07-5439

In the Supreme Court of the United States

RALPH BAZE, ET AL.,

Petitioners,

v.

JOHN D. REES, ET AL.,

Respondents.

ON WRIT OF CERTIORARI TO THE SUPREME COURT OF KENTUCKY

BRIEF FOR RESPONDENTS

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December 3, 2007

QUESTIONS PRESENTED

I. Does the Eighth Amendment to the United States Constitution prohibit means for carrying out a method of execution that create an unnecessary risk of pain and suffering as opposed to only a substantial risk of the wanton infliction of pain?

II. Do the means for carrying out an execution cause an unnecessary risk of pain and suffering in violation of the Eighth Amendment upon a showing that readily available alternatives that [allegedly] pose less risk of pain and suffering could be used?

III. Does the continued use of thiopental, pancuronium, and potassium, individually or together, violate the cruel and unusual punishment clause of the Eighth Amendment because lethal injections can be carried out by using other chemicals that [allegedly] pose less risk of pain and suffering?

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STATEMENT

A. Introduction

This case arises out of two sets of grisly murders for which the Commonwealth of Kentucky has imposed the penalty of death. On January 30, 1992, petitioner Ralph Baze ambushed and murdered Sheriff Steve Bennett and Deputy Sheriff Arthur Briscoe of Powell County, Kentucky, when the officers attempted to serve several Ohio felony warrants on Baze. Baze shot Sheriff Bennett three times in the back with an SKS semi-automatic assault rifle, killing him. Deputy Briscoe returned fire with a pistol until he ran out of ammunition. Briscoe was attempting to run for cover when Baze shot him twice in the back with the assault rifle. As Deputy Briscoe lay face down and bleeding, Baze punched him with the muzzle of the rifle, then executed him with a shot to the back of the head from point-blank range. Baze was convicted by a jury of both murders and sentenced to death. *See Baze v. Commonwealth*, 965 S.W.2d 817, 819-20 (Ky. 1997).

On April 9, 1990, petitioner Thomas Bowling shot and killed Eddie and Tina Earley, and wounded the Earleys' two-year-old son, as the victims sat inside their automobile in the parking lot of a dry cleaning business in Lexington, Kentucky. Bowling's automobile had crashed into the driver's side of the Earleys' vehicle. After the impact, Bowling got out of his automobile, shot the victims, then returned to his vehicle and fled from the scene. Bowling was convicted by a jury and sentenced to death for the

murders of Eddie and Tina Earley. *See Bowling v. Commonwealth.*, 873 S.W.2d 175, 176-77 (Ky. 1994).

Petitioners Baze and Bowling have exhausted all of their appeals. In the proceedings below, petitioners sought to have their executions halted by challenging Kentucky's method of execution under the Eighth Amendment of the United States Constitution. Specifically, petitioners contended that the lethal injection protocol employed by Kentucky constitutes cruel and unusual punishment. After conducting a bench trial featuring the testimony of 20 witnesses, the trial judge rejected petitioners' Eighth Amendment challenge in an opinion that contained detailed findings of fact and conclusions of law. The Kentucky Supreme Court, in a unanimous opinion, upheld the protocol as constitutional. The decision below is correct and should be affirmed.

B. Procedural History of this Case

On August 9, 2004, Baze and Bowling, both inmates under death sentences for murder convictions, filed a civil suit in Franklin Circuit Court naming as defendants Kentucky Department of Corrections ("KDOC" or "DOC") Commissioner John Rees, Kentucky State Penitentiary Warden Glenn Haeberlin, and Governor Ernie Fletcher. JA9.[1] The sole issue was whether the manner in which the Commonwealth of Kentucky carries out death sentences is constitutionally sound. This case

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[1] Commissioner Rees and Governor Fletcher are respondents in this Court. Warden Haeberlin was an appellee below but has since been replaced by Thomas Simpson, who is thus also a respondent here. See S. Ct. Rule 35.3.

did not address issues involving petitioners' guilt or their convictions at trial. Moreover, petitioners did not question their recommended death sentences or maintain that the death penalty itself violates the Eighth Amendment.

Franklin Circuit Court Judge Roger Crittenden conducted a bench trial featuring the testimony of 20 witnesses, including various DOC personnel, physicians, issue advocates, and researchers. JA800. The extensive evidence presented at trial, which is described below, covered a wide range of subjects, including the origins and development of Kentucky's protocol for lethal injection, the pharmacological effects of the three drugs used in that protocol, the procedures and safeguards employed in administering the drugs, and the Commonwealth's experience with implementing that protocol.

Following an "extensive bench trial" (JA802), Judge Crittenden issued his Findings of Fact and Conclusions of Law, holding that petitioners had failed to carry their burden of proving by a preponderance of evidence that Kentucky's lethal injection protocol violates the prohibitions against cruel and unusual punishment under the Eighth Amendment to the U.S. Constitution and Section 17 of the Kentucky Constitution. JA754-769.

Baze and Bowling appealed. The Kentucky Supreme Court unanimously affirmed. JA798-809.

C. The History of Lethal Injection in Kentucky

In 1998, the General Assembly of the Commonwealth of Kentucky passed Kentucky Revised Statute § 431.220, which adopted lethal injection as the primary method of execution. To date, Kentucky is one of 37 states that have adopted lethal injection as the primary or sole method of execution, in addition to the federal government and the United States military. *Stanford v. Kentucky*, 492 U.S. 361, 362 (1989), *abrogated by Roper v. Simmons*, 543 U.S. 551 (2005).

In contrast to the lethal injection statutes in 14 other lethal injection states,[2] Kentucky Revised Statute § 431.220(1) does not specify the drugs or categories of drugs that must be used during a lethal injection or the protocol to be followed in administering the drugs used. Kentucky is one of only two states that expressly prohibit the participation of physicians in executions.[3]

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[2] Those states are: Arkansas, A.C.A. § 5-4-617; Idaho, I.C. § 19-2716; Illinois, 725 ILCS 5/119-5; Maryland, MD Code, Correctional Services, § 3-905; Mississippi, Miss. Code Ann. § 99-19-51; Montana, MCA 46-19-103; New Hampshire, N.H. Rev. Stat. § 630:5; New Jersey, N.J.S.A. 2C:49-2; New Mexico, N.M.S.A. 1978, § 31-14-11; North Carolina, N.C.G.S.A. § 15-188; Oklahoma, 22 Okl. St. Ann. § 1014; Oregon, O.R.S. § 137.473; Pennsylvania, 61 P.S. § 3004; and Wyoming, W.S. 1977 § 7-13-904.

[3] *See* Kentucky Revised Statute § 431.220(3) ("No physician shall be involved in the conduct of an execution except to certify the cause of death provided the condemned is declared dead by

Like the lethal injection statutes in eight other states,[4] Kentucky Revised Statute § 431.220(1) allows inmates (such as petitioners) who were sentenced before lethal injection was adopted as the primary method of execution the option to elect to be executed under the method in place before the adoption of lethal injection. JA804.[5] In addition, Kentucky is one of 13 states with statutes that provide for the method of execution to automatically revert to electrocution or some other method of execution in the event that lethal injection is found to be unconstitutional. *See* Kentucky Revised Statute § 431.223.[6]

Shortly after the adoption of the 1998 amendments to Kentucky Revised Statute § 431.220,

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another person."). Illinois is the other state. *See* 725 ILCS5/119-5.

[4] *See* Alabama, Ala. Code 1975 § 15-18-82; Arizona (pre-11/23/92 offenses), A.R.S. § 13-704; California, Cal. Penal Code § 3604; Florida, F.S.A. § 922.105; South Carolina, Code 1976 § 24-3-530; South Dakota (pre-7/1/07 convictions or sentences), SDCL § 23A-27A-32.1; Virginia, Va. Code Ann. § 53.1-234; Washington, RCWA 10.95.180.

[5] Electrocution was the method of execution in place in Kentucky before March 31, 1998. Both petitioners were sentenced to death before March 31, 1998; each has pleaded that he refuses to elect electrocution as his method of execution, thus leaving lethal injection as the method of execution by default.

[6] *See also* Alabama, Ala. Code 1975 § 15-18-82.1; Arkansas, A.C.A. § 5-4-617; California, Ann. Cal. Penal Code § 3604; Delaware, 11 Del. C. § 4209; Florida, F.S.A. § 922.105; Illinois, 725 ILCS 5/119-5; Ohio, R.C. § 2949.22; Oklahoma, 22 Okl. St. Ann. § 1014; South Carolina, Code 1976 § 24-3-530; Tennessee, T.C.A. § 40-23-114; Utah, U.C.A. 1953 § 77-18-5.5; Wyoming, W.S. 1977 § 7-13-904.

in compliance with the amended statute, KDOC officials began the process of developing a lethal injection protocol by gathering information from and visiting other states, including Indiana, Virginia, Georgia, and Alabama. JA154-157, 221-223. After obtaining information from those states, and drawing on their own professional experience, KDOC officials made numerous changes and the protocol was reviewed by the highest levels of state government. JA153-159, 227.

D. The Execution of Eddie Lee Harper

On May 25, 1999, Eddie Lee Harper became the first and only inmate to date to be executed under Kentucky's lethal injection protocol. According to KDOC personnel present at the execution, Harper went to sleep within 15 seconds to one minute from the moment the Warden commenced the execution, and never moved or exhibited any pain whatsoever after losing consciousness. JA148, 189, 277-278. According to testimony from medical professionals at the trial, the signs, or lack thereof, were exactly what should have happened in a proper execution. There were no visible signs of infiltration, where the needle is not properly inserted into the condemned inmate's vein, according to Kentucky's State Medical Examiner, Dr. Tracey Corey, who performed the autopsy. Dr. Corey also testified that the evidence showed the injected drugs circulated throughout Harper's body. JA230. Even petitioners' expert, Dr. Mark Heath, after reviewing all the medical evidence surrounding Harper's execution, did not find anything out of the ordinary regarding the execution. JA502.

Petitioners imply that the record contains evidence indicating Harper felt pain during the administration of the pancuronium and the potassium. Yet petitioners fail to acknowledge, as their own expert did, that after the administration of the thiopental Harper would have been unconscious, would have therefore been unaware of the administration of the pancuronium and the potassium, and was thereby afforded a painless death. JA496-497. Even Professor Deborah Denno, a Fordham law professor who testified as an expert for petitioners, determined that the execution of Harper showed no signs of problems. JA134.

E. The Three-Drug Formula in Kentucky

1. Thiopental

The Commonwealth's expert, Dr. Mark Dershwitz, testified that the drug combination and amounts used in Kentucky's lethal injection protocol would ensure a humane death. JA566. Dr. Dershwitz is an expert in pharmacokinetics, which measures the time course of drugs in a human being. JA544-545. Dr. Heath, petitioners' expert, acknowledged that Dr. Dershwitz has more expertise in that field and would defer to him. JA484-485. Dr. Dershwitz testified that, when properly delivered, thiopental would render an individual unconscious for hours. JA557. Dr. Heath agreed. JA499. Dr. Dershwitz testified that, even though thiopental is not used frequently in hospitals today, it is a very reliable drug. JA555. Dr. Heath agreed. JA482. Dr. Dershwitz testified that a painless and humane death would result if the three grams used in

Kentucky are properly delivered to an individual. JA558-559. Dr. Heath agreed. JA494. While petitioners go to great lengths to refer to thiopental as an "ultra-short-acting" barbiturate to give the impression it will wear off quickly, Dr. Heath could not escape that fact that, when given in a three-gram dose, thiopental would render someone unconscious for hours. JA499.[7]

Petitioners also claim that one of the dangers of using thiopental is that it must be mixed or reconstituted. Thiopental is purchased in 500-milligram doses. The fluid and powder are already measured and come together when purchased. JA844. Reconstituting the drug is accomplished by drawing the fluid into a syringe and injecting it into the powder and shaking. JA526-527. Dr. Scott Haas, Medical Director for KDOC, equated the task of reconstituting the drug with mixing Kool Aid. 5 Tr. 695. To prepare the three-gram dose, or 3000 milligrams, an individual simply combines six pre-measured containers. JA844, 847. However, petitioners argue that this is an extremely difficult process that should be performed only by medical doctors.

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[7] Dr. Dershwitz testified that the description of thiopental as a "short acting barbiturate" is relative to other barbiturates. JA557-558. When a dose of three grams is used, Dr. Haas testified, the characteristics of the drug change from that of an ultra-short acting barbiturate to a rapid on-set, long-acting barbiturate. JA378-381, 383. Dr. Dershwitz further testified that propofol, the barbiturate petitioners now argue should be substituted for thiopental, is actually a shorter-acting barbiturate than thiopental. JA555.

2. Pancuronium

Petitioners argue that pancuronium has no purpose when used in an execution. However, Dr. William Watson, an expert for petitioners, testified that in executing someone, pancuronium would have a use in stopping breathing. 7 Tr. 956, 967. Other medical testimony showed that pancuronium would decrease respiration in the condemned inmate. JA559. Also, pancuronium assures that involuntary muscle reactions will not cause an intravenous ("IV") line to dislodge, therefore decreasing the possibility of the chemicals not being properly introduced into the condemned. JA523. Moreover, the use of pancuronium eliminates convulsions and thus provides a dignified death to the inmate and witnesses to the execution. JA561. Petitioners further ignore the testimony of all medical experts that agreed that thiopental would eliminate any of the pain that petitioners frequently discuss in their argument. JA558-559.

In connection with evidence relating to pancuronium, the trial court received testimony discussing "conscious awareness." Petitioners offered the testimony of Carol Weihrer, who experienced pain during a surgery after being inadequately anesthetized and receiving a paralytic drug. JA392-395. But petitioners fail to acknowledge that Weihrer received a *therapeutic* dose of a drug similar to thiopental – a dose *ten times less* than would be administered during an execution. JA548. Dr. Heath testified that, in surgical settings when patients are given a therapeutic dose, conscious awareness is estimated to take place in

only 1 out of every 500 surgeries. JA413-414. Dr. Dershwitz confirmed this estimate and further testified that he is not aware of any reported case of conscious awareness when an individual received a three-gram dose of thiopental to place someone into a medically induced coma. JA557-558, 630.

3. Potassium

Petitioners repeatedly characterize potassium being administered into a conscious person as agonizing, once again ignoring the testimony that, when given thiopental first, a condemned inmate would experience a humane death. JA494, 558-559. The amount of potassium given in Kentucky ensures an immediate and certain death. JA452, 455. In Kentucky's execution of Eddie Lee Harper, Dr. Heath testified, Harper died within one minute of potassium being administered. *Id*. No testimony presented by petitioners suggested an alternative that would be as fast-acting and effective as potassium. Throughout their argument, petitioners discuss each drug individually and its effects instead of recognizing that the Kentucky protocol is made of up a three-drug combination.[8]

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[8] To date, 28 states for which information is available as well as the United States Bureau of Prisons use both pancuronium and potassium in their lethal injection protocol. Deborah W. Denno, *When Legislatures Delegate Death: The Troubling Paradox Behind State Use of Electrocution and Lethal Injection and What It Says About Us*, 63 Ohio St. L.J. 63, 146 (2002).

F. Alternatives to the Chemicals Used in Kentucky

Dr. Heath and the other witnesses called by petitioners at trial offered no other testimony regarding the availability of alternative chemicals posing less risk than the ones now used in Kentucky and other jurisdictions. Professor Denno testified that "[i]n my research, I found no studies or investigation on whether or not any other kind of chemicals could be used in the course of a lethal injection execution." JA106. Watson testified that "[t]here is nothing that I'm aware of that has been published" regarding national studies on any alternative drugs for use in lethal injection. 9 Tr. 1176. The testimony by all medical experts during the trial confirmed that the three chemicals used in the Kentucky protocol are very useful and effective drugs even today. JA351-352, 381-382, 482.

Respondents did consult about improvements to the state's protocol with KDOC Medical Director Dr. Scott Haas, who provided them with additional information about the properties of thiopental and the effect of an increase in dosage from two grams to three grams. As Dr. Haas testified at trial, he was asked for "general information about the drugs that are utilized in the execution protocol" as well as for "clinical information how the drugs work, what it is that they actually do when given. JA362. Dr. Haas was also asked about the amount of thiopental to be used for the initial stage of the execution. *Id*.

G. Kentucky's Voluntary Efforts to Improve The Safeguards in its Protocol

KDOC has repeatedly demonstrated its willingness to modify its protocol when doing so would promote the safe, responsible and humane implementation of the death penalty without creating new risks or unduly constraining KDOC's ability to carry out lawful death sentences. For example, KDOC elected to increase the dose of thiopental from two to three grams when discussions with physicians established that the change would further reduce the remote risk of consciousness. JA361-362, 382-383.[9] These modifications were made without prompting from any court. In its opinion below, the trial court commended KDOC for its unilateral actions to improve the protocol. JA768.

Kentucky has also added sections to its lethal injection protocol addressing the qualifications and training of execution team members. JA984. Kentucky's current protocol employs certified phlebotomists and emergency medical technicians ("EMTs") to perform the necessary venipunctures to administer the drugs. *Id*. According to the protocol, these medical professionals are afforded one hour to find suitable IV sites to insert the IV catheters into the arm, hand, leg, or foot of the inmate. JA976. Originally, the protocol didn't limit the possibility for

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[9] Kentucky's original protocol called for the injection of the following sequence of drugs: thiopental (2 gm), a short-acting barbiturate; saline (25 ml); pancuronium (50 mg), a muscular paralytic agent; saline (25 ml); and potassium (240 meq), which disrupts the signal for necessary heart function. JA858.

a cut-down procedure in the event that a suitable site could not be found, but KDOC has removed the cut-down procedure. *Id.* As it stands now, if the IV team cannot locate a suitable site within one hour, KDOC's General Counsel is informed that the team cannot locate a site. The General Counsel then informs Commissioner Rees, who in turn contacts the Governor to request a new execution date. JA975-976.[10]

H. The Decisions of the Kentucky Courts

After a seven-day bench trial in which the trial court received the testimony of 20 witnesses and carefully weighed the parties' arguments and post-trial briefs, the court upheld the constitutionality of Kentucky's method of lethal injection. JA754-769. The trial court concluded that petitioners had failed to carry their burden of demonstrating, by a preponderance of the evidence, that Kentucky's lethal injection protocol "creates a substantial risk of wanton and unnecessary infliction of pain, torture, or lingering death." JA759 (citing *Gregg v. Georgia,* 428 U.S. 153, 171 (1976) (joint opinion)).

The court's decision rested on a number of findings of fact. *See* JA760-765. With respect to the risks supposedly associated with Kentucky's lethal injection protocol, the court found, among other things, that:

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[10] Kentucky's protocol uses an electrocardiogram ("EKG") to verify the cessation of heart activity, and a doctor and coroner are then brought in to confirm the death of the condemned inmate. JA976, 979-981.

- there "would be minimal risk of improper mixing" of the thiopental "[i]f the manufacturers' instructions are followed" (thus rejecting testimony presented by petitioners that "a layperson would have difficulty performing this task");

- there is only "a minimal risk that a precipitate will form" due to a reaction between the thiopental and pancuronium because the protocol "contains the procedural safeguard of flushing the I.V. line with a saline solution after the administration of each drug";

- three grams of Sodium Thiopental, "when properly administered, will render a person unconscious within one (1) minute of injection"; and

- the protocol "employs certified phlebotomists and emergency medical technicians . . . to perform the necessary venipunctures" and allows them a one-hour "window" in which to correctly insert the IV catheter, a window that "is not excessive but rather necessary."

JA761-763. With respect to the changes petitioners claimed Kentucky should make to its protocol, the trial court expressly found that the use of a Bispectral Index ("BIS") monitor "to monitor for consciousness" was not a "regular medical standard" followed even during surgery. JA764. More generally, the court found that petitioners "have not

presented any scientific study indicating a better method of execution by lethal injection." JA760-761 n.8.

Relying on these factual findings, the trial court also reached various conclusions of law, including that petitioners had failed to demonstrate any of the following critical points about "Kentucky's method of execution by lethal injection":

- it "deviates from contemporary norms and societal standards in capital punishment";
- it "offends the dignity of prisoners and society as a whole";
- it "inflicts unnecessary physical pain upon the condemned"; or
- it "inflicts unnecessary psychological suffering on the condemned."

JA761-763. The trial court also noted that, "[a]lthough evidence was presented that other drugs were available that *may* decrease the *possibility* that the condemned *may* experience pain," the Eighth Amendment "does not provide protection against *all* pain, only cruel and unusual pain." JA766 (emphasis added in part). Thus, except for one provision no longer at issue, the trial court concluded that the protocol did not "create a substantial risk of wanton and unnecessary infliction of pain, torture, or lingering death" and thus did not violate the Eighth Amendment. JA767-769.

The Supreme Court of Kentucky unanimously affirmed. JA798-809. As an initial matter, it noted that "matters of fact tried before a judge without a jury are to be reviewed under the clearly erroneous standard." JA801. That standard, the court explained, ensured that "due regard shall be given to the opportunity of the trial court to judge the credibility of the witnesses." *Id.* The court concluded that a "careful review" of the record "indicates there is no reason to believe that the circuit judge was clearly erroneous in any of his findings of fact." *Id*.

Next, the Kentucky Supreme Court, applying *de novo* review, upheld the district court's conclusion that petitioners' Eighth Amendment challenge to Kentucky's lethal injection protocol must be rejected. JA800, 805-808. Like the trial court, the Kentucky Supreme Court applied the "substantial risk" test drawn from *Gregg* and concluded that petitioners had failed to carry their burden of showing that Kentucky's protocol violated the Eighth Amendment under that test. JA800-801, 805, 807.

SUMMARY OF ARGUMENT

Petitioners have been sentenced to death. Kentucky seeks to execute them in a relatively humane manner, and has worked hard to adopt such a procedure. Yet petitioners contend that, as a matter of federal constitutional law, Kentucky was required to try harder and do better. Petitioners' argument has no precedent in this Court's Eighth Amendment decisions and should be rejected.

The Eighth Amendment prohibits governmental imposition of "cruel and unusual punishments," U.S. Const. Amend. VIII, and bars punishments involving the "unnecessary and wanton infliction of pain." *Gregg v. Georgia,* 428 U.S. 153, 171 (1976) (joint opinion). Historically, the focus has been on the pain actually inflicted by a given method of execution. *See, e.g., Wilkerson v. Utah*, 99 U.S. 130, 135 (1878) The party challenging a method of execution faces a "heavy burden" in attempting to overcome the presumption of validity afforded to a state's chosen method of execution. *Gregg,* 428 U.S. at 175.

In recent years, a number of state and federal courts have been forced to address whether and how the Eighth Amendment applies to allegations concerning the mere *risk* of future pain and suffering in connection with a method of execution. To ascertain the appropriate constitutional standard for this new variety of constitutional challenge, state and federal courts have applied by analogy the "substantial risk" standard utilized by this Court in comparable Eighth Amendment contexts. *See Gregg,* 428 U.S. at 188 (death sentence "could not be imposed under sentencing procedures that created a substantial risk that it would be inflicted in an arbitrary and capricious manner"); *Farmer v. Brennan*, 511 U.S. 825, 834 (1994) (for conditions-of-confinement claims based on a failure to prevent harm, "the inmate must show that he is incarcerated under conditions posing a substantial risk of serious harm"). Both the trial court and the Kentucky Supreme Court applied the "substantial risk" test in rejecting petitioners' claims. JA759, 800 (citing *Gregg*).

I. The "substantial risk" test applied by the lower courts is not only legally correct but also vastly superior to the flawed alternative proposed by petitioners. Petitioners urge this Court to forge a new interpretation of the Eighth Amendment under which any risk of pain and suffering is prohibited, no matter how small or remote the risk, if it is considered "unnecessary" in the sense that it can theoretically be reduced or eliminated by alternative drugs or procedures. In effect, petitioners' "unnecessary risk" standard places the states under a continuing obligation to adopt the "lowest risk" alternative that is "reasonably available," even if the risk being avoided is insignificant.

This "unnecessary risk" standard effectively negates the principle set forth in *Gregg* that the courts "may not require the legislature to select the least severe penalty possible so long as the penalty selected is not cruelly inhumane or disproportionate to the crime involved." *Gregg*, 428 U.S. at 175. Under petitioners' proposed approach, any method of lethal injection that does not minimize the risk of pain and suffering would apparently be deemed unconstitutional.

In addition to the "unnecessary risk" standard, petitioners contend that, once an alleged improvement to the protocol has been identified or becomes available, any potential risks arising out of a state's failure to immediately adopt the alleged improvement are deemed "foreseeable" and thus, in petitioners' view, avoidable, without regard to the magnitude of the risk. The purpose of this argument is to try to distinguish alleged risks arising out of

lethal injection procedures from the "unforeseeable" accident addressed in *Louisiana ex rel. Francis v. Resweber*, 329 U.S. 459 (1947). To be foreseeable, a risk of accident must not only be inherent in the method or protocol, but must also impose "a constitutionally significant risk of pain." *Taylor v. Crawford*, 487 F.3d 1072, 1080 (8th Cir. 2007). Thus, the risks described as "foreseeable" in petitioners' brief are not so in a legal sense because the evidence at trial showed them to pose an insubstantial risk of accidental pain and suffering.

In contrast to petitioners' proposed standards, the "substantial risk" standard applied by the Supreme Court of Kentucky provides the proper balance between the need to control the proliferation of insubstantial litigation (see *Hill v. McDonough*, 126 S. Ct. 2096, 2103 (2006)) and the interests of death row inmates who may have legitimate actions stating a claim for substantial risk of unnecessary and wanton pain and suffering.

The "substantial risk" standard has been applied, expressly or implicitly, by a number of courts that have had the opportunity to address the issue.[11] The few, isolated instances in which federal courts of appeals have attempted to implement approaches similar to petitioners' proposed "unnecessary risk" standard have resulted in judicial micromanagement on a scale not envisioned under *Gregg* or other applicable precedents of this Court. These judicial incursions into the states' traditional

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[11] *See*, *e.g.*, *Taylor v. Crawford*, 487 F.3d 1072, 1080 (8th Cir. 2007) ("substantial risk").

authority over matters of enforcement of punishment have typically involved requirements for physician involvement in executions.

II. The Kentucky Supreme Court was also correct in concluding that petitioners failed to carry their burden of proving that the Commonwealth's lethal injection protocol violated the Eighth Amendment under the "substantial risk" test. The evidence established that Kentucky has incorporated safeguards into its lethal injection protocol that eliminate any substantial risk of thiopental not entering the condemned's circulatory system. These safeguards eliminate any substantial risk of an accident resulting in pain or suffering to a condemned.

The most fundamental safeguard contained in Kentucky's protocol is the specification of qualifications and training requirements for execution team personnel. JA984. All members of that team participate in at least 10 practice sessions per year. *Id.* All members must participate in at least two practices before participating in an actual execution. *Id.* Members of the IV team must have at least one year of experience in specified professions, and must remain certified in their profession and fulfill all continuing education requirements. *Id.* Kentucky's IV team consists of a practicing phlebotomist with eight years' experience and a certified EMT with 20 years' experience at the time of the trial. All IV team members were experienced at placing and starting IVs as part of their daily job positions at KDOC. JA273-274.

The experts at trial were in agreement that persons with this training and experience were qualified to reliably place IVs into a death-row inmate and confirm that the IVs functioned properly. Witnesses testified that KDOC employs EMTs and phlebotomists who are able to start IV lines. JA384. Witnesses testified that phlebotomists are typically used to train medical residents to insert IVs due to the phlebotomists' knowledge and proficiency in this area. JA385, 352. Even petitioners' medical expert, Dr. Heath, testified that starting an IV is relatively easy. JA517. The use of qualified medical personnel is the primary way Kentucky's protocol ensures that the entire three-gram dose of thiopental will enter the condemned's circulatory system.

Another safeguard in Kentucky's protocol is the requirement that IV team members establish both a primary IV line and a backup IV line before the administration of the lethal injection drugs. JA975. The IV team members also prepare two sets of lethal injection chemicals before the execution commences. JA987. The protocol provides that, if the condemned is not unconscious within 60 seconds after the Warden gives the command to "proceed," and the flow of thiopental to the primary IV site begins, the Warden must order the executioner to stop the flow of thiopental in the primary IV site, and to begin the flow of a new three-gram dose of thiopental into the backup IV site. JA979. The use of a backup IV eliminates the risk of pain and suffering in the event of the failure of the primary IV site. The 60-second window is also consistent with all medical testimony in ensuring that the condemned prisoner is unconscious.

As an additional safeguard, the Warden and the Deputy Warden are inside the execution room with the condemned watching for signs of IV failure due to problems with IV tubing or infiltration. JA316-317, 337. If signs of IV failure or infiltration occur during the flow of chemicals to the primary IV site, the Warden orders the executioner to immediately stop the flow of chemicals to the primary IV site, and to begin the flow of a new set of chemicals to the inmate through the backup IV site, beginning with a new three-gram dose of thiopental. JA317, 337, 978-979. Neither pancuronium nor potassium would be administered until a full three-gram dose of thiopental had been successfully administered, with no signs of IV failure or infiltration.

Despite these multiple safeguards, petitioners contend that Kentucky's lethal injection protocol creates an unconstitutional risk that less than three grams of thiopental will be delivered to the condemned's bloodstream because the Warden and Deputy Warden have no medical training to assist them in identifying signs of infiltration. Pet. Br. 15-19. But witnesses testified that the physical signs of infiltration would be obvious to an average person without medical training. JA353, 386, 601.

Petitioners' argument that alternative drugs are available that present less risk of pain and suffering is factually incorrect. While alternative drugs are available that will cause death, there was no evidence at trial that any of the alternative drugs discussed at trial would result in less risk of pain and suffering in a lethal injection setting.

Petitioners' contention that pancuronium presents an unconstitutional risk of pain and suffering is based on their presumption that inmates will be awake during administration of the drug. The courts below found, however, that administration of the three-gram dose of thiopental renders the inmate unconscious. JA762-763, 806-807. Petitioners also argue that pancuronium serves no legitimate purpose in an execution, but the Kentucky Supreme Court found that it served the legitimate purposes of preventing involuntary muscular movement and stopping breathing. JA806.

In their brief, petitioners argue for the first time that Kentucky's three-drug lethal injection protocol is unconstitutional due to the theoretical availability of an unproven one-drug alternative protocol in which thiopental is the only drug injected. The argument was not raised on appeal before the Supreme Court of Kentucky or mentioned in their petition for certiorari. Beyond that, Dr. Heath, petitioners' expert, testified that he would not expect a three-gram dose of thiopental to bring about death. JA498-499. Moreover, petitioners' argument that Kentucky's three-drug protocol is allegedly unconstitutional in light of a one-drug protocol is again based on their presumption that inmates will be awake during administration of the remaining drugs, but the courts below found to the contrary. JA762-763, 806-807. Furthermore, the proposed one-drug protocol raises new problems because it will generally take much longer for the condemned to die under the one-drug protocol.

Petitioners argue that Kentucky's protocol is constitutionally deficient because it does not incorporate a laundry list of procedures and safeguards used by anesthesiologists and other medical care providers in hospital settings. But the courts below found that administration of the three-gram dose of thiopental under Kentucky's protocol renders the inmate unconscious. JA762-763, 806-807.

ARGUMENT

I. The Kentucky Supreme Court Correctly Concluded That Petitioners' Eighth Amendment Challenge Was Properly Evaluated Under The "Substantial Risk" Test

The Eighth Amendment prohibits governmental imposition of "cruel and unusual punishments," U.S. Const. amend. VIII, and bars punishments involving unnecessary and wanton pain and suffering. *Gregg v. Georgia*, 428 U.S. 153 (1976). "Punishments are cruel when they involve torture or a lingering death. . . ." *In re Kemmler,* 136 U.S. 436, 447 (1890). The meaning of "cruel and unusual" must be interpreted in a "flexible and dynamic manner," *Gregg,* 428 U.S. at 171, and measured against "the evolving standards of decency that mark the progress of a maturing society." *Trop v. Dulles,* 356 U.S. 86, 101 (1958) (plurality opinion).

The Kentucky courts thoroughly scrutinized Kentucky's method of lethal injection in light of the Eighth Amendment standard, and upheld Kentucky's protocol. JA759-760, 765-767, 800-801.

The trial court determined that Kentucky's method of lethal injection did not deviate from contemporary norms and societal standards. JA765. It concluded that the protocol did not offend the dignity of the condemned or of society as a whole. *Id.* It determined that the protocol did not inflict unnecessary physical or psychological pain upon the condemned. JA766. The trial court then determined that Kentucky's protocol did not present a substantial risk of wanton and unnecessary infliction of pain, torture, or lingering death, with the exception of one particular portion of the protocol, which Kentucky has agreed to eliminate.[12] After careful review, the Supreme Court of Kentucky upheld the trial court's findings and conclusions. JA808.

The sole question petitioners present regarding the Kentucky courts' application of the appropriate constitutional standard is whether a method of execution must create a "substantial" risk of wanton and unnecessary infliction of pain and suffering to implicate the Eighth Amendment's prohibition on cruel and unusual punishment.

For the reasons stated below, the Kentucky courts applied the appropriate standard in upholding the constitutionality of Kentucky's present method of lethal injection.

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[12] The trial court determined that "the procedure where the Department of Corrections attempts to insert an intravenous catheter into the neck through the carotid artery or jugular vein does create a substantial risk of wanton and unnecessary infliction of pain, torture or lingering death." JA767. During the course of the trial, KDOC had agreed to eliminate this procedure.

A. *Gregg* and *Farmer* supply the appropriate legal framework for resolving Eighth Amendment challenges to methods of execution as posing an unconstitutional risk of pain and suffering.

Historically, the Eighth Amendment standard has been stated and applied in terms of the pain and suffering actually resulting from a given method of execution. *See, e.g., Louisiana ex rel. Francis v. Resweber*, 329 U.S. 459, 464 (1947) (infliction of "unnecessary pain"); *In re Kemmler*, 136 U.S. 436, 447 (1890) (infliction of "torture or lingering death"); *Wilkerson v. Utah*, 99 U.S. 130, 134-136 (1878) (infliction of "unnecessary cruelty"). The plain language of the Eighth Amendment speaks to the prohibition of "cruel and unusual punishments *inflicted*." U.S. Const. Amend. VIII (emphasis added). Even this Court's more recent pronouncements have expressed the standard in terms focusing on the actual infliction of pain and suffering. *See, e.g., Gregg v. Georgia*, 428 U.S. 153, 173 (1976) ("[T]he punishment must not involve the unnecessary and wanton *infliction* of pain.") (emphasis added).

The application of the Eighth Amendment to the mere *risk* of pain and suffering is a relatively new development, prompted by the recent proliferation of method-of-execution challenges. A growing number of state and federal courts have been forced to address whether or how the Eighth Amendment should be applied to a *risk* of pain and suffering. As guidance, the courts have applied by analogy the standard this Court uses in similar contexts involving Eighth Amendment protections.

In particular, state and federal courts have relied on *Gregg*, 428 U.S. at 173, and *Farmer v. Brennan*, 511 U.S. 825 (1994), in determining the appropriate standard for method-of-execution constitutional challenges. In *Gregg,* the Court applied the "substantial risk" standard to a claim that Georgia's sentencing procedures violated the Eighth Amendment. *Gregg,* 428 U.S. at 188 (stating that a death sentence "could not be imposed under sentencing procedures that created a substantial risk that it would be inflicted in an arbitrary and capricious manner"). In *Farmer,* the Court applied the "substantial risk" standard to Eighth Amendment conditions-of-confinement claims based on failure to prevent harm. *Farmer,* 511 U.S. at 834 (stating that "the inmate must show that he is incarcerated under conditions posing a substantial risk of serious harm").

The same practical considerations that drove the Court's choice of a "substantial risk" standard in *Gregg* and *Farmer* apply to the determination whether a risk of infliction of unnecessary pain rises to the level of a constitutional violation. In each instance, the Court has recognized that, to protect against an alleged future harm, claims of prospective Eighth Amendment violations may sometimes be cognizable. However, to prevent relief from being granted based on speculative claims of future injury, the Court has consistently imposed a standard requiring the proof of *significant* risk of future injury to state a cognizable claim of an Eighth Amendment violation. *Gregg,* 428 U.S. at 188; *Farmer,* 511 U.S. at 834.

Petitioners argue that the unique nature of the death penalty justifies the extension of the Eighth Amendment's protections to even *insubstantial* risks of future harm. In reality, it was only in recognition of the death penalty's uniqueness that this Court decided in *Gregg* to extend the protections of the Eighth Amendment to cover *substantial* risks of harm in connection with sentencing procedures. *Gregg*, 428 U.S. at 188 ("Because of the uniqueness of the death penalty, *Furman* held that it could not be imposed under sentencing procedures that created a *substantial risk* that the death sentence would be applied in an arbitrary and capricious manner."). It follows *a fortiori* that no standard requiring states to do more than protect against "substantial risk" can apply in the current setting – after all, the risk to be guarded against in *Gregg* was the risk of an arbitrary choice between life and death, while the risk to be guarded against here is only between less painful and unintentionally more painful forms of death. Regrettable though any unnecessary pain may be, it is hardly of greater magnitude than a life-or-death decision.

The focus remains on the objective evidence of the pain a prisoner will actually experience as a result of a particular method of execution. *Fierro v. Gomez*, 77 F.3d 301, 306 (9th Cir. 1996), *vacated on other grounds*, 519 U.S. 918 (1996); *Campbell v. Wood*, 18 F.3d 662, 668 (9th Cir. 1994); *State v. Webb*, 750 A.2d 448, 455 (Conn. 2000).

1. The Eighth Amendment does not require the elimination of remote or insubstantial risks of pain and suffering.

Petitioners advocate an unprecedented interpretation of the Eighth Amendment under which *any* risk of pain and suffering is prohibited, no matter how small or remote the risk, if it is an "unnecessary risk" in the sense that it can theoretically be reduced or eliminated by alternative means or procedures. Under petitioners' standard, a state's execution protocol would violate the Eighth Amendment any time alternatives became available to reduce the risk of pain or suffering further, even if the risk was already insignificant.

In effect, petitioners' "unnecessary risk" standard places the states under a continuing obligation to adopt the "least risk" alternatives reasonably available at any given time. By requiring the states to adopt the "least risk" alternative, petitioners' approach essentially renounces the principle stated in *Gregg* that the courts "may not require the legislature to select the least severe penalty possible so long as the penalty selected is not cruelly inhumane or disproportionate to the crime involved." *Gregg*, 428 U.S. at 175. Petitioners fail to recognize "[t]he deference [owed] to the decisions of the state legislatures under our federal system." *Id* at 176. In sum, petitioners' "unnecessary risk/least risk" approach removes the "presumption of validity" previously afforded a state's adopted method of execution. *Id*.

The breadth of petitioners' "unnecessary risk" argument is demonstrated by their argument that the Kentucky courts acted "myopically" by focusing on the insubstantial risk of pain and suffering posed by Kentucky's lethal injection protocol to them personally. Pet. Br. 42. Under petitioners' standard, an Eighth Amendment violation would exist if a method of execution presented a risk of "botched and inhumane executions as the procedures are employed repeatedly over time to execute hundreds or thousands of condemned prisoners." Pet. Br. 42. Given that some of the executions petitioners cite as being "botched" involve delays of as little as 10 minutes in siting an IV (*see* Denno, *supra*, 63 Ohio St. L.J. at 139, *cited in* Pet. Br. 9 n.7), it appears clear that petitioners' standard essentially requires the elimination of *all* risk of pain or suffering.

2. The Eighth Amendment has never required the elimination of risk of accident or human error.

As a corollary to the "unnecessary risk" standard, petitioners argue that, once an alleged improvement to the protocol is identified or becomes available, any potential risks arising out of a state's failure to immediately adopt the alleged improvement are deemed "foreseeable" and thus, in petitioners' view, avoidable, without regard to the magnitude of the risk. This "foreseeable risk" argument is intended as an attempt to distinguish *Louisiana ex rel. Francis v. Resweber*, 329 U.S. 459 (1947), in which the Court characterized a malfunction of Louisiana's electric chair that subjected the condemned to a non-lethal current of electricity

as "an unforeseeable accident" that did not "add an element of cruelty to a subsequent execution."

A "risk of accident cannot and need not be eliminated from the execution process in order to survive constitutional review." *Campbell*, 18 F.3d at 687. *See also Beardslee v. Woodford*, 395 F.3d 1064, 1070 (9th Cir. 2005); *Workman v. Bredesen*, 486 F.3d 896, 908 (6th Cir. 2007); *Taylor v. Crawford*, 487 F.3d 1072, 1080 (8th Cir. 2007). The proper focus is not the risk of accident, but "whether the written protocol inherently imposes a constitutionally significant risk of pain." *Taylor*, 487 F.3d at 1080. As the Eighth Circuit stated, "[i]f [a] protocol as written involves no inherent substantial risk of the wanton infliction of pain, any risk that the procedure will not work as designated in the protocol is merely a risk of accident which is insignificant in our constitutional analysis." *Id*. (citing *Resweber*, 329 U.S. at 464).

Even Dr. Heath, petitioners' expert, conceded this point. JA493-494. The Protocol also provides built-in safeguards that eliminate any significant risk that less than three grams of thiopental will be delivered to petitioners' bloodstreams. JA291-292. As a result, Kentucky's protocol does not present any foreseeable risk petitioners will suffer any unnecessary or wanton infliction of pain. *See*, *e.g.*, *Taylor*, 487 F.3d at 1085.[13]

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[13] In *Taylor,* 487 F.3d at 1085, the Eighth Circuit stated:

> The State's written protocol does not present any substantial foreseeable risk that the inmate will suffer the unnecessary or wanton infliction of pain. The abundant dose of thiopental . . . , combined with built-in checks to

The overbreadth of petitioners' "foreseeable risk" approach is demonstrated by their argument that a method of execution "creates a foreseeable danger of inflicting severe pain [when] that method, *performed repeatedly over time,* will inflict pain on a subset of executed inmates." Pet. Br. 35 (emphasis altered). This argument underscores petitioners' belief that all risks are foreseeable, regardless of how remote.

B. The "substantial risk" standard strikes the appropriate balance between the rights of the condemned and the states' compelling interest in the timely enforcement of criminal sentences.

The states have a compelling interest in the timely enforcement of criminal sentences, including death sentences. "[T]the power of a State to pass laws means little if the State cannot enforce them." *McCleskey v. Zant*, 499 U.S. 467, 491 (1991). In our federal system, the states also enjoy broad discretion to decide their procedures for conducting executions. *See Gregg,* 428 U.S. at 175-76. The "substantial risk" standard, borrowed by the Supreme Court of Kentucky from the *Gregg* opinion, strikes the appropriate balance between the rights of the condemned and the states' compelling interest in the timely enforcement of criminal sentences.

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ensure that the IV is properly placed by medical personnel trained for the procedure and that the IV is working and not obstructed, renders any risk of pain far too remote to be constitutionally significant.

1. The "substantial risk" standard provides ample incentive for states to improve their execution protocols when available alternatives provide substantial reductions in risk of pain and suffering.

Respondents have always been committed to conducting all executions in a humane manner. Only through the responsible enforcement of death sentences can KDOC carry out its statutory mandate under KRS § 431.220. Through the General Assembly, the citizens of the Commonwealth have adopted lethal injection as the primary method of execution. Respondents are dedicated to carrying out that mandate in the safest, most reliable manner. Significant time and resources are expended in these efforts, including monthly training. JA318-319.

Respondents have demonstrated their willingness to modify Kentucky's lethal injection protocol voluntarily when the proposed changes promote the safe and responsible enforcement of death sentences. For example, respondents increased the dose of thiopental from two grams to three grams when, in consultation with KDOC's Medical Director, Dr. Haas, it was determined that the increased dosage would further reduce the remote risk of consciousness, without creating new risks or obstacles to the safe and secure conducting of executions. JA382-384. Respondents also made voluntary modifications to the protocol to formalize in writing the qualifications and training requirements applicable to execution personnel. JA984.

Those modifications were made to the protocol without prompting from any court. In its opinion below, the trial court commended respondents for their unilateral efforts to improve the protocol. JA768.[14] Imposition of standards that divert respondents' attention and resources to dealing with insubstantial risks will not promote more humane executions in the Commonwealth.

2. The "substantial risk" standard promotes certainty and discourages perpetual litigation, while protecting legitimate Eighth Amendment rights.

The "substantial risk" standard promotes certainty and stability in the law by allowing the courts to dismiss insubstantial claims, while providing condemneds a means of challenging any lethal injection methods or procedures that may genuinely present a substantial risk of unnecessary pain and suffering.

Application of petitioners' proposed "unnecessary risk" standard or their related "foreseeable risk" argument would expose Kentucky and other death penalty states to unending litigation over their execution protocols. *See Hill v. McDonough*, 126 S. Ct. at 2103 (recognizing this possibility). Implementation of these standards would effectively allow

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[14] In contrast, when the trial court asked petitioners' expert witness, Dr. Heath, whether he would ever entertain the possibility of contracting with the Commonwealth to assist in improving the lethal injection protocol, Dr. Heath declined. JA540. He indicated that he believed any such assistance would be a violation of a doctor's ethical obligations. *Id*.

death row inmates to state a cognizable claim simply by alleging that alternative methods or procedures offer reductions in the risk of pain and suffering. Even purely speculative claims might prevail due to the lack of any requirement to prove the existence of a substantial risk of pain and suffering.

Under existing Eighth Amendment law, "a heavy burden rests on those who would attack the judgment of the representatives of the people" regarding a state's selection of its method of execution. *Gregg,* 428 U.S. at 175. The proposed "unnecessary risk" standard, in combination with petitioners' "foreseeable risk" principle, would greatly expand the potential for new litigation. Death row inmates could raise new claims simply by contending that redundant procedures and safeguards should be added to further reduce the already insubstantial risk of pain and suffering.

The "substantial risk" standard has been successfully applied in related Eighth Amendment contexts. *Gregg,* 428 U.S. at 188; *Farmer,* 511 U.S. at 834. The same "substantial risk" standard is appropriate in the context of determining whether a method of execution poses a constitutionally significant risk of unnecessary and wanton pain and suffering.

II. The Kentucky Supreme Court Correctly Concluded That The Commonwealth's Lethal Injection Protocol Does Not Violate The Eighth Amendment

A. The record establishes that Kentucky's protocol poses no substantial risk of unnecessary pain or suffering.

The evidence presented below convincingly established that Kentucky's three-drug lethal injection protocol eliminates any substantial risk that a condemned would ever experience unnecessary pain or suffering during an execution. Furthermore, two courts below made factual findings to that effect. Those findings must be respected. As Justice Kennedy wrote for a plurality in *Hernandez* v. *New York*, 500 U.S. 352, 366 (1991) (citations omitted):

> The reasons justifying a deferential standard of review in other contexts . . . apply with equal force to our review of a state trial court's findings of fact made in connection with a federal constitutional claim. Our cases have indicated that, in the absence of exceptional circumstances, we would defer to state-court factual findings, even when those findings relate to a constitutional issue. Moreover, "an issue does not lose its factual character merely because its resolution is dispositive of the ultimate constitutional question."

1. The administration of three grams of thiopental eliminates all risk of pain or suffering once it enters a condemned's bloodstream.

Dr. Heath, petitioners' own expert witness at trial, testified that the delivery of three grams of thiopental into a condemned's circulatory system is sufficient to ensure a quick, humane, pain-free death under Kentucky's three-drug lethal injection protocol. When questioned about the effects of administering three grams of thiopental as called for in Kentucky's protocol, Dr. Heath stated that the recipient would be unconscious within 60 seconds of administration and would remain unconscious for many hours. JA497, 499. He conceded that "[i]f successfully administered, the thiopental would render them deeply unconscious, to the point where no stimulation, even the painful stimulation of potassium, would cause any response." JA541.

KDOC Medical Director Dr. Haas agreed with petitioners' expert that a person given a three-gram dose of thiopental would be rendered unconscious for hours. JA381. Dr. Steven Hiland, a KDOC physician, also testified that the administration of three grams of thiopental would render an individual unconscious for a significant period of time. JA352.

Respondents' expert, Dr. Dershwitz, is a practicing anesthesiologist and a pharmacokineticist with expertise in researching the time course and effects of intravenous anesthetic agents like thiopental. JA544. Dr. Heath conceded that Dr. Dershwitz has far more experience in

pharmacokinetics. JA485. Dr. Dershwitz testified that he had actual experience administering three-gram dosages of thiopental to patients in a clinical setting. JA549. He testified that a human being of average size, if administered a three-gram dose of thiopental, would be rendered unconscious in less than a minute and would remain unconscious for hours thereafter. JA547-549.

Based on this evidence, the trial court found that "[t]hree grams of sodium thiopental, when administered properly, will render a person unconscious within one minute of injection." JA763. The Kentucky Supreme Court unanimously approved the trial court's findings of fact, adding that "[a]t this level of ingestion the person is rendered unconscious for hours." JA806.

2. Kentucky has incorporated safeguards into its lethal injection protocol that eliminate any substantial risk of thiopental not being delivered into a condemned's bloodstream.

Given the lack of dispute as to the adequacy of the three-gram dose of thiopental to eliminate the risk of pain once it enters a condemned's circulatory system, the only actual point of contention in this case is whether Kentucky's lethal injection protocol creates an unconstitutional risk of thiopental not entering the condemned's circulatory system.

The record establishes that Kentucky has incorporated safeguards into its lethal injection protocol that eliminate any substantial risk of

thiopental not entering the condemned's circulatory system. Furthermore, the record establishes that these safeguards eliminate any substantial risk of an accident resulting in pain or suffering to a condemned.

The most significant safeguards built into Kentucky's execution protocol are the specifications for qualifications and training of the execution team personnel who are responsible for placing the IVs into the condemned. To serve on the IV team, a person must have at least one year of professional experience as a Certified Medical Assistant, Phlebotomist, EMT, Paramedic, or Military Corpsman. Members of the IV team must remain certified in their profession and fulfill all continuing education requirements. The protocol requires the execution team to practice at least 10 times per calendar year, with each practice to include a complete walk-through of an execution, including the siting of IVs into a volunteer. JA984.

The evidence established that KDOC's IV team consisted of qualified medical personnel who were proficient in starting IVs as part of their everyday job assignments at KDOC. IV team member #1 had approximately eight years experience as a practicing phlebotomist, and had been on KDOC's execution team for about 18 months at the time of the trial. IV team member #2 had been a certified EMT for about 20 years at the time of the trial, and had been on KDOC's execution team since 1997. JA273-274.

The experts were in agreement that persons with this level of training and experience were

qualified to reliably place IVs into a condemned and confirm that the IVs functioned properly. KDOC's Medical Director, Dr. Scott Haas, testified that KDOC employs EMTs and phlebotomists who are able to start IV lines. JA384. Both Dr. Haas and Dr. Steve Hiland testified that phlebotomists are typically used to train medical residents to insert IVs due to the phlebotomists' knowledge and proficiency in this area. JA385, 352. Dr. Dershwitz testified that "almost all hospitals now have teams of technicians for doing things like putting in IVs and doing other things that interns and residents used to have to do." JA580. Even petitioners' medical expert, Dr. Heath, testified that starting an IV is relatively easy. JA517.

By employing qualified medical personnel to perform the necessary venipunctures and establish venous access, Kentucky's protocol ensures that the entire three-gram dose of thiopental will enter the condemned's circulatory system except in cases of IV failure. Petitioners implicitly concede this point in their brief, but contend that Kentucky's protocol creates an unconstitutional risk of thiopental not entering a condemned's circulatory system due to IV failure after IV team members have established venous access.

The primary safeguard incorporated into Kentucky's lethal injection protocol to ensure delivery of three grams of thiopental to a condemned's circulatory system is the general requirement that IV team members establish both a primary IV line and a backup IV line before the administration of the lethal injection drugs. JA975.

The IV team members also prepare two sets of lethal injection chemicals before the execution commences. JA987. The protocol provides that if the condemned is not unconscious within 60 seconds of the time the Warden gives the command to "proceed," and the flow of thiopental to the primary IV site begins, the Warden must order the executioner to stop the flow of thiopental in the primary IV site, and to begin the flow of a new three-gram dose of thiopental into the backup IV site. JA979. The use of a backup IV eliminates the risk of pain and suffering in the event of the failure of the primary IV site. The 60-second window is also consistent with all medical testimony in assuring the condemned is unconscious.

As an additional safeguard, the Warden and Deputy Warden are physically inside the execution room with the condemned watching for signs of IV failure due to problems with IV tubing or infiltration. JA316-317, 337. If signs of IV failure or infiltration occur during the flow of chemicals to the primary IV site, the Warden would order the executioner to immediately stop the flow of chemicals to the primary IV site and to begin the flow of a new set of chemicals to the inmate through the backup IV site, beginning with a new three-gram dose of thiopental. JA317, 337, 978-979. Neither pancuronium nor potassium would be administered until a full three-gram dose of thiopental had been successfully administered, with no signs of IV failure or infiltration.

Despite these safeguards, petitioners contend that Kentucky's lethal injection protocol creates an unconstitutional risk that less than three grams of

thiopental will be delivered to the condemned's bloodstream because the Warden and Deputy Warden have no medical training to assist them in identifying signs of infiltration. Pet. Br. 15-19. However, the record establishes that the physical signs of infiltration, given the amount and volume of thiopental solution injected, would be visible and obvious, even to persons with no medical background or training. JA353, 386, 600.

Under Kentucky's protocol, the three grams of thiopental are dissolved into 20 milliliters of sterile solution, resulting in a thiopental solution filling two 60cc syringes. JA300-301, 313. Dr. Haas, the KDOC Medical Director, testified that "[i]t would be very obvious," even to someone without a medical background, if infiltration occurred at an IV site with the amount of thiopental used during an execution in Kentucky. JA386. Dr. Steve Hiland, a KDOC physician at the Kentucky State Penitentiary, testified that the swelling would be "obvious" to "an average person." JA353. Dr. Dershwitz agreed, stating, "you'd also know that the thiopental wasn't working well before you started the injections of anything else." JA600. Dr. Dershwitz went on to explain that "[b]ecause thiopental is a solution of pH 10 . . . [i]f the thiopental were to go into any tissue site other than a vein, the inmate would not lose consciousness." JA601. Dr. Heath did not contradict the testimony of Dr. Dershwitz, Dr. Haas, or Dr. Hiland that signs of infiltration would be visible and obvious during an execution, even to persons with no medical training, due to the characteristics and amount of thiopental solution administered in an execution. JA462-463.

Petitioners contend that the December 13, 2006 execution of Angel Diaz in Florida shows that continuous monitoring for consciousness and other additional procedures are required in order to remove the risk of inmates remaining conscious during executions. Their argument overlooks the findings of the Florida Supreme Court and the Florida Governor's Commission on Administration on Lethal Injection that problems encountered during the Diaz execution were *not* due to any inherent deficiencies in Florida's three-drug protocol, but rather, were attributable to failure to follow the written protocol. *See Lightbourne v. McCollum,* --- So.2d ---, 2007 WL 3196533, at *21 (Fla. Nov. 7, 2007).[15]

Kentucky's lethal injection protocol thus eliminates any substantial risk that petitioners will receive less than the three-gram dose of thiopental called for under the protocol, thereby assuring them a humane death. The additional procedures identified by petitioners, while appropriate in a surgical setting, are not necessary or even appropriate in the context of an execution. Federal courts of appeals that have addressed the issue agree that "[f]or exceedingly practical reasons, no State can carry out an execution in the same manner that a

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[15] In addition, petitioners ignore the fact that Dr. Heath, who also testified as an expert witness in the *Lightbourne* case, could not say with certainty whether Diaz was "awake" when the second and third drugs were administered. *Lightbourne,* 2007 WL 3196533, at *15. Another expert in *Lightbourne,* Georgia Chief Medical Examiner Dr. Kris Sperry, opined that thiopental would be absorbed before the remaining two chemicals, thereby preventing Diaz from experiencing pain. *Id.*

hospital monitors an operation." *Taylor v. Crawford*, 487 F.3d at 1084 (*quoting Workman v. Bredesen*, 486 F.3d at 910).

In *Taylor,* the Eighth Circuit upheld Missouri's three-drug lethal injection protocol in the face of a similar constitutional challenge, stating:

> [T]he protocol mandates a dose [of sodium thiopental] large enough to render anyone deeply unconscious, as long as it is delivered properly. The protocol is designed to ensure a quick, indeed a painless, death, and thus there is no need for the continuing careful, watchful eye of an anesthesiologist or one trained in anesthesiology, whose responsibility in a hospital's surgery suite (as opposed to an execution chamber) is to ensure that the patient will wake up at the end of the procedure.

487 F.3d at 1084.

B. The record is devoid of proof that any alternative drugs identified by petitioners pose substantially less risk than the drugs currently used in Kentucky's protocol.

Petitioners' contention in their Petition for Certiorari was that the record below established the availability of alternative chemicals that pose less risk of pain and suffering than the drugs currently used for lethal injection in Kentucky and other states. In particular, the Petition for Certiorari identifies Propofol and Dilantin as allegedly

presenting less risk than chemicals currently used in Kentucky's protocol, although no citations to the record were included.

Surprisingly, petitioners' brief fails to address the issue raised in the Petition for Certiorari of whether Propofol, Dilantin, or any other alternative drugs actually pose less risk than those currently used in Kentucky and other lethal injection states. Petitioners' brief does not even mention Propofol, Dilantin, or any other alternative drugs. Petitioners also failed to identify any alternative drugs in their appeal before the Kentucky Supreme Court. Appellants' Brief at 39, 44.

Petitioners' argument must fail because of the lack of proof below that Propofol, Dilantin, or any other alternative drugs pose substantially less risk of pain and suffering in an execution setting than the drugs currently used under Kentucky's protocol.

The only alternative drug addressed by Dr. Heath, petitioners' expert, was Propofol. Dr. Heath never stated that Propofol would pose less risk than thiopental in the context of an execution. Instead, Dr. Heath explained why Propofol has become more popular in surgical settings than thiopental, stating that "it's got a slightly more convenient time course of onset and offset and affects on . . . vital signs and things like that . . . [I]t's a little bit of an easier drug to work with." JA430. Even in the surgical context, Dr. Heath described Propofol as being only "*somewhat* more safer [*sic*] and convenient and better attributes." *Id.* In addition, Dr. Heath testified that thiopental "is a very usable drug." *Id.*

Dr. Heath did not identify any other alternative drugs in his testimony. He alleged that there are "many non-painful ways of stopping the heart," but he did not identify any. JA427. No other witness testified as to the availability of alternative, less risky chemicals for lethal injections.

Dr. Dershwitz testified, "Propafol [sic] is a shorter-acting drug [than sodium thiopental], which is why it's more commonly used in anesthesia today, because we typically want our patients to wake up quicker so they can be more quickly discharged from the hospital." JA555. Thus, the fact that Propofol is now used more than thiopental in surgical settings is no indication that Propofol would pose less risk than thiopental in an execution. Dr. Dershwitz testified that "Propafol [sic] is used more commonly than thiopental [in surgical settings] because thiopental is longer lasting." JA555.

Dr. Dershwitz also testified that "Dilantin would stop the heart within a few minutes. Not as fast as potassium, but it would stop the heart within a matter of minutes." JA628. In their brief, petitioners erroneously imply that Dr. Dershwitz testified "there are other cardiotoxic drugs [besides potassium] that will stop the heart *without causing pain.*" Pet. Br. 54 (emphasis in original). However, Dr. Dershwitz was not asked, and neither he nor any other witness ever testified, that Dilantin posed any less of a risk of pain than potassium. Dr. Dershwitz testified that Dilantin would pose less risk of involuntary muscle contractions during an execution, but that involuntary muscle contractions were not a sign that a condemned was experiencing pain.

JA561. Dr. Heath also testified that no pain was associated with involuntary muscle contractions. JA541.

Furthermore, the record is devoid of evidence establishing that any other drug alternatives would pose less risk of pain and suffering than the drugs utilized in Kentucky's lethal injection protocol. The only other drugs discussed at trial as possible alternatives were pentobarbital and Digoxin. The testimony regarding pentobarbital was that, at a dosage of three grams, it would have "about the same duration of action" as thiopental. JA557. Only at lower doses would pentobarbital be slightly longer lasting than thiopental. JA556. The testimony regarding Digoxin rejected it as an alternative to potassium in an execution because it "would take minutes to hours to bring the heart to a stop." JA627.

Petitioners' belief that Kentucky's lethal injection protocol is unconstitutional, in light of this scant evidence of risk reduction, underscores the havoc that application of their "unnecessary risk" standard would wreak on the states' good-faith efforts to humanely enforce lawful sentences of death by means of lethal injection. Death-row inmates across the nation would be free to mount repeated constitutional challenges based on unsubstantiated allegations of alternative chemicals. State and federal courts would be stripped of the means to summarily dispose of meritless claims due to imposition of a standard that would confer constitutional significance to claims alleging the

potential for *insignificant* reductions in risks of pain and suffering.

C. Kentucky's use of pancuronium does not present a substantial risk of pain or suffering.

Petitioners argue at length that pancuronium presents an unconstitutional risk of pain and suffering in light of the fact that administration of the other two lethal injection chemicals would be sufficient to cause death in its absence. Petitioners further contend that pancuronium serves no legitimate purpose in the lethal injection protocol and that its elimination would reduce the risk of pain and suffering to petitioners.

The record establishes that pancuronium performs a number of legitimate functions in the lethal injection protocol, and its removal from the protocol would result in involuntary muscle contractions which might give the impression that the inmate feels pain, even though the medical evidence presented established that an inmate wouldn't feel pain from such a drug.

1. The record establishes that Kentucky's lethal injection protocol eliminates any substantial risk of pain or suffering arising from the use or administration of pancuronium.

Petitioners' objections to the use of a paralytic agent like pancuronium are tied to their belief that Kentucky should carry out executions in the same

manner that an anesthesiologist would monitor a patient during surgery. In effect, petitioners allege that paralysis of the condemned would render ineffective the other additional safeguards that petitioners argue are necessary to transform the execution chamber into a surgical suite, complete with an anesthesiologist and monitoring equipment.

Petitioners' argument ignores the obvious differences between an execution and a surgical setting. Dr. Heath estimated that, in a surgical setting, there was one in 500 cases of conscious awareness. JA414. But Dr. Dershwitz testified that he had never heard of a case of conscious awareness where a three-gram dose of thiopental had been given. JA630. The testimony at trial established that the three-gram dose of thiopental used in an execution in Kentucky represents a tenfold increase over the 300-milligram dose typically used in a surgical procedure. JA548. All experts at trial agreed that, if administered properly, a three-gram dose of thiopental would render petitioners unconscious for hours, with essentially no chance of regaining consciousness during the execution. Even Dr. Heath, petitioners' expert, conceded this point. JA541.

As stated above, Kentucky's protocol contains safeguards that eliminate any substantial risk that less than three grams of thiopental will be delivered to the condemned's bloodstream. The protocol ensures the delivery of thiopental to the inmate's circulatory system by utilizing a backup IV and a second three-gram dose of thiopental in the event of failure of the primary IV site, or under any

circumstances in which unconsciousness is not achieved within 60 seconds of administration of the initial three-gram dose of thiopental.

2. Pancuronium serves the legitimate functions of stopping respiration, preventing involuntary muscular contractions, and providing for a dignified death.

The Supreme Court of Kentucky found that pancuronium served the legitimate purpose of "suspend[ing] muscular movement and . . . stop[ping] respiration or breathing." JA806. These findings were supported by Dr. Dershwitz' testimony. JA559. The spontaneous, involuntary muscle contractions that would likely occur in the absence of pancuronium would not be indicative of pain to the condemned. JA561-562. After administration of the three-gram dose of thiopental, the inmate would be unaware of his surroundings, and nothing would be perceptible to him. *Id*.

Petitioners' own expert witnesses conceded that pancuronium's primary function in an execution is to prevent involuntary muscle contractions that would otherwise result from administration of the other lethal injection chemicals. JA523-524. The secondary function of pancuronium is to cause cessation of breathing or respiration. JA763. *See Workman*, 486 F.3d at 909. "[P]ancuronium bromide . . . speeds the death process, prevents involuntary muscular movement that may interfere with the proper functioning of the IV equipment, and contributes to the dignity of the death process."

Petitioners essentially dismiss the risk that spontaneous, involuntary muscle contractions could disrupt an execution by interfering with an IV. Their rejection of this risk is puzzling, given their own expert witnesses' testimony of the high probability of involuntary muscle contractions in the absence of pancuronium. Their position is even more puzzling in view of the overwhelming concern petitioners have expressed over far more remote risks. The likelihood of involuntary muscle contractions establishes that pancuronium performs a legitimate function in reducing the risk of disruption during an execution, thus leading to a humane death.

Petitioners also dismiss respondents' contention that pancuronium performs a legitimate function by preventing violent muscle contractions that could be incorrectly interpreted as signs of pain or suffering. Petitioners argue that involuntary muscle contractions have no bearing on the dignity of condemned, since the administration of thiopental renders the inmate impervious to pain. However, petitioners' argument ignores the impact on family members and other witnesses who view the involuntary contractions.

The Eighth Amendment forbids punishments that are not in accord with "the dignity of man, which is the basic concept underlying the Eighth Amendment." *Gregg*, 428 U.S. at 173 (internal quotation marks and citations omitted). The record establishes a high probability that in the absence of pancuronium or a similar paralytic agent, condemneds will experience spontaneous, involuntary

muscle contractions that family members and other witnesses will misperceive as signs of pain and suffering.

Respondents are not alone in their concern of whether a paralytic agent is required to avoid an affront to the dignity of man. All 37 states that have adopted lethal injection as a method of execution include a paralytic agent as part of their protocol. In 14 of these states, the state legislatures have enacted legislation that specifically requires use of a paralytic agent.[16]

3. Comparisons between lethal injection and animal euthanasia are misleading and inapposite.

Petitioners argue that pancuronium should not be used in human executions because it is not typically used by veterinarians to euthanize animals. Essentially, petitioners argue that the American Veterinary Medical Association (AVMA) treats animals better during euthanasia than Kentucky treats human beings in an execution.

This comparison is misleading for a number of reasons. First and foremost, the circumstances under

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[16] Arkansas, A.C.A. § 5-4-617; Idaho, I.C. § 19-2716; Illinois, 725 ILCS 5/119-5; Maryland, MD Code, Correctional Services, § 3-905; Mississippi, Miss. Code Ann. § 99-19-51; Montana, MCA 46-19-103; New Hampshire, N.H. Rev. Stat. § 630:5; New Jersey, N.J.S.A. 2C:49-2; New Mexico, N.M.S.A. 1978, § 31-14-11; North Carolina, N.C.G.S.A. § 15-188; Oklahoma, 22 Okl. St. Ann. § 1014; Oregon, O.R.S. § 137.473; Pennsylvania, 61 P.S. § 3004; Wyoming, W.S. 1977 § 7-13-904.

which animals are euthanized and those attendant to the execution of a human being are so wholly different as to render any such comparison absurd. Dr. Geiser, a veterinarian, admitted that the AVMA approves or allows all of the following methods of euthanasia for certain animals: a penetrating captive bolt (which stuns an animal to death); thoracic compression (which euthanizes small animals in a chamber); cervical dislocation (which severs the spinal chord); and finally, blows to the head, decapitation, electrocution, and gun shots. 6 Tr. 758, 759. Thus, petitioners' contention that animals are euthanized under conditions superior to condemneds must fail.

D. The theoretical alternative of an untested one-drug protocol utilizing thiopental as the sole lethal injection chemical does not render Kentucky's three-drug protocol unconstitutional.

In their brief, petitioners argue for the first time that Kentucky's three-drug lethal injection protocol is unconstitutional due to the theoretical availability of an untested alternative protocol in which thiopental is the only lethal injection chemical.[17]

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[17] While Baze and Bowling argued on appeal to the Kentucky Supreme Court that inclusion of a paralytic agent such as pancuronium in Kentucky's protocol violated the Eighth Amendment, they never argued that inclusion of a cardiotoxic drug to stop the heart was unnecessary or that it violated the Constitution. Instead, Baze and Bowling argued that unidentified alternative drugs could be substituted for potassium to trigger cardiac arrest. Appellants' Brief at 37. Notably, Baze and Bowling raised no argument to the Kentucky

Petitioners' argument is apparently grounded in their newfound belief that death can be achieved through administration of thiopental alone. At trial, Dr. Heath testified that he would not expect a three-gram dose of thiopental to kill a person, even if no other measures were taken. JA498-499.

Aside from the fact that Baze and Bowling failed to raise this argument before the Kentucky Supreme Court,[18] their argument must also be rejected due to its lack of merit and its failure to account for other constitutional issues raised by the proposed one-drug protocol.

The trial court and the Supreme Court of Kentucky agreed that the record established that the safeguards included in Kentucky's protocol already eliminate any substantial risk of unnecessary pain or suffering. JA760-764, 805-808; *see also Taylor*, 487 F.3d at 1085. Second, while Kentucky's three-drug protocol is tested and proven effective, petitioners' proposed one-drug protocol remains untested and unreliable.

Supreme Court alleging that Kentucky's three-drug protocol was unconstitutional due to the availability of any one-drug protocol utilizing thiopental as the only drug.

[18] *See* note 17, *supra*. This Court generally does not consider questions or arguments that were not raised on appeal in the courts below. *See*, *e.g.*, *Office of Personnel Management v. Richmond*, 496 U.S. 414, 440 (1990); *Delta Air Lines, Inc. v. August*, 450 U.S. 346, 362 (1981). "These rules apply to all arguments, even those of constitutional dimension." *Richmond*, 496 U.S. at 440. The issue should thus be deemed forfeited due to petitioners' failure to raise it on appeal before the Supreme Court of Kentucky.

Kentucky's three-drug protocol already contains safeguards that eliminate any substantial risk that a condemned would remain conscious when pancuronium and potassium are administered. Petitioners' allegations that Kentucky's three-drug protocol presents an unconstitutional risk are based on speculation and conjecture, and are tied to petitioners' erroneous interpretation of the Eighth Amendment as prohibiting any theoretical risk of pain or suffering.

Furthermore, any attempt to employ petitioners' unproven one-drug protocol would raise new Eighth Amendment issues and practical problems that make it infeasible to implement in Kentucky. The proposed one-drug protocol would present problems determining the time of death in Kentucky and in other states that utilize an EKG monitor to determine time of death. Kentucky Revised Statute § 431.220(3) prohibits physicians from participating in an execution in any manner, "except to certify cause of death provided that the condemned is declared dead by another person." Thus, Kentucky's statute prohibits a doctor from performing an examination to determine the time of death.

Petitioners go outside the record to cite proceedings of a Tennessee committee referred to in *Harbison v. Little*, No. 3:06-1206, 2007 WL 2821230 (M.D. Tenn. Sept. 19, 2007) to imply that Dr. Dershwitz, respondents' expert at trial, now supports the use of the one-drug protocol. This hearsay information is erroneous. If the Court is going to consider this hearsay from outside the record, respondents ask the Court also to consider

Dr. Dershwitz' actual testimony in the *Harbison* case, in which he denies ever recommending one protocol over any other. Dershwitz trial deposition at 21.

In accordance with Supreme Court Rule 32(3), respondents have delivered to the Clerk and served on the parties a letter describing Dr. Dershwitz' trial deposition filed in *Harbison,* setting forth the reasons why it may be properly considered by the Court, and asking that a certified copy of Dr. Dershwitz' trial deposition be lodged with the Court for consideration.

E. Theoretical alternative practices and procedures used in surgical settings do not render Kentucky's three-drug protocol unconstitutional.

Petitioners devote a significant portion of their brief to arguing that respondents should incorporate a number of practices and procedures used by surgeons and anesthesiologists in hospital settings to further reduce the already insubstantial risk of pain and suffering associated with Kentucky's lethal injection protocol.

Petitioners' arguments concerning these alternative practices and procedures were not raised in their Petition for Certiorari, which focused on the appropriate legal standard, the availability of alternative drugs, and the availability of alternative means of execution that eliminate pancuronium from the lethal injection protocol. The Petition for Certio-

rari does not even identify the alternative practices and procedures argued for in petitioners' brief.

"[T]his Court's normal practice is to refuse to consider arguments not presented in the petition for certiorari." *Office of Personnel Management v. Richmond*, 496 U.S. 414, 440 (1990); *Lawn v. United States,* 355 U.S. 339, 362-63 n.16 (1958); *Radio Officers v. NLRB*, 347 U.S. 17, 37 n.35 (1954). The Court accordingly should disregard these arguments.

Nonetheless, petitioners' arguments for applying medical practices and procedures to executions overlook the obvious differences between conducting a surgical procedure in a hospital setting and conducting an execution in a maximum security prison setting. Petitioners' arguments also ignore the fact that Kentucky's lethal injection protocol already eliminates any substantial risk of pain or suffering during an execution.

1. The perceived risks identified by Petitioners are insubstantial and could only arise in the event of an accident arising out of failure to follow the written protocol.

a. Kentucky's protocol presents no substantial risk of error relating to preparation of the chemicals or filling the syringes for an execution.

First, petitioners contend that Kentucky's method of preparing and injecting the lethal

injection drugs is prone to error. In essence, petitioners argue that the execution team members who prepare the drugs and fill the syringes are not adequately qualified or trained to carry out this task. Pet. Br. 45-46. Petitioners believe that the IV team members are not capable of following the manufacturer's simple instructions for preparing the lethal injection drugs.

Petitioners exaggerate the complexity of the task of preparing the drugs and syringes used in a lethal injection. According to petitioners, "[t]he IV team must mix thiopental from multiple kits, calculate the appropriate dose, and lead it into syringes." Pet. Br. 29. The evidence at trial established that the process was simple and that no medical training was required to prepare the drugs. Dr. Haas testified that preparing the drugs was not difficult at all, analogizing it to mixing Kool-Aid. He stated that "[y]ou take a liquid, you inject it into a vial with the powder, then you shake it up until the powder dissolves and you're done. The instructions are on the package insert." 5 Tr. 695. The trial court, after weighing the evidence, found that there was only a "minimal risk" that execution personnel would improperly mix or prepare the lethal injection drugs. JA761-762.

b. Kentucky's protocol does not present any problems with improper connection of IVs or infiltration that would create substantial risk of pain or suffering.

Petitioners contend that Kentucky's procedures for IV insertion create a likelihood of problems with improperly connected catheters and infiltration. Pet. Br. 46. Petitioners apparently concede that the phlebotomists, EMTs, and other medical professionals who qualify for KDOC's IV team are proficient in placing and starting peripheral IVs, but argue that Kentucky's protocol creates an unconstitutional risk of pain and suffering by failing to provide for the use of a central line for venous access for condemneds with severely compromised veins due to medical conditions or histories of drug use. Pet. Br. 46-47.

Petitioners now contend that Kentucky's protocol is unconstitutional due to the lack of a provision for central line venous access, given that petitoners opposed respondents' former procedure that allowed execution personnel to use a central line through the carotid artery or the jugular vein as a last resort, if venous access could not be established through peripheral IV placement.

Petitioners now claim that they suffer from compromised veins after failing to make this argument at trial; therefore this issue has been waived. Indeed, when petitioners filed motions to intervene in the ongoing federal district court lethal

injection action. *Moore v. Rees*, No. 06-CV-22 (E.D. Ky., filed April 19, 2006), petitioners each filed affidavits stating that they did not have compromised veins.

In almost 10 years of conducting monthly lethal injection practices, the IV team had never encountered problems establishing peripheral venous access. JA319. While petitioners argue that prison inmates are more likely than the general population to suffer from compromised veins, the record established that KDOC's IV team members were both long-time KDOC employees who place and start IVs in prison inmates as part of their regular jobs as a KDOC phlebotomist and EMT. JA273-274. The IV team members are probably the most qualified to start an IV since they deal with inmates on a daily basis.

In addition to the remoteness of the risk of being unable to gain peripheral venous access, the record also established that the condemned would not be exposed to a substantial risk of pain and suffering in the unlikely event that the IV team is unable to establish peripheral venous access. The written lethal injection protocol gives the IV team up to 60 minutes to attempt to establish peripheral IV access. JA976. If the IV team is unable to successfully place and start the peripheral IV catheters within the allotted 60-minute time frame, the protocol requires the execution to cease and for the Warden to contact the Governor. *Id.* The Governor would then be asked to reschedule the execution for a later date. *Id.*

The condemned would not be subjected to a significant risk of unconstitutional pain or suffering. Petitioners argued at trial that 60 minutes of attempting to site a peripheral IV amounted to cruel and unusual punishment, but these arguments were not supported by the record and were rejected by the trial court. JA762. Even Dr. Heath, petitioners' expert, testified that he would spend up to 30 minutes attempting to cite an IV before asking someone else to give it a try. JA479.

c. The proximity of execution personnel to the condemned and the failure to administer the lethal injection drugs from bedside does not create a substantial risk of pain or suffering.

Petitioners contend that the protocol creates an unconstitutional risk of pain and suffering because the executioner is not close enough to the condemned to identify IV problems such as infiltration. Their argument ignores the fact that the Warden and Deputy Warden are located in the execution chamber, next to the inmate, to watch for signs of infiltration. JA316-317, 337. It also ignores the undisputed evidence that signs of infiltration would be visible and obvious due to the pH and amount of the thiopental solution being administered. JA353, 386, 600-601.

d. The qualifications and training of execution personnel in administering intravenous drugs does not present a substantial risk of pain or suffering.

Petitioners also contend that the protocol creates an unconstitutional risk of pain and suffering because the IV team members do not have specific training in administering intravenous drugs or identifying or fixing IV problems such as infiltration. Petitioners' argument ignores the evidence in the record showing the experience and capabilities of the IV team members. JA273-274, 352, 384-385. The argument also ignores the undisputed evidence that signs of infiltration would be visible and obvious due to the pH and amount of the thiopental solution being administered. JA353, 386, 600-601.

As an additional safeguard against infiltration, Kentucky's lethal injection protocol requires the siting of two separate IV lines. If for any reason the inmate is not unconscious within one minute of administration of the three-gram dose of thiopental through the primary IV site, the written protocol requires that a second three-gram dose of thiopental be administered through the secondary IV site before any pancuronium or potassium is injected.

e. The lack of monitoring for anesthesia awareness does not present a substantial risk of pain or suffering.

Petitioners also contend that Kentucky's lethal injection protocol presents an unnecessary risk because it does not utilize an anesthesiologist or other qualified medical personnel to monitor for "anesthesia awareness" in the event the inmate regains consciousness during an execution after administration of the thiopental. Pet. Br. 57-59. Petitioners apparently contemplate that such monitoring would include the use of monitoring equipment "such as a BIS monitor, blood pressure cuff, EKG, and/or EEG." *Id*. at 58. Dr. Heath, petitioners' own expert, testified that BIS monitors are not even considered the "standard of care" in surgical settings. JA539.

This result is consistent with the Eighth Circuit's decision in *Taylor*, 487 F.3d 1072. The Eighth Circuit reversed a district court order that required corrections officials in Missouri to modify the State's proposed lethal injection protocol to "require a physician with training in anesthesia" and to "provide for the possibility of purchasing additional equipment to monitor anesthetic depth." *Id*. at 1078. The Eighth Circuit held that Missouri's written protocol met constitutional standards without the modifications, stating:

> We know of no decision holding that the Constitution requires a physician to become an executioner. . . . Neither does the record justify requiring the continuous monitoring of

> the anesthetic depth of the inmate by one trained in anesthesia or by additional equipment. The written protocol requires a 5-gram dose of thiopental to be delivered through a properly placed and working IV, combined with a three-minute wait and a physical confirmation of unconsciousness before the last two chemicals are administered. The experts agree that this dose, successfully delivered, . . . eliminates any need for further monitoring.

Taylor, 487 F.3d at 1084 (citations omitted).

Similarly, in *Hamilton v. Jones*, 472 F.3d 814 (10th Cir. 2007), the Tenth Circuit recently considered whether Oklahoma's lethal injection protocol violated the Eighth Amendment due to the lack of procedures or equipment for monitoring consciousness of condemneds. The Tenth Circuit upheld Oklahoma's existing lethal injection protocol, without additional monitoring procedures, even though Oklahoma's existing protocol called for the administration of only 1200 mg of thiopental, in comparison to the three gram (3,000 mg) dose required under Kentucky's lethal injection protocol. *Id*. at 816-817.

Furthermore, the Court need look no further than the cases cited by petitioners in support of their argument to see the insurmountable problems that Kentucky corrections officials would face if the Commonwealth were required to implement the monitoring requirements contemplated by petitioners. In the wake of *Morales v. Hickman*, 438

F.3d 926 (9th Cir. 2006), the California Department of Corrections was forced to suspend all executions due to the unwillingness of licensed anesthesiologists to participate in executions. In an effort to proceed with the inmate's scheduled execution, California corrections officials attempted to secure the participation of a licensed anesthesiologist in order to comply with the district court's order conditionally denying the inmate's motion for a preliminary injunction if an anesthesiologist participated in the execution. *Id.* Just before the execution, however, the two anesthesiologists who had agreed to be involved in the execution declined to participate due to disagreement as to the degree of participation being required by the district court. *See Morales v. Tilton,* 465 F. Supp. 2d 972, 976 (N.D. Cal. 2006). California corrections officials apparently attempted to purchase a BIS monitor, but the manufacturer refused to sell the machine to the state for use in executions. Deborah W. Denno, *The Lethal Injection Quandary: How Medicine Has Dismantled the Death Penalty*, 2007 Fordham L. Rev. 49, 111.

A similar situation has arisen in North Carolina in the wake of *Brown v. Beck*, No. 5:06CT3018 H, 2006 WL 3914717 (E.D.N.C. April 7, 2006). In *Brown,* North Carolina corrections officials agreed to use a BIS monitor to monitor consciousness during the execution so that the federal district court would allow them to proceed with a scheduled execution. *See Brown v. Beck,* 445 F.3d 752 (4th Cir. 2006).[19]

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[19] Since then, the manufacturer of the BIS monitor has reportedly enacted a policy that requires any state corrections department desiring to purchase a BIS monitor to sign a

Subsequently, North Carolina corrections officials have been unable to secure the participation of licensed anesthesiologists to read the monitor. North Carolina corrections officials were forced to sue the North Carolina Medical Board to prohibit the Medical Board from enforcing its position statement and from taking disciplinary action against physicians who participate in executions. *N.C. Dep't of Corr. v. N.C. Med. Bd.,* No. 07-CVS-3574, at 5 (N.C. Super. Ct. Sept. 21, 2007).

CONCLUSION

The judgment of the Kentucky Supreme Court should be affirmed.

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written contract specifying that the machine will not be used in executions. Denno, *supra*, 2007 Fordham L. Rev. at 111-112.

Respectfully Submitted,

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