Nos. 23-235, 23-236

IN THE
Supreme Court of the United States

U.S. FOOD AND DRUG ADMINISTRATION, ET AL.,
Petitioners,

v.

ALLIANCE FOR HIPPOCRATIC MEDICINE, ET AL.,
Respondents.

DANCO LABORATORIES, L.L.C.,
Petitioner,

v.

ALLIANCE FOR HIPPOCRATIC MEDICINE, ET AL.,
Respondents.

On Writs of Certiorari to the
United States Court of Appeals For the Fifth Circuit

BRIEF OF THE AMERICAN PSYCHOLOGICAL ASSOCIATION AND THE NATIONAL ASSOCIATION OF SOCIAL WORKERS AS *AMICI CURIAE* IN SUPPORT OF PETITIONERS

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INTEREST OF *AMICI CURIAE*[1]

Amicus curiae the American Psychological Association ("APA") submits this brief to provide the Court with context regarding the state of scientific knowledge about the safety and effects of obtaining an abortion. As the largest professional association of psychologists in the United States, the APA is deeply concerned about the mental health effects of denying abortion care. The APA has a particular interest in these cases given the emphasis on mental health issues in the parties' briefing and the decisions below, which at times mischaracterized the scientific literature.

The APA is a scientific and educational organization dedicated to increasing and disseminating psychological knowledge. Its over 150,000 members include researchers, educators, clinicians, consultants, and students.[2] The APA's mission is to promote the advancement, communication and application of psychological science and knowledge to benefit society and improve lives. To that end, the APA has been, and continues to be a strong and consistent advocate for equal access to reproductive health services. The APA has an interest in ensuring that robust scientific

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[1] Pursuant to Rule 37.6, counsel for *amici curiae* state that no counsel for a party authored this brief in whole or in part, and no person or entity other than *amici* or their counsel has made a monetary contribution to the preparation or submission of this brief.

[2] The APA gratefully acknowledges the assistance of the following psychologists in the preparation of this brief: M. Antonia Biggs, Ph.D.; Margaret Bull Kovera, Ph.D.; Nancy F. Russo, Ph.D.; and Julia R. Steinberg, Ph.D.

research is used to examine the mental health effects of denying access to abortion care and to examine the mental health effects of an abortion. In 2008, an APA task force conducted a systematic review of the scientific research addressing the mental health factors associated with abortion, including the psychological responses following abortion, to produce a comprehensive report of empirical studies on the topic published between 1989 and 2008.[3] The APA 2008 Report concluded that based on the available empirical evidence, women who had an abortion in the first trimester did not face a higher risk of mental health problems than women who carried an unplanned pregnancy to term.[4] Moreover, the APA is committed to advancing population heath, rooted in the understanding that an individual's mental health cannot be considered in isolation from the major influencers and social determinants of health that influence health status, wellbeing, and functioning across the lifespan.[5]

The APA has filed nearly 250 *amicus* briefs in federal and state courts around the country. The APA has a rigorous approval process for filing *amicus* briefs, the touchstone being an assessment of whether there is sufficient scientific research, data, and literature on a question in a particular case such that the APA can

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[3] *See* Report of the Am. Psych. Ass'n, *Task Force on Mental Health and Abortion* (2008), https://www.apa.org/pi/women/programs/abortion/mental-health.pdf [hereinafter *APA 2008 Report*].

[4] *Id.* at 89-91.

[5] *See* Report of the Am. Psych. Ass'n, *Psychology's Role in Advancing Population Health* (2022), https://www.apa.org/about/policy/population-health-statement.pdf.

usefully contribute to the Court's understanding and resolution of that question. Given the attention the decisions below have devoted to the mental health consequences of medication abortion, and the decisions' mischaracterizations of the available scientific literature on the topic, the APA has a particular interest in these cases. It is also important to understand what the emerging science has found about the mental health effects of limiting access to abortion care.

Amicus the National Association of Social Workers ("NASW"), established in 1955, is the largest association of professional social workers in the world, with approximately 110,000 members and chapters throughout the United States. The Texas Chapter of NASW has more than 5,157 members. With the purpose of developing and disseminating standards of social work practice while strengthening and unifying the profession as a whole, NASW provides continuing education, enforces the NASW Code of Ethics, conducts research, publishes books and studies, promulgates professional criteria, and develops policy statements on issues of importance to the social work profession. Consistent with its policy statements on women's issues and on reproductive justice, NASW, including its Texas Chapter, advocates for access to the full range of reproductive health services, including unrestricted access to abortion, and supports protecting reproductive rights and freedoms. Social workers regularly engage with clients regarding their personal lives and provide counseling on topics such as pregnancy, reproductive health, parenthood, and adoption.

SUMMARY OF ARGUMENT

In the decisions below, both the district court and the Fifth Circuit incorrectly asserted that medication abortion is linked to negative physical and mental health outcomes. The Fifth Circuit decision misconstrues decades of rigorous scientific research to incorrectly conclude that a "significant percentage of women who take mifepristone experience adverse effects." Pet. App. 17a.[6] And the district court's opinion in turn relied on widely refuted published articles to hold that medication abortion is linked to negative mental health outcomes.

Amici write here to respond to the lower courts' faulty arguments, and to make this Court aware of the flawed evidence undergirding the lower courts' reasoning in these cases. First, *amici* explain that there is no rigorous scientific research to indicate that abortion causes a negative impact on mental health. Indeed, decades of scientific research confirms that abortion does not negatively impact mental health. Scientific studies that have compared the mental health consequences of receiving an abortion versus being denied an abortion have instead found that those denied abortion care experience more symptoms of anxiety and low self-esteem soon after being denied an abortion.

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[6] The decisions below and most studies cited in this brief use the term "women," which *amici* use in referencing those decisions and studies. However, wherever possible, *amici* use more inclusive language and note that the research discussed is relevant for anyone who can become pregnant, including cisgender women, nonbinary people, and some transgender men.

Hence, the district court's finding that women who receive abortions via abortion-inducing medication "often experience shame, regret, anxiety, depression, drug abuse, and suicidal thoughts because of the abortion," Pet. App. 123a, is incorrect and the product of reliance on flawed analyses. Empirical and rigorous scientific evidence overwhelmingly confirms that abortion does not produce these effects.

Second, *amici* provide the Court with scientific evidence demonstrating that denial of access to abortion care results in both short-term and long-term negative socioeconomic and physical health outcomes for women and children. Here, too, research shows that those denied access to abortion care are more likely to live below the federal poverty line, to be unemployed, to be evicted, have low credit scores, and to experience the serious physical health consequences of being denied an abortion and forced to give birth.

Third, *amici* refute the Fifth Circuit's statement that a "significant percentage of women who take mifepristone experience adverse effects." Pet. App. 17a. Again, decades of empirical scientific evidence proves exactly the opposite to be true: mifepristone is extremely safe and effective. Petitioners cited to this evidence below, which the Fifth Circuit wholly disregarded in its analysis, but here *amici* provide the Court with the scientific literature that has long established the safety and efficacy of the current mifepristone and misoprostol medication abortion regimen.

ARGUMENT

I. Rigorous Research Indicates that Abortion does not have a Negative Impact on Women's Mental Health.

Below, Respondents argued—and the district court agreed—that individuals who obtained an abortion via the use of abortion-inducing drugs, "often experience shame, regret, anxiety, depression, drug abuse, and suicidal thoughts because of the abortion." Pet. App. 123a. That argument is refuted by rigorous, empirical scientific studies, which have found no evidence that abortion causes mental health harm.[7]

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[7] *See, e.g.*, Julia R. Steinberg & Nancy F. Russo, *Abortion and Anxiety: What's the Relationship?*, 67 Soc. Sci. & Med. 238, 238-52 (2008) (finding that there was no "significant relationship" between the outcome of an individual's first pregnancy, whether the pregnancy ended in abortion or was carried to term, and "subsequent rates of [generalized anxiety disorder], social anxiety, or PTSD"); Julia R. Steinberg & Lawrence B. Finer, *Examining the Association of Abortion History and Current Mental Health: A Reanalysis of the National Comorbidity Survey Using a Common-Risk-Factors Model*, 72 Soc. Sci. & Med. 72, 72-82 (2011) (finding "no significant relation … between abortion history and anxiety disorders" for women having a single abortion); Julia R. Steinberg et al., *Abortion and Mental Health: Findings from The National Comorbidity Survey-Replication*, 123 Obstetrics & Gynecology 263 (2014) (finding that after controlling for competing factors, "abortion was not a statistically significant predictor of subsequent anxiety, mood, impulse-control, and eating disorders or suicidal ideation"); Laura F. Harris et al., *Perceived Stress and Emotional Social Support Among Women Who Are Denied or Receive Abortions in the United States: A Prospective Cohort Study*, 14 BMC Women's Health 76 (2014) (finding that "neither receiving nor being denied an abortion resulted in increas[ed] stress

or loss of social support over 30 months"); M. Antonia Biggs et al., *Women's Mental Health and Well-Being 5 Years After Receiving or Being Denied an Abortion: A Prospective, Longitudinal Cohort Study*, 74 JAMA Psychiatry 169 (2017) (finding that, "during a 5-year period, women receiving wanted abortions had similar or better mental health outcomes than those who were denied a wanted abortion"); M. Antonia Biggs et al., *Does Abortion Reduce Self-Esteem and Life Satisfaction?*, 23 Quality Life Rsch. 2505, 2505-13 (2014) (finding "no evidence that abortion harms women's self-esteem or life satisfaction in the short term"); M. Antonia Biggs et al., *Mental Health Diagnoses 3 Years After Receiving or Being Denied an Abortion in the United States*, 105 Am. J. Pub. Health 2557 (2015) (finding that the onset of professionally diagnosed depression or anxiety did not differ between women who received or were denied an abortion); M. Antonia Biggs et al., *Does Abortion Increase Women's Risk for Post-Traumatic Stress? Findings From a Prospective Longitudinal Cohort Study*, 6 BMJ Open e009698 (2016) (finding no support for the theory that women obtaining abortions are more likely to experience post-traumatic stress than women who gave birth); Sarah C.M. Roberts et al., *Changes in Alcohol, Tobacco, and Other Drug Use Over Five Years After Receiving Versus Being Denied a Pregnancy Termination*, 79 J. Stud. Alcohol & Drugs 293, 293, 298-300 (2018) (finding that having an abortion does not lead to increased alcohol, tobacco, or other drug use); M. Antonia Biggs et al., *Five-Year Suicidal Ideation Trajectories Among Women Receiving or Being Denied an Abortion*, 175 Am. J. Psychiatry 845 (2018) (finding that for women who had an abortion, symptoms of suicidal ideation decreased over a five-year period); Julia R. Steinberg et al., *Does the Outcome of a First Pregnancy Predict Depression, Suicidal Ideation, or Lower Self-Esteem? Data from the National Comorbidity Survey*, 81 Am. J. Orthopsychiatry 193 (2011) (demonstrating that the relationship of abortion to mental health is explained by other factors related to both unintended pregnancy and mental health); Julia R. Steinberg et al., *Examining the Association Between First Abortion and First-Time Nonfatal Suicide Attempts: A Longitudinal Study Using Danish-Population Registries*, 6 Lancet Psychiatry 1031 (2019) (finding that the abortion was not responsible for an

Indeed, reputable scientific research refutes each of the district court's assertions. One need look no further than *The Turnaway Study*, a groundbreaking ten-year investigation conducted at the University of California, San Francisco, that analyzed the effects of having or being denied an abortion over a five-year period.[8] *The Turnaway Study* is among the most scientifically rigorous studies of the effects of receiving versus being denied a wanted abortion on women, and their children. The study drew from a sample size of nearly 1,000 women who sought abortions from thirty abortion facilities around the country. Researchers conducted interviews with the study participants over a five-year period and compared the trajectories of the women who received a wanted abortion to those who were turned away because they were past the facility's gestational

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increased risk of suicidal ideation in women who had abortions); Trine Munk-Olsen et al., *Induced First-Trimester Abortion and Risk of Mental Disorder*, 364 N. Eng. J. Med. 332 (2011) (finding that "the incidence rate of psychiatric contact was similar before and after a first-trimester abortion").

[8] Diana Greene Foster, *The Turnaway Study: Ten Years, a Thousand Women, and the Consequences of Having—or Being Denied—an Abortion* (2020) [hereinafter *The Turnaway Study*]. While *The Turnaway Study* may be the most rigorous examination of the consequences of having been denied or undergone an abortion, its findings are not inconsistent with both earlier and later independent analyses. *See generally supra* note 7, *infra* note 26. Although the findings of these studies are consistent with those of *The Turnaway Study*, *Turnaway Study* data best captures whether undergoing versus being denied an abortion alters outcomes at the individual level.

age limit.[9] The conclusion of *The Turnaway Study* was that being denied abortion care had serious consequences on women's health and well-being.

First, rather than shame and regret, research shows that the vast majority of individuals who had an abortion felt that the decision was the right one and felt relief both in the immediate aftermath and as many as five years later.[10] Second, research shows that having an abortion was not associated with self-reported increases in alcohol, tobacco, or other drug use, including problematic use.[11] Third, *The Turnaway Study*

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[9] *The Turnaway Study*, *supra* note 8 at 11, 19-20.

[10] *See The Turnaway Study*, *supra* note 8, at 109 (explaining that "[t]o the extent that abortion causes mental health harm, the harm comes from the denial of services, not the provision"); Corinne H. Rocca et al., *Emotions and Decision Rightness Over Five Years Following an Abortion: An Examination of Decision Difficulty and Abortion Stigma*, 248 Soc. Sci. & Med. 112704 (2020) (concluding that the "overwhelming majority of women felt that the abortion was the right decision for them at all times"); Corinne H. Rocca et al., *Decision Rightness and Emotional Responses to Abortion in the United States: A Longitudinal Study*, 10 PLOS One e0128832 (2015) (finding that approximately 95% of women reported that having an abortion was the right decision for them); Corinne H. Rocca et al., *Women's Emotions One Week After Receiving or Being Denied an Abortion in the United States*, 45 Persp. Sexual & Reprod. Health 122, 126 (2013) (finding that "the emotion most reported by women about the[ir] abortion was relief").

[11] *See The Turnaway Study*, *supra* note 8, at 113-14 (noting that "[n]either women who received nor those who were denied an abortion showed an increase in alcohol problem symptoms, tobacco use, or drug use over the five years"); Sarah C.M. Roberts et al., *supra* note 7, at 300 (concluding that "there is no indication that

observed similar levels of low suicidal ideation between women who had abortions and women who were denied abortions.[12]

Last, research also shows that being denied abortion care can cause a short-term adverse impact on mental health. One five-year study of women's mental health (comparing women's mental health after receiving or being denied an abortion), found that one week after abortion denial, women reported *more* symptoms of anxiety and stress, lower self-esteem, lower life satisfaction, and similar levels of depression.[13]

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having an abortion led women to increase heavy episodic or problem [alcohol, tobacco, and other drug] use").

[12] *See Five-Year Suicidal Ideation Trajectories Among Women Receiving or Being Denied an Abortion*, *supra* note 7, at 851-52 (finding no effect of receiving compared with being denied an abortion on suicidal ideation at any point, thereby "dispelling the notion that abortion increases women's risk for suicidal ideation over time").

[13] *Women's Mental Health and Well-Being 5 Years After Receiving or Being Denied an Abortion: A Prospective, Longitudinal Cohort Study*, *supra* note 7, at E1, E9 (finding short-term increases in anxiety and low self-esteem in women one week after being denied an abortion). Biggs' study found that, compared with having an abortion, "being denied an abortion may be associated with greater risk of initially experiencing adverse psychological outcomes," though psychological "well-being improved over time" such that "both groups of women eventually converged." *See also* Laura F. Harris et al., *supra* note 7 (finding that women denied abortions were initially more stressed than women receiving abortions); *Does Abortion Reduce Self-Esteem and Life Satisfaction?*, *supra* note 7 (finding that over the course of the study, self-esteem improved or remained unchanged among women who had an abortion).

Moreover, contrary to the decision below, there is simply no scientific support for the claim that medication abortion is especially traumatic because it "necessitate[s] the woman seeing her aborted child once it passes[.]" Pet. App. 123a. Instead, studies show that medication abortion is not more mentally or emotionally difficult than procedural abortion.[14]

To assert otherwise, the district court chiefly relied on poor quality articles that have been thoroughly critiqued by the scientific community. *See* Pet. App. 123a-124a (citing Priscilla K. Coleman, *Abortion and Mental Health: Quantitative Synthesis and Analysis of*

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[14] *See* Premila W. Ashok et al., *Psychological Sequelae of Medical and Surgical Abortion at 10-13 Weeks Gestation*, 84 Acta. Obstetrics & Gynecology Scand. 761 (2005), https://obgyn.onlinelibrary.wiley.com/doi/pdf/10.1111/j.0001-6349.2005.00728.x (finding "no significant differences in hospital anxiety and depression scales scores for anxiety or depression" between participants who obtained a medication abortion and those who obtained a surgical abortion); F.L. Howie et al., *Medical Abortion or Vacuum Aspiration? Two-Year Follow up of a Patient Preference Trial*, 104 Brit. J. Obstetrics & Gynecology 829 (1997) (finding "no significant differences between women who had undergone [a] medical abortion or [a surgical abortion] two years previously in general, reproductive or psychological health"); Lior Lowenstein et al., *Psychological Distress Symptoms in Women Undergoing Medical vs. Surgical Termination of Pregnancy*, 28 Gen. Hosp. Psychiatry, 43 (2006) (finding that post-procedure women who had either medication or surgical abortions showed a significant decline in anxiety, with no significant symptomatic differences between the two groups); Dorothy Sit et al., *Psychiatric Outcomes Following Medical and Surgical Abortion*, 22 J. Human Reprod. 878 (2007) (studying women post-procedure who obtained either a medication or surgical abortion, this study found that most patients experienced post-procedure "mood improvement").

Research Published 1995-2009, 199 Brit. J. Psychiatry 180, 180-86 (2011)); *see also* Pet. App. 120a, 168a n.40 (citing Katherine A. Rafferty & Tessa Longbons, *#AbortionChangesYou: A Case Study to Understand the Communicative Tensions in Women's Medication Abortion Narratives*, 36 Health Commc'n 1485, 1485-94 (2021)); Pet. App. 123a (David C. Reardon et al., *Deaths Associated with Pregnancy Outcome: A Record Linkage Study of Low Income Women*, 95 S. Med. J. 834, 834-41 (2002)). These articles lack scientific rigor such that their conclusions are unreliable. And the district court misused the articles. For example, the court cited articles unrelated to medication abortion to support claims related to medication abortion.[15] Indeed, each of the articles the district court cited in support of its conclusion about the mental health effects of medication abortion has come under serious negative criticism from the broader scientific community.

First, the Coleman article on which the district court relied has drawn repeated criticism from fellow academics. An independent panel of scientists unanimously called for Coleman's article to be retracted, refuting Coleman's research and questioning her methodology as failing to differentiate mental health problems diagnosed prior to an abortion and those that

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[15] *See generally* Pet. App. 123a-124a citing Reardon et al., *Deaths Associated with Pregnancy Outcome: A Record Linkage Study of Low Income Women*, 95 S. Med. J. at 834-41; Coleman, *Abortion and Mental Health: Quantitative Synthesis and Analysis of Research Published 1995-2009*, 199 Brit. J. Psychiatry at 180-86.

occur after an abortion.[16] In particular, an article by Dr. Julia R. Steinberg and colleagues identified seven fatal errors in Coleman's 2011 meta-analysis: (i) violation of guidelines for conducting meta-analyses; (ii) "not accounting for dependence of effect sizes"; (iii) improper "calculat[ion] [of] population attributable risk factor when not appropriate"; (iv) "not adhering" to the exclusion and inclusion "criteria" outlined in the methods section; (v) "misclassifying the comparison group"; (vi) "adjusting effect sizes for different factors[,]" and (vii) "making invalid inferences regarding the proportion of all births that are unintended."[17]

The article cited by the district court is not Coleman's only abortion-related article to come under scrutiny. In 2009, Coleman published a study examining associations between abortion history and a range of anxiety, mood, and substance abuse disorders.[18] A

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[16] *See* Madlen Davies, *Row Over Medical Journal's Refusal to Retract Paper Used to Restrict Abortion in US Legal Cases*, 382 BMJ 1576 (2023), https://doi.org/10.1136/bmj.p1576 (explaining that a group of scientific researchers wrote to the *British Journal of Psychiatry* to request a retraction of Coleman's 2011 article on the grounds that Coleman's article suffered from "methodological issues that invalidated its conclusions"); *see also* Julia R. Steinberg et al., *Fatal Flaws in a Recent Meta-Analysis on Abortion and Mental Health*, 86 Contraception 430, 430-37 (2012).

[17] *Fatal Flaws in a Recent Meta-Analysis on Abortion and Mental Health*, *supra* note 16, at 431-32.

[18] Priscilla K. Coleman et al., *Induced Abortion and Anxiety, Mood, and Substance Abuse Disorders: Isolating the Effects of Abortion in the National Comorbidity Survey*, 43 J. Psychiatry Rsch. 770 (2009).

refutation of the study's findings prompted a formal inquiry to the editors of the *Journal of Psychiatric Research*,[19] which in turn prompted Coleman and colleagues to prepare a corrigendum indicating that they had used incorrect weights in their original analyses.[20] Scientists then further proved the corrigendum was insufficient as the study involved false statements about the nature of the dependent variables used and the implications of the findings.[21]

More recently, in 2022, Coleman published a critical review of *The Turnaway Study*—one of the most scientifically rigorous studies to investigate the comparative economic and health-related disparities between women who received abortion care and women who were denied access to abortion care. However, Coleman's 2022 review of *The Turnaway Study* has now been formally retracted by the journal in which it was published after the journal, *Frontiers in Psychology*, conducted a post-publication assessment of the article

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[19] *Examining the Association of Abortion History and Current Mental Health: A Reanalysis of the National Comorbidity Survey Using a Common-Risk-Factors Model*, *supra* note 7.

[20] *See* Priscilla K. Coleman et al., Corrigendum to "*Induced Abortion and Anxiety, Mood, and Substance Abuse Disorders: Isolating the Effects of Abortion in the National Comorbidity Survey*," 45 J. Psychiatric Rsch. 1133 (2011).

[21] *See* Julia R. Steinberg & Lawrence B. Finer, *Coleman, Coyle, Shuping, and Rue Make False Statements and Draw Erroneous Conclusions in Analyses of Abortion and Mental Health Using the National Comorbidity Survey*, 46 J. Psychiatric Rsch. 407 (2012).

and concluded that the article did not meet its standards of publication.[22]

Second, the district court relied on an article from Rafferty & Longbons that is deeply flawed in its analysis about the mental health effects of abortion. Rafferty & Longbons' article was based entirely on anonymous blog posts from a website called "abortionchangesyou.com," which is run by the Institute of Reproductive Grief Care, and for which the unit of observation was blog posts and not people.[23] Given this approach, Rafferty & Longbons' article was scientifically flawed, contained an ambiguous sample size (*e.g.*, the same person could have submitted more than one blog post), prone to selection bias (more likely to exclude narratives of people who were not emotionally impacted by abortion), and did not contain sufficient information concerning the methodology used to meet any standards of internal validity.

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[22] *See* Priscilla K. Coleman, *The Turnaway Study: A Case of Self-Correction in Science Upended by Political Motivation and Unvetted Findings*, 13 Front. Psychol. (June 17, 2022), *retracted* (Dec. 26, 2022). The publisher's retraction note explained that "undisclosed competing interests were brought to our attention, which undermined the objective editorial assessment of the article during the peer review process," referencing the fact that the editor of the piece and all four reviewers were associated with anti-abortion organizations.

[23] Katherine A. Rafferty & Tessa Longbons, *#AbortionChangesYou: A Case Study to Understand the Communicative Tensions in Women's Medication Abortion Narratives*, 36 Health Commc'n 1485, 1485-87 (2021) (explaining their decision to focus on abortionchangesyou.com).

Third, the Reardon article relied on by the district court is similarly flawed.[24] The Reardon article sample size was drawn in part from extant studies that were initially conducted for other purposes. The article also improperly relied on sample size subgroups without attention to the differences in reproductive history as a "factor affecting retention in the population sampled."[25] As a result, the data set used in the Reardon article was too affected by selection bias to warrant linking abortion to a higher risk of death, as the article did.

Thus, the district court relied on flawed and widely refuted articles to wrongly conclude that medication abortion negatively affects mental health outcomes. In fact, rigorous scientific studies have shown that having an abortion does not have a negative effect on mental health outcomes. And studies comparing the short-term mental health of those who received abortion care with those who were denied abortion access found that those who were denied abortion access experienced greater symptoms of anxiety and low self-esteem in the immediate aftermath of the denial.

II. Denying Abortions Leads to Negative Socioeconomic and Physical Health Outcomes for Women and Children.

The decisions below emphasize the adverse health effects that may follow a medication abortion, but do not engage with the science indicating that denying abortion care often leads to long-term or short-term negative

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[24] *See APA 2008 Report*, *supra* note 3, at 16-17.

[25] *See id.*

socioeconomic and physical health outcomes for women and children.[26]

The Turnaway Study found that denying a woman an abortion creates economic hardship and insecurity which may last for years.[27] Women who were denied abortion

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[26] Emerging studies indicate that symptoms of anxiety and depression worsened in residents of states with abortion trigger laws compared with individuals who reside in states without such laws after this Court's decision in *Dobbs v. Jackson Women's Health Organization*, 597 U.S. 215 (2022). *See* Benjamin Thornburg et al., *Anxiety and Depression Symptoms After the* Dobbs *Abortion Decision*, 331 JAMA 294, 294 (2024) (finding a "small but significantly greater increase in anxiety and depression symptoms" in residents of states with abortion trigger bans post-*Dobbs*); Sze Yan Liu et al., *The Association Between Reproductive Rights and Access to Abortion Services and Mental Health Among U.S. Women*, 23 SSM Population Health 101428 (2023) (concluding that "abortion rights restrictions may contribute to mental health inequities among women"); Dhaval Dave et al., *Mental Distress Among Female Individuals of Reproductive Age and Reported Barriers to Legal Abortion Following the US Supreme Court Decision to Overturn* Roe v. Wade, 6 JAMA Network Open e234509 (2023) (finding a "statistically significant higher prevalence of mental distress" among women of reproductive age in states restricting abortion rights post-*Dobbs*); Jonathan Zandberg et al., *Association Between State-Level Access to Reproductive Care and Suicide Rates Among Women of Reproductive Age in the United States*, 80 JAMA Psychiatry 127 (2023) (finding that "restrictions on access to reproductive care from 1974 to 2016 were associated with suicide rates among reproductive-aged women").

[27] *The Turnaway Study*, *supra* note 8, at 172-82 (finding that the socioeconomic trajectories of women who were denied wanted abortions when compared to women who received abortions show that women denied abortions face more hardships, accounting for baseline differences).

care and went on to give birth experienced an increase in household poverty lasting at least four years relative to those who received an abortion.[28] And a growing body of empirical research from a health equity perspective indicates that the economic hardships faced by these women are likely felt hardest by those facing pre-existing health disparities based on socioeconomic status, race, age, disability, and immigration status.[29]

Years after being denied an abortion, participants in *The Turnaway Study* were more likely not to have enough money to cover basic living expenses such as food, housing, and transportation.[30] Indeed, one paper found that being denied an abortion resulted in

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[28] *Id.* at 176-77 (finding that women denied a wanted abortion were "more likely to live in poverty … [and] remain significantly more likely to be poor for the next four years"); Diana Greene Foster et al., *Socioeconomic Outcomes of Women Who Receive and Women Who are Denied Wanted Abortions in the United States*, 108 Am. J. Pub. Health 407, 407 (2018) (finding that "[w]omen denied an abortion were more likely than were women who received an abortion to experience economic hardship and insecurity lasting years").

[29] *See* Am. Psych. Ass'n, APA Resolution, *Affirming and Building on APA's History of Support for Reproductive Rights* (Feb. 2022), https://www.apa.org/about/policy/resolution-reproductive-rights.pdf (collecting sources) [hereinafter APA Resolution]. The APA Resolution recognizes that APA's published research, reports, and public interest advocacy have identified a host of health inequities related to cumulative adversity, which do not cause women to have abortions but, rather, exacerbate the harms of being denied such care.

[30] *See The Turnaway Study*, *supra* note 8, at 172-82; APA Resolution, *supra* note 29.

Turnaway Study participants taking on increased amounts of debt, and increased the likelihood that they would face bankruptcies or evictions.[31] That paper linked *Turnaway Study* participants to their credit report data to examine the economic consequences of being denied an abortion and concluded that "women denied an abortion experience a significant increase in financial distress" that is "sustained" for several years.[32] In the short term, the increased debt load was as high as 78% relative to their pre-pregnancy mean, and even as much as five years later these participants faced almost double the level of financial distress than those who were able to access abortion care.[33]

The Turnaway Study also demonstrated that women who were denied an abortion were more likely to experience poor physical health for years after the pregnancy, including chronic pain and gestational hypertension, and to develop serious physical health conditions as a result.[34] In addition, *The Turnaway*

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[31] *See* Sarah Miller et al., *The Economic Consequences of Being Denied an Abortion* (Nat'l Bureau of Econ. Rsch., NBER Working Paper No. 26662, 2020).

[32] *Id.* at 26.

[33] *Id.*

[34] *See generally The Turnaway Study*, *supra* note 8, at 147-49 (explaining that women denied an abortion were more likely to experience gestational hypertension over the five years, which in turn increases the risk of developing cardiovascular disease later in life); Caitlin Gerdts et al., *Side Effects, Physical Health Consequences, and Mortality Associated with Abortion and Birth After An Unwanted Pregnancy*, 26 Women's Health Issues 55, 58 (2015), https://www.whijournal.com/article/S1049-3867(15)00158-

Study found that people who were denied an abortion and carried the pregnancy to term experienced worse physical health outcomes—including two maternal deaths—compared to people who had an abortion.[35] These findings are consistent with other research showing that women in the United States today are more likely to die from giving birth than from having an abortion.[36]

9/fulltext (noting that the results were "consistent with the large body of evidence documenting both the safety of abortion and the higher rates of morbidity and mortality associated with birth" in comparison); Lauren J. Ralph et al., *Self-Reported Physical Health of Women Who Did and Did Not Terminate Pregnancy After Seeking Abortion Services: A Cohort Study*, 171 Annals Internal Med. 238 (2017) (reporting that women who were denied abortions reported more symptoms of chronic pain and gestational hypertension than women who had an abortion).

[35] *The Turnaway Study*, *supra* note 8, at 149-50 (explaining the maternal death rate of about one per 100 women delivering). *See also Self-Reported Physical Health of Women Who Did and Did Not Terminate Pregnancy After Seeking Abortion Services: A Cohort Study*, *supra* note 34 (finding that people who received first- and second-trimester abortions did not appear to have worse long-term physical health than those who did not and "when differences did emerge, they were in the direction of worse health among those giving birth"); Caitlin Gerdts et al., *supra* note 34, at 58 (finding that one maternal death occurred among study participants, underscoring "the reality of an increased risk of death faced by women who are denied abortion services").

[36] *See* Elizabeth G. Raymond & David A. Grimes, *The Comparative Safety of Legal Induced Abortion and Childbirth in the United States*, 119 Obstetrics & Gynecology 215 (2012) (noting that a woman is fourteen times more likely to die by carrying a pregnancy to term than from a legal abortion); *Self-Reported Physical Health*

In short, the results of *The Turnaway Study* are clear: "Women who receive a wanted abortion are more financially stable, set more ambitious goals, raise children under more stable conditions, and are more likely to have a wanted child later."[37]

Further, people denied access to abortion care may turn to ending the pregnancy on their own, often referred to as self-managed abortions. One study found that one in three people accessing facility-based abortion care said they would consider a self-managed abortion if unable to access care at that facility.[38] Another estimated that roughly 7% of women in the United States will attempt a self-managed abortion at some point in their lives.[39]

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of Women Who Did and Did Not Terminate Pregnancy After Seeking Abortion Services: A Cohort Study, *supra* note 34, at 245.

[37] ANSIRH, *The Harms of Denying a Woman a Wanted Abortion: Findings from the Turnaway Study*, Univ. of Cal., S.F., https://www.ansirh.org/sites/default/files/publications/files/the_harms_of_denying_a_woman_a_wanted_abortion_4-16-2020.pdf (last visited Jan. 29, 2024) (emphasis omitted).

[38] *See* Lauren Ralph et al., *A Cross-Sectional Study Examining Consideration of Self-Managed Abortion Among People Seeking Facility-Based Care in the United States*, 19 BMC Reprod. Health 176 (2022).

[39] *See* Lauren Ralph et al., *Prevalence of Self-Managed Abortion Among Women of Reproductive Age in the United States*, 3 JAMA Network Open e2029245 (Dec. 18, 2020), https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2774320; *see also* Daniel Grossman et al., *Self-Induction of Abortion Among Women in the United States*, 18 Reprod. Health Matters 136 (2010), https://www.tandfonline.com/doi/pdf/10.1016/S0968-8080%2810%2936534-7?needAccess=true; Sarah Raifman et al., *"I'll Just Deal*

III. Decades of Scientific Studies Demonstrate that Medication Abortions Are Safe.

The Fifth Circuit's analysis of both the Article III standing requirements and the merits issues raised in these cases turn in large part on the efficacy and safety, or lack thereof, of medication abortion. Analyzing whether the medical organizations satisfied Article III standing, the Fifth Circuit reasoned that the organizations involved were correct to assert that "hundreds" of their members were injured when treating mifepristone patients because a "significant percentage of women who take mifepristone experience adverse effects." Pet. App. 16a-17a. And again in discussing the Food and Drug Administration's ("FDA") actions to expand access to mifepristone usage for abortion care in 2016 and 2021 respectively, the Fifth Circuit reasoned that these actions would cause "more women" to "suffer serious adverse events." Pet. App. 39a.

In fact, decades of empirical scientific evidence refutes this point.[40] As Petitioners explain, the FDA's

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with this on My Own": A Qualitative Exploration of Experiences with Self-Managed Abortion in the United States, 18 Reprod. Health, 91 (2021), https://reproductive-health-journal.biomedcentral.com/articles/10.1186/s12978-021-01142-7; Daniel Grossman & Nisha Verma, *Self-Managed Abortion in the U.S.*, 328 JAMA 1693 (2022).

[40] *See, e.g.*, Daniel Grossman et al., *Effectiveness and Acceptability of Medical Abortion Provided Through Telemedicine*, 2 Obstetrics & Gynecology 118 (2011) (finding that 99% of study participants had a successful abortion); Mary Gatter et al., *Efficacy and Safety of Medical Abortion Using Mifepristone and Buccal Misoprostol Through 63 Days*, 91 Contraception 269 (2015),

2016 and 2021 actions expanding its approval of mifepristone were based on careful review of "clinical trials and other scientific evidence" that indicated mifepristone is extremely safe and effective, and serious complications extremely rare. FDA Pet. 4, 6; *see also id.* at 12, 21-27. The FDA's 2016 action "approved lowering the mifepristone dose from 600 mg to 200 mg and increasing the misoprostol dose from 400 mcg to 800 mcg, changing the misoprostol route of administration from oral to buccal (in the cheek pouch), and extending the approved gestational age from 49 to 70 days." *See* Danco Pet. 6 (U.S. 23-236). In 2021, the FDA temporarily exercised its "enforcement discretion during the COVID-19 public health emergency" to dispense with the requirement that mifepristone must be administered in person. *See id.* at 11.

In making the decision in 2016, the FDA relied on several clinical studies and other data demonstrating that Mifeprex would continue to be safe and effective under the revised conditions, including more than twenty studies in which over 30,000 women used the proposed regimen in gestations through 70 days, for

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https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4373977/#:~:text=Conclusions,low%2C%20and%20hospitalization%20was%20rare (finding that the "need for aspiration for any reason was low, and hospitalization was rare" in "evidence-based regimen of 200 mg of mifepristone orally followed by home use of 800 mcg of buccal misoprostol" taken 24 to 48 hours later); Elizabeth G. Raymond et al., *Efficacy of Misoprostol Alone for First-Trimester Medical Abortion: A Systematic Review*, 133 Obstetrics & Gynecology 137 (2019) (finding that misoprostol alone is effective, safe, and a "reasonable option for women seeking abortion in the first trimester").

which the overall effectiveness rates were in the range of 96% to 98%. Danco Pet. 6-7 (calculating overall effectiveness rate at 97.4%).[41]

The study performed by Dr. Gatter and her colleagues, published in 2015, aimed to report on the safety and efficacy of an evidence-based medical abortion regimen utilizing "200 mg of mifepristone orally followed by home use of 800 mcg buccal misoprostol 24–48 h[ours] later" through 63 days estimated gestational age. The study concluded that "the frequency of hospitalization was rare," and reinforced "the safety and efficacy of the evidence-based regimen for medical abortion."[42] Likewise, a 2018 report from the National Academies of Sciences, Engineering, and Medicine reviewed the scientific evidence on the safety and quality of the four abortion methods used in the U.S. and concluded that "[c]omplications after medication abortion, such as hemorrhage, hospitalization, persistent pain, infection, or prolonged heavy bleeding, are rare—

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[41] *See also* Melissa J. Chen & Mitchell D. Creinin, *Mifepristone with Buccal Misoprostol for Medical Abortion: A Systematic Review*, 126 Obstetrics & Gynecology 12 (2015); Raymond & Grimes, *supra* note 36 (finding that the "mortality rate related to induced abortion was 0.6 deaths per 100,000 abortions" for an estimated gestational age of 63 days); Mary Gatter et al, *supra* note 40 (concluding that a regimen of 200 mg of mifepristone orally followed by home use of 800 mcg of buccal misoprostol taken 24-48 hours later "is safe and effective through 63 days estimated gestational age").

[42] Mary Gatter et al., *supra* note 40.

occurring in no more than a fraction of a percent of patients."[43]

The Fifth Circuit's discussion of the safety of mifepristone largely ignored the wealth of scientific evidence available demonstrating the safety and efficacy of the 2016 changes to the Mifeprex regimen. Indeed, the FDA explained that its 2016 revisions were based on careful review of "clinical trials and other scientific evidence" that indicated mifepristone was safe and effective to terminate pregnancy through seven weeks of gestation. FDA Br. 4; *see also* J.A. 225-232. In particular, the FDA demonstrated that scientific data revealed that "[s]erious adverse events" were "exceedingly rare," and "generally far below 1.0% for any individual [serious] adverse event" in tens of thousands of study participants from the clinical trials supporting those changes. Danco Br. 8 (citing J.A. 474).

Despite this exceedingly low rate of cases with serious complication, the Fifth Circuit reasoned that "FDA and Danco do not dispute that *a significant percentage* of women who take mifepristone experience adverse effects." Pet. App. 17a (emphasis added). That is entirely incorrect. Instead, as both Petitioners asserted, with the support of the scientific literature, the percentage of those who take mifepristone for medication abortions and experience adverse effects was near zero.

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[43] Nat'l Academies of Sciences, Engineering, and Med., *The Safety and Quality of Abortion Care in the United States* 55 (2018) (internal citations omitted).

In sum, decades of peer reviewed, clinical scientific evidence as well as larger more comprehensive reviews of the available clinical data confirm the safety and efficacy of medication abortion.

CONCLUSION

For the foregoing reasons, *amici* respectfully request that this Court reverse the decisions below.

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Respectfully submitted,

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