Each year, about 145,000 women obtain a legal abortion after 12 weeks gestation in the United States. Ninety-eight percent of these second trimester abortions are performed by dilation and evacuation (D&E). Adequately preparing the cervix before D&E improves safety by reducing the likelihood of complication. The best method for cervical preparation in the second trimester is unknown. Current ripening agents include prostaglandins, such as misoprostol, and dilators such as laminaria, Lamicel®, and Dilapan™. Misoprostol, Lamicel®, and Dilapan-S™ are fast acting, condensing cervical ripening and the abortion procedure into one day of care.

There have been few studies of Dilapan in second trimester D&E’s and the efficacy of misoprostol for cervical ripening in the second trimester is unclear, even though both agents are routinely used in practice. To our knowledge, no studies to date have compared same day misoprostol to same day Dilapan-S™ for cervical ripening prior to second trimester D&E. Since it is unknown which agent is better, a randomized controlled trial to determine the most effective ripening agent in same day second trimester D&E’s is necessary. This study was a randomized, double-blinded, placebo-controlled trial. One hundred and twenty five subjects were randomly assigned to receive either misoprostol 400 micrograms buccally or one to two 4 millimeter Dilapan-S™ rod(s) three to four hours before dilation and evacuation. Our primary outcome was level of preoperative dilation. Secondary outcomes included ease of further mechanical dilation, procedure time, complication rates, and patient pain and satisfaction. Enrollment in this study is complete, and data analyses are ongoing.

The results of this randomized controlled study are expected to provide those clinicians who currently perform same day D&E’s at 12 to 15 weeks evidence to guide their choice of the most efficacious cervical preparation method. Furthermore, the rigor of this study may prompt more abortion providers to expand their practice to include same day second trimester procedures, if they are not already. We plan to present the results of this study at a national conference in reproductive health and to publish the results in a peer-reviewed scientific journal. The dissemination of this data may have profound implications in the improvement of second trimester abortion access throughout the world.