

# UC Davis

## UC Davis Previously Published Works

### Title

Extending use of levonorgestrel 52 mg intrauterine device to 8 years

### Permalink

<https://escholarship.org/uc/item/283937jn>

### Journal

American Journal of Obstetrics and Gynecology, 229(1)

### ISSN

0002-9378

### Authors

Creinin, Mitchell D  
Jensen, Jeffrey T

### Publication Date

2023-07-01

### DOI

10.1016/j.ajog.2023.03.011

Peer reviewed

1 Letter to the Editor

2

3 Extending use of levonorgestrel 52 mg IUD to 8 years

4

5

6 Corresponding author

7 Mitchell D. Creinin, MD

8 University of California, Davis

9 Department of Obstetrics and Gynecology

10 4860 Y Street, Suite 2500, Sacramento, CA 95817

11 Phone: (916) 734-6670

12 Fax: (916) 734-6666

13 mdcreinin@ucdavis.edu

14

15 The authors of this letter have the following conflicts of interest:

16 MDC has received speaking honorarium from Gedeon Richter, Mayne and Organon, serves on

17 an Advisory Board for Gedeon Richter, GlaxoSmithKline, OLIC, and Organon, and is a

18 consultant for Estetra SRL, Mayne, and Medicines360. The Department of Obstetrics and

19 Gynecology, University of California, Davis, receives contraceptive research funding for Dr.

20 Creinin from Chemo Research SL, Evofem, Medicines360, Merck, and Sebela.

21 JTJ has received payments for consulting from Bayer Healthcare, Evofem, Hope Medicine,

22 Foundation Consumer Healthcare, Mayne Pharma, ViiV Healthcare, and TherapeuticsMD.

23 OHSU has received research support from Abbvie, Bayer Healthcare, Daré, Estetra SPRL,

24 Hope Medicine, Medicines360, Merck, Myovant, and Sebela. These companies and

25 organizations may have a commercial or financial interest in the results of this research and

26 technology. These potential conflicts of interest have been reviewed and managed by OHSU.

27 To the Editor:

28 We appreciate the journal publishing our reports on the extension of the levonorgestrel 52  
29 mg intrauterine device (IUD) to 8 years for Liletta<sup>1</sup> and Mirena,<sup>2</sup> as well as the corresponding  
30 editorial.<sup>3</sup> Unfortunately, the editorial misrepresents the success rates as reported with life-table  
31 analyses. This error is important should a reader choose to simply read the editorial as a synopsis  
32 and not review the studies themselves.

33 The editorial reports 8-year cumulative pregnancy rates of 1.09 (95% CI 0.56-2.13) for  
34 Liletta and 0.68 (95% CI 0.17-2.71) for Mirena.<sup>1,2</sup> This statement implies that Mirena potentially  
35 has a lower pregnancy rate than Liletta. In fact, the life-table pregnancy rate for Liletta reflects  
36 an 8-year cumulative rate whereas the rate for Mirena only reflects the 3-year cumulative failure  
37 rate using the Kaplan-Meier method for years 6-8. The Liletta study demonstrates a life-table  
38 pregnancy rate of approximately 0.46 in years 6-8.<sup>1</sup>

39 Because the Mirena study<sup>2</sup> did not evaluate a single cohort for 8 continuous years, only  
40 the data from the Liletta study<sup>1</sup> can be used to report the full 8-year cumulative pregnancy risk  
41 with levonorgestrel 52 mg IUD use. However, the consistent results between the two studies for  
42 years 6 -8 demonstrate that patients using either device should experience equivalent clinical  
43 performance through 8 years of use.

44

45 Mitchell D. Creinin, MD

46 University of California, Davis

47 Jeffrey T. Jensen, MD, MPH

48 Oregon Health & Science University

49

50 References

- 51 1. Creinin MD, Schreiber CA, Turok DK, Cwiak C, Chen BA, Olariu AI. Levonorgestrel 52 mg  
52 intrauterine system efficacy and safety through 8 years of use. *Am J Obstet Gynecol.*  
53 2022;227(6):871.e1-871.e7. doi: 10.1016/j.ajog.2022.05.022.
- 54 2. Jensen JT, Lukkari-Lax E, Schulze A, Wahdan Y, Serrani M, Kroll R. Contraceptive efficacy  
55 and safety of the 52-mg levonorgestrel intrauterine system for up to 8 years: findings from

56 the Mirena Extension Trial. Am J Obstet Gynecol. 2022;227(6):873.e1-873.e12. doi:  
57 10.1016/j.ajog.2022.09.007.  
58 3. Goldberg AB. Extending use of 52-mg levonorgestrel intrauterine systems to 8 years:  
59 bridging phases of life. Am J Obstet Gynecol 2022;227(6):803.e1-803.e2. doi:  
60 10.1016/j.ajog.2022.09.041.  
61  
62 Word Count: 214