Methodological Limitations Undermine the Safety and Effectiveness Conclusion

Averbach, et al. conclude that medication abortion (MAB) provided by advanced practice clinicians (APCs) is non-inferior to physician-provided care with respect to safety and effectiveness. However, several methodological flaws undermine this conclusion.

The primary limitation is missing outcome data for 38% of patients. The authors relied on statistical imputation to estimate outcomes for this large subset. The validity of an imputation model depends entirely on the accuracy of assumptions regarding the missing data mechanisms. If these assumptions are flawed, safety and effectiveness estimates become heavily biased. Crucially, the authors provide no empirical evidence validating these assumptions. It is highly probable that patients experiencing complications or treatment failures constitute much of this missing cohort, as women facing complications are likely to seek emergency department care and not complete standard study follow-up.

Furthermore, comparative outcomes for women lost to follow-up after MAB are unknown. A recent conference abstract[1] investigated outcomes among patients lost to follow up after MAB. Despite five additional contact attempts, researchers reached fewer than half of the 35% without follow-up. They calculated effectiveness using only this smaller, reachable subgroup and assumed the entire missing cohort shared identical outcomes. This assumption is empirically unsupported. Outcomes among reachable patients cannot establish outcomes for individuals who never provide follow-up data.

Because Averbach, et al. rely heavily on statistical imputation rather than observed clinical outcomes, their non-inferiority conclusion risks severe attrition bias, and must be interpreted with considerable caution.

Additionally, women with complications after MAB typically present to an emergency department for necessary care. A 2025 peer-reviewed study[2] analyzing CMS data found that 83.8% of MAB-related visits within 30 days were miscoded, resulting in misattribution of MAB-related complications to miscarriage. In these situations, abortion providers remain unaware of significant adverse events. It is highly probable that many such women are represented within the missing data group.

A second limitation is that the study failed to achieve its prespecified enrollment target required for the planned statistical power. Nevertheless, the authors conclude that non-inferiority was demonstrated. This inconsistency between the reported sample size limitations and the study conclusions requires clarification.

Finally, despite pre-treatment ultrasound confirming gestational age under 77 days, Table 1 reveals that an estimated 7–10% of patients with documented follow-up did not achieve effectiveness. The authors do not report how many patients required additional misoprostol vs. procedural abortion, nor how this responsibility was fulfilled within the APC model of care. Regardless of the clinician's professional designation, clinicians who prescribe MAB have a professional and ethical obligation to ensure appropriate management of complications of drugs they prescribe.

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[1] Koenig LR, Glidden D, Ko J, Upadhyay UD. Improving Estimates of Medication Abortion Effectiveness: The Impact of Loss to Follow-Up. Contraception 2023; 127:110155 Abstract 009. doi:10.1016/j.contraception.2023.110155

[2] Studnicki J, Fisher JW, Cox TL, Cirucci CA, Reardon DC, et al. Determining the Period Prevalence and Acuity of Emergency Department Visits Following Induced Abortion Mistakenly Identified as Spontaneous Abortion: An Analytic Observational Prospective Cohort Study. J Family Med Prim Care Open Acc (2025) 9:282. https://doi.org/10.2011/2688-7460.100282