

COMPENDIUM: MEDICATION ABORTION USING MIFEPRISTONE AND MISOPROSTOL

Gynuity Health Projects has dedicated two decades developing evidence in support of safe abortion access. This compendium includes a sample collection of our published research relating to the use of medication abortion with mifepristone and misoprostol. Our studies, undertaken in collaboration with partners, help advance knowledge and inform decisions or shifts in policies and practice. Like the studies from fellow reputable scientists working in this space, our studies adhere to strict standards and the resulting papers are subject to an independent peer-review before publication in scientific journals.

2023

[An Examination of Loss to Follow-up and Potential Bias in Outcome Ascertainment in a Study of Direct-To-Patient Telemedicine Abortion in the United States](#) Rosenberg JD, Raymond EG, Shochet T; Contraception.

[Mailing Abortion Pills Does Not Delay Care: A Cohort Study Comparing Mailed to In-Person Dispensing of Abortion Medications in the United States](#) Koenig LR, Raymond EG, Gold M, Boraas CM, Kaneshiro B, Winikoff B, Coplon L, Upadhyay UD; Contraception.

[Telemedicine Medical Abortion Service in Georgia: An Evaluation of a Strategy with Reduced Number of In-Clinic Visits](#) Tsereteli N, Mamatsashvili L, Tsertsvadze G, Tsereteli T, Platais I; Eur J Contracept Reprod Health Care.

2022

[Person-Centered, High-Quality Care from a Distance: A Qualitative Study of Patient Experiences of TelAbortion, a Model for Direct-To-Patient Medication Abortion by Mail in the United States](#) Kerestes C, Delafield R, Elia J, Shochet T, Kaneshiro B, Soon R; Perspect Sex Reprod Health.

[Telemedicine for Medical Abortion Service Provision in Mexico: A Safety, Feasibility, and Acceptability Study](#) Peña M, Flores KF, Ponce MM, Serafín DF, Zavala AM, Cruz CR, Salgado IG, Rosado YO, Socarras T, López AP, Bousiéguez M; Contraception.

[Medical Abortion via Telemedicine for Women and Adolescents: Experience from Moldova](#) Comendant R, Cook C, Hodorocea S, Sagaidac I, Bubulici C, Platais I; Reproductive, Female and Child Health.

[Outcomes and Safety of History-Based Screening for Medication Abortion: A Retrospective Multicenter Cohort Study](#) Upadhyay UD, Raymond EG, Koenig LR, Coplon L, Gold M, Kaneshiro B, Boraas CM, Winikoff B; JAMA Intern Med.

2021

[Clinical and Service Delivery Implications of Omitting Ultrasound Before Medication Abortion Provided via Direct-to-Patient Telemedicine and Mail in the U.S.](#) Anger HA, Raymond EG, Grant M, Haskell S, Boraas C, Tocce K, Banks J, Coplon L, Shochet T, Platais I, Winikoff B; Contraception.

[Special Issue on the Mifepristone Risk Evaluation and Mitigation Strategy \(REMS\)](#) Guest Editors: Cleland K, Foster A, Gomez A, Raymond E; Contraception.

[“False Positive” Urine Pregnancy Test Results After Successful Medication Abortion](#) Raymond EG, Anger HA, Chong E, Haskell S, Grant M, Boraas C, Tocce K, Banks J, Kaneshiro B, Baldwin MK, Coplon L, Bednarek P, Shochet T, Platais I; Contraception.

[Provision of Medication Abortion in Hawai‘i During COVID-19: Practical Experience with Multiple Care Delivery Models](#) Kerestes C, Murayama S, Tyson J, Natavio M, Seamon E, Raidoo S, Lacar L, Bowen E, Soon R, Platais I, Kaneshiro B, Stowers P; Contraception.

[Expansion of a Direct-To-Patient Telemedicine Abortion Service in the United States and Experience During the COVID-19 Pandemic](#) Chong E, Shochet T, Raymond EG, Platais I, Anger HA, Raidoo S, Soon R, Grant MS, Haskell S, Tocce K, Baldwin MK, Boraas CM, Bednarek PH, Banks J, Coplon L, Thompson F, Priegue E, Winikoff B; Contraception.

2020

[A Repeat Dose of Misoprostol 800 mcg Following Mifepristone for Outpatient Medical Abortion at 64-70 and 71-77 Days of Gestation: A Retrospective Chart Review](#) Dzuba IG, Castillo PW, Bousiéguez M, Lugo Hernández EM, Castañeda Vivar JJ, Sanhueza Smith P; Contraception.

[Commentary: “No-Test” Medication Abortion: A Sample Protocol for Increasing Access During a Pandemic and Beyond](#) Raymond EG, Grossman D, Mark A, Upadhyay UD, Dean G, Creinin MD, Coplon L, Perritt J, Atrio JM, Taylor D, Gold M; Contraception.

[A Non-inferiority Study of Outpatient Mifepristone-Misoprostol Medical Abortion at 64–70 Days and 71–77 Days of Gestation](#) Dzuba IG, Chong E, Hannum C, Lichtenberg ES, Lugo Hernández EM, Ngoc NTN, Patel A, Rzayeva G, Sanhueza Smith P, Tsertsvadze G, Winikoff B; Contraception.

2019

[TelAbortion: Evaluation of a Direct to Patient Telemedicine Abortion Service in the United States](#) Raymond E, Chong E, Winikoff B, Platais I, Mary M, Lotarevich T, Castillo PW, Kaneshiro B, Tschann T, Fontanilla T, Baldwin M, Schnyer A, Coplon L, Mathieu N, Bednarek P, Keady M, Priegue E; Contraception.

2018

[Low-Sensitivity Urine Pregnancy Testing to Assess Medical Abortion Outcome: A Systematic Review](#) Raymond EG, Shochet T, Bracken H; Contraception.

[Self-Assessment of Medical Abortion Outcome Using Symptoms and Home Pregnancy Testing](#) Raymond EG, Tan YL, Grant M, Benavides E, Reis M, Sacks DN, Hannum C, Frapp S, Weaver MA; Contraception.

[Exploring the Feasibility of Obtaining Mifepristone and Misoprostol from the Internet](#) Murtagh C, Wells E, Raymond E, Coeytaux F, Winikoff B; Contraception.

[Simplified Medical Abortion Screening: A Demonstration Project](#) Raymond EG, Tan YL, Comendant R, Sagaidac I, Hodorozea S, Grant M, Sanhueza P, Van Pratt E, Gillespie G, Boraas C, Weaver MA; Contraception.

[A Direct-to-Patient Telemedicine Abortion Service in Australia: Retrospective Analysis of the First 18 Months](#) Hyland P, Raymond EG, Chong E; ANZJOG.

2017

[Serial Multilevel Urine Pregnancy Testing to Assess Medical Abortion Outcome: A Meta-Analysis](#) Raymond EG, Shochet T, Blum J, Sheldon WR, Platais I, Bracken H, Dabash R, Weaver MA, Ngoc NTN, Blumenthal PD, Winikoff B; Contraception.

[Sixteen Years of Overregulation: Time to Unburden Mifeprex](#) Raymond EG, Blanchard K, Blumenthal PD, Cleland K, Foster AM, Gold M, Grossman D, Pendergast MK, Westhoff CL, Winikoff B; New England Journal of Medicine.

2016

[Effects of Depot Medroxyprogesterone Acetate Injection Timing on Medical Abortion Efficacy and Repeat Pregnancy](#) Raymond EG, Weaver MA, Louie KS, Tan YL, Bousiéguéz M, Aranguré-Peraza AG, Lugo-Hernández EM, Sanhueza P, Goldberg AB, Culwell KR, Kaplan C, Memmel L, Sonalkar S, Jamshidi R, Winikoff B; Obstet Gynecol.

[Prospective Study of Home Use of Mifepristone and Misoprostol for Medical Abortion up to 10 Weeks of Pregnancy in Kazakhstan](#) Platais I, Tsereteli T, Grebennikova G, Lotarevich T, Winikoff B; Int J Gynaecol Obstet.

[Randomized Trial Assessing Home Use of Two Pregnancy Tests for Determining Early Medical Abortion Outcomes at 3, 7, and 14 Days After Mifepristone](#) Blum J, Sheldon WR, Ngoc NT, Winikoff B, Nga NTN, Martin R, Van Thanh L, Blumenthal PD; Contraception.

[Self-Administered Multi-Level Pregnancy Tests in Simplified Follow-up of Medical Abortion in Tunisia](#) Dabash R, Shochet T, Hajri S, Chelli H, Hassairi AE, Haleb D, Labassi H, Sfar E, Temimi F, Koenig L, Winikoff B; BMC Women's Health.

[Acceptability and Feasibility of 400 µg Buccal Misoprostol After 200 mg Mifepristone for Early Medical Abortion in Georgia](#) Tsereteli T, Chong E, Louie K, Bokhua Z, Winikoff B; Eur J Contracept Reprod Health Care.

[Increasing Access to Abortion with Telemedicine](#) Raymond EG, Chong E, Hyland P; JAMA Intern Med.

[Effect of Immediate Compared with Delayed Insertion of Etonogestrel Implants on Medical Abortion Efficacy and Repeat Pregnancy: A Randomized Controlled Trial](#) Raymond EG, Weaver MA, Tan YL, Louie KS, Bousiéguéz M, Lugo-Hernández EM, Aranguré-Peraza AG, Sanhueza P, Kaplan C, Sonalkar S, Goldberg AB, Culwell KR, Memmel L, Jamshidi R, Winikoff B; Obstet Gynecol.

2015

[Outpatient Medical Abortion is Safe and Effective Through 70 Days Gestation](#) Abbas D, Chong E, Raymond EG; Contraception.

[A Prospective, Non-Randomized Study of Home-Use of Mifepristone for Medical Abortion in the U.S.](#) Chong E, Frye LJ, Castle J, Dean G, Kuehl L, Winikoff B; Contraception.

[Off-Label Indications for Mifepristone in Gynecology and Obstetrics](#) Dzuba IG, Grossman D, Schreiber CA; Contraception.

[Mifepristone Label Laws and Trends in Use: Recent Experiences in Four U.S. States](#) Sheldon WR, Winikoff B; Contraception.

[Early Medical Abortion Without Prior Ultrasound](#) Raymond EG, Bracken H; Contraception.

[A Prospective Open-Label Study of Home Use of Mifepristone for Medical Abortion in Nepal](#) Conkling K, Karki C, Tuladhar H, Bracken H, Winikoff B; Int J Gynaecol Obstet.

[Safety, Efficacy and Acceptability of Outpatient Mifepristone-Misoprostol Medical Abortion Through 70 Days Since Last Menstrual Period in Public Sector Facilities in Mexico City](#) Sanhueza Smith P, Peña M, Dzuba IG, García Martínez LG, Aranguré Peraza AG, Bousiéguéz M, Shochet T, Winikoff B; Reprod Health Matters.

[The Introduction of First Trimester Medical Abortion in Armenia](#) Louie KS, Chong E, Tsereteli T, Avagyan G, Vardanyan S, Winikoff B; Reprod Health Matters.

[Acceptability and Feasibility of Phone Follow-up with a Semiquantitative Urine Pregnancy Test After Medical Abortion in Moldova and Uzbekistan](#) Platais I, Tsereteli T, Comendant R, Kurbanbekova D, Winikoff B; Contraception.

2014

[Acceptability and Feasibility of Mifepristone Medical Abortion in the Early First Trimester in Azerbaijan](#) Louie KS, Tsereteli T, Chong E, Aliyeva F, Rzayeva G, Winikoff B; Eur J Contracept Reprod Health Care.

[Efficacy and Acceptability of a Mifepristone-Misoprostol Combined Regimen for Early Induced Abortion Among Women in Mexico City](#) Peña M, Dzuba IG, Sanhueza Smith P, Mendoza LJ, Bousiéguéz M, Martínez ML, Polanco RR, Villalón AE, Winikoff B; Int J Gynaecol Obstet.

[Acceptability and Feasibility of Medical Abortion with Mifepristone and Misoprostol in Nigeria](#) Okonofua F, Shittu O, Shochet T, Diop A, Winikoff B; Int J Gynaecol Obstet.

2013

[Acceptability and Feasibility of the Use of 400 µg of Sublingual Misoprostol After Mifepristone for Medical Abortion Up to 63 Days Since the Last Menstrual Period: Evidence From Uzbekistan](#) Raghavan S, Tsereteli T, Kamilov A, Kurbanbekova D, Yusupov D, Kasimova F, Jymagylova D, Winikoff B; Eur J Contracept Reprod Health Care.

[A Two-Pill Sublingual Misoprostol Outpatient Regimen Following Mifepristone for Medical Abortion Through 70 Days' LMP: A Prospective Comparative Open-Label Trial](#) Bracken H, Dabash R, Tsertsvadze G, Posohova S, Shah M, Hajri S, Mundle S, Chelli H, Zeramdini D, Tsereteli T, Platais I, Winikoff B; Contraception.

[Medical Abortion: A Path to Safe, High-Quality Abortion Care in Latin America and the Caribbean](#) Dzuba IG, Winikoff B, Peña M; Eur J Contracept Reprod Health Care.

[Prophylactic Compared with Therapeutic Ibuprofen Analgesia in First-Trimester Medical Abortion](#) Raymond EG, Weaver MA, Louie KS, Dean G, Porsch L, Lichtenberg ES, Ali R, Arnesen M; Obstet Gynecol.

[Acceptability of Home Use of Mifepristone for Medical Abortion](#) Swica Y, Chong E, Middleton T, Prine L, Gold M, Schreiber CA, Winikoff B; Contraception.

[Acceptability and Feasibility of Mifepristone-Misoprostol for Menstrual Regulation in Bangladesh](#) Alam A, Bracken H, Johnston HB, Raghavan S, Islam N, Winikoff B, Reichenbach L; Int Perspect Sex Reprod Health.

[Efficacy and Acceptability of Early Mifepristone-Misoprostol Medical Abortion in Ukraine: Results of Two Clinical Trials](#) Raghavan S, Maistruk G, Shochet T, Bannikov V, Posohova S, Zhuk S, Lishchuk V, Winikoff B; Eur J Contracept Reprod Health Care.

[Simplified Medical Abortion Using a Semi-Quantitative Pregnancy Test for Home-Based Follow-Up](#) Lynd K, Blum J., Ngoc NTN, Shochet T, Blumenthal PD, Winikoff B; Int J Gynaecol Obstet.

[First-Trimester Medical Abortion with Mifepristone 200 mg and Misoprostol: A Systematic Review](#) Raymond EG, Shannon C, Weaver MA, Winikoff B; Contraception.

2012

[Extending Outpatient Medical Abortion Services Through 70 Days of Gestational Age](#) Winikoff B, Dzuba IG, Chong E, Goldberg AB, Lichtenberg ES, Ball C, Dean G, Sacks D, Crowden WA, Swica Y; Obstetrics and Gynecology.

[Use of Medicines Changing the Face of Abortion](#) Winikoff B, Sheldon W; International Perspectives on Sexual and Reproductive Health.

[A Randomized Controlled Trial of Different Buccal Misoprostol Doses in Mifepristone Medical Abortion](#) Chong E, Tsereteli T, Nguyen NTN, Winikoff B; Contraception.

[Comparison of Misoprostol-Only and Combined Mifepristone–Misoprostol Regimens for Home-Based Early Medical Abortion in Tunisia and Vietnam](#) Blum J, Raghavan S, Dabash R, Ngoc NTN, Chelli H, Hajri S, Conkling K, Winikoff B; Int J Gynaecol Obstet.

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[Clinic-Level Introduction of Medical Abortion in Vietnam](#) Raghavan S, Ngoc NTN, Shochet T, Winikoff B; Int J Gynaecol Obstet.

[Abortion: What is the Problem?](#) Winikoff B, Sheldon W; The Lancet.

[The Comparative Safety of Legal Induced Abortion and Childbirth in the United States](#) Raymond EG, Grimes DA; Obstetrics and Gynecology.

2011

[Review of the Literature on Patient Satisfaction with Early Medical Abortion Using Mifepristone and Misoprostol](#) Swica Y, Raghavan S, Bracken H, Dabash R, Winikoff B; Expert Rev Obstet Gynecol.

[Comparing Two Early Medical Abortion Regimens: Mifepristone+Misoprostol vs Misoprostol Alone](#) Ngoc NTN, Blum J, Raghavan S, Nga NTB, Dabash R, Diop A, Winikoff B; Contraception.

[Medical Abortion for Adolescents](#) Grimes DA, Raymond EG; BMJ.

[Introduction and Provision of Medical Abortion: A Tale of Two Countries in Which Technology Is Necessary but Not Sufficient](#) Winikoff B, Hassoun D, Bracken H; Contraception.

[Alternatives to Routine Ultrasound for Eligibility Assessment Prior to Early Termination of Pregnancy With Mifepristone–Misoprostol](#) Bracken H, Clark W, Lichtenberg ES, Schweikert SM, Tanenhaus J, Barajas A, Alpert L, Winikoff B; BJOG.

2010

[Comparison of 400 mcg Buccal and 400 mcg Sublingual Misoprostol After Mifepristone Medical Abortion Through 63 Days' LMP: A Randomized Controlled Trial](#) Raghavan S, Comendant R, Digol I, Ungureanu S, Dondiu C, Turcanu S, Winikoff B; Contraception.

[Medical Abortion: Outcomes in a Family Medicine Setting](#) Prine L, Shannon C, Gillespie G, Crowden WA, Fortin J, Howe M, Dzuba IG; Journal of the American Board of Family Medicine.

[Alternatives to a Routine Follow-Up Visit for Early Medical Abortion](#) Clark W, Bracken H, Tanenhaus J, Schweikert S, Lichtenberg ES, Winikoff B; Obstet Gynecol.

2009

[Increasing Women’s Choices in Medical Abortion: A Study of Misoprostol 400 µg Swallowed Immediately or Held Sublingually Following 200 mg Mifepristone](#) Akin A, Dabash R, Dilbaz B, Aktun H, Dursun P, Kiran S, Aksan G, Dogan B, Winikoff B; Eur J Contracept Reprod Health Care.

[Non-Physician Clinicians Can Safely Provide First Trimester Medical Abortion](#) Yarnall J, Swica Y, Winikoff B; Reprod Health Matters.

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2008

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[How Much Supervision is Necessary for Women Taking Mifepristone and Misoprostol for Early Medical Abortion?](#) Shannon C, Winikoff B; Women’s Health.

2007

[The Supreme Court and the Partial-Birth Abortion Ban Act of 2003: A Political Procedure Replaces Woman-Centered Care](#) Blumenthal PD, Winikoff B; MedGenMed.

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[Mifepristone Followed in 24 Hours to 48 Hours by Misoprostol for Late First-Trimester Abortion](#) Bracken H, Ngoc NTN, Schaff E, Coyaji K, Ambardekar S, Westheimer E, Winikoff B; Obstetrics and Gynecology.

[Medication Abortion Employing Routine Sequential Measurements of Serum hCG and Sonography Only When Indicated](#) Clark W, Panton T, Hann L, Gold M; Contraception.

[Are Two Doses of Misoprostol After Mifepristone for Early Abortion Better Than One?](#) Coyaji K, Krishna U, Ambardekar S, Bracken H, Raote V, Mandlekar A, Winikoff B; British Journal of Obstetrics and Gynaecology.

2006

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2005

[Randomized Trial of Mifepristone and Buccal or Vaginal Misoprostol for Abortion Through 56 Days of Last Menstrual Period](#) Middleton T, Schaff E, Fielding SL, Scahill M, Shannon C, Westheimer E, Wilkinson T, Winikoff B; Contraception.

[Home Use of Two Doses of Misoprostol After Mifepristone for Medical Abortion: A Pilot Study in Sweden and France](#) Clark WH, Hassoun D, Gemzell-Danielsson K, Fiala C, Winikoff B; European Journal of Contraception and Reproductive Health Care.

[Multicenter Trial of a Simplified Mifepristone Medical Abortion Regimen](#) Shannon CS, Winikoff B, Hausknecht R, Schaff E, Blumenthal PD, Oyer D, Sankey H, Wolff J, Goldberg R; American Journal of Obstetrics and Gynecology.

2004

[Expanding Medical Abortion in Tunisia: Women's Experiences From a Multi-Site Expansion Study](#) Hajri S, Blum S, Gueddana N, Saadi H, Maazoun L, Chélli H, Dabash R, Winikoff B; Contraception.

[Accounting for Time: Insights From a Life-Table Analysis of the Efficacy of Medical Abortion](#) Hedley H, Ellertson C, Trussell J, Norris Turner A, Aubeny E, Coyaji K, Ngoc NTN, Winikoff B; American Journal of Obstetrics and Gynecology.

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[Is Home-Based Administration of Prostaglandin Safe and Feasible for Medical Abortion? Results from a Multisite Study in Vietnam](#) Ngoc NTN, Nhan VQ, Blum J, Mai TT, Durocher JM, Winikoff B; BJOG.

[Ectopic Pregnancy and Medical Abortion](#) Shannon C, Brothers LP, Philip N, Winikoff B; Obstetrics and Gynecology.

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