C. Brent Boles, M.D. Medical Director of the Abortion Pill Reversal Network Heartbeat International

Chairman Lipps, Vice Chair Holmes, Ranking Member Liston, and Members of the House Health Committee - thank you for the opportunity to provide proponent testimony on HB 378. I am Charles Brent Boles, M.D., a 1992 graduate of the University of Louisville School of Medicine and a diplomat of the American Board of Obstetrics and Gynecology since 1998. I was in the private practice of OB/GYN in Kentucky and in Tennessee for 25 years, and now work as an OB/GYN Hospitalist in the state of Florida. During my private practice, I cared for the broad spectrum of women's health issues and was known for providing care for many high risk women that other physicians were reluctant to see. I held academic appointments with the Meharry College of Medicine Department of Obstetrics and Gynecology and with the University of Tennessee School of Medicine Department of Emergency Medicine as well as the University of Tennessee Physician Assistant School. I served as a crisis pregnancy center medical director for thirteen years, and now serve as the Medical Director of the Abortion Pill Reversal Network for Heartbeat International. I have testified before committees in the Tennessee General Assembly on abortion related issues on three occasions, and have served the Attorney General in the state of Tennessee and the Attorney General in the state of Indiana as an expert on the issue of abortion pill reversal.

I now provide this statement in support of the specific portion of HB 378 which requires that the woman contemplating a medication abortion be given "materials designed to inform the pregnant woman of the possibility of reversing the effects of an abortion that utilized mifepristone if she changes her mind." It is a well-known fact that women sometimes experience regret after beginning a medication abortion. The Abortion Pill Rescue Network hotline currently receives more than 300 calls each month from women who have done just that—immediately regretted beginning the abortion process, and have chosen to change their mind about the abortion. At Heartbeat, we respect this choice when it is made and believe that women deserve to be empowered with the information about the availability of abortion pill reversal. This legislation is necessary since those within the abortion industry not only debate the well-established process of reversal, they also are not forthright with patients when asked about the possibility of reversal. As one of more than a thousand volunteer providers of reversal services for these women, I always ask the women who seek our assistance if they asked their abortion provider if reversal was possible. Approximately half of my patients say that they did ask the abortion provider before calling us, and the universal answer they are given is false—they are told that nothing can be done. In refusing to respect the choice that these women make to try to save their babies, the abortion industry denies them potentially life-saving information and disrespects the patient's bodily autonomy because they disagree with the choice these women have made. If abortion providers would simply function as the unbiased supporters of choice they purport to be, this legislation would not be necessary.

To justify their opposition to the reality of successful abortion pill reversal, those within the abortion industry invariably and inaccurately claim that there is no evidence that progesterone can interfere with a mifepristone abortion and that attempts to reverse a mifepristone abortion are dangerous, and that attempts to do so amount to 'experimental treatment.' A brief consideration of the available evidence refutes their position. Mifepristone acts as a reversible blocker of the progesterone receptor, preventing the natural hormone progesterone from exercising its vital life-giving function in pregnancy. Abortion pill reversal can be accomplished through the administration of natural progesterone. There are four avenues of evidence to consider as you evaluate this question.

First, the basic sciences of biochemistry and physiology and pharmacology are taught to all medical students. These subjects, along with anatomy, form the foundation upon which the science and art of medicine stands. Each of these subjects teach various parts of the principles of reversible hormone receptor binding and competition. Multiple examples of the manner in which natural hormones compete with therapeutic hormone receptor blockers to alter the effects of hormone receptor blockade can be found in these sciences.

Second, there is convincing animal data on this subject. More than 30 years ago, a Japanese researcher studied the effect of giving natural progesterone to pregnant rats after they had been given mifepristone. In his study, Dr. Yamabe demonstrated that when pregnant rats were given mifepristone only, 2/3 of the rat embryos were lost. When Yamabe gave mifepristone doses to pregnant rats then followed that with natural progesterone, 100% of the rat embryos survived.

Thirdly, there is convincing human data. In 2018, Dr. George Delgado published the results of an evaluation of more than 500 patients who had desired to attempt reversal and were given one of several different regimens of progesterone administration. The overall results were that progesterone administration doubled the embryonic and fetal rates of survival when compared to historical controls, and the best results were from the regimen known as the 'high dose oral regimen'. An evaluation of abortion industry data shows that when women take mifepristone but do not take the misoprostol and are not given progesterone, the best estimate of embryonic and fetal survival is in the range of 12-15 percent. The high dose oral regimen achieves a 68% embryonic/fetal survival rate, with no increase in adverse effects for the child and no evidence that there is any danger to the mother. It is this high dose oral regimen that is used by Heartbeat International volunteer reversal providers. Abortion supporters point to an article by Dr. Creinin to say that attempts to reverse mifepristone abortion with progesterone endanger women, but this is an inaccurate conclusion not supported by objective analysis of his results. In his prematurely halted study, the only women who required emergency treatment with either transfusion of blood products or surgery or both were women who were given mifepristone but were not given progesterone. Not only did the group of women given mifepristone followed by progesterone have no patient who required transfusion or surgery, 80% of those women demonstrated embryonic/fetal survival. The numbers in this study were small, but if any conclusion is to be drawn from the data, it is not that attempts to reverse mifepristone abortion with progesterone are dangerous to women. It is that reversal is both safe and effective. Additionally, the American College of Obstetricians and Gynecologists warned abortion providers against beginning birth control methods that utilize progesterone for contraception on the same day as mifepristone administration. The study they cited in ACOG Practice Bulletin #225 demonstrates that when a form of progesterone known as Depo Provera is given for birth control on the same day as mifepristone administration, the 'risk' of embryonic/fetal survival is quadrupled.

Finally, there is the human experience that supports the concept of reversal. The first known successful baby delivered after the mother was treated with progesterone will celebrate her 18^{th} birthday in 2022, and thousands of successful reversal babies have been delivered since then. There is also the human experience evidenced by the willingness of more than 1,000 reversal providers across the country to provide their time and expertise free of charge to the women who take mifepristone and then choose to change their mind about the abortion process. Like many of my colleagues across the country, I have delivered babies whose mothers I treated with progesterone to reverse the effects of the mifepristone they have been given.

I urge the committee to objectively consider the available evidence and to approve HB 378 so that women who make the choice to change their mind about the mifepristone abortion process will have that choice, and their autonomy, respected by those within the abortion industry who currently resist sharing this information with these patients.

Most sincerely and respectfully yours,

C Bren Boles

Charles Brent Boles, M.D. Medical Director of the Abortion Pill Reversal Network