IN THE SUPREME COURT OF MISSISSIPPI

NO. 2017-DR-00870-SCT

THOMAS EDWIN LODEN, JR.

v.

STATE OF MISSISSIPPI

DATE OF JUDGMENT:	09/21/2001
TRIAL JUDGE:	HON. THOMAS J. GARDNER, III
COURT FROM WHICH APPEALED:	ITAWAMBA COUNTY CIRCUIT COURT
ATTORNEY FOR PETITIONER:	STACY FERRARO
ATTORNEY FOR RESPONDENT:	OFFICE OF THE ATTORNEY GENERAL BY: JASON L. DAVIS
NATURE OF THE CASE:	CIVIL - DEATH PENALTY- POST-CONVICTION
DISPOSITION:	PETITION FOR POST-CONVICTION RELIEF DENIED - 12/06/2018
MOTION FOR REHEARING FILED:	
MANDATE ISSUED:	

EN BANC.

RANDOLPH, PRESIDING JUSTICE, FOR THE COURT:

¶1. Before the Court is Thomas Edwin Loden Jr.'s fourth[1] petition for post-conviction relief. Loden challenges the Mississippi Department of Corrections' use of midazolam in its lethal-injection protocol. He claims that midazolam is not an "appropriate anesthetic or

[1] Loden's first petition for post-conviction relief was filed in July 2003 and was denied. ***Loden v. State,*** 971 So. 2d 548, 552 (Miss. 2007). Loden filed a second petition, which was denied in April 2010. ***Loden v. State***, 43 So. 3d 365, 401 (Miss. 2010). Loden's third petition was dismissed in May 2017 as moot. ***Loden v. State***, 222 So. 3d 312, 313 (Miss. 2017).

sedative" that, "if properly administered in a sufficient quantity, is likely to render the condemned inmate unconscious, so that the execution process should not entail a substantial risk of severe pain" under Mississippi Code Section 99-19-51 (Supp. 2018). Loden requests this Court to enter an order forbidding the State from using any drug, including midazolam, as the first drug in its lethal-injection series that is not "likely to render the condemned inmate unconscious," or, in the alternative, to grant him an evidentiary hearing to prove that midazolam is not "an appropriate anesthetic or sedative" under Mississippi Code Section 99-19-51.

¶2. First, our review of Loden's filings and affidavits on the critical issue—that is, whether a 500-milligram dose of midazolam meets Mississippi's statutory definition of an "appropriate anesthetic or sedative," reveals that Loden has offered no more than the *ipse dixit* arguments of his expert, Craig W. Stevens, Ph.D. Loden has failed to carry his burden of proof in presenting a substantial showing of the denial of a state or federal right as required by Mississippi Code Section 99-39-27 (Rev. 2015), for the portions of his affidavits related to the efficacy of a 500-milligram dose of midazolam are a "sham" and are not supported by established medical literature. ***Gable v. State***, 748 So. 2d 703, 706 (Miss. 1999) (quoting ***Young v. State***, 731 So. 2d 1120, 1122-23 (Miss. 1999)).

¶3. Moreover, the State responds that, in ***Glossip v. Gross***, the United States Supreme Court considered the same arguments presented in Loden's petition and rejected them, affirming the United States Court of Appeals for the Tenth Circuit's and a United States District Court's finding that a 500-milligram dose of midazolam—the same dosage that

MDOC requires in its lethal-injection protocol—is capable of placing a person at a sufficient level of unconsciousness so that the recipient is unable to feel pain. ***Glossip v. Gross***, 135 S. Ct. 2726, 2739-41, 192 L. Ed. 2d 761, 83 U.S.L.W. 4656 (2015). In addition to Loden's failure to present a substantial showing of the denial of a state or federal right, the holding in ***Glossip*** is relevant to the outcome of this petition. Accordingly, his petition for PCR is denied.

FACTS AND PROCEDURAL HISTORY

¶4. On June 22, 2000, Loden discovered Leesa Marie Gray's car stranded on the side of the road with a flat tire. ***Loden v. State***, 971 So. 2d 548, 552 (Miss. 2007) (***Loden I***). According to an interview of Loden, Loden stopped, asked Leesa what was wrong, and told her "Don't worry. I'm a Marine. We do this kind of stuff." ***Id.*** Loden then asked Leesa if she had ever considered becoming a Marine. ***Id.*** Leesa responded that "that'd be the last thing I want to do with my life." ***Id.*** Loden became so angry that he ordered Leesa to get in his van. ***Id.*** Then, "[o]ver the next four hours, Loden repeatedly raped and sexually battered Leesa, videotaping portions of the sadistic acts, before murdering her by way of suffocation and manual strangulation." ***Id.*** at 551.

¶5. Loden was indicted for capital murder, rape, and four counts of sexual battery. ***Id.*** Loden voluntarily waived his right to a jury for both trial and sentencing and pleaded guilty to all six counts in the indictment. ***Id.*** at 551-52. "The Circuit Court of Itawamba County, Mississippi, accepted those pleas and adjudged Loden guilty on each count." ***Id.*** at 552. "At the sentencing hearing, Loden elected to waive cross-examination of all of the State's

witnesses, to waive objection to all exhibits presented by the State, and not to offer any mitigation evidence on his own behalf." ***Id.*** Loden then chose to address the court and Leesa's friends and family by stating, "I hope you may have some sense of justice when you leave here today." ***Id.*** The circuit court then considered the four factors required by Mississippi Code Section 99-19-101(7) (Rev. 2015) and found that each factor was satisfied, "that sufficient aggravating circumstances existed, and 'that the mitigating circumstances do not outweigh the aggravating circumstances and that the death penalty should be imposed.'" ***Id.***

¶6. Loden was also sentenced to thirty years' imprisonment for the rape conviction on Count II of the indictment; thirty years' imprisonment for the sexual battery conviction on Count III; thirty years' imprisonment for the sexual battery conviction on Count IV; thirty years' imprisonment for the sexual battery on Count V; and thirty years' imprisonment for the sexual battery conviction on Count VI; all sentences were ordered to run consecutively to all other sentences imposed. ***Id.*** at 575.

¶7. Loden's direct appeal was found meritless. ***Id.*** at 575. In addition, Loden's three previous petitions for PCR have all either been denied or dismissed. ***Id.***; ***Loden v. State***, 43 So. 3d 365, 376 (Miss. 2010) (***Loden II***); ***Loden v. State***, 222 So. 3d 312, 313 (Miss. 2017) (***Loden III***). Loden is also currently a petitioner in a pending federal civil action challenging Mississippi's lethal injection protocol. ***Jordan v. Hall***, No. 3:15CV295HTW-LRA, 2018 WL 1546632 (S.D. Miss. March 29, 2018).

¶8. In this fourth petition for post-conviction relief, Loden now argues that MDOC's current lethal-injection protocol[2] violates Mississippi Code Section 99-19-51(1), amended in April 2017, which provides,

> The manner of inflicting the punishment of death shall be by the sequential intravenous administration of a lethal quantity of the following combination of substances: (a) *an appropriate anesthetic or sedative*; (b) a chemical paralytic agent; and (c) potassium chloride, or other similarly effective substance, until death is pronounced by the county coroner where the execution takes place or by a licensed physician according to accepted standards of medical practice. *As used in this section, the term "appropriate anesthetic or sedative" means any substance that, if properly administered in a sufficient quantity, is likely to render the condemned inmate unconscious, so that the execution process should not entail a substantial risk of severe pain*.

Miss. Code Ann. § 99-19-51(1) (Supp. 2018) (emphasis added). Loden argues that midazolam is not "an appropriate anesthetic or sedative" that is "likely to render the condemned inmate unconscious . . . ." *Id.*

[2] Mississippi employs a three-drug lethal-injection protocol. Miss. Code. Ann. § 99-19-51(1). MDOC's current protocol states that, "[i]n the event of the unavailability of a sufficient quantity of Pentobarbital from available sources, a sufficient quantity of Midazolam will be acquired and administered in the place of Pentobarbital. The Midazolam will be administered in the same serial order as Pentobarbital (Two 50 cc syringes totaling 500 MG)." The revised protocol also requires that, "when three (3) minutes have elapsed following the administration of the first drug in the protocol, the IV Team leader, dressed in a manner to preserve their anonymity shall enter into the room where the offender is located to determine, pursuant to necessary and medically appropriate and approved methods, whether the offender is unconscious." Furthermore, the revised protocol provides that, "[t]hroughout the entire procedure, the IV Team members, and other Execution Team members shall continually monitor the offender using all available means to ensure that the offender remains unconscious and that there are no complications."

ISSUE

I. WHETHER MIDAZOLAM IS AN "APPROPRIATE ANESTHETIC OR SEDATIVE" AS DEFINED BY MISSISSIPPI CODE SECTION 99-19-51(1).

STANDARD OF REVIEW

¶9. Mississippi Code Section 99-39-27(5) provides that,

> [u]nless it appears from the face of the application, motion, exhibits and the prior record that the claims presented by those documents are not procedurally barred under Section 99-39-21 and that they further present a substantial showing of the denial of a state or federal right, the court shall by appropriate order deny the application.

Miss. Code Ann. § 99-39-27(5) (Rev. 2015). Mississippi Code Section 99-39-27(7) further provides that the Court, in its discretion, may,

> (a) Where sufficient facts exist from the face of the application, motion, exhibits, the prior record and the state's response, together with any exhibits submitted with those documents, or upon stipulation of the parties, grant or deny any or all relief requested in the attached motion.
>
> (b) Allow the filing of the motion in the trial court for further proceedings under Sections 99-39-13 through 99-39-23.

Miss. Code Ann. § 99-39-27(7) (Rev. 2015).

¶10. Post-conviction proceedings afford the Court an opportunity "to review those matters which, in practical reality, could not or should not have been raised at trial or on direct appeal." ***Brown v. State***, 798 So. 2d 481, 491 (Miss. 2001) (quoting ***Turner v. State***, 590 So. 2d 871, 874 (Miss. 1991)). Loden's petition involves the revised lethal-injection protocol promulgated by MDOC on July 28, 2015, and amended again in November 2017, as well as the revised method-of-execution statute amended in April 2017. Accordingly, the Court may

consider Loden's petition because the issue raised in it could not have been raised at trial or on direct appeal. Loden "bears the burden of proof by preponderance of the evidence that he is entitled to post-conviction relief." ***Lambert v. State***, 941 So. 2d 804, 811 (Miss. 2006) (internal quotations omitted) (quoting ***McClendon v. State***, 539 So. 2d 1375, 1377 (Miss. 1989).

¶11. In cases in which a petitioner and the State produce contradictory affidavits in post-conviction proceedings, this Court has held that, "where an affidavit is overwhelmingly belied by unimpeachable documentary evidence in the record such as, for example, a transcript or written statements of the affiant to the contrary to the extent that the court can conclude that the affidavit is a sham[,] no hearing is required. " ***Gable***, 748 So. 2d at 706.

DISCUSSION

¶12. In this case, Loden and the State have produced contradictory affidavits regarding whether a 500-milligram dose of midazolam is an appropriate anesthetic or sedative. But one need not examine the State's competing affidavit to find that Loden's petition for post-conviction relief fails to present a substantial showing of the denial of a state or federal right. Miss. Code Ann. § 99-39-27(5). Loden offers multiple affidavits of Craig W. Stevens, Ph.D., who meanders through a series of contradictory, speculative assertions about midazolam, from criticizing the State's definition of "appropriate anesthetic or sedative" (while simultaneously conceding that midazolam satisfies that definition), to criticizing the ability of a 500-milligram dose of midazolam to induce unconsciousness without citing a

single scientific publication or study involving such a dose to support his argument.[3] Loden has not carried his burden of proof that he is entitled to post-conviction relief, irrespective of the contradictory affidavit presented by the State.

¶13. Stevens[4] opines that midazolam does not satisfy the State's definition of an "appropriate anesthetic or sedative" under Section 99-19-51. Stevens criticizes midazolam as the first drug in MDOC's lethal-injection protocol on two theories. First, Stevens asserts that midazolam does not comply with the statute's definition of "appropriate anesthetic or sedative," arguing that midazolam does not produce "general anesthesia." Second, Stevens opines that the "ceiling effect" of midazolam prevents the drug from changing from a

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[3] Additionally, the State points out in its response to Loden's petition that Stevens's testimony was recently rejected by the United States Court of Appeals for the Sixth Circuit in ***In re Ohio Execution Protocol***, 860 F.3d 881, 887-88 (6th Cir. 2017). The State notes that the Sixth Circuit found that "Dr. Stevens [sic] 'estimates' regarding the ceiling effect of midazolam were 'highly speculative' and that Stevens'[s] testimony that midazolam could not produce 'general anesthesia' (the same claims asserted here) was contradicted by the fact that the studies he relied on did not involve the 'massive' 500 mg dose such as here." The State notes that "the Sixth Circuit held that Ohio's three-drug protocol including midazolam was not "sure or very likely" to cause serious pain in violation of ***Glossip***."

[4] Per the curriculum vitae provided for this litigation, Stevens currently serves as a professor of pharmacology in the department of pharmacology and physiology at the College of Osteopathic Medicine at Oklahoma State University. Stevens is neither a licensed anesthesiologist nor a medical doctor. Stevens has provided litigation assistance as a litigation consultant and expert witness in a number of cases involving pharmacological issues. Stevens states that he has worked with various state departments of corrections, as well as with death-row attorneys in lethal-injection cases. Loden previously offered Stevens's opinions in the pending federal civil action and in his successive petition for post-conviction relief, in which he challenged the use of midazolam under the former version of Mississippi Code Section 99-19-51, which required the first drug to be an "ultra-short acting barbiturate or other similar drug." ***Loden III***, 222 So. 3d at 313. Loden offers the same report supplemented by two others authored by Stevens in support of his challenge to MDOC's revised lethal-injection protocol.

sedative into a general anesthetic. Additionally, Stevens challenges MDOC's preparation and administration of the IV, the actual dose of midazolam to be administered, the lack of a saline flush, and the method of checking consciousness.

¶14. Stevens does not dispute that midazolam is a sedative as prescribed in the statute.[5] Indeed, Stevens admits that midazolam is part of the sedative-hypnotic class of drugs, and that sedative-hypnotic drugs have largely replaced barbiturates, which he admits "reliably produce anesthesia,"[6] in clinical therapeutics. Despite these concessions, Stevens surmises that the legislative intent of the word "or"[7] in the phrase "anesthetic or sedative" requires an equivalency between anesthetic drugs and sedative drugs; he concludes that the two are not equivalent. Stevens offers that midazolam is not an anesthetic drug because it cannot produce the state of general anesthesia. Stevens continues, opining that midazolam is a sedative, which "by its very nature and definition, cannot meet the criteria of an appropriate drug that is likely to render the inmate unconscious" and "impervious to pain." Stevens offers that the second and third drugs, if not given with a state of general anesthesia produced by the first drug, would be severely painful and cause suffering. Stevens, despite not sharing

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[5] "The manner of inflicting the punishment of death shall be by the sequential intravenous administration of a lethal quantity of the following combination of substances: (a) an appropriate anesthetic or *sedative*; . . . ." Miss. Code Ann. § 99-19-51(1) (emphasis added).

[6] "[T]he term 'appropriate *anesthetic* or sedative' means any substance that, if properly administered in a sufficient quantity, is likely to render the condemned inmate unconscious, so that the execution process should not entail a substantial risk of severe pain." Miss. Code Ann. § 99-19-51(1) (emphasis added).

[7] "Or: Used to indicate 1. An alternative, usu. only before the last term of a series <cold or hot> <this, that, or the other>." *Or*, Webster's II New College Dictionary (2001).

the education, practical experience, or training of an anesthesiologist, then offers that "even under the best circumstances, . . . anesthesiologists inducing general anesthesia appear to get it wrong a significant percentage of the time and their patients are not unconscious (or anesthesized) as often as they think." In a final *coup de grâce*, Stevens offers that the lethal-injection statute should be modified, stating that, "[t]o be correct and to be in alignment with common pharmacological knowledge," Mississippi Code Section 99-19-51(1) "should be modified to read '(a) an appropriate general anesthetic drug'" as opposed to an "appropriate anesthetic or sedative."[8]

¶15. Stevens also opines that midazolam has a "ceiling effect," in which a greater dose will not produce a greater pharmacological effect; yet, he freely concedes that no scientific studies or tests of midazolam's ceiling effect on humans exist. Instead, Stevens opines about midazolam's ceiling effect by extrapolating from studies conducted on cells in laboratory dishes (*in vitro*) and studies examining the blood concentration of midazolam in humans who were administered clinical doses of midazolam at five to fifteen milligrams and then offers his *ipse dixit* opinion about what the concentration of midazolam would be in the human brain after a 500-milligram dose. Stevens concludes that a 200-milligram dose of midazolam is sufficient to reach its ceiling effect.

¶16. Stevens's contradictory opinions overwhelmingly belie his assertion that midazolam is not an "appropriate anesthetic or sedative." *See* ***Gable***, 748 So. 2d at 706 (holding that petitioner is not entitled to an evidentiary hearing when petitioner's affidavit is belied by

[8] Stevens's suggestion to amend the statute is a form of relief that the trial court cannot grant.

written statements of the affiant to the contrary). Stevens opines that a 500-milligram dose of midazolam cannot render an inmate unconscious, yet in the very same report, Stevens concedes that much smaller doses of midazolam are routinely used for sedation and anesthesia. Stevens himself provided five different uses of midazolam as an anesthetic or sedative: (1) preoperative sedation, (2) outpatient sedation, (3) anesthesia induction, (4) sedation for intubated patients, and (5) co-anesthesia.

¶17. Stevens also admits that "the highest-clinically used" dosage of midazolam does "not approach the ceiling effect dosage," admitting that "the usual clinical midazolam IV doses produce brain concentrations that are far below ceiling or plateau effect." In other words, Stevens admits that the highest clinically used dosage of midazolam, which is routinely used for sedation and anesthesia, does not reach the drug's ceiling effect. Furthermore, Stevens admits that no scientific tests, studies, or literature concerning midazolam's ceiling effect on humans following a 500-milligram dosage exist. Additionally, Stevens does not provide any evidence that his own calculation of midazolam's purported ceiling effect was the product of reliable principles and methods.

¶18. As to midazolam's effectiveness in inducing unconsciousness, Stevens's affidavits and supplemental reports focus entirely on midazolam's inability to produce "general anesthesia," which is not required under either Mississippi Code Section 99-19-51 or ***Glossip***. Indeed, the statute only requires an appropriate anesthetic or sedative, and Stevens concedes that midazolam is routinely used as both an anesthetic and a sedative. Even if Mississippi's lethal-injection protocol required only anesthetics, Stevens admits that

midazolam, among other drugs, has largely replaced barbiturates, which "reliably produce anesthesia" in clinical therapeutics. Stevens defines anesthesia as "the loss of all feeling and is generally meant to be in a state of unconsciousness."

¶19. Furthermore, Stevens concedes that midazolam is used for regional anesthesia and actually cites clinical studies in which midazolam was infused until patients became unresponsive to mild prodding or shaking. Stevens further admits that midazolam has been documented to produce a "BIS value"[9] of 65 in surgery patients, which represents "deep sedation." And just like the weakness contained in Stevens's "ceiling effect" argument, Stevens opined that unconsciousness cannot be measured.

¶20. As previously stated, "where an affidavit is overwhelmingly belied by unimpeachable documentary evidence in the record such as, for example, a transcript or written statements of the affiant to the contrary to the extent that the court can conclude that the affidavit is a sham[,] no hearing is required." ***Gable***, 748 So. 2d at 706. Having examined Stevens's contradictory, speculative affidavits, the Court finds that the portions of the affidavits related to the efficacy of a 500-milligram dose of midazolam are a "sham" and are without established medical support.[10] ***Id.*** Loden has not carried his burden of proof in presenting

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[9] In one of his affidavits, Stevens opines that researchers utilize a "bispectral analysis," or BIS value, to measure the patient's level of anesthesia. In another affidavit, Stevens states that the BIS method is not universally accepted as a measure of unconsciousness and that it is "not without controversial results." This is yet another example of Stevens's own contradictory assertions, which are contained throughout his affidavits.

[10] Though not necessary to conclude that Stevens's affidavits are a "sham," the Court has the benefit of the counter-affidavit of Dr. Joseph F. Antognini, M.D., M.B.A., a board-certified medical doctor in the medical specialty of anesthesiology licensed to practice

a substantial showing of the denial of a state or federal right; therefore, he is not entitled to post-conviction relief. Miss. Code Ann. § 99-39-27(5).

¶21. Moreover, Loden is not entitled to post-conviction relief because the United States Supreme Court has already rejected squarely the claims advanced by Loden in his challenge to midazolam.

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medicine in the State of California. Dr. Antognini received his medical degree from the University of Southern California and currently serves as a clinical professor of anesthesiology and pain medicine at the University of California, Davis-School of Medicine, and as the director of peri-operative services at the University of California, Davis Health System. Dr. Antognini has provided expert testimony in one case over the last four years.

Dr. Antognini relates that, in practice, the typical therapeutic dose of midazolam is two to three milligrams, and that a dose above five milligrams must be used with extreme caution because of the well-known risks of unconsciousness, respiratory depression, and apnea. He further relates that midazolam has been used for the induction of anesthesia and cites two scientific studies in support. He specifically points out that a 500-milligram dose of midazolam, which is about 100 to 200 times the normal therapeutic dosage, would render a person "completely unconscious and insensate to pain and noxious stimuli." Dr. Antognini cites the "Black Box Warning" of midazolam, which signifies that midazolam can cause respiratory depression, unconsciousness, and death. Further, Dr. Antognini states that "there is only an exceedingly small risk that a person administered a 500[-milligram] dose of midazolam would experience any pain" from the administration of vecuronium bromide and potassium chloride. Dr. Antognini also relates that 500 milligrams of midazolam would produce a state of anesthesia that is considered adequate "for many thousands of surgical procedures performed on a daily basis." Further, Dr. Antognini states that Stevens's hypothesis on the "ceiling effect" of midazolam is erroneous. Applying the Supreme Court's holding in ***Glossip*** coupled with his training, knowledge, and experience in performing real-life anesthesia, Dr. Antognini states that the ceiling effect is only germane as to the dosage at which the ceiling effect kicks in. Dr. Antognini states that "the primary medical and scientific issue raised in this case is whether the ceiling effect, if it exists for midazolam, occurs before a person becomes unconscious and insensate to pain and noxious stimuli." Dr. Antognini ultimately concludes that "a purported ceiling effect does not affect midazolam's ability to induce unconsciousness and render a person insensate to pain and noxious stimuli."

¶22. In ***Glossip***, the United States Supreme Court granted certiorari on an Eighth Amendment challenge to Oklahoma's use of midazolam in its lethal-injection protocol. ***Glossip***, 135 S. Ct. at 2726. Oklahoma's three-drug protocol (like Mississippi's) included a 500-milligram dose of midazolam as the first drug. ***Id.*** Four death-row inmates filed a 42 U.S.C. § 1983 challenge, claiming that the use of midazolam violated the Eighth Amendment, because, they alleged, it would not render them unable to feel pain as the second and third drugs were administered. ***Id.*** Specifically, the petitioners claimed that a 500-milligram dose of midazolam would not induce or maintain unconsciousness and that its "ceiling effect" prevented midazolam from producing a greater pharmacological effect than a normal dose, the very same arguments presented by Stevens in his affidavits and reports.

¶23. The district court held an evidentiary hearing and denied the four prisoners' application for preliminary injunction, finding that they had failed to prove that midazolam is ineffective. The United States Court of Appeals for the Tenth Circuit affirmed. After granting certiorari, the United States Supreme Court affirmed the judgments of the trial and appellate courts and addressed the lack of contrary scientific evidence to support the petitioners' claims:

> Petitioners attack the District Court's findings of fact on two main grounds. First, they argue that even if midazolam is powerful enough to induce unconsciousness, it is too weak to maintain unconsciousness and insensitivity to pain once the second and third drugs are administered. Second, while conceding that the 500-milligram dose of midazolam is much higher than the normal therapeutic dose, they contend that this fact is irrelevant because midazolam has a "ceiling effect"—that is, at a certain point, an increase in the

dose administered will not have any greater effect on the inmate. Neither argument succeeds.

The District Court found that midazolam is capable of placing a person "at a sufficient level of unconsciousness to resist the noxious stimuli which could occur from the application of the second and third drugs." . . . This conclusion was not clearly erroneous. Respondents' expert, Dr. Evans, testified that the proper administration of a 500-milligram dose of midazolam would make it a "virtual certainty" that any individual would be "at a sufficient level of unconsciousness to resist the noxious stimuli which could occur from application of the 2nd and 3rd drugs" used in the Oklahoma protocol. . . . And petitioners' experts acknowledged that they had no contrary scientific proof. . . . (Dr. Sasich stating that the ability of midazolam to render a person insensate to the second and third drugs "has not been subjected to scientific testing"); . . . (Dr. Lubarsky stating that "there is no scientific literature addressing the use of midazolam as a manner to administer lethal injections in humans").

. . . .

Testimony from both sides supports the District Court's conclusion that midazolam can render a person insensate to pain. Dr. Evans testified that although midazolam is not an analgesic, it can nonetheless "render the person unconscious and 'insensate' during the remainder of the procedure." . . . In his discussion about the ceiling effect, Dr. Sasich agreed that as the dose of midazolam increases, it is "expected to produce sedation, amnesia, and finally lack of response to stimuli such as pain (unconsciousness)." . . . Petitioners argue that midazolam is not powerful enough to keep a person insensate to pain after the administration of the second and third drugs, but Dr. Evans presented creditable testimony to the contrary. . . . (testifying that a 500-milligram dose of midazolam will induce a coma). Indeed, low doses of midazolam are sufficient to induce unconsciousness and are even sometimes used as the sole relevant drug in certain medical procedures. Dr. Sasich conceded, for example, that midazolam might be used for medical procedures like colonoscopies and gastroscopies. . . .

Petitioners emphasize that midazolam is not recommended or approved for use as the sole anesthetic during painful surgery, but there are two reasons why this is not dispositive. First, as the District Court found, the 500-milligram dose at issue here "is many times higher than a normal therapeutic does of midazolam." . . . The effect of a small dose of midazolam has minimal probative value about the effect of a 500-milligram dose. Second, 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 of midazolam is constitutionally adequate for purposes of conducting an execution. We recognized this point in ***Baze***, where we concluded that although the medical standard of care might require the use of a blood pressure cuff and an electrocardiogram during surgeries, this does not mean those procedures are required for an execution to pass Eighth Amendment scrutiny. . . .

. . . .

Petitioners assert that midazolam's "ceiling effect" undermines the District Court's finding about the effectiveness of the huge dose administered in the Oklahoma protocol. Petitioners argue that midazolam has a "ceiling" above which any increase in dosage produces no effect. As a result, they maintain, it is wrong to assume that a 500-milligram dose has a much greater effect than a therapeutic dose of about 5 milligrams. But the mere fact that midazolam has such a ceiling cannot be dispositive. Dr. Sasich testified that "all drugs essentially have a ceiling effect." . . . The relevant question here is whether midazolam's ceiling effect occurs below the level of a 500-milligram dose and at a point at which the drug does not have the effect of rendering a person insensate to pain caused by the second and third drugs.

Petitioners provided little probative evidence on this point, and the speculative evidence that they did present to the District Court does not come close to establishing that its factual findings were clearly erroneous. Dr. Sasich stated in his expert report that the literature "indicates" that midazolam has a ceiling effect, but he conceded that he "was unable to determine the midazolam dose for a ceiling effect on unconsciousness because there is no literature in which such testing has been done." . . . Dr. Lubarsky's report was similar, . . . and the testimony of petitioners' experts at the hearing was no more compelling. Dr. Sasich frankly admitted that he did a "search to try and determine at what dose of midazolam you would get a ceiling effect," but concluded: "I could not find one." . . . The closest petitioners came was Dr. Lubarsky's suggestion that the ceiling effect occurs "[p]robably after about . . . 40 to 50 milligrams," but he added that he had not actually done the relevant calculations, and he admitted: "I can't tell you right now" at what dose the ceiling effect occurs. . . .We cannot conclude that the District Court committed clear error in declining to find, based on such speculative evidence, that the ceiling effect negates midazolam's ability to render an inmate insensate to pain caused by the second and third drugs in the protocol.

Glossip, 135 S. Ct. at 2740-43 (internal citations and emphasis omitted). The United States Supreme Court also noted that numerous courts have examined similar challenges to midazolam but have ultimately concluded "that the use of midazolam as the first drug in a three-drug protocol is likely to render an inmate insensate to pain that might result from administration of the paralytic agent and potassium chloride."[11] ***Glossip***, 135 S. Ct. at 2739.

¶24. Based on the above holdings in ***Glossip***, Loden's petition fails. Like the petitioners in ***Glossip***, Loden's filings lack contrary scientific evidence to support his challenge to midazolam. Furthermore, Loden's expert, Stevens, has failed to present any new argument that was not already considered and rejected by the United States Supreme Court. Indeed, like the petitioners in ***Glossip***, Stevens attacks MDOC's use of midazolam on two main grounds: (1) that midazolam is incapable of rendering an inmate unconscious, and (2) that midazolam's "ceiling effect" renders the drug's effect no greater than normal therapeutic doses. Stevens provides nearly identical expert opinions and conclusions to those offered in ***Glossip***. The United States Supreme Court expressly rejected those arguments, opinions, and conclusions as speculative, because the petitioners had not offered contrary scientific proof to support their challenge to midazolam. *See* ***Glossip***, 135 S. Ct. at 2741 (noting expert's testimony that, to a virtual certainty, any individual would be at a sufficient level of

[11] *See*, *e.g.*, ***In re Ohio Execution Protocol***, 860 F.3d 881 (6th Cir. 2017); ***Gray v. McAuliffe***, No. 3:16CV982-HEH, 2017 WL 102970 (E.D. Va. Jan. 10, 2017); ***Grayson v. Warden***, 672 Fed. Appx. 956 (11th Cir. 2016); ***Brooks v. Warden***, 810 F.3d 812 (11th Cir. 2016); ***Warner v. Gross***, 776 F.3d 721, 723 (10th Cir. 2015); ***Chavez v. Florida SP Warden***, 742 F.3d 1267, 1268 (11th Cir. 2014); ***Banks v. State***, 150 So. 3d 797 (Fla. 2014); ***Howell v. State***, 133 So. 3d 511 (Fla. 2014); ***Muhammad v. State***, 132 So. 3d 176 (Fla. 2013).

unconsciousness to resist the noxious stimuli which could occur from application of the second and third drugs after administering a 500-milligram dose of midazolam). Here, too, Stevens's opinions concerning the ceiling effect of midazolam and its ability to induce unconsciousness lack scientific proof supporting Loden's challenge to midazolam and contain the same speculative assertions that the Supreme Court rejected in ***Glossip***. Stevens conceded that no scientific studies or tests of midazolam's ceiling effect on humans exist and freely conceded that "unconsciousness *per se* cannot be measured." Loden offered no other scientific proof to support his hypothesis that midazolam is not an "appropriate anesthetic or sedative" under Mississippi Code Section 99-19-51(1).

¶25. Loden attempts to distinguish ***Glossip***, arguing that the Supreme Court merely held that the district court "did not abuse its discretion in denying a preliminary injunction." Loden argues that, if MDOC's argument is correct—that is, if the Supreme Court held that midazolam is clearly sufficient to induce unconsciousness and render an inmate insensate to pain, then "the case would be over." Loden asserts that, because ***Glossip*** is still proceeding in Oklahoma, the Supreme Court's holding is not dispositive. This argument is without merit. The Supreme Court's analysis began with holding that "this case turns on whether petitioners are able to establish a likelihood of success on the merits" of their challenge to midazolam. ***Glossip***, 135 S. Ct at 2737 (emphasis added). The Supreme Court then examined the petitioners' substantive arguments against the use of midazolam—the same arguments made by Stevens for Loden—and specifically rejected them, affirming the district court's and the Tenth Circuit's holding that midazolam is capable of placing a person "at a

sufficient level of unconsciousness to resist the noxious stimuli which could occur from the application of the second and third drugs." ***Id.*** at 2740. Because Loden has not offered any contrary scientific proof to support his challenge to midazolam, we hold likewise. Pursuant to the United States Supreme Court's holdings in ***Glossip***, a 500-milligram dose of midazolam satisfies Mississippi's statutory standard for lethal injection under Mississippi Code Section 99-19-51(1).

¶26. Although Loden frames his petition for PCR as a state-law challenge instead of an Eighth Amendment challenge as in ***Glossip***, the underlying claims to support his statutory challenge are the very same claims that were made in ***Glossip***. Loden cannot circumvent the Supreme Court's holding in ***Glossip***—that a 500-milligram dose of midazolam is capable of placing a person "at a sufficient level of unconsciousness" to "render a person insensate to pain[,]" for the Supreme Court's holdings mirror Mississippi's statutory requirement for lethal injection. ***Glossip***, 135 S. Ct. at 2739-41; *see also* Miss. Code Ann. § 99-19-51(1) ("[T]he term "appropriate anesthetic or sedative" means any substance that, if properly administered in a sufficient quantity, is likely to render the condemned inmate unconscious, so that the execution process should not entail a substantial risk of severe pain."). ***Glossip*** dictates the outcome in this case. Loden has not demonstrated otherwise. Loden fails to demonstrate any likelihood of success on the merits to his challenge to midazolam and fails to present a substantial showing of the denial of a state or federal right from MDOC's use of midazolam in its lethal-injection protocol. *See* Miss. Code Ann. § 99-39-27.

CONCLUSION

¶27. For the aforementioned reasons, the Court finds that Loden has failed to demonstrate any likelihood of success on the merits of his challenge to midazolam and has failed to present a substantial showing of the denial of a state or federal right based on MDOC's use of a 500-milligram dose of midazolam in its lethal-injection protocol. Thus, Loden has not demonstrated that he is entitled to post-conviction relief. His petition is denied.

¶28. **PETITION FOR POST-CONVICTION RELIEF IS DENIED.**

WALLER, C.J., COLEMAN, MAXWELL, BEAM, CHAMBERLIN AND ISHEE, JJ., CONCUR. KING, J., DISSENTS WITH SEPARATE WRITTEN OPINION JOINED BY KITCHENS, P.J.

KING, JUSTICE, DISSENTING:

¶29. The sole issue in this case is whether Thomas Loden is entitled to an evidentiary hearing on his petition for post-conviction relief. This Court need not and should not reach the merits of his petition, because he is entitled to an evidentiary hearing in the trial court. Accordingly, I respectfully dissent.

¶30. The parties disagree about whether a 500-milligram dose of midazolam is an "appropriate anaesthetic or sedative" that will render Loden "unconscious, so that the execution process should not entail a substantial risk of severe pain" pursuant to state statute. Miss. Code Ann. § 99-19-51(1) (Supp. 2018). Loden presents two affidavits from Dr. Craig Stevens to support his argument that midazolam is incapable of rendering an inmate unconscious and insensate to pain. The State presents Dr. Richard Antognini's affidavit, in

which he opines that 500 milligrams of midazolam will render an inmate "completely unconscious and insensate to pain."

¶31. When a petitioner and the State produce contradictory affidavits in post-conviction proceedings, an evidentiary hearing should be ordered when the contested facts are material and the affidavit produced by the petitioner is not a "sham." ***Wright v. State***, 577 So. 2d 387, 390 (Miss. 1991) ("In order for a contested fact to require an evidentiary hearing it must be material. Moreover, where an affidavit is overwhelmingly belied by unimpeachable documentary evidence in the record such as, for example, a transcript or written statements of the affiant to the contrary to the extent that the court can conclude that the affidavit is a sham no hearing is required."); *see also* ***Neal v. State***, 525 So. 2d 1279, 1281 n.2 (Miss. 1987) ("Post-conviction actions employ many of the procedural trappings of a civil action. . . . As in civil actions, we do not resolve genuine issues of material fact by a process of trial by affidavit.").[12]

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[12] In ***Neal***, Justice Robertson explained in his separate opinion that the State should respond to a petitioner's affidavit in PCR proceedings by showing that an evidentiary hearing is not warranted, not by presenting a contradictory affidavit:

> The State appears to be of the view that its function in responding to a post-conviction application is to present counter affidavits which contradict and overcome petitioner's affidavits. But this is not the case at all, for we do not engage in trial by affidavits here any more than any other proceeding. The State would be better advised to direct its responses to the idea that an evidentiary hearing is not required, that is, to the proposition that either the petitioner's showing is not in proper form or that the facts he alleges are supported by affidavits suggesting no reasonable possibility that at an evidentiary hearing [the petitioner] may be able to establish a claim for relief from his sentence or conviction. The counter affidavit process is at the very earliest one in which the State should engage in connection with a motion for summary judgment. Miss. Code Ann. § 99-39-19(2) (Supp. 1986).

¶32. Loden frames the issue as a "simple matter of enforcing the statutory command." He clarifies that the instant petition does not raise an Eighth Amendment method-of-execution challenge, but is grounded solely in state law.

¶33. The majority of cases that discuss midazolam address constitutional arguments. *See* ***Glossip v. Gross***, 135 S. Ct. 2726, 2739-40, 192 L. Ed. 2d 761 (2015). Here, the majority argues that ***Glossip*** is instructive to the state-law claim at issue. The Court in ***Glossip***, however, was not presented with a state-law based claim; instead, it considered whether midazolam violates the Eighth Amendment. The petitioners in ***Glossip*** were on death row in Oklahoma. ***Id.*** at 2735. In contrast to Section 99-19-51's requirement that the State of Mississippi use "an appropriate anesthetic or sedative[,]" Oklahoma's statute does not contain a specific directive. Oklahoma's statute provides, "The punishment of death shall be carried out by the administration of a lethal quantity of a drug or drugs until death is pronounced by a licensed physician according to accepted standards of medical practice." Okla. Stat. Ann. § 1014. Additionally, ***Glossip*** was not dispositive regarding midazolam; the district court found that the plaintiffs were not entitled to a preliminary injunction because their claims did not have a substantial likelihood of success; the Supreme Court affirmed this decision, but did not rule that the plaintiffs also should lose the substantive case. ***Glossip***, 135 S. Ct. at 2736, 2746. And, importantly, the Supreme Court was reviewing a more developed record including testimony and documents, not simply affidavits.[13] ***Id.*** at 2735.

Neal, 525 So. 2d at 1287 (Robertson, J., concurring in part, dissenting in part).

[13]"[A]fter discovery, the District Court held a 3-day evidentiary hearing on the preliminary injunction motion. The District Court heard testimony from 17 witnesses and

It did not itself weight the expert opinions, as the majority inappropriately does; rather, it found that the trial court was not clearly erroneous in its conclusion regarding midazolam after the trial court held a three-day evidentiary hearing. ***Id.*** at 2739. Thus, ***Glossip*** is not dispositive regarding whether an evidentiary hearing is warranted on a state-law claim. Indeed, a thorough evidentiary hearing did occur in ***Glossip***, providing the Supreme Court with an adequate record and allowing the district court to decide evidentiary matters and matters of credibility. The majority goes so far as to chastise Dr. Stevens for failing to cite enough "proof" for his conclusion that he was unable to determine the ceiling effect for midazolam, even criticizing him for failing to "provide any evidence" regarding a ceiling effect. Maj. Op. ¶ 17. However, the majority denies the very evidentiary hearing in which Loden and Dr. Stevens would have the opportunity to present proof and evidence under the Mississippi Rules of Evidence. Moreover, in ***Glossip***, the Supreme Court specifically held that the lack of research on non-therapeutic doses of midazolam applies equally to both parties' cases, noting that "because a 500-milligram dose is never administered for a therapeutic purpose, extrapolation was reasonable." ***Glossip***, 135 S. Ct. at 2741.

¶34. In addition to sharply criticizing Dr. Stevens for extrapolations that the Supreme Court found acceptable, the majority attempts to paint Dr. Stevens's affidavits as a sham and "contradictory" because "Stevens opines that a 500-milligram dose of midazolam cannot render an inmate unconscious, yet in the very same report, Stevens concedes that much smaller doses of midazolam are routinely used for sedation and anesthesia." Maj. Op. ¶ 16.

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reviewed numerous exhibits." ***Id.*** at 2735.

To hold that these two statements are "contradictory" misrepresents or misunderstands medical terminology, a misunderstanding that might be corrected at an evidentiary hearing. "Unconscious" is defined as "not conscious" and "unconsciousness" is defined as "an imprecise term for severely impaired awareness of self and the surrounding environment; most often used as a synonym for coma or unresponsiveness." *Unconscious*, PDR Medical Dictionary (3d ed. 2006); *Unconsciousness*, PDR Medical Dictionary (3d ed. 2006). "Sedation" is defined as "the act of calming, especially by the administration of a sedative" and "sedative" is defined as "calming; quieting" and "a drug that quiets nervous excitement." *Sedation*, PDR Medical Dictionary (3d ed. 2006); *Sedative*, PDR Medical Dictionary (3d ed. 2006). "Anesthesia" is defined as a "loss of sensation resulting from pharmacological depression of nerve function." *Anesthesia*, PDR Medical Dictionary (3d ed. 2006). Clearly, a person can lose some of his sensation (anesthesia) without becoming unconscious. A person can also become calm (sedative) without becoming unconscious. Dr. Stevens's admission that midazolam is used for sedation and anesthesia in no way contradicts his assertion that it cannot render an inmate unconscious.

¶35. In fact, Dr. Stevens was the expert witness for prisoners in the Ohio litigation regarding midazolam, and the trial court found that,

> [a]lthough there was no time to conduct a ***Daubert*** hearing, Plaintiffs presented an adequate foundation in this hearing which, when coupled with what was presented in January, established a sufficient basis to find Dr. Stevens was qualified to offer opinions on the subjects on which he was presented so as to comply with Fed. R. Evid. 702.

In re Ohio Execution Protocol Litig., No. 2:11-cv-1016, 2017 WL 5020138 (S.D. Ohio Nov. 3, 2017). In the appeal of that case, the United States Court of Appeals for the Sixth Circuit, while ultimately finding that the petitioners had not proved that midazolam is "sure or very likely" to cause serious pain, conceded that "the plaintiffs have shown some risk that Ohio's execution protocol may cause some degree of pain, at least to some people[,]" a showing made primarily through Dr. Stevens's testimony. ***In re Ohio Execution Protocol***, 860 F.3d 881, 890 (6th Cir. 2017).[14]

¶36. Furthermore, the majority parses two phrases out of approximately thirty-five pages of scientific reports and gaslights its readers into thinking that these two phrases, taken out of context, magically render the affidavit so contradictory as to be a sham. The majority's conclusion, which is essentially that any scientist who disagrees with the majority's unscientific opinion on midazolam is a sham, is simply not supported by the expert reports, nor is it supported by caselaw that by and large allows and examines contradictory expert opinions on midazolam. The information upon which Dr. Stevens bases his conclusions does not appear to be a sham, and reasonable minds in the scientific community often disagree

[14]In an attempt to bolster its finding that Dr. Stevens's affidavit is a sham, the majority misrepresents the findings of the Sixth Circuit. After an *evidentiary hearing*, the Sixth Circuit took no issue with Dr. Stevens's qualifications and even credited his testimony, but simply determined that it did not meet the legal standard the plaintiff was required to meet. Crediting Dr. Stevens's testimony is a far cry from determining that his affidavit is so untrustworthy as to be a sham. The majority appears to find that whenever two experts disagree, the expert who "loses" automatically becomes a scientific sham. Such a ruling is dangerously contrary to science and the law. Further, the majority's misrepresentations of caselaw and the affidavit actually bolster the notion that an evidentiary hearing is needed, because the majority factfinds and makes misrepresentations and leaps from facts to determine that the affidavit is a sham.

regarding issues that cannot be proven to certainty, which is exactly what occurred here. To declare the affidavit a sham and speculatively inadmissible under ***Daubert*** and the Rules of Evidence without a hearing and without a full record of scientific testimony goes far beyond the appropriate role of an appellate court. It also seemingly ignores the Supreme Court's warnings that scientific controversies are beyond the expertise of the courts by declaring its scientific opinion to be more informed than that of an actual scientist who other courts have found to be an acceptable expert.

¶37. Loden provides a Montana case which addresses a similar deviation-from-state-law challenge, and distinguishes such a claim from a constitutional challenge. ***Smith v. Montana***, No. BDV-2008-303 (Oct. 6, 2015). There, the petitioners challenged whether pentobarbital—the drug selected by the Montana Department of Corrections to perform lethal injections—meets the legislative directive that the drug be an "ultra-fast acting barbiturate." ***Id.*** at *2; *see also* Mont. Code Ann. § 46-19-103(3). The Montana court went to great lengths to distinguish this state-law challenge from an Eighth Amendment claim:

> [I]t is important to clarify the nature of this case. This Court has not been asked and will not make a determination as to whether lethal injection of the Plaintiffs constitutes cruel and unusual punishment. This case is not about the constitutionality or appropriateness of the death penalty in Montana. This case is not about whether the use of pentobarbital in a lethal injection setting is cruel and unusual or if pentobarbital in the doses contemplated by the State of Montana would produce a painless death. . . . This case is only about whether the drug selected by the Department of Corrections to effectuate the Plaintiffs' lethal injections, pentobarbitol, meets the legislatively required classification of being an "ultra-fast acting barbiturate."

Id. at **1-2. After a hearing, the court found that pentobarbital did not meet Montana's statutory requirements and enjoined the state from using the drug in its lethal injection protocol. ***Id.*** at *11.

¶38. Taking Loden's claim as a state-law challenge—that is, whether midazolam conforms with Section 99-19-51's requirement that the State use "an appropriate anesthetic or sedative" which "is likely to render the [Loden] unconscious, so that the execution process should not entail a substantial risk of severe pain"—he has presented sufficient support to warrant an evidentiary hearing. Loden and the State have produced competing affidavits on a material issue. And, although the State presents a ***Daubert***-style defense[15] to Dr. Stevens's affidavit, his affidavit is not a "sham." ***Wright***, 577 So. 2d at 390 ("[W]here an affidavit is overwhelmingly belied by unimpeachable documentary evidence in the record such as, for example, a transcript or written statements of the affiant to the contrary to the extent that the court can conclude that the affidavit is a sham no hearing is required.").

¶39. At this point, the relevant inquiry before the Court is whether Loden is entitled to a hearing. *Cf.* ***Thorson v. State***, 76 So. 3d 667, 676 n.14 (Miss. 2011) ("the evidence sufficient to warrant the granting of an evidentiary hearing . . . in no way permeates the trial judge's testing and weighing of the evidence"); *see also* ***Rowland v. Britt***, 867 So. 2d 260, 262 (Miss. Ct. App. 2003) ("The purpose of an evidentiary hearing is for the court to receive evidence in order to make findings of fact.").

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[15]In fact, in ***Glossip***, the petitioners challenged the state's expert, who was a doctor of pharmacy, claiming that inconsistencies in his testimony existed. The district court denied the ***Daubert*** challenge, and the Supreme Court upheld that decision.

¶40. Loden, through Dr. Stevens's affidavits, has established a *prima facie* claim. The affidavits are not a "sham." As such, an evidentiary hearing is warranted, especially when considering the heightened standard of review we apply to death penalty cases.[16] *See* ***Harveston v. State***, 597 So. 2d 641, 643 (Miss. 1992) (petition meeting basic pleading requirements is sufficient to mandate an evidentiary hearing unless it appears beyond doubt that petitioner can prove no set of facts which would entitle him to relief). I would therefore grant Loden's petition and remand to the trial court for an evidentiary hearing.

KITCHENS, P.J., JOINS THIS OPINION.

[16]Because execution is final, it "weighs in favor of hearing plaintiffs' claims." ***McGehee v. Hutchinson***, No. 4:17-cv-00179 KGB, 2017 WL 1381663, at *1 (E.D. Ark. April 15, 2017). A review of the caselaw indicates that courts generally hold evidentiary hearings regarding midazolam claims.