

CADTH Reference List

# Same-Day Discharge After Minimally Invasive Gynecologic Surgery

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## Key Messages

- One randomized controlled trial was identified regarding the clinical effectiveness of same-day discharge after minimally invasive gynecologic surgery.
- No evidence was identified regarding the cost-effectiveness of same-day discharge after minimally invasive gynecologic surgery.
- No relevant evidence-based guidelines were identified regarding same-day discharge after minimally invasive gynecologic surgery.

## Research Questions

1. What is the clinical effectiveness of same-day discharge after minimally invasive gynecologic surgery?
2. What is the cost-effectiveness of same-day discharge after minimally invasive gynecologic surgery?
3. What are the evidence-based guidelines regarding same-day discharge after minimally invasive gynecologic surgery?

## Methods

### Literature Search Methods

A limited literature search was conducted by an information specialist on key resources including MEDLINE, the Cochrane Database of Systematic Reviews, the international HTA database, the websites of Canadian and major international health technology agencies, as well as a focused internet search. The search strategy comprised both controlled vocabulary, such as the National Library of Medicine's MeSH (Medical Subject Headings), and keywords. The main search concepts were same-day or patient discharge and gynecologic surgery. Filters were applied to limit the retrieval to health technology assessments, systematic reviews and meta-analyses, randomized controlled trials, economic studies, non-randomized studies, and guidelines. Where possible, retrieval was limited to the human population. The search was also limited to English-language documents published between January 1, 2011 and January 11, 2021. Internet links were provided, where available.

### Selection Criteria and Summary Methods

One reviewer screened literature search results (titles and abstracts) and selected publications according to the inclusion criteria presented in Table 1. Full texts of study publications were not reviewed. Open access full-text versions of evidence-based guidelines were reviewed when abstracts were not available.

One randomized controlled trial<sup>1</sup> was identified regarding the clinical effectiveness of same-day discharge after minimally invasive gynecologic surgery. No relevant health technology assessments, systematic reviews, non-randomized studies, economic evaluations, or

**Table 1: Selection Criteria**

Criteria	Description
<b>Population</b>	Patients (any age) with gynecological conditions (benign or malignant) requiring removal of the uterus (i.e., hysterectomy)
<b>Intervention</b>	Same-day discharge (i.e., discharge before midnight on the day of the surgery) after MIS (i.e., laparoscopic, robotic, vaginal procedures) for total hysterectomy alone or in conjunction with another procedure (e.g., bilateral salpingo-oophorectomy, bilateral pelvic lymph node dissection, para-aortic lymph node dissection)  Exclude: Patients undergoing open gynecologic surgery or radical hysterectomy (open or MIS)
<b>Comparator</b>	Q1 and Q2: Discharge on the following day after MIS (i.e., after midnight); discharge before midnight on the day of the MIS, with patient staying an alternative number of hours; no comparator (safety outcomes only)  Include: Studies comparing same types of MIS procedure (e.g., laparoscopic vs. laparoscopic) or different types of MIS procedures (e.g., laparoscopic vs. robotic)  Q3: Not applicable
<b>Outcomes</b>	Q1: Clinical effectiveness (e.g., health-related quality of life, pain, safety [e.g., rates of adverse events], rates of hospital-acquired infections [e.g., SARS-CoV-2], rates of hospital readmission)  Q2: Cost-effectiveness (e.g., cost per quality-adjusted life-year)  Q3: Recommendations regarding same-day discharge after gynecologic MIS (e.g., patient criteria for same-day discharge, surgical procedures appropriate for same-day discharge)
<b>Study Designs</b>	Health technology assessments, systematic reviews, randomized controlled trials, non-randomized studies, economic evaluations, evidence-based guidelines

MIS = minimally invasive surgery; SARS-CoV-2 = severe acute respiratory syndrome coronavirus 2; vs. = versus.

evidence-based guidelines were identified. Additional references of potential interest that did not meet the inclusion criteria are provided in Appendix 1.

## References

### Health Technology Assessments

No literature identified.

### Systematic Reviews and Meta-Analyses

No literature identified.

### Randomized Controlled Trial

- Christiansen UJ, Kruse AR, Olesen PG, Lauszus FF, Kesmodel US, Forman A. Outpatient vs inpatient total laparoscopic hysterectomy: a randomized controlled trial. *Acta Obstet Gynecol Scand.* 2019 Nov;98(11):1420-1428. [Medline](#)

### Non-Randomized Studies

No literature identified.

## Economic Evaluations

No literature identified.

## Guidelines and Recommendations

No literature identified.

## Appendix 1: References of Potential Interest

### Systematic Reviews and Meta-Analyses

#### *Unclear Intervention (Type of Hysterectomy Not Specified)*

2. Sanabria D, Rodriguez J, Pecci P, Ardila E, Pareja R. Same-day discharge in minimally invasive surgery performed by gynecologic oncologists: a review of patient selection. *J Minim Invasive Gynecol*. 2020 May-Jun;27(4):816-825. [Medline](#)
3. Korsholm M, Mogensen O, Jeppesen MM, Lysdal VK, Traen K, Jensen PT. Systematic review of same-day discharge after minimally invasive hysterectomy. *Int J Gynaecol Obstet*. 2017 Feb;136(2):128-137. [Medline](#)
4. Nahas S, Feigenberg T, Park S. Feasibility and safety of same-day discharge after minimally invasive hysterectomy in gynecologic oncology: a systematic review of the literature. *Gynecol Oncol*. 2016 Nov;143(2):439-442. [Medline](#)

#### *Unknown Comparator*

5. Dedden SJ, Geomini P, Huirne JAF, Bongers MY. Vaginal and laparoscopic hysterectomy as an outpatient procedure: a systematic review. *Eur J Obstet Gynecol Reprod Biol*. 2017 Sep;216:212-223. [Medline](#)

### Randomized Controlled Trial – Alternative Intervention (Partial Hysterectomy)

6. Kistic-Trope J, Qvigstad E, Ballard K. A randomized trial of day-case vs inpatient laparoscopic supracervical hysterectomy. *Am J Obstet Gynecol*. 2011 Apr;204(4):307.e301-308. [Medline](#)

### Non-Randomized Studies

#### *Alternative Intervention (Radical Hysterectomy)*

7. Fountain CR, Havrilesky LJ. Promoting same-day discharge for gynecologic oncology patients in minimally invasive hysterectomy. *J Minim Invasive Gynecol*. Sep-Oct 2017;24(6):932-939. [Medline](#)

#### *Unclear Intervention (Type of Hysterectomy Not Specified)*

8. Liu L, Yi J, Cornella J, Butterfield R, Buras M, Wasson M. Same-day discharge after vaginal hysterectomy with pelvic floor reconstruction: pilot study. *J Minim Invasive Gynecol*. 2020 Feb;27(2):498-503.e491. [Medline](#)
9. Praiss AM, Chen L, St. Clair CM, et al. Safety of same-day discharge for minimally invasive hysterectomy for endometrial cancer. *Am J Obstet Gynecol*. 2019 Sep;221(3):239.e1-239.e11. [Medline](#)
10. Lee SJ, Calderon B, Gardner GJ, et al. The feasibility and safety of same-day discharge after robotic-assisted hysterectomy alone or with other procedures for benign and malignant indications. *Gynecol Oncol*. 2014 Jun;133(3):552-5. [Medline](#)
11. Schiavone MB, Herzog TJ, Ananth CV, et al. Feasibility and economic impact of same-day discharge for women who undergo laparoscopic hysterectomy. *Am J Obstet Gynecol*. 2012 Nov;207(5):382.e381-389. [Medline](#)

#### *Alternative Outcome – Budget Information*

12. Borahay MA, Patel PR, Kilic CH, Kilic GS. Outpatient robotic hysterectomy: clinical outcomes and financial analysis of initial experience. *Int J Med Robot*. 2014 Jun;10(2):244-250. [Medline](#)

### Clinical Practice Guideline – Methodology Unclear

13. Saskatoon Health Region. Day surgery unit standard of care (*Policies and procedures, no. 1164*). Saskatoon (SK): Saskatoon Health Region; 2020 Jan. <https://www.saskatoonhealthregion.ca/about/NursingManual/1164.pdf> Accessed 2021 Jan 14. (See: Section 3.4.13, page 5.)