EFFECTIVENESS AND SAFETY OF MISOPROSTOL-ONLY FOR FIRST-TRIMESTER MEDICATION ABORTION: AN UPDATED SYSTEMATIC REVIEW AND META-ANALYSIS

The evidence establishing the high effectiveness and safety of a regimen combining mifepristone and misoprostol for first-trimester medication abortion is extensive and robust and the use of these two medicines for this purpose has expanded greatly over the past few decades. However, for many people seeking abortion, mifepristone is not always available or accessible. In the absence of mifepristone, use of misoprostol alone is a recommended treatment option.

Gynuity Health Projects conducted a systematic review and meta-analysis of available data on the effectiveness and safety of misoprostol-only for medication abortion in the first 12 weeks of gestation. This latest study updates our prior review published in 2019.

The updated review and analysis shows that most individuals had complete abortion without a procedure or medications beyond the planned misoprostol regimen. It continues to support the key conclusion from our previous study that misoprostol-only is effective and safe for early medication abortion and is a reasonable alternative if obtaining mifepristone is not feasible.

Key Findings

- Data were collected and analyzed from 49 published papers. A total of 66 trial groups of patients treated with various misoprostol-only regimens were recorded.
- Abortion outcomes were established for 16,354 people—93% of the total treated population.
- Overall, 2,960 individuals experienced treatment failure (meta-analytic estimate: 15%).
- Some 521 ongoing pregnancies were recorded in the 9,228 patients assessed for that condition (meta-analytic estimate: 6%).
- Among 11,007 patients allowed to take at least three misoprostol doses, the first consisting of misoprostol 800 mcg administered vaginally, sublingually, or buccally, the meta-analytic estimate of the failure risk was 11%.
- Very few people were hospitalized for abortion-related reasons or received transfusions—at most 0.2% of the 15,679 evaluable patients.


Note Medication abortion with mifepristone and misoprostol has indisputable advantages over using misoprostol only and is generally recognized as more efficacious. Policymakers should advocate for greater access to mifepristone.