

Supplementary Table S4. List of excluded studies with reasons for exclusion. This table provides an overview of all articles that were assessed in full text but excluded from the systematic review, along with the specific reasons for exclusion (e.g., wrong intervention, wrong study design, no differentiation between interventions).

Author	Title	Reason for exclusion
Yang 2019	Treatment efficiency of comprehensive hysteroscopic evaluation and lesion resection combined with progestin therapy in young women with endometrial atypical hyperplasia and endometrial cancer.	Wrong intervention
De Marzi 2015	Hysteroscopic Resection in Fertility-Sparing Surgery for Atypical Hyperplasia and Endometrial Cancer: Safety and Efficacy.	Wrong population
Chen 2022	Oncological and reproductive outcomes for gonadotropin-releasing hormone agonist combined with aromatase inhibitors or levonorgestrel-releasing intra-uterine system in women with endometrial cancer or atypical endometrial hyperplasia	Wrong intervention
Tamauchi 2017	Efficacy of medroxyprogesterone acetate treatment and retreatment for atypical endometrial hyperplasia and endometrial cancer	Duplication of results
Atallah 2021	The use of hysteroscopic endometrectomy in the conservative treatment of early endometrial cancer and atypical hyperplasia in fertile women	Wrong intervention
Baker 2017	Nonoperative management of atypical endometrial hyperplasia and grade 1 endometrial cancer with the levonorgestrel intrauterine device in medically ill post-menopausal women	Wrong population
Fan 2021	Analysis of pregnancy-associated factors after fertility-sparing therapy in young women with early stage endometrial cancer or atypical endometrial hyperplasia	Wrong study design
He 2020	Oncologic and obstetrical outcomes after fertility-preserving retreatment	Wrong population

	in patients with recurrent atypical endometrial hyperplasia and endometrial cancer	
Donnez 2003	Conservative treatment may be beneficial for young women with atypical endometrial hyperplasia or endometrial adenocarcinoma	Wrong intervention
Janda 2021	Complete pathological response following levonorgestrel intrauterine device in clinically stage 1 endometrial adenocarcinoma: Results of a randomized clinical trial	Wrong study design
Le Digabel 2006	Hyperplasies atypiques et carcinomes de l'endomètre de stade I chez la femme jeune désirant une grossesse : le traitement conservateur est-il envisageable ? Résultats d'une étude multicentrique française Young women with atypical endometrial hyperplasia or endometrial adenocarcinoma stage I: will conservative treatment allow pregnancy? Results of a French multicentric survey	Wrong language
Marnach 2017	Oral Progestogens Versus Levonorgestrel-Releasing Intrauterine System for Treatment of Endometrial Intraepithelial Neoplasia	Wrong population
Masciullo 2021	Prognostic impact of hysteroscopic resection of endometrial atypical hyperplasia-endometrioid intraepithelial neoplasia and early-stage cancer in combination with megestrol acetate	Wrong population
Tock 2018	Fertility Sparing Treatment in Patients With Early Stage Endometrial Cancer, Using a Combination of Surgery and GnRH Agonist: A Monocentric Retrospective Study and Review of the Literature	Wrong intervention
van Gent MDJM 2016	Exploring Morphologic and Molecular Aspects of Endometrial Cancer Under Progesterone Treatment in the Context of Fertility Preservation	Wrong study design
Wang 2022	[Significance of molecular classification in fertility-sparing treatment of endometrial carcinoma and atypical endometrial hyperplasia]	Wrong language
Yang 2015	Prognostic factors of regression and relapse of complex atypical	Wrong study design

	hyperplasia and well-differentiated endometrioid carcinoma with conservative treatment	
Varma 2007	The effectiveness of a levonorgestrel-releasing intrauterine system (LNG-IUS) in the treatment of endometrial hyperplasia—A long-term follow-up study	Wrong population
òrbo 2016	HE4 is a novel tissue marker for therapy response and progestin resistance in medium- and low-risk endometrial hyperplasia	Wrong study design
Von Minckwitz 2002	Adjuvant endocrine treatment with medroxyprogesterone acetate or tamoxifen in stage I and II endometrial cancer—a multicentre, open, controlled, prospectively randomised trial	Wrong population
Sletten 2019	Significance of progesterone receptors (PR-A and PR-B) expression as predictors for relapse after successful therapy of endometrial hyperplasia: a retrospective cohort study	Wrong study design
Wu 2022	Clinical implications of morular metaplasia in fertility-preserving treatment for atypical endometrial hyperplasia and early endometrial carcinoma patients	Wrong population
Yoshimura 2022	Clinical Usefulness of Endometrial Cytology in Determining the Therapeutic Effect of Fertility Preserving Therapy	Wrong study design
Liu 2022	Efficacy of Levonorgestrel-intrauterine Releasing System Combined with Goserelin in Treatment of Atypical Endometrial Hyperplasia	Full text not available
He 2021	Maintenance Therapy Can Improve the Oncologic Prognosis and Obstetrical Outcome of Patients With Atypical Endometrial Hyperplasia and Endometrial Cancer After Fertility-Preserving Treatment: A Multicenter Retrospective Study	Wrong intervention
Wang 2021	Significance of serum and pathological biomarkers in fertility-sparing treatment for endometrial cancer or atypical hyperplasia: a retrospective cohort study	Wrong intervention

Li 2021	Insulin Resistance and Metabolic Syndrome Increase the Risk of Relapse For Fertility Preserving Treatment in Atypical Endometrial Hyperplasia and Early Endometrial Cancer Patients	Wrong study design
Shan 2021	Effect and Management of Excess Weight in the Context of Fertility-Sparing Treatments in Patients With Atypical Endometrial Hyperplasia and Endometrial Cancer: 8-Year Experience of 227 Cases	Wrong outcomes
Wang 2021	Fertility-preserving treatment outcome in endometrial cancer or atypical hyperplasia patients with polycystic ovary syndrome	Wrong population
Piatek 2021	The results of different fertility-sparing treatment modalities and obstetric outcomes in patients with early endometrial cancer and atypical endometrial hyperplasia: Case series of 30 patients and systematic review	Wrong population
Sengal 2021	Fibroblast growth factor receptor 2 isoforms detected via novel rna ish as predictive biomarkers for progestin therapy in atypical hyperplasia and low-grade endometrial cancer	Wrong outcomes
Westin 2021	Prospective phase II trial of levonorgestrel intrauterine device: nonsurgical approach for complex atypical hyperplasia and early-stage endometrial cancer	Wrong population
Matsuo 2020	Route-specific association of progestin therapy and concurrent metformin use in obese women with complex atypical hyperplasia	Wrong population
Kim 2020	Comparison of diagnostic accuracy between endometrial curettage and aspiration biopsy in patients treated with progestin for endometrial hyperplasia: A Korean gynecologic oncology group study	Wrong outcomes
Mandelbaum 2020	Progestin therapy for obese women with complex atypical hyperplasia: levonorgestrel-releasing intrauterine device vs systemic therapy	Wrong population
Behrouzi 2020	Baseline serum HE4 but not tissue HE4 expression predicts response to the levonorgestrel-releasing intrauterine system in atypical	Wrong population

	hyperplasia and early stage endometrial cancer	
Wang 2019	Impact of treatment duration in fertility-preserving management of endometrial cancer or atypical endometrial hyperplasia	Wrong study design
Kim 2018	Fertility-Sparing Management Using Progestin for Young Women with Endometrial Cancer From a Population-Based Study	Wrong population
Zhou 2017	Gonadotropin-releasing hormone agonist combined with a levonorgestrel-releasing intrauterine system or letrozole for fertility-preserving treatment of endometrial carcinoma and complex atypical hyperplasia in young women	Wrong study design
Laurelli 2016	Long-Term Oncologic and Reproductive Outcomes in Young Women with Early Endometrial Cancer Conservatively Treated: A Prospective Study and Literature Update	Wrong population
Zhang 2015	Dual-specificity phosphatase 6 predicts the sensitivity of progestin therapy for atypical endometrial hyperplasia	Wrong outcomes
Gonthier 2014	Impact of obesity on the results of fertility-sparing management for atypical hyperplasia and grade 1 endometrial cancer	Wrong intervention
Gunderson 2014	Pathologic features associated with resolution of complex atypical hyperplasia and grade 1 endometrial adenocarcinoma after progestin therapy	Wrong study design
Simpson 2014	Fertility sparing treatment of complex atypical hyperplasia and low grade endometrial cancer using oral progestin	Wrong population
Cade 2013	Long-term outcomes after progestogen treatment for early endometrial cancer	Wrong population
Goncharenko 2013	Predictive diagnosis of endometrial hyperplasia and personalized therapeutic strategy in women of fertile age	Wrong outcomes
Kim 2013	Comparison of dilatation & curettage and endometrial aspiration biopsy accuracy in patients treated with high-	Wrong population

	dose oral progestin plus levonorgestrel intrauterine system for early-stage endometrial cancer	
Gallos 2013	Predictive ability of estrogen receptor (ER), progesterone receptor (PR), COX-2, Mlh1, and Bcl-2 expressions for regression and relapse of endometrial hyperplasia treated with LNG-IUS: A prospective cohort study	Wrong outcomes
Gallos 2013	LNG-IUS vs oral progestogen treatment for endometrial hyperplasia: A long-term comparative cohort study	Wrong population
Bakkum-Gamez 2012	Conservative management of atypical hyperplasia and grade I endometrial carcinoma: Review of the literature and presentation of a series	Wrong intervention
Upton 2012	Biomarkers of progestin therapy resistance and endometrial hyperplasia progression	Wrong outcomes
Dursun 2012	A Turkish Gynecologic Oncology Group study of fertility-sparing treatment for early-stage endometrial cancer	Wrong population
Haoula 2011	Levonorgestrel intra-uterine system as a treatment option for complex endometrial hyperplasia	Wrong population
òrbo 2010	Down-regulated progesterone receptor A and B coinciding with successful treatment of endometrial hyperplasia by the levonorgestrel impregnated intrauterine system	Wrong outcomes
Cade 2010	Progestogen treatment options for early endometrial cancer	Wrong population
Vereide 2005	Bcl-2, BAX, and apoptosis in endometrial hyperplasia after high dose gestagen therapy: A comparison of responses in patients treated with intrauterine levonorgestrel and systemic medroxyprogesterone	Wrong population
Montz 2002	Intrauterine progesterone treatment of early endometrial cancer	Wrong population
Lago 2022	Fertility sparing treatment in patients with endometrial cancer (FERT-ENC): a multicentric retrospective study from the Spanish Investigational Network Gynecologic Oncology Group (SPAIN-GOG)	Wrong population

Chung 2021	Mismatch repair status influences response to fertility-sparing treatment of endometrial cancer	Wrong population
Kudesia 2013	Reproductive and oncologic outcomes after progestin therapy for endometrial complex atypical hyperplasia or carcinoma	Wrong study design
Greenwald 2016	Does hormonal therapy for fertility preservation affect the survival of young women with early-stage endometrial cancer?	Wrong population
Yin 2022	Clinical outcomes of levonorgestrel-releasing intrauterine device present during controlled ovarian stimulation in patients with early stage endometrioid adenocarcinoma and atypical endometrial hyperplasia after fertility-sparing treatments: 10-year experience in 1 tertiary hospital in China	Wrong study design
Vereide 2006	Effect of levonorgestrel IUD and oral medroxyprogesterone acetate on glandular and stromal progesterone receptors (PRA and PRB), and estrogen receptors (ER-alpha and ER-beta) in human endometrial hyperplasia	Wrong population
Marnach 2017	Oral Progestogens vs Levonorgestrel-Releasing Intrauterine System for Treatment of Endometrial Intraepithelial Neoplasia	Wrong population
Wu 2023	Impacts of ovarian reserve on conservative treatment for endometrial cancer and atypical hyperplasia	Wrong study design
Oishi 2023	Obstetric outcomes after medroxyprogesterone acetate treatment for early stage endometrial cancer or atypical endometrial hyperplasia: a single hospital-based study	Wrong outcomes
Barr 2023	Serum HE4 predicts progestin treatment response in endometrial cancer and atypical hyperplasia: A prognostic study	Wrong outcomes
Chaudhari 2023	Comparison of Mirena and Liletta levonorgestrel intrauterine devices for the treatment of endometrial intraepithelial neoplasia and grade 1 endometrioid endometrial cancer	Wrong study design

Xue 2023	PTEN mutation predicts unfavorable fertility preserving treatment outcome in the young patients with endometrioid endometrial cancer and atypical hyperplasia	Wrong outcomes
Xi 2023	Efficacy and pregnancy outcomes of hysteroscopic surgery combined with progestin as fertility-sparing therapy in patients with early stage endometrial cancer and atypical hyperplasia	Wrong study design
Wang 2023	Characteristics of molecular classification in 52 endometrial cancer and atypical hyperplasia patients receiving fertility-sparing treatment	Wrong population
Ga 2023	Prognosis of patients with endometrial cancer or atypical endometrial hyperplasia after complete remission with fertility-sparing therapy	Wrong outcomes
Fu 2023	Postoperative Adjuvant Treatment in Women with Stage i Endometrial Cancer: A Retrospective Study	Wrong population
Kudesia 2014	Reproductive and oncologic outcomes after progestin therapy for endometrial complex atypical hyperplasia or carcinoma	Wrong study design
Chung 2019	Oncologic and pregnancy outcomes with fertility-sparing management for early endometrial cancer in young women	Wrong population
Milishkevich 2022	The results of fertility-sparing treatment and obstetric outcomes in patients with atypical endometrial hyperplasia and early endometrial cancer: a case series from belarus	Wrong study design
Lv 2023	Efficacy of fertility-sparing treatment with LNG-IUS is associated with different ProMisE subtypes of endometrial carcinoma or atypical endometrial hyperplasia	Wrong outcomes
Lin 2024	DNA methylation profiling identifies subset of lowgrade endometrial neoplasms with poor response to progestin therapy	Wrong population
Perri 2011	Prolonged Conservative Treatment of Endometrial Cancer Patients More Than 1 Pregnancy Can Be Achieved	Wrong study design

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