Testimony of Matthew Harrison, M.D. to House Health and Human Services Committee

February 20, 2019

Madam Chairwoman, Members of the House Health and Human Services Committee, I am Dr. Matthew Harrison and I am here to ask for your support of **HB 2274**.

Abortion Pill Reversal is supported by real science and is **SAFE** and **EFFECTIVE**, and proper informed consent is **NECESSARY** for women to understand that a second chance is available. I hope that my credentials will convince you that I am not a peddler of "junk science."

Abortion Pill Reversal is SAFE

- Progesterone is a bioidentical, natural hormone, which is FDA approved Category B safe for pregnant women, in the same category as Tylenol. It has been used for 50 years in fertility care for pregnant women, and is deemed safe and effective (1).
- In our case study of over 500 women using progesterone, we have had a birth defect rate of less than or equal to the national average of 3%. These are mainly minor issues such as birthmarks.
- The main side effect reported with injected progesterone use is pain at site of injection.
- The unsafe medications involve the two pills used for abortion. Mifepristone causes death and the second pill, misoprostol, can cause facial nerve paralysis and limb abnormalities if the fetus survives (2). Under our protocol, the second pill has not been taken, and children that survive the abortion pill show no other birth defects (3).

Abortion Pill Reversal is EFFECTIVE

- Mifepristone, the abortion pill, is a progesterone receptor antagonist. It blocks the action of progesterone by blocking the receptor. This prevents the formation of healthy blood vessels to the developing embryo and the mother's body is tricked into thinking there is no progesterone. The lining of the uterus sloughs off just like in a normal menstrual cycle and the embryo dies. The second pill is taken 24-48 hours later and induces contractions, expelling the embryo (4). Mifepristone is like a key that fits into a lock but cannot open it. By adding more functional keys, we are able to outcompete the mifepristone and turn the lock, activate the progesterone receptor, and sustain the life of the embryo.
- Animal models have shown that the effects of mifepristone on rats are reversed and nullified by progesterone supplementation (5).
- Our initial case study published in 2012 had a 67% successful reversal rate with 6 cases (6). An Australian study just published had similar results (7). Our next series that was published in April 2018 (12) had 547 patients with an overall reversal success rate of 48% but 68% success rate with high dose oral progesterone and 64% with injectable progesterone through first trimester. This is in comparison to 23.3% at best if nothing is done after ingesting the abortion pill (8). To date, we have seen over 500 babies born healthy with another 100 mothers currently pregnant and going through the protocol. We have over 400 providers available for reversals and we have assisted with reversals in 15 countries and are backed by the 2500 member AAPLOG. Since Heartbeat International has taken over the Hotline, we now have a much further reach since they have affiliations with over 2500 pregnancy care centers and many more countries.

- Even the pro-choice director of the reproductive and placental research unit at Yale School of Medicine, Dr. Harvey Kliman, said, "I think this is actually totally feasible…I bet you it would work," and said that he would give his daughter progesterone if she wanted to reverse her abortion (9).

HB 2274 is NECESSARY

- Women that regret their abortions and have returned to the clinics have been given incorrect and unscientific answers when asked if there is anything to be done to save their babies. They have been coerced into completing their abortions with scare tactics that their babies will be malformed or developmentally delayed without any evidence of these results. Even mothers who have not been successful with reversal have expressed gratitude and relief that they tried to save their children. Without **HB 2274**, abortion providers will continue to provide false information and delay or prevent potentially life-saving treatments.

One of the main attacks on this science is from physicians saying that if a woman takes the first pill but not the second one that induces labor, that the chance of failed abortion is between 20%-50%. I have coauthored a paper with Dr. Mary Davenport that carefully reviews the literature regarding pregnancy termination by mifepristone alone (8). We reviewed hundreds of papers to find out the true survival rate of embryos after exposure to the abortion pill without exposure to the labor inducing pill. Our review shows that the true survival rate of embryos to be between 10% and 23.3% when they are only exposed to the abortion pill at the common 200mg dose. This is significantly lower than the 55%-68% survival rate that we see after progesterone rescue. So where are their 50% failed abortion rates coming from? In the literature sited by opponents, they define "failed abortion" as the failure of the mother to expel a dead embryo or fetus. So, many of the "failed abortions" actually have resulted in a dead embryo, but it has remained in the uterus and was not expelled when the labor inducing pill was not taken.

A salient point to remember is that the same physicians that seem to be upset about using progesterone "off label" are the same physicians that used the abortion pill "off label" for years! Mifepristone was approved for use in America in the year 2000 at the dose of 600mg and up to 49 days gestation. But shortly thereafter, doctors realized that the 600mg dose was more expensive and caused more side effects so they decreased the dose to 200mg and they also expanded the gestational age to 70 days. This "off label" use of progesterone was not approved by the FDA until 16 years later. Recently, I was contacted by a patient who was given the abortion pill at 13 weeks gestation, so they continue to push the boundaries of "off label" use.

Again, I appreciate your concern for the women of Kansas and their children. I think we should trust women when they say they regret their mistakes and are asking for help, and **HB 2274** offers this help.

Thank you, Madam Chairwoman and members of the House Health and Human Services Committee, I will be happy to follow up with you on any questions you may have.

Credentials:

- B.S. Biology/M.A. Biology - The College of William and Mary
- Post graduate research at Johns Hopkins, Duke, Medical College of Virginia
- Coauthored 3 peer-reviewed journals (8), (10), (11)
- Doctorate Allopathic Medicine M.D. – The Medical College of Virginia
- Chief Resident – Family Medicine Residency Program – University of South Alabama
- Board Certified Diplomate – American Academy of Family Practice
- Full Time Hospitalist – Novanthealth Rowan Regional Medical Center, maintaining admitting privileges at 3 hospitals and active medical license in North Carolina and Virginia
- Assistant Professor – Campbell School of Osteopathic Medicine
- Medical Director – Student Health Center Belmont Abbey College
- Medical Director – Stanton Women' Center, Charlotte, NC
- Medical Director – HELP Crisis Pregnancy Center Medical Clinic
- Assistant Medical Director – Abortion Pill Reversal

1. **The use of isomolecular progesterone in the support of pregnancy and fetal safety,** Thomas W. Hilgers, Catherine E. Keefe, Kristina A Pakiz, *Issues in Law and Medicine* , 2015.
2. **Use of Misoprostol during Pregnancy and Moebius Syndrome in Infants,** A. Patuszak, L. Schuler, C. Speck-Martins, K. Coelho, et al. *The New England Journal of Medicine* , June 1998.
3. **Continuation of pregnancy after first-trimester exposure to mifepristone: an observational prospective study,** N Bernard, E. Elefant, P Carlier, M Tebacher, CE Barjhoux, MA Bod-Thompson, E Amar, J Descotes, T Vial, *BJOG: An International Journal of Obstetrics & Gynecology,* April 2013.
4. **RU486 (mifepristone): mechanisms of action and clinical uses.** Cadepond, F. et al. *Annu Rev Med.* 1997.
5. **The effect of RU486 and progesterone on luteal function during pregnancy,** Yamabe, S; Katayama, K; Mochizuki, M, *Nihon Naibunpi Gakkai Zasshi.* May 1989.
6. **Progesterone Use to Reverse the Effects of Mifepristone,** George Delgado, Mary L. Davenport, *The Annals of Pharmacotherapy,* Dec. 2012.
7. **Progesterone for preventing pregnancy termination after initiation of medical abortion with mifepristone,** Deborah Garratt, Joseph V. Turner, *The European Journal of Contraception & Reproductive Health Care.* Dec 2017.
8. **Embryo survival after mifepristone: a systematic review of the literature** , M Davenport, G Delgado, MP Harrison, V Khauv, *Issues in Law and Medicine* , 2017.
9. **A New Front in the War Over Reproductive Rights: 'Abortion-Pill Reversal,'** Ruth Graham, *The New Your Times Magazine* , July 2017.
10. **Red blood cell methotrexate and folate levels in children with acute lymphoblastic leukemia undergoing therapy: a Pediatric Oncology Group pilot study** , Michael L Graham, Jonathan J. Shuster, Barton A. Kamen, David L. Cheo, Matthew P. Harrison, Brigid G. Leventhal, D. Jeanetter Pullen, V. Michael Whitehead, *Cancer Chemotherapy and Pharmacology* , May 1992.

11. **Immunohistochemical localization of the neural cannabinoid receptor in rat brain** , Denise A. Dove Pettit, Matthew P. Harrison, John M. Olsen, Robert F. Spencer, Guy A. Cabral, *Journal of Neuroscience Research* , Feb 1998.

12. **A Case Series Detailing the Successful Reversal of the Effects of Mifepristone Using Progesterone** , George Delgado, M.D., Steven J. Condly, Ph.D, Mary Davenport, M.D., M.S., Thidarat Tinnakornsrisuphap, Ph.D., Jonathan Mack, Ph.D., N.P, R.N., Veronica Khauv, B.S., Paul Zhou, *Issues in Law and Medicine* . April 2018.