself—would be bound by the factual findings of the sole Oklahoma district court judge who presided over the *Glossip* preliminary-injunction hearing, based upon the particular evidence presented in that unique preliminary-injunction hearing, simply because that judge did not make any obvious mistakes and happened to be the first to be reviewed by the

Supreme Court on the question of midazolam's efficacy. Such a rule would preclude district court judges from exercising their own independent judgment and, more significantly, preclude them from considering new information that comes to light after *Glossip*. It would be strange if, simply by saying that the Oklahoma district court judge did not clearly err by deciding that the Oklahoma petitioners did not satisfy their burden for a preliminary injunction, the Supreme Court robbed all other district court judges of the power to issue preliminary injunctions when presented with new and different evidence about midazolam. If the Supreme Court intended to establish a per se rule that stripped district judges of this discretion, presumably it would have said so explicitly, rather than focusing on the deferential standard of review and the Oklahoma petitioners' failure to show that the district judge there clearly erred.

The distinction between establishing a per se rule that use of midazolam is always constitutional and what the Supreme Court actually did—which is determine that the Oklahoma district court did not clearly err by finding that a particular group of petitioners failed to meet their burden at the preliminary-injunction stage to show that they were likely to succeed on their claim that use of midazolam was unconstitutional—is crucial. Just as the Supreme Court (and the Tenth Circuit) were limited in their review of the Oklahoma district court's findings of fact, we are similarly constrained by the Ohio district court's findings of fact unless they are clearly erroneous. Like the Supreme Court, we are “not entitle[d] . . . to overturn a finding ‘simply because [we are] convinced that [we] would have decided the case differently.’” *Glossip*, 135 S. Ct. at 2739 (quoting *Anderson*, 470 U.S. at 573) (second and third alterations in original). And, particularly important to this case, “when a trial judge’s finding is based on his decision to credit the testimony of one of two or more witnesses, each of whom has told a coherent and facially plausible story that is not contradicted by extrinsic evidence, that finding, if not internally inconsistent, can virtually never be clear error.” *Anderson*, 470 U.S. at 575.

Just as the Oklahoma district judge in *Glossip*, the magistrate judge here—relying on his “superior[] . . . position to make determinations of credibility” and “experience” in “the determination of fact”—evaluated evidence from scientific experts, eyewitnesses to executions, and ODRC employees discussing Ohio's current execution protocol. *Anderson*, 470 U.S. at 574. The district court here characterized the “debate among the experts on the pharmacologic effects

of midazolam” as “robust and even spirited.” Decision & Order at 103. The district court found “from both the expert opinions and the lay descriptions comparing executions with a barbiturate as the first drug and midazolam as the first drug that the drugs do not produce the same effects in those being executed [T]hose administered midazolam . . . take longer to die and exhibit different bodily behaviors in the process.” *Id.* at 104. Evaluating the evidence presented in the hearing, including the eyewitness testimony and the opposing viewpoints presented by the experts, the district court “conclude[d] that use of midazolam as the first drug in a three-drug execution protocol will create ‘a substantial risk of serious harm.’” *Id.* at 105. For several reasons, this determination was not clearly erroneous.

The district court was in the position to make credibility determinations about the eyewitnesses’ testimony and the competing experts’ testimony. Even if, as we note above, the district court could have been more explicit when making credibility determinations, the district court’s discussion of the expert’s testimony indicates that it found Plaintiffs’ experts to be more credible than Defendants’. *See* Decision & Order at 28–103. It is noteworthy that Defendants’ experts did not agree with each other about whether midazolam has a ceiling effect, and Dr. Buffington did not appear to agree with Dr. Antognini that midazolam has analgesic properties (only that it would sedate someone sufficiently to make them insensate to pain, which is distinct from actually eliminating pain). *Id.* at 71–75, 93–94. By contrast, Plaintiffs’ experts were in agreement that midazolam does not have analgesic properties, and, although he was less adamant, Dr. Bergese generally agreed with Dr. Stevens that midazolam has a ceiling effect. *Id.* at 31, 87. The specific points of disagreement between Defendants’ experts support the district court’s determination that Plaintiffs’ experts were more convincing. Moreover, the eyewitness testimony supported Plaintiffs’ experts’ testimony, and the district court explained why it determined that the eyewitness accounts were credible. *Id.* at 24–25.

It is also noteworthy that the district court in this case evaluated evidence that was not available to the Oklahoma district court in *Glossip*. The district court in this case heard testimony from eyewitnesses to five executions. Two of those, the execution of Christopher Brooks and the execution of Ronald Smith, occurred after the *Glossip* decision. In addition to providing the district court with information about additional midazolam-involved executions,

these recent executions also shed new light on earlier midazolam-involved executions. In *Glossip*, the Supreme Court noted that neither Lockett nor Wood received the dose of midazolam at issue in the case before it, and that there were problems with the Lockett execution that were not attributable to the drugs used (namely, “the execution team’s inability to obtain an IV access site”). *Glossip*, 135 S. Ct. at 2746. Taking into account these differences, the Supreme Court said that “[w]hen all of the circumstances are considered, the Lockett and Wood executions have little probative value for present purposes.” *Id.* This conclusion may have been reasonable given the circumstances at the time, but new circumstances entitle a district court to come to a different conclusion. The Brooks execution, and particularly the Smith execution, in which Smith coughed, flailed, and heaved for several minutes, cast the problems observed in the Lockett and Wood executions in a new light. Unlike Lockett and Wood, both Smith and Brooks were executed using 500 milligrams of midazolam followed by a paralytic drug and potassium chloride (like Ohio’s current protocol). Like Lockett and Wood, witnesses testified that Smith and Brooks moved and heaved during their executions. Witnesses’ testimony that Brooks was heaving and that Smith was heaving, coughing, and flailing could suggest that Lockett’s writhing and Wood’s gasping were attributable to midazolam’s inability to prevent the pain caused by paralytic drugs and potassium chloride, rather than to other circumstances.

Therefore, considering that the district court based its finding on its evaluation of testimony presented in a five-day evidentiary hearing, including competing expert testimony and eyewitness testimony about recent executions involving the same amount of midazolam called for in Ohio’s current three-drug protocol, the district court’s factual finding is not clearly erroneous. We are bound by the district court’s factual finding that “use of midazolam as the first drug in a three-drug execution protocol will create ‘a substantial risk of serious harm.’” Decision & Order at 105.

b. Availability of an alternative

Having found that use of midazolam as the first drug in a three-drug execution protocol creates a substantial risk of severe pain, the district court also found that “Plaintiffs have met their burden to identify a sufficiently available alternative method of execution to satisfy *Baze* and *Glossip*.” Decision & Order at 107. Although Ohio does not currently have pentobarbital on

hand and cannot purchase pentobarbital to use in executions directly from drug manufacturers, Plaintiffs proposed compounded pentobarbital as an alternative, and the district court found that this proposal satisfied their burden.² *Id.* at 106. According to the district court, Ohio has taken key steps toward acquiring compounded pentobarbital, including passing secrecy statutes “to protect the anonymity of potential suppliers and compounders,” and applying for the import license necessary to purchase pentobarbital’s active ingredient. The district court recognized that this application is still pending, and that Ohio has “no indication when a decision on that application might be made.” *Id.* at 106–07. On the other hand, the district court also noted that Dr. Buffington, who helped develop Ohio’s current execution protocol and who testified about the content of an affidavit he submitted in an Alabama case, “stated in his affidavit in that case that since other states had been able to procure compounded pentobarbital for their executions, he believed it could be obtained.” *Id.* at 95.³

Glossip explicitly states that whether an alternative method of execution is available is a “factual finding” subject to the “clearly erroneous” standard of review. *Glossip*, 135 S. Ct. at 2738. Other than defining “availability” as a factual finding, the Supreme Court has provided very little guidance as to the definition of “availability” of execution methods. As the district court observed, “In *Baze* and *Glossip*, the Supreme Court did not attempt to quantify how available the alternative method must be to qualify.” Decision & Order at 107.

Both Plaintiffs and Defendants make colorable arguments about the meaning of availability. Plaintiffs argue that “[a] plain-language interpretation actually provides compelling support for [their] arguments and the district court’s findings that the *Glossip* standard of

²The district court did not make any determination about the availability of the other alternative protocols that Plaintiffs discuss in their briefs, and we will not make our own factual findings about those alternative protocols.

³The dissent takes issue with our characterization of Dr. Buffington’s testimony. We acknowledge that Dr. Buffington’s testimony that “there are pharmacists in the United States that are able to compound pentobarbital for use in lethal injections because other states have been reported to have obtained compounded pentobarbital for use in executions,” and assurance that “I do agree with that statement,” R. 925 (Prelim. Inj. Hr’g Tr. at 982–83) (Page ID #31440–41), is not the clearest possible statement on the availability of compounded pentobarbital. However, it was the district court that characterized Dr. Buffington as stating that “since other states had been able to procure compounded pentobarbital for their executions, he believed it could be obtained,” Decision & Order at 95. We review the district court’s characterizations of witness testimony for clear error, and the district court’s characterization of Dr. Buffington’s statement is not clearly erroneous.

‘available,’ ‘feasible,’ and ‘readily implemented’ necessarily contemplates proposed alternatives that are possible, and is not limited to those methods that are immediately on hand.” Appellee Br. at 99. To Plaintiffs, “available” means “reasonable possibility” not “immediate presence.” *Id.* at 100 (emphasis omitted). Because the evidence established that Ohio could obtain pentobarbital, “the plain meaning of the terms above reinforces the district court’s conclusion that [Plaintiffs] met their burden of showing that pentobarbital was ‘available.’” *Id.* at 101–02. Defendants respond that “Plaintiffs’ ‘reasonably possible’ standard would effectively require that an alternative be only ‘known’—eliminating the requirements that it be ‘available,’ ‘feasible,’ and ‘readily implemented.’” Reply Br. at 22 (quoting *Baze*, 553 U.S. at 52, 61 (plurality op.)).

Defendants’ arguments may raise some doubts about Plaintiffs’ definition of availability, but—at least with the limited guidance we have from the Supreme Court on how to define availability—they have not raised enough doubt to convince us that the district court clearly erred when it found that compounded pentobarbital is available to Ohio as an alternative execution method. “[A] finding is ‘clearly erroneous’ when . . . the reviewing court on the entire evidence is left with the definite and firm conviction that a mistake has been committed.” *Anderson*, 470 U.S. at 573. In this case, we are not “left with the definite and firm conviction” that the district court made a mistake when it found that compounded pentobarbital is an available alternative. *Id.* Therefore, given the deferential standard of review that we must apply to the district court’s finding that an alternative method is available, the limited guidance from the Supreme Court about the meaning of “available,” and the reasonable definition of “available” that Plaintiffs offer, we must defer to the district court’s finding that compounded pentobarbital is available.

2. Likelihood of irreparable harm

In assessing whether the party seeking the injunction will likely suffer irreparable harm, “[t]he key word in this consideration is irreparable.” *Babler*, 618 F.3d at 523–24 (quoting *Sampson v. Murray*, 415 U.S. 61, 90 (1974)). “A plaintiff’s harm from the denial of a preliminary injunction is irreparable if it is not fully compensable by monetary damages.” *Obama for Am. v. Husted*, 697 F.3d 423, 436 (6th Cir. 2012) (internal quotation marks omitted). Being executed by a method of execution that is later determined to be unconstitutional is

quintessentially an injury that is not fully compensable. Or, as the district court noted, “[t]he irreparable harm to the named Plaintiffs if temporary injunctive relief is not granted is patent”; “[w]hether or not Plaintiffs’ claims survive their deaths, the injury would be irreparable.” Decision & Order at 116. Moreover, the district court stated that “Defendants do not contest this element.” *Id.* This element favors Plaintiffs.

3. Balance of equities

The balance of the equities also tips in favor of granting a preliminary injunction. Again we note that a key consideration is whether a party will suffer irreparable harm. *See Babler*, 618 F.3d at 524. Although “a State retains a significant interest in meting out a sentence of death in a timely fashion,” *Nelson v. Campbell*, 541 U.S. 637, 644 (2004), the harm from a delay in meting out a death sentence is not an irreparable harm. By contrast, there is no question that the harm Plaintiffs face, execution by a method that the district court determined is likely unconstitutional, is an irreparable harm.

Balancing the equities, the irreparability of the potential harm to Plaintiffs is decisive. Because the harm that the State would suffer is reparable, but the harm that the Plaintiffs would suffer is irreparable, the balance of the equities favors Plaintiffs.

4. Public interest

The public has an interest in sentences being carried out, but it also has an interest in ensuring that those sentences are carried out in a constitutional manner. Indeed, “it is always in the public interest to prevent violation of a party’s constitutional rights.” *Deja Vu of Nashville, Inc. v. Metro. Gov’t of Nashville & Davidson Cty.*, 274 F.3d 377, 400 (6th Cir. 2001) (internal quotation marks omitted). These interests suggest that, as the district court stated, “[o]n balance, the public interest weighs in favor of granting temporary injunctive relief, but maintaining a fast track approach to adjudicating Plaintiffs’ claims on the merits.” Decision & Order at 118.

C. Judicial Estoppel

The district court did not err by deciding that Defendants were judicially estopped from reverting to an execution protocol that includes pancuronium bromide (a paralytic agent) and potassium chloride (which stops the heart).

We begin by reviewing in more detail the facts relevant to Plaintiffs' judicial-estoppel claim. Litigation challenging Ohio's lethal injection protocol commenced in 2004, with case number 04-cv-1156. The first events relevant to Plaintiffs' judicial-estoppel claim occurred in 2009. On October 19, 2009, Judge Frost, the presiding judge in 04-cv-1156, entered a stay of Kenneth Biros's execution. R. 965-16 (10/19/2009 Order at 1–4) (Page ID #34294–97). A trial had been scheduled for November 2, 2009, and Biros's execution's date had been set for December 8, 2009. *Id.* at 1–2 (Page ID #34294–95). As of October 19, 2009, there was outstanding discovery, including discovery concerning the failed attempt to execute Romell Broom and the State's consideration of a new execution protocol. *Id.* Because of the outstanding discovery, the district court postponed the trial date and entered a "stay of [Biros's] execution." *Id.* at 1–3 (Page ID #34294–6). The district court reasoned that "[g]iven the issues involved and the instruction of the appellate court, Biros is . . . entitled to a stay affording him time for discovery and to be heard at trial on the merits of his claims." *Id.* at 3 (Page ID #34296).

On October 27, 2009, the State filed a Notice of Appeal "from the Court's Opinion and Order granting an injunction to intervenor Kenneth Biros, which was filed on October 19, 2009." R. 965-18 (Notice of Appeal at 1) (Page ID #34304). The State's appeal was docketed in this court as case number 09-4300. Also on October 27, the State filed a motion in 09-4300 asking this court to vacate the district court's order delaying Biros's execution, which the State variously referred to as a stay and a preliminary injunction. R. 965-19 (Defs-Appellants' Mot. to Vacate Prelim. Inj. Granted to Biros at 1–9) (Page ID #34307–15). In its motion, the State took issue with the district court making the determination that outstanding discovery necessitated a stay of execution without considering Biros's likelihood of success on the merits. The State argued that "[a] condemned prisoner cannot obtain a stay of execution . . . absent a finding by the court that the prisoner is likely to succeed on the merits of his claims." *Id.* at 6 (Page ID

#34312). Because “a party seeking a preliminary injunction must demonstrate, among other things, a likelihood of success on the merits[,] . . . [w]here a condemned prisoner seeks a stay of execution to permit litigation of a claim that the state’s method of execution will violate the Eighth Amendment, the likelihood or lack thereof of the prisoner’s success on the merits is not only a necessary consideration, but may well be sufficient to resolve the matter.” *Id.*

On October 29, 2009 the district court issued a second order which, “[i]n light of Defendants’ characterization of [the district court’s] actions and in an effort to assist the Sixth Circuit Court of Appeals in considering the appeal, . . . further memorialize[d] the substance of the October 19, 2009 conference.” R. 966 (10/29/2009 Order at 1) (Page ID #34318). In the order, the district court noted that Defendants “helped develop, along with Plaintiffs’ counsel, proposed language to be included in the October 19, 2009 Order. In fact, Defendants’ counsel asked the Court not to characterize the stay as an injunction and explained that they did not want the court to make a finding of unconstitutionality in regard to the stay.” *Id.* at 1–2 (Page ID #34318–19). The district court surmised that Defendants did not want it to make a finding as to Biros’s likelihood of success on the merits of his constitutional claims because “[s]uch Rule 65 injunctive relief analysis would have necessitated the Court discussing in detail in a written decision its review of the numerous deposition transcripts of witnesses involved in the attempted execution of Romell Broom.” *Id.* at 2 (Page ID #34319). The court also ordered that “all future conferences, except those dealing with protected discovery material, shall be held in open court and on the record” “[t]o avoid creating an incorrect impression of the events of this litigation and to facilitate clarity as to the parties’ public positions.” *Id.*

On November 13, 2009 the State announced its intention to change its execution protocol effective no later than November 30, 2009. In its News Release, the State, through ODRC Director Terry Collins, said, ““The previous method of execution included a three-drug protocol applied intravenously. The first change to the execution procedure includes the adoption of a one-drug protocol, using thiopental sodium alone, applied intravenously. Pancuronium bromide and potassium chloride will no longer be used as a part of the process.”” R. 966-1 (11/13/2009 ODRC News Release) (Page ID #34322).

On the same day, the State filed in the district court a motion for summary judgment. In its motion, the State argued that, as a result of changes to the execution protocol, “Defendants have negated all of Plaintiffs’ claims” and “Plaintiffs’ challenges to defendants’ previous ‘three-drug protocol’ are moot.” R. 966-2 (Defs.’ Second Mot. Summ. J. with Req. Expedited Briefing Sched. at 4) (Page ID #34328). The State explained,

It is readily apparent here that the recent changes to defendants’ execution procedures have rendered moot plaintiffs’ constitutional challenges to the “three-drug protocol” previously used by defendants to execute condemned prisoners. The issues presented by plaintiffs’ complaints stem from the alleged risk of severe pain which could be caused by the use of pancuronium bromide and potassium chloride, the second and third drugs in the so-called “three-drug protocol,” in the event that the first drug, thiopental sodium, is not properly administered. In view of the new procedures’ elimination of the second and third drugs, the issues presented in plaintiffs’ suits are no longer actionable. . . . Moreover, there is *no* possibility here that the allegedly unconstitutional conduct will reoccur, or that there is any lingering effects [sic] of previous allegedly unconstitutional conduct. There is absolutely no reason to believe that defendants will reinstate the previous “three-drug protocol” if the plaintiffs’ suits were dismissed. And, more importantly, if defendants execute plaintiffs using the revised procedures, defendants cannot “go back to their old ways” and execute plaintiffs using the prior procedures.

Id. at 5 (Page ID #34329) (emphasis in original). The State attached to its summary-judgment motion an affidavit of Director Collins, in which he swore, “[G]oing forward, pancuronium bromide no longer will be used as part of the lethal injection process. Also, potassium chloride no longer will be used as part of that process.” R. 966-3 (Collins Aff. at ¶ 6) (Page ID #34335).

In the summary-judgment motion, the State repeatedly argued that the claims of *all* Plaintiffs were moot as a result of the change to the execution protocol, R. 966-2 (Defs.’ Second Mot. Summ. J. with Req. Expedited Briefing Sched. at 5) (Page ID #34329), and Collins’s affidavit stated that pancuronium bromide and potassium chloride would not be used “going forward,” R. 966-3 (Collins Aff. at ¶ 6) (Page ID #34335). The State sought judgment as a matter of law on the claims of all plaintiffs, not only Biros.

On November 16, 2009, the State filed in this court a reply in support of its October 27 motion to vacate the stay. R. 966-4 (Defs-Appellants’ Mem. Reply to Biros’ Mem. in Opp’n to Defs’ Mot. Vacate District Ct.’s Stay of Biros’ Execution, Sche’d for Dec. 8, 2009, and Defs’

Mem. in Opp. to Biros' Mot. Dismiss Defs' Appeal at 1) (Page ID #34338). In the reply, the State argued that "Biros's lawsuit is moot." *Id.* at 7 (Page ID #34344). The State explained that Collins, "has directed changes in the procedures used to carry out the execution of condemned prisoners. The changes include the discontinuation of the use of pancuronium bromide and potassium chloride in the execution process." *Id.* The State argued that as a result of this change, "Biros' suit no longer presents a case or controversey [sic], as the 'three-drug protocol' he challenges is no longer used." *Id.*

Unlike in the district court summary-judgment motion, in the reply in our court the State argued that "Biros' suit" was moot, but did not address claims of other Plaintiffs. This focus on Biros is in keeping with the narrowness of that appeal, in which the only issue was the stay of Biros's execution, not the underlying merits of Plaintiffs' challenge or any other Plaintiffs' individual procedural claims. However, although the State did not mention the other Plaintiffs in the body of the reply, the State did attach its summary-judgment motion from the district court as an exhibit to the reply. R. 966-4 (Defs.' Second Mot. Summ. J. with Req. Expedited Briefing Sched., filed as Ex. A to Defs-Appellants' Mem. Reply to Biros' Mem. in Opp'n to Defs' Mot. Vacate District Ct.'s Stay of Biros' Execution, Sche'd for Dec. 8, 2009, and Defs' Mem. in Opp. to Biros' Mot. Dismiss Defs' Appeal) (Page ID #34348-59). It also addressed Biros's "suit," as opposed to his claims, which may suggest that it had the entire lawsuit in mind, which involved multiple plaintiffs. As noted above, the summary-judgment motion argued that the claims of all Plaintiffs were moot, and sought judgment as a matter of law on all claims.

On November 25, 2009, a panel of this court vacated the district court's stay of Biros's execution. The panel held that "the district court's stay order must be vacated because any challenge to Ohio's three-drug execution protocol is now moot." *Cooey v. Strickland*, 588 F.3d 921, 923 (6th Cir. 2009). The panel explained that, "the question at hand is whether Ohio will use the old procedure, or the new one, in executing Biros." *Id.* In response to this question, the panel maintained that "[t]here is no basis in the record or for that matter in common sense for assuming that the State will do anything other than what it has told us in court filings and what it has told the public at large: it has changed its execution protocol, and it intends to apply the substantially modified protocol to Biros." *Id.* On December 4, 2009, this court denied rehearing

en banc. The concurrence with denial of rehearing en banc posited that, “At a minimum, the new protocol ‘likely’ moots the old challenge, and that is enough to create a likelihood-of-success problem for Biros when it comes to premising a request for a stay on orders related to a different protocol.” *Cooley v. Strickland*, 588 F.3d 924, 925 (6th Cir. 2009) (Sutton, J., concurring in denial of reh’g en banc). Dissents from denial of rehearing en banc pointed out that nothing prevented the State from going back to the prior execution protocol, which, it explained, fatally undermined the holding that the challenge was moot. *Id.* at 925–26 (Moore, J., dissenting from denial of reh’g en banc) (“Although there is little indication that the State will continue to use the initially challenged three-drug cocktail now that it has developed a new procedure, in analyzing whether Biros’s claim is moot, we must consider whether anything would prevent the State from doing so. . . . Although we have no reason to doubt Ohio’s sincerity, determining mootness based on a litigant’s statement that it has no reason to resume the challenged activity, no matter how earnest, is not part of the mootness analysis.”); *see also id.* at 928 (Martin, J., dissenting).

Neither the panel opinion nor the concurrence with denial of rehearing en banc clarified the breadth of the court’s holding. It is not clear whether the panel held that the challenge to Ohio’s lethal injection protocol was moot as to Biros or was moot as to all of the Plaintiffs. It is unclear, first, because in this court the State was ambiguous about whether it was arguing that the claims were moot as to Biros or moot as to all Plaintiffs. It is unclear, second, because neither the panel opinion nor the concurrence with the denial of rehearing en banc explicitly stated whether the claims were moot as to Biros or moot as to all Plaintiffs.

Subsequently, Biros’s execution was again set for December 8, 2009, and Biros challenged the November 30, 2009 one-drug execution protocol. On December 7, 2009, this court considered Biros’s challenge to the new protocol, and, affirming the district court, declined to stay his execution. *Cooley v. Strickland*, 589 F.3d 210, 221, 234 (6th Cir. 2009). The State executed Biros on December 8, 2009.

On December 9, 2009, the district court held a hearing. At that hearing, the district judge “suggest[ed] that all of these motions, as a result of the November 30, 2009, new protocol, are moot and should be withdrawn. I’m talking about the defendants’, the plaintiffs’, everything; that the plaintiffs should amend all of their complaints based upon the new protocol and we

proceed from that standpoint.” R. 966-10 (12/9/2009 Hr’g Tr. at 25–26) (Page ID #34453–54). The district court added, “I actually can’t demand that you withdraw something, and wouldn’t do that, but I am suggesting that almost everything that’s been filed in this case up until now is moot.” *Id.* at 26 (Page ID #34456). Addressing this court’s decision on mootness, the district court added, “And I’m not going to get into an argument over mootness like the Court of Appeals has done recently. I’m not going to get into that mess, as I’m sure Judge Sutton would not like to get back into that mess.” *Id.* Instead, the district court explained, “I’m trying to suggest a way in which the record can get cleaned up and where we present arguments, present with new arguments, that have anything to do with the new protocol. It just seems to me to be the better way in which to proceed in this case, but, again, it’s up to you guys how we decide this.” *Id.* After some discussion, attorneys for both sides agreed to withdraw their pending motions, with the understanding that Plaintiffs would file amended complaints challenging the November 30, 2009 protocol. Defendants agreed not to assert a statute-of-limitations defense to Plaintiffs’ amended complaints, and the district court granted leave to Plaintiffs to amend their complaints. *Id.* at 43, 46 (Page ID #34471, 34474).

Litigation proceeded, and so did executions. After the execution of Kenneth Biros on December 8, 2009, Ohio executed an additional twenty people until the State halted executions after the Dennis McGuire execution in 2014. However, prior to the McGuire execution, the State replaced the November 30, 2009 protocol with a protocol providing for a single-injection of midazolam and hydromorphone. *See* R. 323 (10/10/2013 Ohio DRC Execution Protocol, 01-COM-11 at 1–19) (Page ID #9568–86). McGuire’s execution using the October 10, 2013 protocol prompted questions about midazolam and caused Ohio again to change its protocol, this time to the midazolam protocol at issue in this case. As far as the progress of the litigation, it is worth noting that on December 5, 2011, case number 04-cv-1156 was consolidated with several other cases under a new case number, 11-cv-01016. *See* R. 11 (12/5/2011 Order at 2–3) (Page ID #479–80). This appeal originated from district court case number 11-cv-01016.

The “rule[] known as judicial estoppel” provides that “[w]here a party assumes a certain position in a legal proceeding, and succeeds in maintaining that position, he may not thereafter, simply because his interests have changed, assume a contrary position, especially if it be to the

prejudice of the party who has acquiesced in the position formerly taken by him.” *New Hampshire v. Maine*, 532 U.S. 742, 749 (2001). “We review *de novo* a district court’s decision regarding the application of judicial estoppel.” *Javery v. Lucent Techs., Inc.*, 741 F.3d 686, 697 (6th Cir, 2014).⁴ Three factors “typically inform the decision whether to apply the [judicial estoppel] doctrine.” *New Hampshire v. Maine*, 532 U.S. at 750. “First, a party’s later position must be clearly inconsistent with its earlier position.” *Id.* “Second, courts regularly inquire whether the party has succeeded in persuading a court to accept that party’s earlier position, so that judicial acceptance of an inconsistent position in a later proceeding would create the perception that either the first or the second court was misled.” *Id.* “A third consideration is whether the party seeking to assert an inconsistent position would derive an unfair advantage or impose an unfair detriment on the opposing party if not estopped.” *Id.* at 751.

The first factor for judicial estoppel is satisfied. The State’s earlier position is “clearly inconsistent” with its current position. *Id.* at 750. The State represented to the district court and this court that it would no longer use pancuronium bromide or potassium chloride for executions. The Director of the ODCR swore that “going forward, pancuronium bromide no longer will be used as part of the lethal injection process” and that “potassium chloride no longer will be used as part of that process.” R. 966-3 (Collins Aff. at ¶ 6) (Page ID #34335). In its motion for summary judgment, the State represented to the district court not only that it had “eliminate[ed] . . . the second and third drugs” but that “there is *no* possibility here that the allegedly unconstitutional conduct will reoccur.” R. 966-2 (Defs.’ Second Mot. Summ. J. with Req. Expedited Briefing Sched. at 5) (Page ID #34329). The State’s motion explicitly stated that “[t]here is absolutely no reason to believe that defendants will reinstate the previous ‘three-drug protocol.’” *Id.* The State’s motion also argued that its decision to stop using pancuronium bromide and potassium chloride mooted Plaintiff’s claims. At the December 9, 2009 hearing, the State reasserted its promise that it would stop using pancuronium bromide and potassium chloride, and said that because of this promise, “[t]o the extent that the other motions are based

⁴“In several recent cases, this Court has questioned the continuing viability of the *de novo* standard for judicial estoppel,” but we have continued to apply the *de novo* standard of review. *Javery*, 741 F.3d at 697 (citing *Lorillard Tobacco Co. v. Chester, Wilcox & Saxbe*, 546 F.3d 752, 757 (6th Cir. 2008)).

on the old protocol, we think it's appropriate that they be dismissed as moot or withdrawn." R. 966-10 (12/9/2009 Hr'g Tr. at 43) (Page ID #34471).

The State's representations that there was "*no possibility*" of reverting to a three-drug protocol using pancuronium bromide or potassium chloride and Director Collins's sworn statement that the State would not use these two drugs "going forward" are inconsistent with the State's current position. R. 966-3 (Collins Aff. at ¶ 6) (Page ID #34335); R. 966-2 (Defs.' Second Mot. Summ. J. with Req. Expedited Briefing Sched. at 5) (Page ID #34329). The State's current execution protocol, which it is seeking to use in executing Otte, Phillips, and Tibbetts, includes pancuronium bromide and potassium chloride. R. 667-1 (Ohio DRC Execution Protocol, 01-COM-11 at 2) (Page ID #19813). By repeatedly representing that it would no longer use pancuronium bromide or potassium chloride in executions but now attempting to execute condemned inmates with these very drugs, the State had taken directly contradictory positions.

The second factor, whether the State succeeded in persuading a court to accept its earlier position that it would not use pancuronium bromide or potassium chloride in executions, is the most difficult. *See New Hampshire v. Maine*, 532 U.S. at 750–51. As noted above, this court did not make clear whether its November 25, 2009 decision held that the claims of all Plaintiffs were moot or only Biros's claims were moot. At the December 9, 2009 hearing, the district court expressed its view that all of the motions pending as of December 9, 2009 were moot, but the district court also stated that it was not going to get into the "mess" over mootness, and urged the parties to withdraw their pending motions as a way "the record can get cleaned up." R-966-10 (12/9/2009 Hr'g Tr. at 26) (Page ID #34454). The State withdrew the November 13, 2009 motion for summary judgment that argued mootness, but it is not clear whether the State withdrew that motion because the motion's argument had already been successful or because the district court was not going to entertain the motion's argument.

If this court held that the claims of all Plaintiffs were moot, then the State's mootness argument was successful, regardless of whether the State withdrew the motion. Similarly, if the district court held that all Plaintiffs' claims were moot, then the State's mootness argument was successful, notwithstanding the fact that as a procedural matter the State withdrew the motion.

On the other hand, if this court's holding applied only to Biros and the district court prompted the parties to withdraw their motions because of practical concerns rather than a determination that the claims of all Plaintiffs were moot, then the State's mootness argument was not successful.

Ultimately, it appears that the State succeeded in persuading at least the district court, if not also this court, that the claims of all the Plaintiffs were moot. At the December 9 hearing, the district court repeatedly emphasized its view that all the motions pertaining to the old protocol were moot, and encouraged the parties to withdraw their motions for precisely that reason, even if it offered practical reasons as well. R. 966-10 (12/9/2009 Hr'g Tr. at 25–26) (Page ID #34453–54). The State also expressed its view that Plaintiffs should withdraw their motions because they were moot. *Id.* at 43 (Page ID #34471). Based on the statements of the district court and the State, and after some hesitation, Plaintiffs withdrew their challenge to the three-drug protocol. *Id.* at 42, 46 (Page ID #34470, 34474).

Significantly, the Plaintiffs' withdrawal of their challenge to the old protocol cleared the way for the State to proceed with executions. After Biros's execution, the State executed twenty other individuals until it halted executions in the wake of the McGuire execution. The fact that Ohio no longer had to litigate the constitutionality of its three-drug protocol and was able to proceed with executions beginning in December 2009 using other protocols indicates that its mootness argument succeeded. Resuming executions was the State's ultimate goal in the litigation, and it achieved that goal by affirmatively stating that it was no longer going to use pancuronium bromide or potassium chloride "going forward." R. 966-3 (Collins Aff. at ¶ 6) (Page ID #34335). If the State were now allowed to revert to using pancuronium bromide or potassium chloride, it would create the perception that the district court, and perhaps this court, had been misled about the abandonment of pancuronium chloride and potassium chloride. Accordingly, the second factor is satisfied.

The third factor, "whether the party seeking to assert an inconsistent position would derive an unfair advantage or impose an unfair detriment on the opposing party if not estopped," is also satisfied. *New Hampshire v. Maine*, 532 U.S. at 751. Earlier in this litigation, by representing that there was "no possibility" that it would use pancuronium bromide or potassium

chloride “going forward,” the State avoided having to litigate the constitutionality of an execution protocol that relied on those drugs. R. 966-3 (Collins Aff. at ¶ 6) (Page ID #34335); R. 966-2 (Defs.’ Second Mot. Summ. J. with Req. Expedited Briefing Sched. at 5) (Page ID #34329). Given the possibility the State would revert to an execution protocol that relies on pancuronium bromide and potassium chloride—as State officials and attorneys represented that the State would not do, but as the State has now done—Plaintiffs were entitled to continue litigating the constitutionality of those drugs. By making unnecessarily broad and, we now know, false representations that there was “no possibility” the State would use those drugs “going forward,” the State prevented Plaintiffs from arguing that an execution protocol that relies on pancuronium bromide and potassium chloride is unconstitutional. R. 966-3 (Collins Aff. at ¶ 6) (Page ID #34335); R. 966-2 (Defs.’ Second Mot. Summ. J. with Req. Expedited Briefing Sched. at 5) (Page ID #34329). Nothing required the State to make such broad representations. The State could have represented that it was changing its protocol without making the sweeping and definitive assertions that it was not going to use pancuronium bromide or potassium bromide “going forward,” and that there was “no possibility” it would revert to using those drugs. R. 966-3 (Collins Aff. at ¶ 6) (Page ID #34335); R. 966-2 (Defs.’ Second Mot. Summ. J. with Req. Expedited Briefing Sched. at 5) (Page ID #34329). Because it made those broad representations and is now acting inconsistently with those representations, the State would derive an unfair advantage from being able to use those drugs despite its earlier assertions.

A State official said to the public in a press release that pancuronium bromide and potassium chloride would no longer be used. R. 966-1 (11/13/2009 ODRC News Release) (Page ID #34322). The same official swore in an affidavit that pancuronium bromide and potassium chloride would no longer be used. R. 966-3 (Collins Aff. at ¶ 6) (Page ID #34335). State attorneys represented to the district court and this court that pancuronium bromide and potassium chloride would no longer be used. R. 966-2 (Defs.’ Second Mot. Summ. J. with Req. Expedited Briefing Sched. at 5) (Page ID #34329). Allowing the State to reverse course and use pancuronium bromide and potassium chloride in executions not only would unfairly advantage the State, but also would undermine the integrity of this litigation.

Finally, Ohio's other arguments against judicial estoppel are unconvincing. Ohio's argument that judicial estoppel does not apply to states is unavailing. *See New Hampshire v. Maine*, 532 U.S. at 755 (applying judicial estoppel to New Hampshire over its objection that judicial estoppel ordinarily does not apply to states). We are also not convinced that a change in circumstances rescues Ohio, for three reasons. First, it makes no sense to have an exception to judicial estoppel for changed circumstances. The purpose of judicial estoppel is to prevent the confusion and unfairness that would ensue if a party could change its position "simply because [its] interests have changed." *New Hampshire v. Maine*, 532 U.S. at 749. Usually a party's interests change because circumstances have changed. Creating an exception to judicial estoppel for changed circumstances would undermine judicial estoppel by creating an exception that swallows the rule.

Second, even if Ohio changed its position because "anti-death-penalty advocates' shut down avenues for obtaining barbiturates," "anti-death-penalty advocates" had no bearing on Ohio's decision to represent to two federal courts that the State would no longer use pancuronium bromide or potassium chloride. Reply Br. at 9 (quoting *Glossip*, 135 S. Ct. at 2733). We reiterate that nothing required Ohio to make the sweeping assertions that there was "no possibility" it would use potassium chloride "going forward," rather than making a narrower representation that it could hold to. R. 966-3 (Collins Aff. at ¶ 6) (Page ID #34335); R. 966-2 (Defs.' Second Mot. Summ. J. with Req. Expedited Briefing Sched. at 5) (Page ID #34329). We cannot know Ohio's motivation for making these sweeping assertions, but the effect of these sweeping assertions was to allow Ohio to achieve its ultimate goal of resuming executions. Regardless of the status of any drugs or the actions of anyone else, the point is that through its high-level officials and attorneys, Ohio made assertions to the courts and the public, gained a strategic advantage from those assertions, and is now attempting to act inconsistently with them. This sort of behavior is precisely what judicial estoppel prohibits.

Third, and relatedly, even if "anti-death-penalty advocates' shut down avenues for obtaining barbiturates," the unavailability of barbiturates would not require Ohio to revert to pancuronium bromide and potassium chloride, as opposed to using a different drug or combination of drugs. Reply Br. at 9 (quoting *Glossip*, 135 S. Ct. at 2733). Ohio's previous

representations—including representations made under oath, *see* R. 966-3 (Collins Aff. at ¶ 6) (Page ID #34335)—prevent it from reverting to pancuronium bromide and potassium chloride. Given these representations, if barbiturates are not available to Ohio, Ohio still must rely on an execution protocol not involving pancuronium bromide or potassium chloride.

Therefore, having reviewed the issue *de novo*, we come to the same conclusion as the district court. The State of Ohio is judicially estopped from using pancuronium bromide or potassium chloride for executions.

III. CONCLUSION

For the reasons stated above, we **AFFIRM** the judgment of the district court granting a preliminary injunction enjoining Defendants from executing Ronald Phillips, Raymond Tibbetts, and Gary Otte using the three-drug midazolam protocol embodied in the October 7, 2016 Ohio execution protocol or any lethal injection method which employs either a paralytic agent (including vecuronium bromide, pancuronium bromide, or rocuronium bromide) or potassium chloride.

CONCURRENCE

JANE B. STRANCH, Circuit Judge, concurring. I concur in the majority opinion because its legal analysis applied to the record before us fully supports and explains our decision. I write separately to address briefly concerns that our merits determination need not reach. The dissent raises one such fundamental concern by recounting the crimes that underlie the death penalty sentences of prisoners involved in this execution protocol challenge. The recitation of these crimes reveals what they are—horrific. But even in the face of such crimes and their powerful provocation to respond in kind, our American legal system and current experience with the death penalty provide reasons to stay the hand of those implementing this lethal injection protocol so that the court may evaluate whether the latest protocol complies with the requirements of our constitution.

In her dissent from the denial of certiorari in *Arthur v. Dunn*, an Alabama case addressing the same issues raised here, Justice Sotomayor explains why the Eighth Amendment requires a “national conversation”—a continuing dialogue between the legislatures and the courts on the meaning of the Amendment’s prohibition on cruel and unusual punishments. 137 S. Ct. 725, 731 (2017) (Sotomayor, J., dissenting). She reminds us that the meaning of this prohibition is derived from “the evolving standards of decency that mark the progress of a maturing society.” *Id.* (quoting *Kennedy v. Louisiana*, 554 U.S. 407, 419 (2008)).

This case contains a conversation that implicates that standard. The dissent notes that “death-penalty opponents successfully prevented Ohio (along with other states) from obtaining the drugs necessary to use the one-drug protocol.” Dissent at 44. This comment grows from an argument made by various states that death-penalty opponents have employed improper means to prevent sale of the protocol drugs to states. But that argument ignores the possibility that our national conversation simply may have resulted in an evolution in the standard of decency upon which the Eighth Amendment relies. The refusal of drug companies to sell execution drugs may evidence a recognition of changing societal attitudes toward the death penalty and a

conclusion—whether based on principle, profit motivation, or both—that the business in which drug companies engage, selling drugs that improve health and preserve life, is not consistent with selling drugs that are used to put people to death.

This dialogue about the constitutional prohibition on cruel and unusual punishment is closely intertwined with our ongoing national conversation about the American criminal justice system. Woven through both is disquiet about issues such as punishing the innocent, discrimination on the basis of race, and effective deterrence of crime. These concerns are present throughout the criminal justice processes from arrest, to trial, to sentencing, to appeals, and to the final chapter in death penalty litigation such as this.

Such concerns, admittedly along with myriad others, have a role in public opinion that may lead to evolution in the standards of decency that govern the Eighth Amendment's prohibition on cruel and unusual punishment. *See Kennedy*, 554 U.S. at 419. A 2015 survey found that a majority of Americans prefer life without parole over the death penalty for people convicted of murder. Robert P. Jones et al., Public Religion Research Institute, *Anxiety, Nostalgia, and Mistrust: Findings from the 2015 American Values Survey* 47 (2015), <http://www.prrri.org/wp-content/uploads/2015/11/PRRI-AVS-2015-1.pdf>. This matches polling in 2016 finding that public support for the death penalty has dropped below 50%, to its lowest level in 45 years. Baxter Oliphant, *Support for death penalty lowest in more than four decades*, Pew Research Center: Fact Tank (Sept. 29, 2016), <http://www.pewresearch.org/fact-tank/2016/09/29/support-for-death-penalty-lowest-in-more-than-four-decades>.

I fully agree with the analysis in the majority opinion and believe that affirming the grant of a preliminary injunction is the correct outcome on the factual record before us and under governing precedent. I also agree with Justice Sotomayor that the Eighth Amendment requires a continuing national conversation—among the American people, legislatures, and the courts—on the meaning of the Amendment's prohibition on cruel and unusual punishment.

DISSENT

KETHLEDGE, Circuit Judge. Roughly two decades have passed since the plaintiffs in this case murdered their victims. Ronald Phillips raped a three-year-old girl and beat her so badly that her internal organs ruptured. For two days she suffered intense abdominal pain and vomiting, until her heart collapsed. *See State v. Phillips*, 656 N.E.2d 643, 650-52 (Ohio 1995). Gary Otte entered the home of an Ohio man, robbed him, and then shot him in the head. Two nights later, Otte pushed his way into a woman's home and did the same things to her. After each murder Otte went out partying. *See State v. Otte*, 660 N.E.2d 711, 715-16 (Ohio 1996). Raymond Tibbetts killed an elderly man and his caretaker. Police found the man slumped in his chair with butcher knives protruding from his chest and back. His caretaker lay on the floor in a pool of blood with her skull cracked open and its contents scattered nearby. *See State v. Tibbetts*, 749 N.E.2d 226, 237-39 (Ohio 2001).

Phillips, Tibbetts, and Otte now claim that Ohio's Execution Protocol would cause them to suffer severe pain in violation of the Eighth Amendment. In a sense the claim is unprecedented: the Supreme Court "has never invalidated a State's chosen procedure for carrying out a sentence of death as the infliction of cruel and unusual punishment." *Glossip v. Gross*, 135 S. Ct. 2726, 2732 (2015) (internal quotation marks omitted). The State's chosen procedure here is the same procedure (so far as the combination of drugs is concerned) that the Supreme Court refused to invalidate in *Glossip*. Yet the district court thought we should likely invalidate that procedure, and today the majority agrees. I respectfully disagree and would reverse the district court's grant of a preliminary injunction.

I.

The litigation that produced this appeal began in 2004, when death-row inmates challenged Ohio's then-existing three-drug protocol under 42 U.S.C. § 1983. That protocol called for the injection of sodium thiopental (which anesthetizes the prisoner) followed by pancuronium bromide (which paralyzes the prisoner's muscles) and finally potassium chloride

(which stops the prisoner's heart). By 2008, 30 of the 36 states with the death penalty had adopted that three-drug protocol. *See Baze v. Rees*, 553 U.S. 35, 42-44 (2008). Yet the Ohio inmates argued that the protocol created an unacceptable risk that, if the sodium thiopental were improperly administered, inmates would feel the painful effects of the second and third drugs. In 2008, the Supreme Court rejected that argument and upheld Kentucky's nearly identical three-drug protocol. *See id.*

Nevertheless, the next year, Ohio announced that it was switching to the same one-drug protocol favored by the losing plaintiffs in *Baze*: a massive, lethal dose of either sodium thiopental or another barbiturate, pentobarbital. From 2010 to 2013, Ohio executed 20 inmates using those barbiturates. *See Ohio Br. 8; R. 922 at 30663.* Meanwhile, opponents of the death penalty successfully pressured the pharmaceutical companies who make the drugs to stop selling them to states. *See Glossip*, 135 S. Ct. at 2733-35. Ohio's supplies soon ran out, as did other states'. *See id.*; R. 941 at 31942-44.

The shortage led some states with three-drug protocols to turn to midazolam, a sedative in the same family of drugs as Valium. *See Glossip*, 135 S. Ct. at 2733; R. 923 at 30745-46. In 2014, Oklahoma adopted a protocol that called for the administration of 500 milligrams of midazolam—about 100 times the usual therapeutic dose—followed by a paralytic agent and potassium chloride. Death-row inmates filed a § 1983 action alleging that Oklahoma's protocol violated the Eighth Amendment. As relief, the inmates sought a stay, which the district court denied. The Supreme Court affirmed the denial on two “independent grounds”: that the district court “did not commit clear error when it found that midazolam is highly likely to render a person unable to feel pain during an execution”; and that Oklahoma was unable to acquire either pentobarbital or sodium thiopental. *Glossip*, 135 S. Ct. at 2738-39.

In October 2016, Ohio adopted a lethal-injection protocol using the same three drugs that Oklahoma uses. Like the Oklahoma protocol, the Ohio protocol contains several procedural safeguards to ensure that executions are carried out humanely, including guidelines for identifying viable IV sites, detailed requirements for training execution team members, and a “consciousness check” after the 500-milligram injection of midazolam. If the prisoner is found to be conscious, a qualified drug administrator can inject another 500 milligrams of midazolam.

After confirming that the prisoner is unconscious, the team can then administer the second and third drugs. *See* R. 667-1 at 19828-29.

Ohio planned to use this protocol to execute Phillips, Otte, and Tibbetts during the first four months of this year. The three inmates then filed complaints and moved for a preliminary injunction, claiming among other things that Ohio's three-drug protocol violates the Eighth Amendment's ban on "cruel and unusual punishments." The plaintiffs' theory here is the same one the Court rejected in *Glossip*: that the first drug—a massive dose of midazolam—will not prevent them feeling severe pain after injection of the second and third drugs.

After an evidentiary hearing, the district court found that "use of midazolam as the first drug" in Ohio's three-drug protocol would create a "substantial risk of serious harm" under *Baze* and *Glossip*. The court separately held that Ohio was estopped from using the paralytic and heart-stopping drugs because of Ohio's putative representations when it switched from its original three-drug protocol to the one-drug protocol in 2009. Thus, the court held that the plaintiffs had demonstrated a likelihood of success on their claims, and stayed the plaintiffs' executions. Ohio then brought this appeal.

II.

A.

The plaintiffs first argue that Ohio's three-drug protocol violates their Eighth Amendment right to be free from cruel and unusual punishment. As to that claim, I begin with two areas of common ground. First, I agree with the district court and the majority that the protocol's second and third drugs—the paralytic and potassium chloride, which stops the inmate's heart—would cause severe pain to a person who is fully conscious. (Hence the need for the first drug—the 500-milligram dose of midazolam.) Second, like the majority, I reject the State's argument that the Supreme Court's holding in *Glossip* categorically bars the plaintiffs' claim here. The Court's holding—that the district court there "did not commit clear error when it found that midazolam is highly likely to render a person unable to feel pain during an execution[.]" 135 S. Ct. at 2738-39—is couched expressly in terms of a standard of review that cuts the other way here. But neither, as the plaintiffs suggest, is *Glossip* irrelevant here. Quite

the contrary: the Court's opinion contains plenty of reasoning that was not confined to the record there—and which therefore binds us just as much as the reasoning in any other opinion of the Supreme Court.

1.

Yet here the district court's opinion is seriously flawed nonetheless. Respectfully, that opinion (like the majority opinion) does not even apply the relevant legal standard, which by now the Supreme Court and our court have recited a total of four times. Specifically, to challenge successfully a State's chosen method of execution, the plaintiffs must "establish that the method presents a risk that is *sure or very likely* to cause" serious pain and "needless suffering[.]" *Glossip*, 135 S.Ct. at 2737 (emphasis in original) (internal quotations marks omitted); see also *Baze*, 553 U.S. at 50 (same); *Cooley v. Strickland (Cooley II)*, 604 F.3d 939, 944 (6th Cir. 2010) (same); *Cooley v. Strickland (Cooley I)*, 589 F.3d 210, 220 (6th Cir. 2009) (same). Instead, both the district court and the majority address only whether Ohio's procedure presents a "substantial risk of serious harm," *Baze*, 553 U.S. at 50 (internal quotation marks omitted). That standard is correct so far as it goes; but it elides the more rigorous showing—that the method of execution is *sure or very likely* to cause serious pain—that the Supreme Court and our court have repeatedly said is necessary to satisfy the "substantial risk" standard in the particular context present here.

Nor, respectfully, did the district court offer much reasoning in support of its decision. (To some extent that omission is understandable, given the tight timelines applicable here.) The bulk of the court's order merely summarized the expert testimony on both sides. The relevant question, to reiterate, is whether the plaintiffs met their "heavy burden," *Baze*, 553 U.S. at 53, to show that an inmate who receives a 500-milligram dose of midazolam is "sure or very likely" to be conscious enough to experience serious pain from the second and third drugs in the protocol. *Glossip*, 135 S. Ct. at 2737. As to that question the experts offered diametrically opposed conclusions: the plaintiffs' experts argued that serious pain was "highly likely" or a "virtual certainty," while Ohio's experts testified that the risk was "very, very low" or "speculative." Compare R. 923 at 30802-03 and R. 844-1 at 24944 with R. 924 at 31063-64 and R. 852-2 at 25831-32. Yet the district court offered virtually no reason for its decision to adopt the

conclusions of the plaintiffs' experts wholesale. The court did say, "[w]ithout knowing precisely why," that inmates who are "administered midazolam" (including doses as low as ten milligrams—one fiftieth of the dosage at issue here) "take longer to die and exhibit different bodily behaviors in the process." R. 948 at 32227. The court also noted that "there was little support in the record for the idea that midazolam would be used alone" (again, at doses that are a tiny fraction of the dosage at issue here) "for surgeries other than those performed on an outpatient basis." *Id.* at 32228. The latter observation has little relevance in light of a passage from *Glossip* that does bind us here: "the fact that a low dose of midazolam is not the best drug for maintaining unconsciousness during surgery says little about whether a 500-milligram dose is *constitutionally adequate* to conduct an execution." 135 S. Ct. at 2742 (emphasis in original). And taken even on their own terms, neither of the district court's observations provide much support for the conclusion that a 500-milligram dose of midazolam is very likely to leave an inmate conscious enough to feel serious pain.

The court also drew what it called "reasonable inferences" from the abandonment of midazolam-based protocols by three states. R. 948 at 32227-28. First, the district court noted that, in 2014, Ohio abandoned the midazolam-opioid protocol that it used to execute Dennis McGuire. *Id.* But McGuire's dose of midazolam was only 10 milligrams, so again his execution says little about the effectiveness of a 500-milligram dose. Second, the district court found that Florida, "despite having conducted many executions using midazolam, abandoned the drug while this case was in hearing." *Id.* at 32228. But the court did not explain why Florida changed its protocol or why that decision helps the plaintiffs here. And meanwhile, in *Glossip*, the Supreme Court observed that Florida had used midazolam in 11 executions, apparently "without any significant problems." 135 S. Ct. at 2734, 2746. Third, the district court noted that Arizona had "abandoned midazolam shortly before [the hearing below] as a result of settling litigation over its use." R. 948 at 32228. But Arizona's settlement agreement says nothing about why the State abandoned midazolam, other than that the State had run out of it. *See* R. 976-2 at 36214. None of these States' actions, therefore, provide reason to infer that 500 milligrams of midazolam is sure or very likely to leave an inmate conscious enough to feel serious pain.

Otherwise, the district court merely observed that “there are not now and never will be clinical studies of the effect of injecting 500 mg of midazolam into a person[.]” and that “we certainly cannot ask the executed whether they experienced pain after the injection of midazolam[.]” R. 948 at 32227. Those observations are obviously correct, but the district court’s reliance on them effectively shifted the burden of proof to the State. Fairly or not, the applicable legal standard requires the plaintiffs to prove their allegations to a high level of certainty; yet the district court based its decision, at best, on uncertainty.

2.

The district court’s findings thus provide little support for its conclusion that Ohio’s three-drug protocol creates an unconstitutional risk of pain. Since we can affirm the district court’s decision on any ground supported by the record, however, we must consider whether the plaintiffs met their burden for reasons the court did not articulate. The plaintiffs’ evidence as to risk of pain fell into two main categories: testimony about midazolam’s effects, and testimony about executions carried out with midazolam. I address each in turn.

Each side offered testimony from two experts as to midazolam’s effects. The plaintiffs offered testimony from Dr. Sergio Bergese, M.D., an anesthesiologist, and Dr. Craig Stevens, Ph.D., a pharmacologist. The State offered testimony from Dr. Joseph Antognini, M.D., an anesthesiologist, and Dr. Daniel Buffington, Ph.D., a pharmacologist.

The experts generally agreed that midazolam ultimately has a “ceiling” above which an increase in dosage will not have any greater anesthetic effect. (On that point Dr. Buffington was the only dissenter.) Dr. Stevens attempted to estimate the ceiling using two different methods. One method, based on extrapolations from petri-dish experiments, suggested that the ceiling effect occurs at 228 milligrams. R. 923 at 30800. Another method, based on extrapolations from clinical studies, yielded an estimate of 25 milligrams. R. 836-1 at 24827. That Dr. Stevens’s estimates vary by a factor of nine, however, underscores that they are highly speculative. Moreover, even Dr. Stevens’s estimates suggest that any ceiling effect arrives only at doses five to 45 times greater than the usual therapeutic dose. And in any event, the relevant question is not whether the ceiling effect arrives at the equivalent of five doses or 45, but whether, once it

arrives, an inmate is sure or very likely to experience serious pain from the second and third drugs. *See Glossip*, 135 S. Ct. at 2743.

As to that point, Dr. Stevens testified that midazolam cannot produce “general anesthesia,” the level of unconsciousness appropriate for major surgeries. Studies indicate that midazolam—at doses in the therapeutic range—produces “deep sedation,” a level of brain depression just short of general anesthesia. But none of those studies involved the massive doses at issue here. *See id.* at 2742 (“The effect of a small dose of midazolam has minimal probative value about the effect of a 500-milligram dose.”). Meanwhile, the experts for both sides agreed that midazolam is sometimes used alone for intubation, a medical procedure in which a tube is inserted into a person’s windpipe. Dr. Antognini, one of Ohio’s experts, testified that intubation is “incredibly stimulating.” R. 924 at 31052. Dr. Bergese likewise acknowledged that intubation is “very reactive,” meaning that “people react to it quite a bit.” R. 923 at 30900. True, Dr. Bergese asserted in his expert report that the protocol’s second and third drugs are more painful than intubation. But Dr. Bergese did not cite any medical evidence to support that assertion. And Dr. Antognini did cite studies showing that injection of the paralytic drug has no effect on a sedated person’s level of consciousness as measured by a brain scan, even when the person appears to flinch in response. R. 924 at 31066. Dr. Antognini further testified that midazolam would reduce or remove any sensation of suffocation (commonly referred to as “air hunger”) caused by the paralytic. *See* R. 924 at 31072, 31088-89.

Thus, even Dr. Bergese—the plaintiffs’ principal expert as to whether Ohio’s execution protocol would cause inmates to experience severe pain—admitted that the science on this issue “could go either way.” R. 923 at 30844, 30909. What tipped the balance for him, rather, was “the eyewitness reports” from laymen who attended executions involving midazolam. *Id.*; *see id.* at 30870. But that data came with a raft of problems of its own. First, the sample size was small: in his expert report, Dr. Bergese discussed only nine midazolam-based executions. *See* R. 844-1 at 24972-80. Second, most of those accounts came from witnesses who, according to the district court, were likely to be “highly biased”—such as relatives of executed inmates, capital-defense attorneys, and even the inmates’ own lawyers. R. 923 at 30869. And none of these witnesses had any medical training. *See, e.g.*, R. 922 at 30644, 30713. Thus, as

Dr. Bergese himself admitted, “the quality of the data is not there.” R. 923 at 30910; *see also id.* at 30869.

The reliability of Dr. Bergese’s opinion does not improve when one considers the evidence of the nine executions themselves. Two of them—the execution of Clayton Lockett in Oklahoma and the execution of Joseph Wood in Arizona—are ones that the Supreme Court has specifically said have “little probative value” because they “did not involve the protocol at issue here.” *Glossip*, 135 S. Ct. at 2746. And notwithstanding the majority’s assertion to the contrary, *see* Maj. Op. at 15, we are not free to disregard that reasoning simply because the plaintiffs’ experts have to some extent testified to the contrary here. Moreover, Lockett’s IV line was not properly connected. *See* R. 948 at 32147; *Glossip*, 135 S. Ct. at 2734. A third execution—the McGuire execution in Ohio—involved a dose of 10 milligrams of midazolam rather than 500. And the district court in McGuire’s case found that McGuire had a condition that “might render him susceptible to airway obstruction.” R. 948 at 32191 n.26. Hence that execution too has “little probative value[.]” *Glossip*, 135 S. Ct. at 2746.

That leaves six executions that were conducted using the same protocol at issue here. But five of those involved reports only of eyes opening, “head movements,” and “foot movements” after the injection of midazolam. R. 844-1 at 24974-80. And the plaintiffs concede that “evidence of slight movements might, in a vacuum, not be compelling evidence of consciousness.” Appellee Br. 54. Dr. Bergese likewise testified that minor movements are possible even under general anesthesia. R. 923 at 30834, 30850. Moreover, even in executions involving barbiturates, inmates may have “convulsions” without a paralytic. *Workman v. Bredesen*, 486 F.3d 896, 909 (6th Cir. 2007). We upheld the use of a paralytic in executions for that very reason, finding legitimate a state’s concern that “lethal injection without [the paralytic] would typically result in involuntary movement,” which “might be misinterpreted as . . . an indication of consciousness.” *Id.*

That leaves only the execution of Ronald Smith in Alabama. The district court heard testimony about that execution from Spencer Hahn, a federal defender in the Alabama Capital Habeas Unit. According to Hahn, at some point after the injection of midazolam, Smith began coughing, clenching and unclenching his fists, flailing his arms, and moving his lips. R. 922 at

30619. Both sides' experts agreed, however, that people's bodies' can move at reduced levels of consciousness. Dr. Antognini explained that surgical patients under anesthesia can respond to noxious stimuli in complex ways, sometimes by thrashing about violently. R. 852-1 at 25792; R. 924 at 31037, 31044, 31063-64. That is why patients' arms are strapped down and their eyes taped shut. R. 924 at 31044. Dr. Stevens agreed that "reflexive withdrawal from a noxious stimulus is not considered a purposeful movement." R. 948 at 32196. Similarly, Dr. Bergese testified that "movement is . . . in the spinal cord," so "patients are going to move even when the consciousness is depressed." R. 923 at 30834. And a reporter for the *Columbus Dispatch*, who witnessed nineteen executions using barbiturate-based protocols, said that he had sometimes seen "clenching and unclenching of the hands." R. 922 at 30708.

As for coughing or gasping, neither demonstrates that the inmate is feeling air hunger. Dr. Antognini testified that midazolam, like other anesthetics, can remove the sensation of air hunger by depressing the drive to breathe. R. 924 at 31071-73, 31088-93. Even Dr. Bergese admitted that an inmate who gasps repeatedly during an execution might not be conscious, and that involuntary respirations associated with the process of dying are hard to distinguish from purposeful attempts to breathe. *See* R. 923 at 30860-61. Dr. Antognini also testified that patients can cough vigorously while under anesthesia for surgery, though this behavior may signal that the patient is shifting to a lighter level of anesthesia. R. 924 at 31037, 31043, 31157, 31178.

All that said, Hahn's description of the Smith execution is the plaintiffs' best evidence in support of their claim. But that evidence is far from compelling. Some people react differently to drugs than other people do, *see* R. 923 at 30896; and the amount of movement reported in Smith's execution appears to be the exception, not the rule, for executions with the three-drug protocol. More fundamentally, as Dr. Bergese himself explained, consciousness falls on a "spectrum." *Id.* at 30830. Yet he appeared to treat consciousness as binary when he opined that an inmate sedated with 500 milligrams of midazolam would feel pain the same way a conscious person would, simply because the inmate clenches his fists or coughs.

In sum, I will grant that the plaintiffs have shown some risk that Ohio's execution protocol may cause some degree of pain, at least in some people. But some risk of pain "is

inherent in any method of execution—no matter how humane[.]” *Baze*, 553 U.S. at 47. And the Constitution does not guarantee “a pain-free execution[.]” *Cooley I*, 589 F.3d at 220. Different people may have different moral intuitions as to whether—taking into account all the relevant circumstances—the potential risk of pain here is acceptable. But the relevant legal standard, as it comes to us, requires the plaintiffs to show that Ohio’s protocol is “sure or very likely” to cause serious pain. *Glossip*, 135 S. Ct. at 2737, 2745. Neither the district court nor the majority meaningfully applies that standard here. And in my view the plaintiffs have fallen well short of meeting it.

B.

One can make shorter work of the remaining two issues in this case. The first is whether, as *Glossip* requires, the plaintiffs have also proven that an alternative method of execution is “available,” “feasible,” and can be “readily implemented,” among other things. *Id.* at 2737. The district court found this requirement met as to one of the plaintiffs’ proposed alternatives, namely a one-drug, barbiturate-only method using either sodium thiopental or pentobarbital. The court acknowledged, however, that Ohio no longer has any supplies of these drugs, that “Ohio’s efforts to obtain the drug from other States and from non-State sources have not met with success[.]” and that Ohio is “not likely” to overcome these obstacles anytime soon. R. 948 at 32229. Yet the court concluded that barbiturates are “available” to Ohio because “there remains the possibility” that Ohio can obtain the active ingredient of pentobarbital and have it made into injectable form by a compounding pharmacy. *Id.* Again the majority agrees.

In my view both the district court and the majority are seriously mistaken as to what “available” and “readily implemented” mean. (For that reason the district court’s error is legal, and thus subject to de novo review. *See Highmark Inc. v. Allcare Health Mgmt. Sys., Inc.*, 134 S. Ct. 1744, 1748 (2014).) To obtain pentobarbital or its active ingredient, Ohio would need to receive an import license from the Drug Enforcement Administration. R. 948 at 32229. Ohio’s application for that license has been pending, without apparent action by the DEA, for over four months. R. 966-13 at 34506-10; R. 966-14 at 34512-17. Ohio does not know whether the DEA will approve its application, or even when that decision might be made. R. 948 at 32229. And even if that application is approved, Ohio may not be able to locate a willing supplier or

manufacturer, for reasons already explained at some length in *Glossip*. See 135 S. Ct. at 2733. As the district court acknowledged, even the plaintiffs' expert, Dr. Stevens, "was unable to identify any manufacturers or suppliers of thiopental and/or pentobarbital who were willing to sell those drugs, or even those drugs' active pharmaceutical ingredients, to Ohio for the purposes of conducting lethal injection executions." R. 948 at 32163. The majority, for its part, recites Dr. Buffington's testimony about an affidavit he filed in a prior case, in which he stated that he believed "there are pharmacists in the United States that are able to compound pentobarbital for use in lethal injections because other states have been reported to have obtained compounded pentobarbital for use in executions." R. 925 at 31440-41. But that is quite different from saying that any given state can actually locate those pharmacies and readily obtain the drugs. And Dr. Buffington testified that he personally contacted 15 pharmacies to that end without success. *Id.* Meanwhile, Ohio itself contacted the departments of correction in Texas, Missouri, Georgia, Virginia, Alabama, Arizona, and Florida to ask whether they would be willing to share their supplies of pentobarbital. All refused. See R. 905-1 at 30313-14.

Granted, for the one-drug protocol to be "available" and "readily implemented," Ohio need not already have the drugs on hand. For that standard to have practical meaning, however, the State should be able to obtain the drugs with ordinary transactional effort. Plainly it cannot. The reality is that the barbiturate-only method is no more available to Ohio than it was to Oklahoma two years ago in *Glossip*—for precisely the same reasons.

The last issue in this appeal is whether Ohio is judicially estopped from returning to a three-drug protocol. We review de novo whether Ohio is so estopped. *Mirando v. U.S. Dep't of Treasury*, 766 F.3d 540, 545 n.1 (6th Cir. 2014). The doctrine's purpose is to prevent a party "from abusing the judicial process through cynical gamesmanship" by changing positions "to suit an exigency of the moment." *Id.* at 545. True, as the majority points out, the State is incorrect to argue that judicial estoppel does not apply to states at all. When the doctrine is invoked against a state, however, it must be "construed narrowly." *United States v. Owens*, 54 F.3d 271, 275 (6th Cir. 1995).

I will stipulate that Ohio flatly stated in 2009 that it was switching to a one-drug protocol and that "going forward, pancuronium bromide [the paralytic drug] no longer will be used as part

of the lethal injection process.” R. 718-3 at 22390. Ohio also stated in a motion for summary judgment that a then-pending challenge to its prior three-drug protocol was therefore moot—because Ohio was no longer using it. R. 966-2. The district court never granted Ohio’s motion, but our court soon held that any challenge to Ohio’s old three-drug protocol (using sodium thiopental) was “now moot.” *Cooley v. Strickland*, 588 F.3d 921, 923 (6th Cir. 2009) (per curiam). Thus, the plaintiffs argue, Ohio prevailed by “permanently” renouncing the paralytic and potassium chloride—a promise on which Ohio has putatively now reneged.

The argument is meritless. Ohio represented that it was switching to a one-drug protocol in the context of a particular case involving particular named plaintiffs, who apparently did not include the named plaintiffs here. Ohio then proceeded to execute 20 death-row inmates with the new one-drug protocol, which should be proof enough of the State’s truthfulness in making those representations. Ohio did represent in 2009 that “[t]here is absolutely no reason to believe that defendants will reinstate the previous ‘three-drug protocol’ if the plaintiffs’ suits were dismissed.” R. 966-2 at 34329. But that was before death-penalty opponents successfully prevented Ohio (along with other states) from obtaining the drugs necessary to use the one-drug protocol. *See Glossip*, 135 S. Ct. at 2733-34. Ohio then ceased executions altogether for about three years before switching to the three-drug protocol at issue here.

A state’s change in policy in response to changed circumstances like these is hardly the kind of inconsistency that warrants estoppel. *See New Hampshire v. Maine*, 532 U.S. 742, 749-50 (2001); *Owens*, 54 F.3d at 275. Judicial estoppel prohibits “playing fast and loose with the courts”—that is, “abusing the judicial process through cynical gamesmanship” by changing positions “to suit an exigency of the moment.” *New Hampshire*, 532 U.S. at 749-50; *Mirando*, 766 F.3d at 545. Suffice it to say that, if any gamesmanship led us to this pass, it was not gamesmanship by the State.

I respectfully dissent.