



Läkemedelsbehandling av polycystiskt ovarialsyndrom -
hälsa och livskvalitet på kort och lång sikt,
Pharmacological treatment of polycystic ovary syndrome -
health and quality of life in the short and long term,
report 394 (2025)

Appendix 3 Excluded references

Table of contents

1 Studies excluded on relevance.....	2
2 Studies excluded after risk of bias-evaluation	42

1 Studies excluded on relevance

Study	Reason for exclusion
1. Abbas M, Gannon M. The use of metformin as first line treatment in polycystic ovary syndrome. Irish Medical Journal. 2008;101(2):51–3.	Time on drug/follow up
2. Abd El Hameed AA, Shreif HE, Mowafy HE. The role of continuing metformin therapy during pregnancy in the reduction of gestational diabetes and improving pregnancy outcomes in women with polycystic ovary syndrome. Middle East Fertility Society Journal. 2011;16(3):204-8. Available from: https://doi.org/10.1016/j.mefs.2011.04.002 .	Wrong patient population
3. Acien P, Mauri M, Gutierrez M. Clinical and hormonal effects of the combination gonadotrophin-releasing hormone agonist plus oral contraceptive pills containing ethinyl-oestradiol (EE) and cyproterone acetate (CPA) versus the EE-CPA pill alone on polycystic ovarian disease-related hyperandrogenisms. Human reproduction (Oxford, England). 1997;12(3):423–9.	Wrong comparator
4. Adjei NN, Yung N, Towers G, Caty M, Solomon D, Vash-Margita A. Establishing an Association between Polycystic Ovarian Syndrome and Pilonidal Disease in Adolescent Females. Journal of Pediatric and Adolescent Gynecology. 2023;36(1):39-44. Available from: https://doi.org/10.1016/j.jpag.2022.08.005 .	Wrong intervention
5. Aghamohammadzadeh N, Aliasgarzadeh A, Baglar L, Abdollahifard S, Bahrami A, Najafipour F, et al. Comparison of metformin and cyproteroneestrodinol compound effect on hs c-reactive protein and serum androgen levels in patients with poly cystic ovary syndrome. Pakistan Journal of Medical Sciences. 2010;26(2):347–51.	Wrong study design
6. Al-Deresawi MS, Al-Rekaabi AR, Edee AARKA. Evaluation of hormonal profile and insulin growth factor-1 gene expression before and after metformin treatment in women with polycystic ovary syndrome. Drug Invention Today. 2019(11):2593–7.	Wrong comparator
7. Al-Khawajah MM. Finasteride for hirsutism: a dose finding study. Saudi Medical Journal. 1998;19(1):19–21.	Wrong patient population
8. Al-Nozha O, Habib F, Mojaddidi M, El-Bab MF. Body weight reduction and metformin: Roles in polycystic ovary syndrome. Pathophysiology : the official journal of the International	Time on drug/follow up

Society for Pathophysiology. 2013;20(2):131–7. Available from: https://doi.org/10.1016/j.pathophys.2013.03.002 .	
9. Al-Ruthia YS, Al-Mandeel H, AlSanawi H, Balkhi B, Mansy W, AlGasem R, et al. The effect of metformin use on pregnancy rates among polycystic ovary syndrome patients undergoing in vitro fertilization: A retrospective-cohort study. Saudi pharmaceutical journal : SPJ : the official publication of the Saudi Pharmaceutical Society. 2017;25(6):906–10. Available from: https://doi.org/10.1016/j.jsps.2017.02.008 .	Wrong patient population
10. Al-Ruthia YS, Balkhi B, AlGhadeer S, Mansy W, AlSanawi H, AlGasem R, et al. Relationship between health literacy and body mass index among Arab women with polycystic ovary syndrome. Saudi pharmaceutical journal : SPJ : the official publication of the Saudi Pharmaceutical Society. 2017;25(7):1015–8. Available from: https://doi.org/10.1016/j.jsps.2017.04.003 .	Wrong outcomes
11. Al-Sudani H, Ali R. #1702651 Comparative Effectiveness of Bariatric Surgery vs. GLP-1 Therapy in Obese Women with PCOS. Endocrine Practice. 2024;30(5):S128. Available from: https://doi.org/10.1016/j.eprac.2024.03.381 .	Other reason
12. Al-Youzbaki WB, Abdullah RG. C-reactive protein and lipid profile in patients with polycystic ovary syndrome treated by metformin. Pakistan Journal of Medical Sciences. 2013;29(2). Available from: https://doi.org/10.12669/pjms.292.2935 .	Time on drug/follow up
13. Alawdi SH, Alhalabi M, Al-Hallak R. Clinical patterns and treatment outcomes of polycystic ovarian syndrome. Folia medica Cracoviensia. 2024;64(1):87–96. Available from: https://doi.org/10.24425/fmc.2024.150145 .	Wrong study design
14. Alexandraki KI, Kandaraki E, Papaioannou TG, Piperi C, Argyris AA, Aznaouridis K, et al. Assessment of aortic wave reflection in lean and obese women with polycystic ovary syndrome. Archives of the Balkan Medical Union. 2020;55(2):224-32. Available from: https://doi.org/10.31688/ABMU.2020.55.2.03 .	Time on drug/follow up
15. AlHussain F, AlRuthia Y, Al-Mandeel H, Bellahwal A, Alharbi F, Almogbel Y, et al. Metformin Improves the Depression Symptoms of Women with Polycystic Ovary Syndrome in a Lifestyle Modification Program. Patient preference and adherence. 2020;14:737–46. Available from: https://doi.org/10.2147/PPA.S244273 .	Time on drug/follow up
16. Alsoghachi H, Althanoon Z. THE THERAPEUTIC EFFECT OF ORAL INSULIN SENSITIZER METFORMIN ON LIPID PROFILE IN	Time on drug/follow up

WOMEN WITH POLYCYSTIC OVARY SYNDROME. Georgian medical news. 2023(336):59–62.	
17. Amiri M, Rahmati M, Firouzi F, Azizi F, Ramezani Tehran F. A prospective study on the relationship between polycystic ovary syndrome and age at natural menopause. Menopause (New York, NY). 2024;31(2):130–7. Available from: https://doi.org/10.1097/GME.0000000000002213 .	Wrong study design
18. Amiri M, Ramezani Tehrani F, Bidhendi-Yarandi R, Nahidi F. Effects of Oral Contraceptives Containing Desogestrel and Drospirenone on Clinical, Hormonal, and Metabolic Parameters of the Patients with Polycystic Ovary Syndrome: a Randomized Clinical Trial. Scientific journal of kurdistan university of medical sciences. 2022;27(1):55–70.	Wrong language
19. Anastasiou OE, Canbay A, Fuhrer D, Reger-Tan S. Metabolic and androgen profile in underweight women with polycystic ovary syndrome. Archives of Gynecology and Obstetrics. 2017;296(2):363–71. Available from: https://doi.org/10.1007/s00404-017-4422-9 .	Wrong study design
20. Andries M, Glintborg D, Andersen M. Risk of impaired glucose tolerance in normal weight hirsute women during four years observation. Acta Obstetrica et Gynecologica Scandinavica. 2010;89(8):1091–5. Available from: https://doi.org/10.3109/00016341003801680 .	Time on drug/follow up
21. Anithasri A, Ananthanarayanan PH, Veena P. A Study on Omentin-1 and Prostate Specific Antigen in Women on Treatment for Polycystic Ovary Syndrome. Indian journal of clinical biochemistry : IJCB. 2019;34(1):108–14. Available from: https://doi.org/10.1007/s12291-017-0723-9 .	Time on drug/follow up
22. Antoaneta G, Kamenov Z, Tsakova A. Myeloperoxidase levels in patients with PCOS and/or obesity before and after metformin treatment. International Journal of Women's Health and Reproduction Sciences. 2014;3(1):21–4. Available from: https://doi.org/10.15296/ijwhr.2015.04 .	Wrong study design
23. Anwary SA, Alfazzaman M, Bari N, Islam MR. Outcome of metformin treatment in polycystic ovary syndrome. Mymensingh medical journal : MMJ. 2012;21(1):60-5	Other reason
24. Artani M, Iftikhar MF, Khan S. Effects of Metformin on Symptoms of Polycystic Ovarian Syndrome Among Women of Reproductive Age. Cureus. 2018;10(8):e3203. Available from: https://doi.org/10.7759/cureus.3203 .	Wrong study design

25. Arya TS. A Study of Potential Comparison of N-Acetyl Cysteine with Metformin on Clinical Profile in an Ovulatory Infertile Woman with PCOS. International Journal of Pharmaceutical and Clinical Research. 2022;14(8):707–12.	Wrong comparator
26. Asad M, Nandy M, Banerjee M, Mukherjee M. Effect of Oral Contraceptive Pill and Metformin on Metabolic and Endocrine Parameters in Polycystic Ovarian Syndrome: A Prospective Interventional Study. Journal of Clinical and Diagnostic Research. 2022;16(9):FC20-FC4. Available from: https://doi.org/10.7860/JCDR/2022/56913.16915 .	Wrong outcomes
27. Awoke MA, Earnest A, Joham AE, Hodge AM, Teede HJ, Brown WJ, et al. Weight gain and lifestyle factors in women with and without polycystic ovary syndrome. Human Reproduction. 2022;37(1):129–41. Available from: https://doi.org/10.1093/humrep/deab239 .	Wrong comparator
28. Azargoon A, Fatemi HM, Mirmohammadkhani M, Darzi S. Is the Co-administration of Metformin and Clomiphene Superior to Induce Ovulation in Infertile Patients With Poly Cystic Ovary Syndrome and Confirmed Insulin-Resistance: A Double Blind Randomized Clinical Trial. Journal of family & reproductive health. 2023;17(1):21–8. Available from: https://doi.org/10.18502/jfrh.v17i1.11973 .	Wrong study design
29. Azziz R, Sanchez LA, Knochenhauer ES, Moran C, Lazenby J, Stephens KC, et al. Androgen excess in women: experience with over 1000 consecutive patients. The Journal of clinical endocrinology and metabolism. 2004;89(2):453–62.	Wrong comparator
30. Baer TE, Milliren CE, Walls C, DiVasta AD. Clinical Variability in Cardiovascular Disease Risk Factor Screening and Management in Adolescent and Young Adult Women with Polycystic Ovary Syndrome. Journal of Pediatric and Adolescent Gynecology. 2015;28(5):317–23. Available from: https://doi.org/10.1016/j.jpbg.2014.09.010 .	Wrong outcomes
31. Barnard L, Balen AH, Ferriday D, Tiplady B, Dye L. Cognitive functioning in polycystic ovary syndrome. Psychoneuroendocrinology. 2007;32(8-10):906–14.	Time on drug/follow up
32. Barnard L, Ferriday D, Guenther N, Strauss B, Balen AH, Dye L. Quality of life and psychological well being in polycystic ovary syndrome. Human reproduction (Oxford, England). 2007;22(8):2279–86.	Wrong study design

33. Bassaw B, Maharaj R, Ali A, Roopnarinesingh S. Therapeutic alternatives for the hirsute woman. The West Indian medical journal. 1992;41(1):12–4.	Wrong patient population
34. Bassols J, de Zegher F, Diaz M, Carreras-Badosa G, Garcia-Beltran C, Puerto-Carranza E, et al. Effects of half-dose spimet treatment in girls with early puberty and accelerated bone maturation: a multicenter, randomized, placebo-controlled study protocol. Trials. 2023;24(1):56. Available from: https://doi.org/10.1186/s13063-022-07050-w .	Protocol
35. Batukan C, Muderris II. Efficacy of a new oral contraceptive containing drospirenone and ethinyl estradiol in the long-term treatment of hirsutism. Fertility and Sterility. 2006;85(2):436–40.	Wrong patient population
36. Beltadze K, Barbakadze L. Ovarian reserve in the women of late reproductive age after conservative treatment of polycystic ovary syndrome in adolescence. Georgian medical news. 2015(238):27–31.	Wrong patient population
37. Bilgir O, Kebapcilar L, Taner C, Bilgir F, Kebapcilar A, Bozkaya G, et al. The effect of ethinylestradiol (EE)/cyproterone acetate (CA) and EE/CA plus metformin treatment on adhesion molecules in cases with polycystic ovary syndrome (PCOS). Internal medicine (Tokyo, Japan). 2009;48(14):1193–9.	Wrong study design
38. Bird ST, Hartzema AG, Brophy JM, Etminan M, Delaney JAC. Risk of venous thromboembolism in women with polycystic ovary syndrome: a population-based matched cohort analysis. CMAJ : Canadian Medical Association journal = journal de l'Association medicale canadienne. 2013;185(2):E115–20. Available from: https://doi.org/10.1503/cmaj.120677 .	Wrong comparator
39. Bird ST, Hartzema AG, Etminan M, Brophy JM, Delaney JAC. Polycystic ovary syndrome and combined oral contraceptive use: a comparison of clinical practice in the United States to treatment guidelines. Gynecological endocrinology : the official journal of the International Society of Gynecological Endocrinology. 2013;29(4):365–9. Available from: https://doi.org/10.3109/09513590.2012.743007 .	Wrong study design
40. Bodmer M, Becker C, Meier C, Jick SS, Meier CR. Use of metformin and the risk of ovarian cancer: a case-control analysis. Gynecologic Oncology. 2011;123(2):200–4. Available from: https://doi.org/10.1016/j.ygyno.2011.06.038 .	Wrong patient population
41. Borzan V, Riedl R, Obermayer-Pietsch B. Probiotic vs. placebo and metformin: probiotic dietary intervention in polycystic	Protocol

ovary syndrome - A randomized controlled trial. BMC Endocrine Disorders. 2023;23(1):82. Available from: https://doi.org/10.1186/s12902-023-01294-6 .	
42. Buyers E, Sass AE, Severn CD, Pyle L, Cree-Green M. Twelve-month Continuation of the Etonogestrel Implant in Adolescents With Polycystic Ovary Syndrome. Journal of Pediatric and Adolescent Gynecology. 2021;34(1):33–9. Available from: https://doi.org/10.1016/j.jpag.2020.08.017 .	Wrong study design
43. Carlioglu A, Kaygusuz I, Karakurt F, Gumus II, Uysal A, Kasapoglu B, et al. The platelet activating factor acetyl hydrolase, oxidized low-density lipoprotein, paraoxonase 1 and arylesterase levels in treated and untreated patients with polycystic ovary syndrome. Archives of Gynecology and Obstetrics. 2014;290(5):929–35. Available from: https://doi.org/10.1007/s00404-014-3275-8 .	Time on drug/follow up
44. Carmina E, Lobo RA. Gonadotrophin-releasing hormone agonist therapy for hirsutism is as effective as high dose cyproterone acetate but results in a longer remission. Human reproduction (Oxford, England). 1997;12(4):663–6.	Wrong patient population
45. Carvalho LML, Ferreira CN, Candido AL, Reis FM, Soter MO, Sales MF, et al. Metformin reduces total microparticles and microparticles-expressing tissue factor in women with polycystic ovary syndrome. Archives of Gynecology and Obstetrics. 2017;296(4):617–21. Available from: https://doi.org/10.1007/s00404-017-4471-0 .	Time on drug/follow up
46. Castelo-Branco C, Hernandez-Angeles C, Alvarez-Olivares L, Balasch J. Long-term satisfaction and tolerability with low-dose flutamide: a 20-year surveillance study on 120 hyperandrogenic women. Gynecological endocrinology : the official journal of the International Society of Gynecological Endocrinology. 2016;32(9):723–7.	Wrong patient population
47. Castelo-Branco C, Moyano D, Gomez O, Balasch J. Long-term safety and tolerability of flutamide for the treatment of hirsutism. Fertility and Sterility. 2009;91(4):1183–8. Available from: https://doi.org/10.1016/j.fertnstert.2008.01.046 .	Wrong patient population
48. Castelo-Branco C, Moyano D, Gómez O, Balasch J. Long-term safety and tolerability of flutamide for the treatment of hirsutism. Obstetrical and Gynecological Survey. 2009;64(9):598–9. Available from: https://doi.org/10.1097/01.ogx.0000358017.01384.7b .	Wrong study design
49. Cetik S, Acikgoz A, Yildiz BO. Investigation of taste function and eating behavior in women with polycystic ovary	Wrong study design

<p>syndrome. <i>Appetite</i>. 2022;168:105776. Available from: https://doi.org/10.1016/j.appet.2021.105776.</p>	
<p>50. Chang H, Xie L, Ge H, Wu Q, Wen Y, Zhang D, et al. Effects of hyperhomocysteinaemia and metabolic syndrome on reproduction in women with polycystic ovary syndrome: a secondary analysis. <i>Reproductive BioMedicine Online</i>. 2019;38(6):990–8. Available from: https://doi.org/10.1016/j.rbmo.2018.12.046.</p>	Wrong intervention
<p>51. Chen Z, Tan J, Wang H, Zheng B, Liu J, Hao G, et al. A Randomized Cohort Study: Is It Worth the Time to Receive Antiandrogenic Pretreatment Before Ovulation Induction for Women With Polycystic Ovary Syndrome? <i>Frontiers in Endocrinology</i>. 2022;13:813188. Available from: https://doi.org/10.3389/fendo.2022.813188.</p>	Wrong outcomes
<p>52. Christakou C, Kollias A, Piperi C, Katsikis I, Panidis D, Diamanti-Kandarakis E. The benefit-to-risk ratio of common treatments in PCOS: effect of oral contraceptives versus metformin on atherogenic markers. <i>Hormones (Athens, Greece)</i>. 2014;13(4):488–97. Available from: https://doi.org/10.14310/horm.2002.1553.</p>	Wrong study design
<p>53. Cicero AFG, Reggi A, Parini A, Morbini M, Rosticci M, Grandi E, et al. Berberine and monacolin effects on the cardiovascular risk profile of women with oestroprogestin-induced hypercholesterolemia. <i>High blood pressure & cardiovascular prevention : the official journal of the Italian Society of Hypertension</i>. 2014;21(3):221–6. Available from: https://doi.org/10.1007/s40292-014-0052-5.</p>	Wrong intervention
<p>54. Crawford A, Cooney LG, Jochym N, Dokras A, Amaro A. Insulin resistance and weight loss in obese women with polycystic ovary syndrome treated with liraglutide-single institution experience. <i>Diabetes</i>. 2018;67:A637.</p>	Other reason
<p>55. Crosby PD, Rittmaster RS. Predictors of clinical response in hirsute women treated with spironolactone. <i>Fertility and Sterility</i>. 1991;55(6):1076–81.</p>	Wrong study design
<p>56. Daan NMP, Louwers YV, Koster MPH, Eijkemans MJC, De Rijke YB, Lentjes EWG, et al. Cardiovascular and metabolic profiles amongst different polycystic ovary syndrome phenotypes: Who is really at risk? <i>Fertility and Sterility</i>. 2014;102(5):1444–51. Available from: https://doi.org/10.1016/j.fertnstert.2014.08.001.</p>	Wrong outcomes
<p>57. Dahlgren E, Friberg LG, Johansson S, Lindstrom B, Oden A, Samsioe G, et al. Endometrial carcinoma; ovarian</p>	Wrong patient population

dysfunction—a risk factor in young women. European journal of obstetrics, gynecology, and reproductive biology. 1991;41(2):143–50.	
58. Daneshjou D, Mehranjani MS, Zadehmodarres S, Shariatzadeh SMA, Mofarahe ZS. Sitagliptin/metformin improves the fertilization rate and embryo quality in polycystic ovary syndrome patients through increasing the expression of GDF9 and BMP15: A new alternative to metformin (a randomized trial). Journal of Reproductive Immunology. 2022;150:103499. Available from: https://doi.org/10.1016/j.jri.2022.103499 .	Time on drug/follow up
59. Dasari P, Pranahita G. The efficacy of metformin and clomiphene citrate combination compared with clomiphene citrate alone for ovulation induction in infertile patients with PCOS. Journal of Human Reproductive Sciences. 2009;2(1):18–22. Available from: https://doi.org/10.4103/0974-1208.51337 .	Wrong outcomes
60. Dastgheib M, Barati-Boldaji R, Bahrampour N, Taheri R, Borghei M, Amooee S, et al. A comparison of the effects of cinnamon, ginger, and metformin consumption on metabolic health, anthropometric indices, and sexual hormone levels in women with polycystic ovary syndrome: A randomized double-blinded placebo-controlled clinical trial. Frontiers in nutrition. 2022;9:1071515. Available from: https://doi.org/10.3389/fnut.2022.1071515 .	Time on drug/follow up
61. De Diego MV, Gomez-Pardo O, Groar JK, Lopez-Escobar A, Martin-Estal I, Castilla-Cortazar I, et al. Metabolic impact of current therapeutic strategies in Polycystic Ovary Syndrome: a preliminary study. Archives of Gynecology and Obstetrics. 2020;302(5):1169–79. Available from: https://doi.org/10.1007/s00404-020-05696-y .	Time on drug/follow up
62. De Leo V, La Marca A, Morgante G. Metformin and ovarian steroidogenesis in PCOS women. Clinical Endocrinology. 2000;52(2):243–6.	Other reason
63. de Zegher F, Diaz M, Ibanez L. Adolescent polycystic ovary syndrome without obesity: HOTAIR rs1443512 genotype relates to fat mass and to the redistribution of fat mass on low-dose pioglitazone. Journal of Endocrinological Investigation. 2023. Available from: https://doi.org/10.1007/s40618-023-02206-0 .	Wrong intervention
64. de Zegher F, Diaz M, Villarroja J, Cairo M, Lopez-Bermejo A, Villarroja F, et al. The relative deficit of GDF15 in adolescent girls with PCOS can be changed into an abundance that	Wrong study design

reduces liver fat. Scientific reports. 2021;11(1):7018. Available from: https://doi.org/10.1038/s41598-021-86317-9 .	
65. Derrigo K, LaFata EM. Examining the proportions of food addiction among women with and without polycystic ovarian syndrome who do and do not take hormonal birth control. Eating Behaviors. 2023;51. Available from: https://doi.org/10.1016/j.eatbeh.2023.101824 .	Wrong comparator
66. Deshmukh H, Akbar S, Bhajji A, Saeed Y, Shah N, Adeleke K, et al. Assessing the androgenic and metabolic heterogeneity in polycystic ovary syndrome using cluster analysis. Clinical Endocrinology. 2023;98(3):400–6. Available from: https://doi.org/10.1111/cen.14847 .	Wrong intervention
67. Diamanti-Kandarakis E, Economou FN, Livadas S, Tantalaki E, Piperi C, Papavassiliou AG, et al. Hyperreninemia characterizing women with polycystic ovary syndrome improves after metformin therapy. Kidney & blood pressure research. 2009;32(1):24–31. Available from: https://doi.org/10.1159/000201791 .	Wrong comparator
68. Diamanti-Kandarakis E, Spina G, Kouli C, Migdalis I. Increased endothelin-1 levels in women with polycystic ovary syndrome and the beneficial effect of metformin therapy. The Journal of clinical endocrinology and metabolism. 2001;86(10):4666–73.	Time on drug/follow up
69. Dikensoy E, Balat O, Pence S, Akcali C, Cicek H. The risk of hepatotoxicity during long-term and low-dose flutamide treatment in hirsutism. Archives of Gynecology and Obstetrics. 2009;279(3):321–7. Available from: https://doi.org/10.1007/s00404-008-0719-z .	Time on drug/follow up
70. Dinsdale NL, Chizen DR, Crespi BJ. Diagnosis, pelvic pain, and medication mediate cognitive empathic abilities among women with endometriosis or polycystic ovary syndrome. Journal of Endometriosis and Pelvic Pain Disorders. 2023;15(2):64-71. Available from: https://doi.org/10.1177/22840265231178334 .	Wrong intervention
71. Dragamestianos C, Messini CI, Antonakis PT, Zacharouli K, Kostopoulou E, Makrigiannakis A, et al. The Effect of Metformin on the Endometrium of Women with Polycystic Ovary Syndrome. Gynecologic and Obstetric Investigation. 2019;84(1):35–44. Available from: https://doi.org/10.1159/000491086 .	Time on drug/follow up
72. Dramusic V, Rajan U, Chan P, Ratnam SS, Wong YC. Adolescent polycystic ovary syndrome. 1997. p. 194–208.	Wrong study design

73. Du Y, Zhang M, Wang Z, Hu M, Xie D, Wang X, et al. A real-world disproportionality analysis of semaglutide: Post-marketing pharmacovigilance data. <i>Journal of Diabetes Investigation</i> . 2024. Available from: https://doi.org/10.1111/jdi.14229 .	Wrong setting
74. Eickman K, Maxwell R, McGinnis LK, Stanczyk F, Legro R, Lindheim SR. Total and bioavailable 25-hydroxyvitamin D is not associated with improved sexual dysfunction following vitamin D supplementation in women with polycystic ovarian syndrome: a pilot study. <i>The journal of sexual medicine</i> . 2024;21(3):240–7. Available from: https://doi.org/10.1093/jsxmed/qdad176 .	Wrong study design
75. El-Sharkawy AA, Abdelmotaleb GS, Aly MK, Kabel AM. Effect of metformin on sleep disorders in adolescent girls with polycystic ovarian syndrome. <i>Journal of Pediatric and Adolescent Gynecology</i> . 2014;27(6):347–52. Available from: https://doi.org/10.1016/j.jpag.2014.01.004 .	Wrong study design
76. Elbandrawy AM, Yousef AM, Morgan EN, Ewais NF, Eid MM, Elkholi SM, et al. Effect of aerobic exercise on inflammatory markers in polycystic ovary syndrome: a randomized controlled trial. <i>European Review for Medical and Pharmacological Sciences</i> . 2022;26(10):3506–13. Available from: https://doi.org/10.26355/eurrev_202205_28845 .	Wrong intervention
77. Elenis E, Desroziers E, Persson S, Sundstrom Poromaa I, Campbell RE. Early initiation of anti-androgen treatment is associated with increased probability of spontaneous conception leading to childbirth in women with polycystic ovary syndrome: a population-based multiregistry cohort study in Sweden. <i>Human reproduction (Oxford, England)</i> . 2021;36(5):1427–35. Available from: https://doi.org/10.1093/humrep/deaa357 .	Wrong outcomes
78. Fabregues F, Castelo-Branco C, Carmona F, Guimera M, Casamitjana R, Balasch J. The effect of different hormone therapies on anti-mullerian hormone serum levels in anovulatory women of reproductive age. <i>Gynecological endocrinology : the official journal of the International Society of Gynecological Endocrinology</i> . 2011;27(4):216–24. Available from: https://doi.org/10.3109/09513590.2010.487595 .	Time on drug/follow up
79. Fadhil ZF, Khalaf BH, Mousa Abo Almaali HM, Abdulwahid HH. ASSOCIATION OF GENETIC POLYMORPHISM OF INSULIN RECEPTOR SUBSTRATE 1 (IRS-1) WITH THERAPEUTIC RESPONSE OF METFORMIN IN WOMEN WITH POLYCYSTIC	Wrong study design

OVARY SYNDROME IN IRAQ. Biochemical and Cellular Archives. 2020;20(2):4471–5.	
80. Fattah A, Al-Kader DA, Jones Amaowei EE, Amini H, Hewadmal H, Rasuli SF, et al. A Comparative Study of Luteinizing Hormone Levels in Polycystic Ovarian Syndrome With Hyperandrogenism: Metformin Versus Oral Contraceptive Pills. Cureus. 2022;14(9):e29487. Available from: https://doi.org/10.7759/cureus.29487 .	Wrong study design
81. Fornes R, Simin J, Nguyen MH, Cruz G, Crisosto N, van der Schaaf M, et al. Pregnancy, perinatal and childhood outcomes in women with and without polycystic ovary syndrome and metformin during pregnancy: a nationwide population-based study. Reproductive biology and endocrinology : RB&E. 2022;20(1):30. Available from: https://doi.org/10.1186/s12958-022-00905-6 .	Wrong patient population
82. Frossing S, Nylander M, Kistorp C, Skouby SO, Faber J. Effects of the GLP-1 analogue liraglutide on ectopic fat distribution and sex hormones in women with PCOS: a randomised, clinical trial. Diabetologia. 2016;59(1):S385. Available from: https://doi.org/10.1007/s00125-016-4046-9 .	Other reason
83. Fulghesu AM, Melis F, Murru G, Canu E, Melis GB. Very low dose of flutamide in the treatment of hyperandrogenism. Gynecological endocrinology : the official journal of the International Society of Gynecological Endocrinology. 2018;34(5):394–8. Available from: https://doi.org/10.1080/09513590.2017.1397114 .	Wrong patient population
84. Gan J, Chen J, Ma RL, Deng Y, Ding XS, Zhu SY, et al. Gut Microbiome Structure and Metabolic Analysis in the Obese PCOS Patients After The Treatment of Exenatide Combined with Metformin and Metformin Only. Latin American Journal of Pharmacy. 2023;42(6):1329–38.	Wrong outcomes
85. Gao R, Qin L, Li Z, Min W. The homeostasis model assessment of insulin resistance is a judgment criterion for metformin pre-treatment before IVF/ICSI and embryo transfer cycles in patients with polycystic ovarian syndrome. Frontiers in Endocrinology. 2023;14:1106276. Available from: https://doi.org/10.3389/fendo.2023.1106276 .	Wrong study design
86. Garcia-Beltran C, Bassols J, Carreras-Badosa G, Lopez Bermejo A, Ibanez L, de Zegher F. Raised Thyroid-Stimulating Hormone in Girls with Polycystic Ovary Syndrome: Effects of Randomized Interventions. Hormone Research in Paediatrics.	Wrong outcomes

2023;96(5):458–64. Available from: https://doi.org/10.1159/000529183 .	
87. Garcia-Beltran C, Cereiyo R, Quesada-Lopez T, Malpique R, Lopez-Bermejo A, de Zegher F, et al. Reduced circulating levels of chemokine CXCL14 in adolescent girls with polycystic ovary syndrome: normalization after insulin sensitization. <i>BMJ open diabetes research & care</i> . 2020;8(1). Available from: https://doi.org/10.1136/bmjdr-2019-001035 .	Wrong study design
88. Garcia-Beltran C, Peyrou M, Navarro-Gascon A, Lopez-Bermejo A, de Zegher F, Villarroja F, et al. Organokines and liver enzymes in adolescent girls with polycystic ovary syndrome during randomized treatments. <i>Frontiers in Endocrinology</i> . 2024;15:1325230. Available from: https://doi.org/10.3389/fendo.2024.1325230 .	Wrong outcomes
89. Garcia-Gomez E, Gomez-Viais YI, Cruz-Aranda MM, Martinez-Razo LD, Reyes-Mayoral C, Ibarra-Gonzalez L, et al. The Effect of Metformin and Carbohydrate-Controlled Diet on DNA Methylation and Gene Expression in the Endometrium of Women with Polycystic Ovary Syndrome. <i>International Journal of Molecular Sciences</i> . 2023;24(7). Available from: https://doi.org/10.3390/ijms24076857 .	Wrong study design
90. Garzia E, Galiano V, Marfia G, Navone S, Grossi E, Marconi AM. Hyperandrogenism and menstrual imbalance are the best predictors of metformin response in PCOS patients. <i>Reproductive biology and endocrinology : RB&E</i> . 2022;20(1):6. Available from: https://doi.org/10.1186/s12958-021-00876-0 .	Wrong study design
91. Gleason EG, Levine L, Lee IT, Koelper NC, Amaro A, Dokras A. EFFECT OF GLUCAGON-LIKE PEPTIDE 1 RECEPTOR AGONIST PHARMACOTHERAPY ON WEIGHT LOSS IN PATIENTS WITH AND WITHOUT POLYCYSTIC OVARY SYNDROME. <i>Fertility and Sterility</i> . 2023;120(4):e33–e4. Available from: https://doi.org/10.1016/j.fertnstert.2023.08.130 .	Wrong study design
92. Glintborg D, Ollila M-M, Moller J-JK, Pesonen P, Persson S, Elenis E, et al. Prospective risk of Type 2 diabetes in 99 892 Nordic women with polycystic ovary syndrome and 446 055 controls: national cohort study from Denmark, Finland, and Sweden. <i>Human reproduction (Oxford, England)</i> . 2024;39(8):1823–34. Available from: https://doi.org/10.1093/humrep/deae124 .	Wrong intervention
93. Glintborg D, Rubin KH, Nybo M, Abrahamsen B, Andersen M. Cardiovascular disease in a nationwide population of Danish women with polycystic ovary syndrome. <i>Cardiovascular</i>	Wrong patient population

Diabetology. 2018;17(1):37. Available from: https://doi.org/10.1186/s12933-018-0680-5 .	
94. Glueck CJ, Aregawi D, Agloria M, Winiarska M, Sieve L, Wang P. Sustainability of 8% weight loss, reduction of insulin resistance, and amelioration of atherogenic-metabolic risk factors over 4 years by metformin-diet in women with polycystic ovary syndrome. <i>Metabolism: Clinical and Experimental</i> . 2006;55(12):1582–9.	Wrong comparator
95. Glueck CJ, Golnik KC, Aregawi D, Goldenberg N, Sieve L, Wang P. Changes in weight, papilledema, headache, visual field, and life status in response to diet and metformin in women with idiopathic intracranial hypertension with and without concurrent polycystic ovary syndrome or hyperinsulinemia. <i>Translational research : the journal of laboratory and clinical medicine</i> . 2006;148(5):215–22.	Wrong study design
96. Glueck CJ, Moreira A, Goldenberg N, Sieve L, Wang P. Pioglitazone and metformin in obese women with polycystic ovary syndrome not optimally responsive to metformin. <i>Human reproduction (Oxford, England)</i> . 2003;18(8):1618–25.	Wrong intervention
97. Glueck CJ, Morrison JA, Wang P. Insulin resistance, obesity, hypofibrinolysis, hyperandrogenism, and coronary heart disease risk factors in 25 pre-perimenarchal girls age < or =14 years, 13 with precocious puberty, 23 with a first-degree relative with polycystic ovary syndrome. <i>Journal of pediatric endocrinology & metabolism : JPEM</i> . 2008;21(10):973–84.	Wrong intervention
98. Glueck CJ, Papanna R, Wang P, Goldenberg N, Sieve-Smith L. Incidence and treatment of metabolic syndrome in newly referred women with confirmed polycystic ovarian syndrome. <i>Metabolism: Clinical and Experimental</i> . 2003;52(7):908–15.	Wrong study design
99. Gokmen O, Senoz S, Gulekli B, Isik AZ. Comparison of four different treatment regimes in hirsutism related to polycystic ovary syndrome. <i>Gynecological endocrinology : the official journal of the International Society of Gynecological Endocrinology</i> . 1996;10(4):249–55.	Wrong study design
100. Goricar K, Bozic T, Jensterle M, Horvat S, Janez A, Dolzan V. Deptor polymorphisms are associated with unfavourable adipose tissue distribution in obese women with PCOS. <i>Endocrine Reviews</i> . 2017;38(3).	Other reason
101. Gregoriou O, Bakas P, Konidaris S, Papadias K, Mathiopoulos D, Creatsas G. The effect of combined oral contraception with or without spironolactone on bone mineral density of hyperandrogenic women. <i>Gynecological</i>	Wrong patient population

endocrinology : the official journal of the International Society of Gynecological Endocrinology. 2000;14(5):369–73.		
102.	Gu M, Ruan X, Li Y, Li T, Yin C, Mueck AO. Effect on the cardiovascular independent risk factor lipoprotein(a) in overweight or obese PCOS patients with ethinyl-estradiol/drospirenone alone or plus orlistat. Gynecological endocrinology : the official journal of the International Society of Gynecological Endocrinology. 2022;38(7):598–602. Available from: https://doi.org/10.1080/09513590.2022.2078805 .	Wrong intervention
103.	Hahn S, Frey UH, Siffert W, Tan S, Mann K, Janssen OE. The CC genotype of the GNAS T393C polymorphism is associated with obesity and insulin resistance in women with polycystic ovary syndrome. European Journal of Endocrinology. 2006;155(5):763–70.	Time on drug/follow up
104.	Hamadneh J, Amarín Z, Alchalabi H, Al-Bayyari N, Hamadneh S. Are STK11 polymorphisms a predictor of the response to metformin in polycystic ovarian syndrome? Biomedical reports. 2022;17(2):70. Available from: https://doi.org/10.3892/br.2022.1553 .	Wrong comparator
105.	Hameed MA, Ali RH, Al-Qadhi HI. Changes in Serum Irisin in Response to Metformin Treatment in Iraqi Women Patients with Polycystic Ovary Syndrome. Neuroquantology. 2022;20(3):295–301. Available from: https://doi.org/10.14704/nq.2022.20.3.NQ22279 .	Time on drug/follow up
106.	Han SJ, Kim H, Hong YS, Kim SW, Ku S-Y, Suh CS. Prediction model of persistent ovulatory dysfunction in Korean women with polycystic ovary syndrome. The journal of obstetrics and gynaecology research. 2022;48(7):1795–805. Available from: https://doi.org/10.1111/jog.15288 .	Time on drug/follow up
107.	Han SJ, Kim H, Ku S-Y, Suh CS. Comparison of resumption of ovulation after cessation of oral contraceptives and medroxyprogesterone acetate in women with polycystic ovary syndrome. Gynecological endocrinology : the official journal of the International Society of Gynecological Endocrinology. 2024;40(1):2309349. Available from: https://doi.org/10.1080/09513590.2024.2309349 .	Time on drug/follow up
108.	Hantoushzadeh S, Saleh M, Aghajanian S, Saleh M. Pathogenesis and prevention of adverse pregnancy outcomes in polycystic ovary syndrome. BJOG: An International Journal of Obstetrics and Gynaecology. 2023;130(5):541–2. Available from: https://doi.org/10.1111/1471-0528.17361 .	Wrong study design

109.	Hariton E, Shirazi TN, Douglas NC, Hershlag A, Briggs SF. Anti-Mullerian hormone levels among contraceptive users: evidence from a cross-sectional cohort of 27,125 individuals. American Journal of Obstetrics and Gynecology. 2021;225(5):515.e1–.e10. Available from: https://doi.org/10.1016/j.ajog.2021.06.052 .	Wrong study design
110.	Heald AH, Livingston M, Holland D, Robinson J, Moreno GY, Donnahey G, et al. Polycystic ovarian syndrome: Assessment of approaches to diagnosis and cardiometabolic monitoring in UK primary care. Int J Clin Pract. 2018;72(1):e13046. Available from: https://doi.org/https://doi.org/10.1111/ijcp.13046 .	Wrong outcomes
111.	Heshmati N, Shahgheibi S, Nikkhoo B, Amini S, Abdi M. Association of Prooxidant-Antioxidant Balance with Clinical and Laboratory Parameters and Its Relation to Different Drug Regimens in Polycystic Ovary Syndrome Women with Normal BMI. Indian journal of clinical biochemistry : IJCB. 2017;32(3):315–22. Available from: https://doi.org/10.1007/s12291-016-0613-6 .	Wrong outcomes
112.	Heutling D, Schulz H, Nickel I, Kleinstein J, Kaltwasser P, Westphal S, et al. Asymmetrical dimethylarginine, inflammatory and metabolic parameters in women with polycystic ovary syndrome before and after metformin treatment. The Journal of clinical endocrinology and metabolism. 2008;93(1):82–90.	Wrong study design
113.	Hill RC, Wang Y, Shaikh B, Lipner SR. No increased risk of breast or gynecologic malignancies in women exposed to spironolactone for dermatologic conditions: A retrospective cohort study. Journal of the American Academy of Dermatology. 2024;90(6):1302–4. Available from: https://doi.org/10.1016/j.jaad.2024.02.030 .	Wrong patient population
114.	Hill RC, Wang Y, Shaikh B, Lipner SR. Future research directions regarding safety of spironolactone for dermatologic conditions. Journal of the American Academy of Dermatology. 2024. Available from: https://doi.org/10.1016/j.jaad.2024.08.012 .	Other reason
115.	Hill RC, Wang Y, Shaikh B, Ong M, Christos PJ, Lipner SR. Spironolactone treatment for dermatologic indications is not associated with hypotension in a single-center retrospective study. Journal of the American Academy of Dermatology. 2024;90(6):1245–7. Available from: https://doi.org/10.1016/j.jaad.2024.01.057 .	Wrong study design

116.	Hong X, Qin P, Gao L, Huang L, Shi Y, Peng D, et al. Change of the vaginal microbiome with oral contraceptive therapy in women with polycystic ovary syndrome: a 6-month longitudinal cohort study. BMC Medicine. 2023;21(1):478. Available from: https://doi.org/10.1186/s12916-023-03196-9 .	Wrong study design
117.	Hu L, Ma L, Xia X, Ying T, Zhou M, Zou S, et al. Efficacy of Bariatric Surgery in the Treatment of Women With Obesity and Polycystic Ovary Syndrome. The Journal of clinical endocrinology and metabolism. 2022;107(8):e3217–e29. Available from: https://doi.org/10.1210/clinem/dgac294 .	Wrong comparator
118.	Hu Z, Wang Y, Qiao J, Li M, Chi H, Chen X. The role of family history in clinical symptoms and therapeutic outcomes of women with polycystic ovary syndrome. International journal of gynaecology and obstetrics: the official organ of the International Federation of Gynaecology and Obstetrics. 2010;108(1):35–9. Available from: https://doi.org/10.1016/j.ijgo.2009.08.004 .	Wrong study design
119.	Hudecova M, Holte J, Olovsson M, Lind L, Poromaa IS. Endothelial function in patients with polycystic ovary syndrome: a long-term follow-up study. Fertility and Sterility. 2010;94(7):2654–8. Available from: https://doi.org/10.1016/j.fertnstert.2010.02.048 .	Wrong study design
120.	Hwang KJ, Chang HS, Choi HJ, Cho PJ, Kim MR, Lee H. Effects of Metformin in Patients with Polycystic Ovary Syndrome (PCOS) undergoing In Vitro Fertilization and Embryo Transfer. Korean journal of obstetrics and gynecology. 2005;48(9):2181–9.	Wrong outcomes
121.	Ibanez L, de Zegher F. Low-dose combination of flutamide, metformin and an oral contraceptive for non-obese, young women with polycystic ovary syndrome. Human reproduction (Oxford, England). 2003;18(1):57–60.	Time on drug/follow up
122.	Ibanez L, de Zegher F. Low-dose flutamide-metformin therapy for hyperinsulinemic hyperandrogenism in nonobese adolescents and women. Fertility and Sterility. 2006;86 Suppl 1:S24–5.	Wrong study design
123.	Ibanez L, de Zegher F. Low-dose flutamide-metformin therapy for hyperinsulinemic hyperandrogenism in non-obese adolescents and women. Human reproduction update. 2006;12(3):243–52. Available from: https://doi.org/10.1093/humupd/dmi054 .	Wrong study design
124.	Ibanez L, Jaramillo A, Ferrer A, de Zegher F. Absence of hepatotoxicity after long-term, low-dose flutamide in	Wrong outcomes

hyperandrogenic girls and young women. Human reproduction (Oxford, England). 2005;20(7):1833–6.		
125.	Ibanez L, Jaramillo AM, Ferrer A, de Zegher F. High neutrophil count in girls and women with hyperinsulinaemic hyperandrogenism: normalization with metformin and flutamide overcomes the aggravation by oral contraception. Human reproduction (Oxford, England). 2005;20(9):2457–62.	Time on drug/follow up
126.	Ibanez L, Lopez-Bermejo A, Diaz M, Enriquez G, Del Rio L, De Zegher F. Low-dose pioglitazone, flutamide, metformin plus an estro-progestagen for non-obese young women with polycystic ovary syndrome: increasing efficacy and persistent safety over 30 months. Gynecological endocrinology : the official journal of the International Society of Gynecological Endocrinology. 2010;26(12):869–73. Available from: https://doi.org/10.3109/09513590.2010.487589 .	Wrong study design
127.	Ibanez L, Ong K, Ferrer A, Amin R, Dunger D, de Zegher F. Low-dose flutamide-metformin therapy reverses insulin resistance and reduces fat mass in nonobese adolescents with ovarian hyperandrogenism. The Journal of clinical endocrinology and metabolism. 2003;88(6):2600–6.	Time on drug/follow up
128.	Jacewicz-święcka M, Wołczyński S, Kowalska I. The effect of ageing on clinical, hormonal and sonographic features associated with pcos—a long-term follow-up study. Journal of Clinical Medicine. 2021;10(10). Available from: https://doi.org/10.3390/jcm10102101 .	Wrong study design
129.	Jaganmohan C, Vannan M, Ali A, Parasuraman S. Evaluation of clinical efficacy of metformin therapy in Polycystic Ovary Syndrome. Journal of Young Pharmacists. 2017;9(2):277–9. Available from: https://doi.org/10.5530/jyp.2017.9.54 .	Time on drug/follow up
130.	Janez A, Jensterle M. Add-on therapies in obese pre-diabetic women with polycystic ovary syndrome. Diabetes Technology and Therapeutics. 2017;19:A5–A6. Available from: https://doi.org/10.1089/dia.2017.2525.abstracts .	Other reason
131.	Jang S, Hwang SO. The risk factors for premalignant and malignant endometrial polyps in premenopausal and postmenopausal women and trends over the past decade: A retrospective study in a single center, South Korea. European journal of obstetrics, gynecology, and reproductive biology. 2024;295:118–23. Available from: https://doi.org/10.1016/j.ejogrb.2024.01.033 .	Wrong study design

132.	Jason J. Polycystic ovary syndrome in the United States: Clinical visit rates, characteristics, and associated health care costs. Archives of Internal Medicine. 2011;171(13):1209–11. Available from: https://doi.org/10.1001/archinternmed.2011.288 .	Wrong intervention
133.	Jensterle M, Ferjan S, Janez A. The maintenance of long-term weight loss after semaglutide withdrawal in obese women with PCOS treated with metformin: a 2-year observational study. Frontiers in Endocrinology. 2024;15:1366940. Available from: https://doi.org/10.3389/fendo.2024.1366940 .	Wrong comparator
134.	Jensterle M, Ferjan S, Ležaič L, Sočan A, Goričar K, Zaletel K, et al. Semaglutide delays 4-hour gastric emptying in women with polycystic ovary syndrome and obesity. Diabetes, Obesity and Metabolism. 2023;25(4):975–84. Available from: https://doi.org/10.1111/dom.14944 .	Other reason
135.	Jensterle M, Ferjan S, Lezaic L, Socan A, Zaletel K, Janez A. Once-weekly semaglutide delays a late phase gastric emptying of solid meal measured by repeated scintigraphic imaging in obese women with PCOS. Journal of the Endocrine Society. 2022;6:A33–A4. Available from: https://doi.org/10.1210/jendso/bvac150.070 .	Wrong study design
136.	Jensterle M, Kravos NA, Ferjan S, Goricar K, Dolzan V, Janez A. Long-term efficacy of metformin in overweight-obese PCOS: longitudinal follow-up of retrospective cohort. Endocrine Connections. 2020;9(1):44–54. Available from: https://doi.org/10.1530/EC-19-0449 .	Wrong comparator
137.	Jensterle M, Vovk A, Kovač J, Battelino S, Ferjan S, Hrast B, et al. Semaglutide alters tongue transcriptome along with the improvement of taste perception and increased brain activation in response to sweet tasting solution women with obesity and PCOS. Obesity Facts. 2023;16:403–4. Available from: https://doi.org/10.1159/000530456 .	Other reason
138.	Jiang F, Wei K, Lyu W, Wu C. Predicting Risk of Insulin Resistance in a Chinese Population with Polycystic Ovary Syndrome: Designing and Testing a New Predictive Nomogram. BioMed Research International. 2020;2020:8031497. Available from: https://doi.org/10.1155/2020/8031497 .	Time on drug/follow up
139.	Jiang S, Tang T, Sheng Y, Li R, Xu H. The Effects of Letrozole and Metformin Combined with Targeted Nursing Care on Ovarian Function, LH, and FSH in Infertile Patients with Polycystic Ovary Syndrome. Journal of Healthcare	Wrong intervention

Engineering. 2022;2022:3712166. Available from: https://doi.org/10.1155/2022/3712166 .		
140.	Jinno M, Kondou K, Teruya K. Low-dose metformin improves pregnancy rate in in vitro fertilization repeaters without polycystic ovary syndrome: prediction of effectiveness by multiple parameters related to insulin resistance. <i>Hormones (Athens, Greece)</i> . 2010;9(2):161–70.	Wrong patient population
141.	Joham AE, Boyle JA, Ranasinha S, Zoungas S, Teede HJ. Contraception use and pregnancy outcomes in women with polycystic ovary syndrome: data from the Australian Longitudinal Study on Women's Health. <i>Human reproduction (Oxford, England)</i> . 2014;29(4):802–8. Available from: https://doi.org/10.1093/humrep/deu020 .	Wrong study design
142.	Jungari M, Choudhary A, Gill NK. Comprehensive Management of Polycystic Ovary Syndrome: Effect of Pharmacotherapy, Lifestyle Modification, and Enhanced Adherence Counseling. <i>Cureus</i> . 2023;15(2):e35415. Available from: https://doi.org/10.7759/cureus.35415 .	Time on drug/follow up
143.	Kabil Kucur S, Gozukara I, Aksoy A, Uludag EU, Keskin H, Kamalak Z, et al. How medical treatment affects mean platelet volume as a cardiovascular risk marker in polycystic ovary syndrome? <i>Blood coagulation & fibrinolysis : an international journal in haemostasis and thrombosis</i> . 2015;26(8):862–5. Available from: https://doi.org/10.1097/MBC.0000000000000229 .	Time on drug/follow up
144.	Kachhawa G, Senthil Kumar KV, Kulshrestha V, Khadgawat R, Mahey R, Bhatla N. Efficacy of myo-inositol and d-chiro-inositol combination on menstrual cycle regulation and improving insulin resistance in young women with polycystic ovary syndrome: A randomized open-label study. <i>International journal of gynaecology and obstetrics: the official organ of the International Federation of Gynaecology and Obstetrics</i> . 2022;158(2):278–84. Available from: https://doi.org/10.1002/ijgo.13971 .	Wrong comparator
145.	Kahal H, Kilpatrick ES, Coady AM, Atkin SL. The effects of treatment with liraglutide on quality of life and depression in young obese women with PCOS and controls. <i>Endocrine reviews</i> . 2014;35.	Wrong study design
146.	Kahraman S, Vanlioglu F, Yakin K, Cengiz S, Karlikaya G. A comparative trial of metformin and oral contraceptive pretreatment in patients with polycystic ovary syndrome	Wrong study design

undergoing ICSI for severe male factor infertility. Fertility and Sterility. 2001;76(3 Suppl 1):S67.	
147. Kalem MN, Kalem Z, Gurgan T. Effect of metformin and oral contraceptives on polycystic ovary syndrome and IVF cycles. Journal of Endocrinological Investigation. 2017;40(7):745–52. Available from: https://doi.org/10.1007/s40618-017-0634-x .	Time on drug/follow up
148. Kamrul-Hasan A, Aalpona FTZ. Comparison of Serum Vitamin B12 Levels Among Drug-Naive and Metformin-Treated Patients With Polycystic Ovary Syndrome. Cureus. 2022;14(10):e30447. Available from: https://doi.org/10.7759/cureus.30447 .	Time on drug/follow up
149. Karakurt F, Carlioglu A, Kaygusuz I, Gumus II, Uz B, Akdeniz D. Effect of ethinyl estradiol-cyproterone acetate treatment on asymmetric dimethyl-arginine levels in women with polycystic ovary syndrome. Archives of Gynecology and Obstetrics. 2014;289(1):135–40. Available from: https://doi.org/10.1007/s00404-013-2960-3 .	Time on drug/follow up
150. Karim N, Ali SS, Ishaq M, Ansari MA, Ahmed SP. To compare the effects of metformin HCl with diet and exercise on the carbohydrate metabolism in polycystic ovary syndrome. Canadian journal of pure & applied sciences. 2007;1(1):57–61.	Time on drug/follow up
151. Karjane NW, Cheang KI, Mandolesi GA, Stovall DW. Persistence with oral contraceptive pills versus metformin in women with polycystic ovary syndrome. Journal of women's health (2002). 2012;21(6):690-4. Available from: https://doi.org/10.1089/jwh.2011.3116 .	Wrong outcomes
152. Karrer-Voegeli S, Rey F, Reymond MJ, Meuwly J-Y, Gaillard RC, Gomez F. Androgen dependence of hirsutism, acne, and alopecia in women: retrospective analysis of 228 patients investigated for hyperandrogenism. Medicine. 2009;88(1):32–45. Available from: https://doi.org/10.1097/md.0b013e3181946a2c .	Wrong study design
153. Kelestimur F, Sahin Y. Comparison of Diane 35 and Diane 35 plus spironolactone in the treatment of hirsutism. Fertility and Sterility. 1998;69(1):66–9.	Wrong patient population
154. Khalaf S, Al Anzy M, Sarhat E. IMPACT OF METFORMIN ON OSTEOPROTEGERIN LEVELS IN POLYCYSTIC OVARIAN WOMEN. Georgian medical news. 2024(346):144–6.	

155.	Khan A, Arslaan M, Pahore AK, Sayyar HT, Karim N. Outcomes of Pioglitazone and Metformin on Anthropometric, Metabolic and Endocrine variables in Polycystic Ovary Syndrome. Pakistan Journal of Medical and Health Sciences. 2023;17(1):220–2. Available from: https://doi.org/10.53350/pjmhs2023171220 .	Wrong comparator
156.	Khan A, Munir M, Sayyar HT, Amjad H, Karim N. Effect of metformin on BMI, body circumferences and metabolic parameters in polycystic ovarian syndrome. Rawal Medical Journal. 2022;47(4):948–51.	Wrong study design
157.	Kiconco S, Teede HJ, Earnest A, Loxton D, Joham AE. Menstrual cycle regularity as a predictor for heart disease and diabetes: Findings from a large population-based longitudinal cohort study. Clinical Endocrinology. 2022;96(4):605–16. Available from: https://doi.org/10.1111/cen.14640 .	Wrong patient population
158.	Kim J, Mersereau JE, Khankari N, Bradshaw PT, McCullough LE, Cleveland R, et al. Polycystic ovarian syndrome (PCOS), related symptoms/sequelae, and breast cancer risk in a population-based case-control study. Cancer causes & control : CCC. 2016;27(3):403–14. Available from: https://doi.org/10.1007/s10552-016-0716-7 .	Wrong patient population
159.	Kim JJ, Hwang KR, Lee D, Kim S, Choi YM. Adolescents diagnosed with polycystic ovary syndrome under the Rotterdam criteria but not meeting the diagnosis under the updated guideline. Human Reproduction. 2024;39(5):1072–7. Available from: https://doi.org/10.1093/humrep/deae042 .	Wrong study design
160.	Ko EM, Sturmer T, Hong J-L, Castillo WC, Bae-Jump V, Funk MJ. Metformin and the risk of endometrial cancer: a population-based cohort study. Gynecologic Oncology. 2015;136(2):341–7. Available from: https://doi.org/10.1016/j.ygyno.2014.12.001 .	Wrong comparator
161.	Kocer D, Bayram F, Diri H. The effects of metformin on endothelial dysfunction, lipid metabolism and oxidative stress in women with polycystic ovary syndrome. Gynecological endocrinology : the official journal of the International Society of Gynecological Endocrinology. 2014;30(5):367–71. Available from: https://doi.org/10.3109/09513590.2014.887063 .	Wrong study design
162.	Koiou E, Tziomalos K, Katsikis I, Kandaraki EA, Kalaitzakis E, Delkos D, et al. Weight loss significantly reduces serum lipocalin-2 levels in overweight and obese women with polycystic ovary syndrome. Gynecological endocrinology : the official journal of the International Society of Gynecological	Time on drug/follow up

Endocrinology. 2012;28(1):20–4. Available from: https://doi.org/10.3109/09513590.2011.588745 .		
163.	Komorowski AS, Hughes L, Sarkar P, Aaby DA, Kumar A, Kalra B, et al. Anti-Mullerian Hormone Level Predicts Ovulation in Women with Polycystic Ovary Syndrome Treated with Clomiphene and Metformin. <i>Fertility and Sterility</i> . 2023. Available from: https://doi.org/10.1016/j.fertnstert.2023.12.031 .	Wrong comparator
164.	Koyuncu FM, Kuscü NK, Var A, Onur E. Leptin levels in patients with polycystic ovary syndrome in response to two different oral contraceptive treatments. <i>Acta Obstetrica et Gynecologica Scandinavica</i> . 2003;82(8):767–8.	Wrong study design
165.	Kruszynska A, Slowinska-Srzednicka J, Jeske W, Zgliczynski W. Proinsulin, adiponectin and hsCRP in reproductive age women with polycystic ovary syndrome (PCOS)--the effect of metformin treatment. <i>Endokrynologia Polska</i> . 2014;65(1):2–10. Available from: https://doi.org/10.5603/EP.2014.0001 .	Wrong study design
166.	Kumari B, Pritam A, Pratima, Bibha K. To Study the Effect of Oral Contraceptives and Metformin on Metabolic and Endocrine Parameters in Individuals with Polycystic Ovarian Syndrome: a Prospective Interventional Study. <i>International Journal of Pharmaceutical and Clinical Research</i> . 2024;16(5):1404–10.	Time on drug/follow up
167.	Lazaro I, Diaz M, Cabre A, Masana L, Ibanez L. Fatty acid-binding protein-4 plasma levels are associated to metabolic abnormalities and response to therapy in girls and young women with androgen excess. <i>Gynecological endocrinology : the official journal of the International Society of Gynecological Endocrinology</i> . 2011;27(11):935–9. Available from: https://doi.org/10.3109/09513590.2011.569608 .	Wrong study design;
168.	Leelaphiwat S, Munkrut N, Weerakiet S, Tingthanatikul Y. Incidence of diabetes mellitus in thai women with polycystic ovary syndrome. <i>Journal of the Medical Association of Thailand</i> . 2019;102(8):853–60.	Wrong study design
169.	Lefoulon N, Begon E, Perrissin-Fabert M, Grouthier V, Hocke C, Bernard V. Impact of combined oral contraceptives and spironolactone on hirsutism and quality of life. <i>Gynecologie Obstetrique Fertilité et Senologie</i> . 2022;50(9):591–9. Available from: https://doi.org/10.1016/j.gofs.2022.06.001 .	Wrong language

170.	Li K, Li L, Yang G. Circulating fetuin B is associated with insulin resistance in polycystic ovary syndrome woman and is regulated by liraglutide treatment. <i>Diabetologia</i> . 2019;62:S240–S1. Available from: https://doi.org/10.1007/s00125-019-4946-6 .	Wrong study design
171.	Li M, Yang M, Zhou X, Fang X, Hu W, Zhu W, et al. Elevated circulating levels of irisin and the effect of metformin treatment in women with polycystic ovary syndrome. <i>The Journal of clinical endocrinology and metabolism</i> . 2015;100(4):1485–93. Available from: https://doi.org/10.1210/jc.2014-2544 .	Wrong comparator
172.	Li Y, Deng B, Ouyang N, Yuan P, Zheng L, Wang W. Telomere length is short in PCOS and oral contraceptive does not affect the telomerase activity in granulosa cells of patients with PCOS. <i>Journal of Assisted Reproduction and Genetics</i> . 2017;34(7):849–59. Available from: https://doi.org/10.1007/s10815-017-0929-z .	Time on drug/follow up
173.	Li Y, Ruan X, Wang H, Li X, Cai G, Du J, et al. Comparing the risk of adverse pregnancy outcomes of Chinese patients with polycystic ovary syndrome with and without antiandrogenic pretreatment. <i>Fertility and Sterility</i> . 2018;109(4):720–7. Available from: https://doi.org/10.1016/j.fertnstert.2017.12.023 .	Wrong patient population
174.	Liu M, Gao J, Zhang Y, Li P, Wang H, Ren X, et al. Serum levels of TSP-1, NF-kappaB and TGF-beta1 in polycystic ovarian syndrome (PCOS) patients in northern China suggest PCOS is associated with chronic inflammation. <i>Clinical Endocrinology</i> . 2015;83(6):913–22. Available from: https://doi.org/10.1111/cen.12951 .	Wrong study design
175.	Liu Z, Wang K-H. Effect of basal luteinizing hormone (bLH) level on in vitro fertilization/intra-cytoplasmic injections (IVF/ICSI) outcomes in polycystic ovarian syndrome (PCOS) patients. <i>BMC Pregnancy and Childbirth</i> . 2023;23(1):618. Available from: https://doi.org/10.1186/s12884-023-05944-4 .	Time on drug/follow up
176.	Livadas S, Yildiz BO, Mastorakos G, Gambineri A, Pignatelli D, Giorgino F, et al. European survey of diagnosis and management of the polycystic ovary syndrome: full report on the ESE PCOS Special Interest Group's 2023 Questionnaire. <i>European Journal of Endocrinology</i> . 2024;191(2):134–43. Available from: https://doi.org/10.1093/ejendo/lvae085 .	Wrong study design
177.	Long X, Liu H, Xiong W, Li W, He H, Fu T, et al. Low dose of liraglutide combined with metformin leads to a significant	Wrong study design

weight loss in Chinese Han women with polycystic ovary syndrome: a retrospective study. <i>Gynecological endocrinology : the official journal of the International Society of Gynecological Endocrinology</i> . 2023;39(1):2223648. Available from: https://doi.org/10.1080/09513590.2023.2223648 .	
178. Lou XF, Lin JF, Fang SP, Wang FL. Analysis on reverse of Atypical endometrial hyperplasia by drugs in patients with polycystic ovary syndrome. <i>Journal of Reproduction and Contraception</i> . 2013;24(4):205–14. Available from: https://doi.org/10.7669/j.issn.1001-7844.2013.04.0205 .	Time on drug/follow up
179. Lu L, Luo J, Deng J, Huang C, Li C. Polycystic ovary syndrome is associated with a higher risk of premalignant and malignant endometrial polyps in premenopausal women: a retrospective study in a tertiary teaching hospital. <i>BMC Women's Health</i> . 2023;23(1):127. Available from: https://doi.org/10.1186/s12905-023-02269-4 .	Wrong study design
180. Lu Y, Wang Y, Zhang T, Wang G, He Y, Lindheim SR, et al. Effect of Pretreatment Oral Contraceptives on Fresh and Cumulative Live Birth in Vitro Fertilization Outcomes in Ovulatory Women. <i>Obstetrical and Gynecological Survey</i> . 2021;76(1):33–4. Available from: https://doi.org/10.1097/OGX.0000000000000885 .	Wrong outcomes
181. Madsen HN, Lauszus FF, Trolle B, Ingerslev HJ, Topping N. Impact of metformin on anti-Mullerian hormone in women with polycystic ovary syndrome: a secondary analysis of a randomized controlled trial. <i>Acta Obstetrica et Gynecologica Scandinavica</i> . 2015;94(5):547–51. Available from: https://doi.org/10.1111/aogs.12605 .	Wrong outcomes
182. Magalhaes FMV, Pestana RMC, Ferreira CN, Silva IFO, Candido AL, Oliveira FR, et al. GDF-15 levels in patients with polycystic ovary syndrome treated with metformin: a combined clinical and in silico pathway analysis. <i>Archives of endocrinology and metabolism</i> . 2024;68:e230416. Available from: https://doi.org/10.20945/2359-4292-2023-0416 .	Wrong outcomes
183. Maier PS, Mattiello SS, Lages L, Spritzer PM. 17-Hydroxysteroid dehydrogenase type 5 gene polymorphism (-71A/G HSD17B5 SNP) and treatment with oral contraceptive pills in PCOS women without metabolic comorbidities. <i>Gynecological endocrinology : the official journal of the International Society of Gynecological Endocrinology</i> . 2012;28(8):606–10. Available from: https://doi.org/10.3109/09513590.2011.650760 .	Wrong study design

184.	Manzoor S, Ganie MA, Amin S, Shah ZA, Bhat IA, Yousuf SD, et al. Oral contraceptive use increases risk of inflammatory and coagulatory disorders in women with Polycystic Ovarian Syndrome: An observational study. Scientific reports. 2019;9(1):10182. Available from: https://doi.org/10.1038/s41598-019-46644-4 .	Time on drug/follow up
185.	Manzoor S, Ganie MA, Majid S, Shabir I, Kawa IA, Fatima Q, et al. Analysis of Intrinsic and Extrinsic Coagulation Pathway Factors in OCP Treated PCOS Women. Indian journal of clinical biochemistry : IJCB. 2021;36(3):278–87. Available from: https://doi.org/10.1007/s12291-020-00901-w .	Time on drug/follow up;
186.	Marsh KA, Steinbeck KS, Atkinson FS, Petocz P, Brand-Miller JC. Effect of a low glycemic index compared with a conventional healthy diet on polycystic ovary syndrome. The American journal of clinical nutrition. 2010;92(1):83–92. Available from: https://doi.org/10.3945/ajcn.2010.29261 .	Wrong study design;
187.	Mateen B, Hussain R, Memon SB, Memon AS, Sodhar JM, Hingoro MA. Anatomical Changes in Young Women with Polycystic Ovary Syndrome and First Line Treatment, A Clinical Study. Pakistan Journal of Medical and Health Sciences. 2022;16(7):517–9. Available from: https://doi.org/10.53350/pjmhs22167517 .	Wrong study design
188.	Matsuzaki T, Tungalagsuvd A, Iwasa T, Munkhzaya M, Yano K, Mayila Y, et al. Clinical outcome of various metformin treatments for women with polycystic ovary syndrome. Reproductive medicine and biology. 2017;16(2):179–87. Available from: https://doi.org/10.1002/rmb2.12026 .	Wrong comparator
189.	McGovern PG, Carson SA, Barnhart HX, Myers ER, Legro RS, Diamond MP, et al. Medication adherence and treatment success in the National Institute of Child Health and Human Development-Reproductive Medicine Network's Pregnancy in Polycystic Ovary Syndrome Trial. Fertility and Sterility. 2008;90(4):1283–6.	Wrong study design
190.	McKenna KM, Pepperell RJ, Evans J. Hirsutism in a gynaecological context. Aust N Z J Obstet Gynaecol. 1990;30(2):153-6. Available from: https://doi.org/10.1111/j.1479-828x.1990.tb03251.x	Wrong patient population
191.	Mes-Krowinkel MG, Louwers YV, Mulders AGMGJ, de Jong FH, Fauser BCJM, Laven JSE. Influence of oral contraceptives on anthropomorphometric, endocrine, and metabolic profiles of anovulatory polycystic ovary syndrome patients. Fertility and Sterility. 2014;101(6):1757-65.e1.	Wrong study design

Available from: https://doi.org/10.1016/j.fertnstert.2014.02.039 .		
192.	Meyer ML, Sotres-Alvarez D, Steiner AZ, Cousins L, Talavera GA, Cai J, et al. Polycystic Ovary Syndrome Signs and Metabolic Syndrome in Premenopausal Hispanic/Latina Women: the HCHS/SOL Study. The Journal of clinical endocrinology and metabolism. 2020;105(3). Available from: https://doi.org/10.1210/clinem/dgaa012 .	Wrong study design
193.	Min M, Ruan X, Wang H, Cheng J, Luo S, Xu Z, et al. Effect of orlistat during individualized comprehensive life-style intervention on visceral fat in overweight or obese PCOS patients. Gynecological endocrinology : the official journal of the International Society of Gynecological Endocrinology. 2022;38(8):676–80. Available from: https://doi.org/10.1080/09513590.2022.2089108 .	Wrong intervention
194.	Mitkov M, Pehlivanov B, Terzieva D. Combined use of metformin and ethinyl estradiol-cyproterone acetate in polycystic ovary syndrome. European journal of obstetrics, gynecology, and reproductive biology. 2005;118(2):209–13.	Time on drug/follow up
195.	Mitrašinović-Brulić M, Buljan M, Suljević D. Association of LH/FSH ratio with menstrual cycle regularity and clinical features of patients with polycystic ovary syndrome. Middle East Fertility Society Journal. 2021;26(1). Available from: https://doi.org/10.1186/s43043-021-00085-0 .	Time on drug/follow up
196.	Modarres SZ, Daneshjou D, Mehranjani MS, Ali Shariatzadeh SM. Comparative evaluation of metformin & sitaformin in classic PCOS patients undergoing intracytoplasmic sperm injection: A randomized controlled pilot study. The Indian journal of medical research. 2023;157(1):66–73. Available from: https://doi.org/10.4103/ijmr.IJMR_2139_20 .	Time on drug/follow up
197.	Molin J, Vanky E, Lovvik TS, Dehlin E, Bixo M. Gestational weight gain, appetite regulating hormones, and metformin treatment in polycystic ovary syndrome: A longitudinal, placebo-controlled study. BJOG : an international journal of obstetrics and gynaecology. 2022;129(7):1112–21. Available from: https://doi.org/10.1111/1471-0528.17042 .	Wrong patient population
198.	Moran C, Tapia MC, Hernandez E, Vazquez G, Garcia-Hernandez E, Bermudez JA. Etiological review of hirsutism in 250 patients. Archives of Medical Research. 1994;25(3):311–4.	Wrong study design

199.	Moran LJ, Thomson RL, Buckley JD, Noakes M, Clifton PM, Norman RJ, et al. Steroidal contraceptive use is associated with lower bone mineral density in polycystic ovary syndrome. <i>Endocrine</i> . 2015;50(3):811–5. Available from: https://doi.org/10.1007/s12020-015-0625-7 .	Time on drug/follow up
200.	Mosorin M-E, Piltonen T, Rantala AS, Kangasniemi M, Korhonen E, Bloigu R, et al. Oral and Vaginal Hormonal Contraceptives Induce Similar Unfavorable Metabolic Effects in Women with PCOS: A Randomized Controlled Trial. <i>Journal of Clinical Medicine</i> . 2023;12(8). Available from: https://doi.org/10.3390/jcm12082827 .	Time on drug/follow up
201.	Mukundan A, Jayakumari S. Risk of developing depression and its impact on quality of life in patients with polycystic ovary syndrome - A South Indian scenario. <i>International Journal of Pharmaceutical Sciences and Research</i> . 2019;10(6):2956–61. Available from: https://doi.org/10.13040/IJPSR.0975-8232.10(6).2956-61 .	Time on drug/follow up
202.	Mulders AGM, ten Kate-Booij M, Pal R, De Kruif M, Nekrui L, Oostra BA, et al. Influence of oral contraceptive pills on phenotype expression in women with polycystic ovary syndrome. <i>Reproductive BioMedicine Online</i> . 2005;11(6):690–6.	Time on drug/follow up
203.	Nawaz FH, Khalid R, Naru T, Rizvi J. Does continuous use of metformin throughout pregnancy improve pregnancy outcomes in women with polycystic ovarian syndrome? <i>The journal of obstetrics and gynaecology research</i> . 2008;34(5):832–7. Available from: https://doi.org/10.1111/j.1447-0756.2008.00856.x .	Wrong outcomes
204.	Nazirudeen R, Sridhar S, Priyanka R, Sumathi B, Natarajan V, Subbiah E, et al. A randomized controlled trial comparing myoinositol with metformin versus metformin monotherapy in polycystic ovary syndrome. <i>Clinical Endocrinology</i> . 2023;99(2):198–205. Available from: https://doi.org/10.1111/cen.14931 .	Wrong comparator
205.	Okoroh EM, Hooper WC, Atrash HK, Yusuf HR, Boulet SL. Is polycystic ovary syndrome another risk factor for venous thromboembolism? United States, 2003-2008. <i>American Journal of Obstetrics and Gynecology</i> . 2012;207(5):377.e1–8. Available from: https://doi.org/10.1016/j.ajog.2012.08.007 .	Wrong intervention
206.	Okoroh EM, Hooper WC, Atrash HK, Yusuf HR, Boulet SL. Prevalence of polycystic ovary syndrome among the privately insured, United States, 2003-2008. <i>American Journal</i>	Wrong study design

of Obstetrics and Gynecology. 2012;207(4):299.e1–7. Available from: https://doi.org/10.1016/j.ajog.2012.07.023 .	
207. Okyay E, Gode F, Acet F, Bodur T, Cagliyan E, Sahan C, et al. The effect of drospirenone (3 mg) with ethinyl estradiol (30 mcg) containing pills on ovarian blood flows in women with polycystic ovary syndrome: a case controlled study. European journal of obstetrics, gynecology, and reproductive biology. 2014;180:93–9. Available from: https://doi.org/10.1016/j.ejogrb.2014.06.027 .	Time on drug/follow up
208. Okyay RE, Cetintas B, Akdoner A, Oztura I, Eryasar Yildirim G, Cagliyan E, et al. The effect of oral contraceptive use on sympatic nerve activity in patients with polycystic ovary syndrome. Gynecological endocrinology : the official journal of the International Society of Gynecological Endocrinology. 2022;38(7):592–7. Available from: https://doi.org/10.1080/09513590.2022.2082403 .	Wrong study design
209. Omar HA, Logsdon S, Richards J. Clinical profiles, occurrence, and management of adolescent patients with HAIR-AN syndrome. TheScientificWorldJournal. 2004;4:507–11.	Wrong study design
210. Omar HS, Ibrahim OA, Sayed MG, Faruk EM, Fouad H, Safwat M. Non-coding RNA genes modulate PI3K/AKT signaling pathway in polycystic ovary syndrome. Molecular Biology Reports. 2023;50(10):8361–72. Available from: https://doi.org/10.1007/s11033-023-08604-0 .	Wrong study design
211. Ong KK, de Zegher F, Lopez-Bermejo A, Dunger DB, Ibanez L. Flutamide metformin for post-menarcheal girls with preclinical ovarian androgen excess: evidence for differential response by androgen receptor genotype. European Journal of Endocrinology. 2007;157(5):661–8.	Wrong patient population
212. Orsino A, Van Eyk N, Hamilton J. Clinical features, investigations and management of adolescents with polycystic ovary syndrome. Paediatrics & child health. 2005;10(10):602–8.	Wrong outcomes
213. Osman M, Muqbel T, Abdualh A, Alanazi S, Khalifa NE, Khojali WMA, et al. Metformin Therapy and Breast Cancer Incidence in the Ha'il Region. Healthcare (Basel, Switzerland). 2023;11(3). Available from: https://doi.org/10.3390/healthcare11030321 .	Wrong patient population
214. Ozay AC, Emekci Ozay O, Okyay RE, Gulekli B. The effect of myoinositol on ovarian blood flows in women with polycystic ovary syndrome. Gynecological endocrinology : the	Time on drug/follow up

official journal of the International Society of Gynecological Endocrinology. 2019;35(3):237–41. Available from: https://doi.org/10.1080/09513590.2018.1520827 .		
215.	Palomba S, Falbo A, Orio F, Jr., Russo T, Tolino A, Zullo F. Pretreatment with oral contraceptives in infertile anovulatory patients with polycystic ovary syndrome who receive gonadotropins for controlled ovarian stimulation. <i>Fertility and Sterility</i> . 2008;89(6):1838–42.	Wrong outcomes
216.	Palomba S, Falbo A, Russo T, Di Cello A, Morelli M, Orio F, et al. Metformin administration in patients with polycystic ovary syndrome who receive gonadotropins for in vitro fertilization cycles: 10-year experience in a large infertile population. <i>Gynecological endocrinology : the official journal of the International Society of Gynecological Endocrinology</i> . 2012;28(2):81–6. Available from: https://doi.org/10.3109/09513590.2011.588749 .	Time on drug/follow up
217.	Palomba S, Falbo A, Russo T, Orio F, Tolino A, Zullo F. Systemic and local effects of metformin administration in patients with polycystic ovary syndrome (PCOS): relationship to the ovulatory response. <i>Human reproduction (Oxford, England)</i> . 2010;25(4):1005–13. Available from: https://doi.org/10.1093/humrep/dep466 .	Wrong comparator
218.	Pan J-X, Liu Y, Ke Z-H, Zhou C-L, Meng Q, Ding G-L, et al. Successive and cyclic oral contraceptive pill pretreatment improves IVF/ICSI outcomes of PCOS patients and ameliorates hyperandrogenism and antral follicle excess. <i>Gynecological endocrinology : the official journal of the International Society of Gynecological Endocrinology</i> . 2015;31(4):332–6. Available from: https://doi.org/10.3109/09513590.2014.995621 .	Time on drug/follow up
219.	Pan M-L, Chen L-R, Chen K-H. The Risk of Subsequent Miscarriage in Pregnant Women with Prior Polycystic Ovarian Syndrome: A Nationwide Population-Based Study. <i>International Journal of Environmental Research and Public Health</i> . 2021;18(16). Available from: https://doi.org/10.3390/ijerph18168253 .	Time on drug/follow up
220.	Pan M-L, Chen L-R, Chen K-H. Prepregnancy Polycystic Ovary Syndrome as a Risk Factor of Subsequent Preterm Labor: A National Population-Based Cohort Study. <i>International Journal of Environmental Research and Public Health</i> . 2022;19(9). Available from: https://doi.org/10.3390/ijerph19095470 .	Wrong outcomes
221.	Pan M-L, Chen L-R, Tsao H-M, Chen K-H. Polycystic ovarian syndrome and the risk of subsequent primary ovarian	Wrong outcomes

insufficiency: a nationwide population-based study. Menopause (New York, NY). 2017;24(7):803–9. Available from: https://doi.org/10.1097/GME.0000000000000832 .		
222.	Pan M-L, Chen L-R, Tsao H-M, Chen K-H. Prepregnancy Endocrine, Autoimmune Disorders and the Risks of Gestational Hypertension-Preeclampsia in Primiparas: A Nationwide Population-Based Study in Taiwan. International Journal of Environmental Research and Public Health. 2020;17(10). Available from: https://doi.org/10.3390/ijerph17103657 .	Wrong outcomes
223.	Pandurevic S, Bergamaschi L, Pizzi C, Patton L, Rucci P, Corzani F, et al. Body mass index rather than the phenotype impacts precocious ultrasound cardiovascular risk markers in polycystic ovary syndrome. European Journal of Endocrinology. 2021;184(1):199–208. Available from: https://doi.org/10.1530/EJE-20-0725 .	Time on drug/follow up
224.	Panidis DK, Rousso DH, Matalliotakis IM, Kourtis AI, Stamatopoulos P, Koumantakis E. The influence of long-term administration of conjugated estrogens and antiandrogens to serum leptin levels in women with polycystic ovary syndrome. Gynecological endocrinology : the official journal of the International Society of Gynecological Endocrinology. 2000;14(3):169–72.	Wrong study design
225.	Paradisi R, Venturoli S. Retrospective observational study on the effects and tolerability of flutamide in a large population of patients with various kinds of hirsutism over a 15-year period. European Journal of Endocrinology. 2010;163(1):139–47. Available from: https://doi.org/10.1530/EJE-10-0100 .	Wrong patient population
226.	Paredes Palma JC, Lopez Byhen E, Ibanez L, Balladares Macedo L, Paredes Palma C, Ramirez Velazquez C. Comparative treatment between sitagliptin vs. metformin, alone or in combination, in patients with polycystic ovary syndrome. A clinical entity at high risk for developing diabetes mellitus and gestational diabetes: a pilot study (in press). Revista Medica del Hospital General de Mexico. 2017.	Wrong study design
227.	Paredes Palma JC, López Byhen E, Ibáñez L, Balladares Macedo L, Paredes Palma C, Ramírez Velázquez C. Comparative treatment between sitagliptin vs. metformin, alone or in combination, in patients with polycystic ovary syndrome. A clinical entity at high risk for developing diabetes mellitus and gestational diabetes: A pilot study. Revista	Wrong intervention

Medica del Hospital General de Mexico. 2018;81(1):15–26. Available from: https://doi.org/10.1016/j.hgmx.2017.03.001 .		
228.	Pasqual E, O'Brien K, Rinaldi S, Sandler DP, Kitahara CM. Obesity, obesity-related metabolic conditions, and risk of thyroid cancer in women: results from a prospective cohort study (Sister Study). <i>Lancet Regional Health - Americas</i> . 2023;23. Available from: https://doi.org/10.1016/j.lana.2023.100537 .	Wrong intervention
229.	Patil GL, Hosanemati G, Patil LS, Vijayanath V, Patil VM, Surpur RR. A two year study of polycystic ovary syndrome in Davangere, Karnataka. <i>Indian Journal of Public Health Research and Development</i> . 2012;3(2):35–9.	Time on drug/follow up
230.	Persson S, Elenis E, Turkmen S, Kramer MS, Yong E-L, Poromaa IS. Higher risk of type 2 diabetes in women with hyperandrogenic polycystic ovary syndrome. <i>Fertility and Sterility</i> . 2021;116(3):862–71. Available from: https://doi.org/10.1016/j.fertnstert.2021.04.018 .	Wrong study design
231.	Plouvier P, Peigne M, Gronier H, Robin G, Catteau-Jonard S, Dewailly D. Is the suppressive effect of cyproterone acetate on serum anti-Müllerian-hormone levels in women with polycystic ovary syndrome stronger than under oral contraceptive pill? <i>Gynecological endocrinology : the official journal of the International Society of Gynecological Endocrinology</i> . 2016;32(8):612–6.	Time on drug/follow up
232.	Porcile A, Gallardo E. Oral contraceptives containing desogestrel in the maintenance of the remission of hirsutism: Monthly versus bimonthly treatment. <i>Contraception</i> . 1991;44(5):533–40. Available from: https://doi.org/10.1016/0010-7824(91)90155-9 .	Wrong patient population
233.	Powell MJ, Fuller S, Gunderson EP, Benz CC. Reduced cardiovascular risks in women with endometriosis or polycystic ovary syndrome carrying a common functional IGF1R variant. <i>Human reproduction (Oxford, England)</i> . 2022;37(5):1083–94. Available from: https://doi.org/10.1093/humrep/deac059 .	Wrong study design
234.	Powell W, Song X, Mohamed Y, Walsh D, Parks EJ, McMahon TM, et al. Medications and conditions associated with weight loss in patients prescribed semaglutide based on real-world data. <i>Obesity</i> . 2023;31(10):2482–92. Available from: https://doi.org/10.1002/oby.23859 .	Wrong patient population
235.	Ramamoorthy S, Bhuvaneswari K. A cross sectional study on the status of inflammatory markers in polycystic	Time on drug/follow up

ovary syndrome (PCOS) in Indian population. Biomedical and Pharmacology Journal. 2019;12(4):1975–83. Available from: https://doi.org/10.13005/bpj/1829 .		
236.	Rao HC, Meyer ML, Kominiarek MA, Daviglus ML, Gallo LC, Cordero C, et al. Polycystic Ovary Syndrome, Metabolic Syndrome, and Inflammation in the Hispanic Community Health Study/Study of Latinos. The Journal of clinical endocrinology and metabolism. 2024. Available from: https://doi.org/10.1210/clinem/dgae426 .	Wrong study design
237.	Rasheed N, Ahmed A, Nosheen F, Imran A, Islam F, Noreen R, et al. Effectiveness of combined seeds (pumpkin, sunflower, sesame, flaxseed): As adjacent therapy to treat polycystic ovary syndrome in females. Food science & nutrition. 2023;11(6):3385–93. Available from: https://doi.org/10.1002/fsn3.3328 .	Wrong study design
238.	Riemann A, Blaschke M, Jauho-Ghadimi A, Siggelkow H, Gollisch KSC. Metformin Improves the Hepatic Steatosis Index in Non-Obese Patients with Polycystic Ovary Syndrome. Journal of Clinical Medicine. 2022;11(15). Available from: https://doi.org/10.3390/jcm11154294 .	Time on drug/follow up
239.	Rubin KH, Grintborg D, Nybo M, Andersen M, Abrahamsen B. Fracture Risk Is Decreased in Women with Polycystic Ovary Syndrome: A Register-Based and Population-Based Cohort Study. Journal of Bone and Mineral Research. 2016;31(4):709–17. Available from: https://doi.org/10.1002/jbmr.2737 .	Wrong outcomes
240.	Sabbadin C, Beggiao F, Keiko Vedolin C, Orlando G, Ragazzi E, Ceccato F, et al. Long-Lasting Effects of Spironolactone after its Withdrawal in Patients with Hyperandrogenic Skin Disorders. Endocrine, metabolic & immune disorders drug targets. 2023;23(2):188–95. Available from: https://doi.org/10.2174/1871530322666220509051746 .	Wrong comparator
241.	Salamun V, Jensterle M, Janez A, Vrtacnik Bokal E. Short term intervention with liraglutide and metformin increased fertility potential in a subset of obese PCOS proceeding IVF. Human Reproduction. 2017;32:i291-i2.	Other reason
242.	Saleh BO, Ibraheem WF, Ameen NS. The role of anti-Mullerian hormone and inhibin B in the assessment of metformin therapy in women with polycystic ovarian syndrome. Saudi Medical Journal. 2015;36(5):562–7. Available from: https://doi.org/10.15537/smj.2015.5.11112 .	Wrong study design

243.	Sanchez LA, Perez M, Centeno I, David M, Kahi D, Gutierrez E. Determining the time androgens and sex hormone-binding globulin take to return to baseline after discontinuation of oral contraceptives in women with polycystic ovary syndrome: a prospective study. <i>Fertility and Sterility</i> . 2007;87(3):712–4.	Wrong study design
244.	Sbraccia P, Aberle J, Jørgensen NB, Olsen A, Skovgaard D, Major-Pedersen A. Drug utilization study of liraglutide in Europe - Investigating the potential for real-world misuse of Victoza and Saxenda to obtain weight loss. <i>Obesity Facts</i> . 2021;14(SUPPL 1):118. Available from: https://doi.org/10.1159/000515911 .	Wrong patient population
245.	Schmidt J, Dahlgren E, Brannstrom M, Landin-Wilhelmsen K. Body composition, bone mineral density and fractures in late postmenopausal women with polycystic ovary syndrome - a long-term follow-up study. <i>Clinical Endocrinology</i> . 2012;77(2):207–14. Available from: https://doi.org/10.1111/j.1365-2265.2012.04378.x .	Wrong outcomes
246.	Seaman HE, de Vries CS, Farmer RD. The risk of liver disorders in women prescribed cyproterone acetate in combination with ethinylloestradiol (Dianette): a nested case-control study using the GPRD. <i>Pharmacoepidemiology and Drug Safety</i> . 2003;12(7):541–50.	Wrong patient population
247.	Seaman HE, de Vries CS, Farmer RDT. The risk of venous thromboembolism in women prescribed cyproterone acetate in combination with ethinyl estradiol: a nested cohort analysis and case-control study. <i>Human reproduction (Oxford, England)</i> . 2003;18(3):522–6.	Wrong patient population
248.	Sert M, Tetiker T, Kirim S. A comparative study of anti-androgenic drug therapies among patients with hirsutism. <i>Annals of Medical Sciences</i> . 2001;10(3):119–22.	Wrong study design
249.	Sever MJ, Kravos N, Janez A. Short-term intervention with liraglutide improved eating behavior in obese women with polycystic ovary syndrome. <i>Diabetes</i> . 2014;63:A248–A9. Available from: https://doi.org/10.2337/db14-833-1316 .	Wrong study design
250.	Sharma P, Chandra R, Sarkar A, Jindal S, Sharma A, Sharma JC, et al. Assessment of Fertility Outcomes Following Combined Clomiphene and Letrozole Versus Letrozole Therapy for the Treatment of Polycystic Ovarian Syndrome Subfertility. <i>Cureus</i> . 2023;15(5):e38886. Available from: https://doi.org/10.7759/cureus.38886 .	Wrong intervention

251.	Shaw JC, White LE. Long-term safety of spironolactone in acne: results of an 8-year followup study. <i>Journal of Cutaneous Medicine and Surgery</i> . 2002;6(6):541–5.	Wrong patient population
252.	Sheng Y, Lu G, Liu J, Liang X, Ma Y, Zhang X, et al. Effect of body mass index on the outcomes of controlled ovarian hyperstimulation in Chinese women with polycystic ovary syndrome: a multicenter, prospective, observational study. <i>Journal of Assisted Reproduction and Genetics</i> . 2017;34(1):61–70. Available from: https://doi.org/10.1007/s10815-016-0830-1 .	Wrong intervention
253.	Shengir M, Krishnamurthy S, Ghali P, Deschenes M, Wong P, Chen T, et al. Prevalence and predictors of nonalcoholic fatty liver disease in South Asian women with polycystic ovary syndrome. <i>World Journal of Gastroenterology</i> . 2020;26(44):7046–60. Available from: https://doi.org/10.3748/wjg.v26.i44.7046 .	Wrong outcomes
254.	Shukurov FI, Mamazhanova DM, Yuldasheva NZ, Sattarova KA. ESTIMATION OF THE EFFICIENCY OF BELARA APPLICATION IN ADJUVANT THERAPY OF POLYCYSTIC OVARIAN SYNDROME AFTER ENDOSURGICAL TREATMENT. <i>Eksperimental'naya i klinicheskaya farmakologiya</i> . 2022;85(8):14–6. Available from: https://doi.org/10.30906/0869-2092-2022-85-8-14-16 .	Other
255.	Sidra S, Tariq MH, Farrukh MJ, Mohsin M. Evaluation of clinical manifestations, health risks, and quality of life among women with polycystic ovary syndrome. <i>PLoS One</i> . 2019;14(10). Available from: https://doi.org/10.1371/journal.pone.0223329 .	Time on drug/follow up
256.	Sills ES, Perloe M, Tucker MJ, Kaplan CR, Genton MG, Schattman GL. Diagnostic and treatment characteristics of polycystic ovary syndrome: descriptive measurements of patient perception and awareness from 657 confidential self-reports. <i>BMC Women's Health</i> . 2001;1(1):3.	Wrong outcomes
257.	Snabes MC, Ng J, Li H, Ali I, Shebley M, Schlaff WD. Phase 2, double-blind, randomized, placebo-controlled study of the safety and efficacy of elagolix in women with polycystic ovary syndrome. <i>F&S reports</i> . 2023;4(2):206–12. Available from: https://doi.org/10.1016/j.xfre.2023.02.007 .	Wrong intervention
258.	Soldat-Stankovic V, Popovic-Pejicic S, Stankovic S, Prtina A, Malesevic G, Bjekic-Macut J, et al. The effect of metformin and myoinositol on metabolic outcomes in women with polycystic ovary syndrome: role of body mass and adiponectin in a randomized controlled trial. <i>Journal of</i>	Wrong comparator

Endocrinological Investigation. 2022;45(3):583–95. Available from: https://doi.org/10.1007/s40618-021-01691-5 .		
259.	Spranger J, Mohlig M, Wegewitz U, Ristow M, Pfeiffer AFH, Schill T, et al. Adiponectin is independently associated with insulin sensitivity in women with polycystic ovary syndrome. Clinical Endocrinology. 2004;61(6):738–46.	Wrong study design
260.	Srinivasan D, Lofton HF. Effect of GLP-1 agonists on weight loss in patients with polycystic ovary syndrome and obesity: A single-center study. Obesity Pillars (Online). 2022;2:100016. Available from: https://doi.org/10.1016/j.obpill.2022.100016 .	Wrong study design
261.	Sukhapure M, Eggleston K, Fenton A, Frampton C, Porter RJ, Douglas KM. Changes in Mood, Anxiety, and Cognition with Polycystic Ovary Syndrome Treatment: A Longitudinal, Naturalistic Study. Neuropsychiatric Disease and Treatment. 2022;18:2703–12. Available from: https://doi.org/10.2147/NDT.S385014 .	Wrong comparator
262.	Tan BK, Chen J, Hu J, Amar O, Mattu HS, Adya R, et al. Metformin increases the novel adipokine cartonectin/CTRP3 in women with polycystic ovary syndrome. The Journal of clinical endocrinology and metabolism. 2013;98(12):E1891–900. Available from: https://doi.org/10.1210/jc.2013-2227 .	Time on drug/follow up;
263.	Tang L, Ye J, Shi Y, Zhu X. Association between CD16++ monocytes in peripheral blood and clinical features and short-term therapeutic effects of polycystic ovary syndrome. International journal of gynaecology and obstetrics: the official organ of the International Federation of Gynaecology and Obstetrics. 2019;145(1):12–7. Available from: https://doi.org/10.1002/ijgo.12779 .	Time on drug/follow up
264.	Tawfeq M, Sarhat E. METFORMIN EFFECTS ON NEUREGULIN-1 IN POLYCYSTIC OVARIAN WOMEN. Georgian medical news. 2023(337):56–62.	Time on drug/follow up
265.	Tayachew B, Vanden Brink H, Garcia-Reyes Y, Rahat H, D'Alessandro A, Frank DN, et al. Combined Oral Contraceptive Treatment Does Not Alter the Gut Microbiome but Affects Amino Acid Metabolism in Sera of Obese Girls With Polycystic Ovary Syndrome. Frontiers in Physiology. 2022;13:887077. Available from: https://doi.org/10.3389/fphys.2022.887077 .	Wrong study design
266.	Taylor AE, Ware MA, Breslow E, Pyle L, Severn C, Nadeau KJ, et al. 11-Oxyandrogens in Adolescents With Polycystic Ovary Syndrome. Journal of the Endocrine Society.	Time on drug/follow up

2022;6(7):bvac037. Available from: https://doi.org/10.1210/jendso/bvac037 .		
267.	Thatcher SS, Jackson EM. Pregnancy outcome in infertile patients with polycystic ovary syndrome who were treated with metformin. <i>Fertility and Sterility</i> . 2006;85(4):1002–9.	Wrong outcomes
268.	Torres-Zegarra C, Sundararajan D, Benson J, Seagle H, Witten M, Walders-Abramson N, et al. Care for Adolescents With Polycystic Ovary Syndrome: Development and Prescribing Patterns of a Multidisciplinary Clinic. <i>Journal of Pediatric and Adolescent Gynecology</i> . 2021;34(5):617–25. Available from: https://doi.org/10.1016/j.jpbg.2021.02.002 .	Wrong outcomes
269.	Tzeng C-R, Huang Z, Asada Y, Zhang C, Ho MT, Li RHW, et al. Factors affecting the distribution of serum anti-mullerian hormone levels among infertile Asian women: a multi-nation, multi-centre, and multi-ethnicity prospective cohort study. <i>Human reproduction (Oxford, England)</i> . 2023;38(7):1368–78. Available from: https://doi.org/10.1093/humrep/dead081 .	Time on drug/follow up
270.	Udesen PB, Sørensen AE, Svendsen R, Frisk NLS, Hess AL, Aziz M, et al. Circulating miRNAs in Women with Polycystic Ovary Syndrome: A Longitudinal Cohort Study. <i>Cells</i> . 2023;12(7). Available from: https://doi.org/10.3390/cells12070983 .	Wrong intervention
271.	Uliassi N, Sullivan S, Damle L, Gomez-Lobo V. Trends, in Diagnosis and Treatment of Polycystic Ovarian Syndrome by Specialty. <i>The Journal of reproductive medicine</i> . 2016;61(9-10):441–6.	Wrong study design
272.	Underdal MO, Salvesen O, Schmedes A, Andersen MS, Vanky E. Prolactin and breast increase during pregnancy in PCOS: linked to long-term metabolic health? <i>European Journal of Endocrinology</i> . 2019;180(6):373–80. Available from: https://doi.org/10.1530/EJE-19-0002 .	Wrong patient population
273.	Unluhizarci K, Ozel D, Tanriverdi F, Karaca Z, Kelestimur F. A comparison between finasteride, flutamide, and finasteride plus flutamide combination in the treatment of hirsutism. <i>Journal of Endocrinological Investigation</i> . 2009;32(1):37–40.	Wrong patient population
274.	Valdimarsdottir R, Vanky E, Elenis E, Lindstrom L, Junus K, Jonsson M, et al. Polycystic ovary syndrome and risk of pre-eclampsia: A national register-based cohort study. <i>BJOG : an</i>	Wrong outcomes

international journal of obstetrics and gynaecology. 2023. Available from: https://doi.org/10.1111/1471-0528.17734 .		
275.	van Wayjen RG, van den Ende A. Experience in the long-term treatment of patients with hirsutism and/or acne with cyproterone acetate-containing preparations: efficacy, metabolic and endocrine effects. <i>Experimental and clinical endocrinology & diabetes : official journal, German Society of Endocrinology [and] German Diabetes Association</i> . 1995;103(4):241–51.	Wrong patient populatio
276.	Vanky E, Backe B, Carlsen SM. Sex ratio and pregnancy complications according to mode of conception in women with polycystic ovary syndrome. <i>Acta Obstetricia et Gynecologica Scandinavica</i> . 2009;88(11):1261–6. Available from: https://doi.org/10.3109/00016340903294280 .	Time on drug/follow up
277.	Venkateswaran M, Dhanasekaran M, Arun Kumar J, Yousuf Ali AS. Assessment Of Frequency Of Hypoglycemia Due To Metformin Therapy In Patients With Type-2 Diabetes Mellitus, Polycystic Ovarian Disease: A Prospective Observational Study. <i>Research Journal of Pharmaceutical, Biological and Chemical Sciences</i> . 2024;15(3):67–71. Available from: https://doi.org/10.33887/rjpbcs/2024.15.3.8 .	Time on drug/follow up
278.	Verma R, Tewari S, Singhal SR, Sangwan A. Effect of ethinyl estradiol/ norethisterone acetate with and without scaling on periodontal status and high-sensitivity C-reactive protein levels in women with polycystic ovarian syndrome having gingivitis: a randomized controlled trial. <i>Quintessence international (Berlin, Germany : 1985)</i> . 2024;0(0):0. Available from: https://doi.org/10.3290/j.qi.b5751228 .	Wrong intervention
279.	Villaseca P, Hormaza P, Cardenas I, Oestreicher E, Arteaga E. Ethinylestradiol/cyproterone acetate in polycystic ovary syndrome: lipid and carbohydrate changes. <i>The European journal of contraception & reproductive health care : the official journal of the European Society of Contraception</i> . 2004;9(3):155–65.	Time on drug/follow up
280.	1. Visnovský J, Biringer K, Svecová I, Biringerová Z. [Hormonal treatment effectivity in hyperandrogenic syndrome]. <i>Ceska Gynkol</i> . 2010;75(5):481-5.	Wrong language
281.	Wang W, Hua T, Li X, Zhang X, Hao W. The UCA1 and microRNA-18a signaling pathway mediates the irisin-lowering effect of metformin in the management of polycystic ovary syndrome. <i>Archives of medical science : AMS</i> .	Time on drug/follow up

2022;18(2):489–98. Available from: https://doi.org/10.5114/aoms/103379 .		
282.	Wang Y, Nisenblat V, Tao L, Zhang X, Li H, Ma C. Combined estrogen-progestin pill is a safe and effective option for endometrial hyperplasia without atypia: a three-year single center experience. Journal of Gynecologic Oncology. 2019;30(3):e49. Available from: https://doi.org/10.3802/jgo.2019.30.e49 .	Time on drug/follow up
283.	Wassell J, Michail M, Soliman N, Wardle PG. The value of sex hormone binding globulin (SHBG) in predicting treatment response in polycystic ovary syndrome (PCOS). Clinical Laboratory. 2011;57(1-2):95–8.	Wrong intervention
284.	Watkins S, Toliver JC, Kim N, Whitmire S, Garvey WT. Economic outcomes of antiobesity medication use among adults in the United States: A retrospective cohort study. Journal of Managed Care and Specialty Pharmacy. 2022;28(10):1066–79.	Wrong patient population
285.	Wen X, Wang L, Bai E. Metabolic characteristics of different phenotypes in reproductive-aged women with polycystic ovary syndrome. Frontiers in Endocrinology. 2024;15. Available from: https://doi.org/10.3389/fendo.2024.1370578 .	Wrong study design
286.	Xia S, Lu F, Wang Z, Zhou L, Dong X. Clinical Efficacy of Pioglitazone with Ethinylestradiol-cyproterone Acetate for Treatment of Polycystic Ovary Syndrome. Latin American Journal of Pharmacy. 2022;41(9):1773–8.	Wrong comparator
287.	Xu Z, Meng L, Pan C, Chen X, Huang X, Yang H. Does oral contraceptives pretreatment affect the pregnancy outcome in polycystic ovary syndrome women undergoing ART with GnRH agonist protocol? Gynecological endocrinology : the official journal of the International Society of Gynecological Endocrinology. 2019;35(2):124–7. Available from: https://doi.org/10.1080/09513590.2018.1500535 .	Wrong outcomes
288.	Yang M, Liu R, Li S, Luo Y, Zhang Y, Zhang L, et al. Zinc- α 2-glycoprotein is associated with insulin resistance in humans and is regulated by hyperglycemia, hyperinsulinemia, or liraglutide administration: Cross-sectional and interventional studies in normal subjects, insulinresistant subjects, and subjects with newly diagnosed diabetes. Diabetes Care. 2013;36(5):1074–82. Available from: https://doi.org/10.2337/dc12-0940 .	Wrong patient population

289.	Yang M, Liu R, Li S, Luo Y, Zhang Y, Zhang L, et al. Zinc- α 2-glycoprotein is associated with insulin resistance in humans and is regulated by hyperglycemia, hyperinsulinemia, or liraglutide administration: cross-sectional and interventional studies in normal subjects, insulin-resistant subjects, and subjects with newly diagnosed diabetes. <i>Diabetes Care</i> . 2013;36(5):1074–82. Available from: https://doi.org/10.2337/dc12-0940 .	Wrong study design
290.	Yaylali A, Bakacak M, Bakacak Z. The efficacy of different insulin-sensitizing agents on treatment outcomes in patients with polycystic ovary syndrome who underwent in-vitro fertilization: A retrospective, record-based, comparative study. <i>Journal of gynecology obstetrics and human reproduction</i> . 2021;50(1):102006. Available from: https://doi.org/10.1016/j.jogoh.2020.102006 .	Time on drug/follow up
291.	Yousuf SD, Ganie MA, Jeelani S, Mudassar S, Shah ZA, Zargar MA, et al. Effect of six-month use of oral contraceptive pills on plasminogen activator inhibitor-1 & factor VIII among women with polycystic ovary syndrome: An observational pilot study. <i>The Indian journal of medical research</i> . 2018;148(Suppl):S151–S5. Available from: https://doi.org/10.4103/ijmr.IJMR_1899_17 .	Time on drug/follow up
292.	Yousuf SD, Ganie MA, Urwat U, Andrabi SM, Zargar MA, Dar MA, et al. Oral contraceptive pill (OCP) treatment alters the gene expression of intercellular adhesion molecule-1 (ICAM-1), tumor necrosis factor-alpha (TNF-alpha), monocyte chemoattractant protein-1 (MCP-1) and plasminogen activator inhibitor-1 (PAI-1) in polycystic ovary syndrome (PCOS) women compared to drug-naïve PCOS women. <i>BMC Women's Health</i> . 2023;23(1):68. Available from: https://doi.org/10.1186/s12905-023-02187-5 .	Time on drug/follow up
293.	Yousuf SD, Rashid F, Mattoo T, Shekhar C, Mudassar S, Zargar MA, et al. Does the Oral Contraceptive Pill Increase Plasma Intercellular Adhesion Molecule-1, Monocyte Chemoattractant Protein-1, and Tumor Necrosis Factor-alpha Levels in Women with Polycystic Ovary Syndrome: A Pilot Study. <i>Journal of Pediatric and Adolescent Gynecology</i> . 2017;30(1):58–62. Available from: https://doi.org/10.1016/j.jpog.2016.06.010 .	Time on drug/follow up
294.	Yu JH, Moon MK, Ahn HC, Yang Y-M. Assessing medication use patterns among patients with polycystic ovary syndrome at a tertiary care teaching hospital in South Korea: A retrospective study. <i>Medicine</i> . 2024;103(32):e39055.	Wrong outcomes

Available from: https://doi.org/10.1097/MD.00000000000039055 .	
295. Yuan X, Huang Q, Li J, Yao Q, Zhang H, Wang Q, et al. Bone morphogenetic protein-9 maybe an important factor which improves insulin resistance in PCOS. <i>Gynecological Endocrinology</i> . 2022;38(9):781–9. Available from: https://doi.org/10.1080/09513590.2022.2109144 .	Time on drug/follow up
296. Yucelten D, Erenus M, Gurbuz O, Durmusoglu F. Recurrence rate of hirsutism after 3 different antiandrogen therapies. <i>Journal of the American Academy of Dermatology</i> . 1999;41(1):64–8.	Wrong patient population
297. Zhang X, Miao H, Zhou J, Chen Y, Ou Y, Song Y, et al. Association between preconception anti-androgen therapy and pregnancy outcomes of patients with PCOS: A prospective cohort study. <i>Frontiers in Endocrinology</i> . 2023;14:1109861. Available from: https://doi.org/10.3389/fendo.2023.1109861 .	Wrong study design
298. Zhang Y, Ran Y, Kong L, Geng L, Huang H, Zhang H, et al. Decreased SFRP5 correlated with excessive metabolic inflammation in polycystic ovary syndrome could be reversed by metformin: implication of its role in dysregulated metabolism. <i>Journal of Ovarian Research</i> . 2021;14(1):97. Available from: https://doi.org/10.1186/s13048-021-00847-4 .	Time on drug/follow up
299. Zhang Y, Shao X, Cai M, Dilimulati D, Qu S, Zhang M. Effect of Dulaglutide plus Calorie-Restricted Diet vs. Calorie-Restricted Diet on Visceral Fat and Metabolic Profiles in Women with Polycystic Ovary Syndrome-A Randomized Controlled Trial. <i>Diabetes</i> . 2023;72. Available from: https://doi.org/10.2337/db23-111-OR .	Other reason
300. Zhao H, Guo Y. Effects of Liraglutide on Leptin Promoter Methylation in Ovarian Granulosa Cells of Patients with Polycystic Ovary Syndrome and Obesity. <i>Gynecologic and Obstetric Investigation</i> . 2024:1–12. Available from: https://doi.org/10.1159/000539039 .	Time on drug/follow up
301. Zhao J-Z, Lin J-J, Yang H-Y, Zhang W, Huang X-F, Huang Y-P. Effects of oral contraceptives and metformin on the outcome of in vitro maturation in infertile women with polycystic ovary syndrome. <i>Journal of women's health</i> (2002). 2010;19(2):261–5. Available from: https://doi.org/10.1089/jwh.2009.1491 .	Wrong outcomes
302. Zhao T, Xiao X, Li L, Zhu J, He W, Zhang Q, et al. Changes in the serum metabolomics of polycystic ovary syndrome before and after compound oral contraceptive treatment.	Wrong study design

Frontiers in Endocrinology. 2024;15:1354214. Available from: https://doi.org/10.3389/fendo.2024.1354214 .		
303.	Zhong X, Li Y, Liang W, Hu Q, Zeng A, Ding M, et al. Clinical and metabolic characteristics of endometrial lesions in polycystic ovary syndrome at reproductive age. BMC Women's Health. 2023;23(1):236. Available from: https://doi.org/10.1186/s12905-023-02339-7 .	Wrong study design

2 Studies excluded after risk of bias-evaluation

Study	Reason for exclusion
1. Bechtold S, Dalla Pozza R, Putzker S, Roeb J, Buckel M, Weissenbacher C, et al. Effect of antiandrogen treatment on bone density and bone geometry in adolescents with polycystic ovary syndrome. J Pediatr Adolesc Gynecol. 2012;25(3):175-80. Available from: https://doi.org/10.1016/j.jpog.2011.11.010 .	Non randomised study with less than 100 participants
2. Bredella MA, McManus S, Misra M. Impact of metformin monotherapy versus metformin with oestrogen-progesterone on lipids in adolescent girls with polycystic ovarian syndrome. Clin Endocrinol (Oxf). 2013;79(2):199-203. Available from: https://doi.org/10.1111/cen.12028 .	Non randomised study with less than 100 participants
3. Briggs A, Sadhir M, Todd M, Omar HA, editors. Effect of Metformin on Body Mass Index in Adolescent Females with Polycystic Ovary Syndrome 2016.	Unacceptably high risk of bias
4. Castelo-Branco C, Martinez de Osaba MJ, Pons F, Fortuny A. Gonadotropin-releasing hormone analog plus an oral contraceptive containing desogestrel in women with severe hirsutism: effects on hair, bone, and hormone profile after 1-year use. Metabolism. 1997;46(4):437-40. Available from: https://doi.org/10.1016/s0026-0495(97)90062-7 .	Unacceptably high risk of bias
5. Chantrapornichkul P, Indhavivadhana S, Wongwananuruk T, Techatrasak K, Dangrat C, Sa-Nga-Areekul N. Prevalence of type 2 diabetes mellitus compared between lean and overweight/obese patients with polycystic ovarian syndrome: a 5-year follow-up study. Arch Gynecol Obstet. 2020;301(3):809-16. Available from: https://doi.org/10.1007/s00404-019-05423-2 .	Unacceptably high risk of bias
6. deOliveira TA, Marchesan LB, Spritzer PM. Potassium levels in women with polycystic ovary syndrome using spironolactone	Unacceptably high risk of bias

for long-term. Clin Endocrinol (Oxf). 2024;100(3):278–83. Available from: https://doi.org/10.1111/cen.15008 .		
7.	Díaz M, de Zegher F, Ibáñez L. Circulating follistatin concentrations in adolescent PCOS: Divergent effects of randomized treatments. Front Endocrinol (Lausanne). 2023;14:1125569. Available from: https://doi.org/10.3389/fendo.2023.1125569 .	Another article from same study included, no additional data presented in article
8.	Dumesic DA, Winnett C, Lu G, Grogan TR, Abbott DH, Naik R, et al. Randomized clinical trial: effect of low-dose flutamide on abdominal adipogenic function in normal-weight women with polycystic ovary syndrome. Fertil Steril. 2023;119(1):116–26. Available from: https://doi.org/10.1016/j.fertnstert.2022.09.324 .	Another article from same study included, no additional data presented in article
9.	Ezeh U, Huang A, Landay M, Azziz R. Long-Term Response of Hirsutism and Other Hyperandrogenic Symptoms to Combination Therapy in Polycystic Ovary Syndrome. J Womens Health (Larchmt). 2018;27(7):892–902. Available from: https://doi.org/10.1089/jwh.2017.6833 .	Unacceptably high risk of bias
10.	Falbo A, Rocca M, Russo T, D'Ettore A, Tolino A, Zullo F, et al. Serum and follicular anti-Mullerian hormone levels in women with polycystic ovary syndrome (PCOS) under metformin. J Ovarian Res. 2010;3:16. Available from: https://doi.org/10.1186/1757-2215-3-16 .	Non randomised study with less than 100 participants
11.	Gambineri A, Patton L, Altieri P, Pagotto U, Pizzi C, Manzoli L, et al. Polycystic ovary syndrome is a risk factor for type 2 diabetes: results from a long-term prospective study. Diabetes. 2012;61(9):2369–74. Available from: https://doi.org/10.2337/db11-1360 .	Unacceptably high risk of bias
12.	Gan J, Chen J, Ma RL, Deng Y, Ding XS, Zhu SY, et al. Action Mechanisms of Metformin Combined with Exenatide and Metformin Only in the Treatment of PCOS in Obese Patients. Int J Endocrinol. 2023;2023:4288004. Available from: https://doi.org/10.1155/2023/4288004 .	Unacceptably high risk of bias
13.	Ibáñez L, Díaz M, García-Beltrán C, Malpique R, Garde E, López-Bermejo A, et al. Toward a Treatment Normalizing Ovulation Rate in Adolescent Girls With Polycystic Ovary Syndrome. J Endocr Soc. 2020;4(5):bvaa032. Available from: https://doi.org/10.1210/jendso/bvaa032 .	Another article from same study included, no additional data presented in article
14.	Jensterle M, Ferjan S, Vovk A, Battelino T, Rizzo M, Janež A. Semaglutide reduces fat accumulation in the tongue: A randomized single-blind, pilot study. Diabetes Res Clin Pract.	Suspicion of lack of research integrity

2021;178:108935. Available from: https://doi.org/10.1016/j.diabres.2021.108935 .	
15. Jensterle M, Goricar K, Janez A. Metformin as an initial adjunct to low-dose liraglutide enhances the weight-decreasing potential of liraglutide in obese polycystic ovary syndrome: Randomized control study. <i>Exp Ther Med</i> . 2016;11(4):1194–200. Available from: https://doi.org/10.3892/etm.2016.3081 .	Suspicion of lack of research integrity
16. Jensterle M, Kravos NA, Goričar K, Janez A. Short-term effectiveness of low dose liraglutide in combination with metformin versus high dose liraglutide alone in treatment of obese PCOS: randomized trial. <i>BMC Endocr Disord</i> . 2017;17(1):5. Available from: https://doi.org/10.1186/s12902-017-0155-9 .	Suspicion of lack of research integrity
17. Jensterle M, Kravos NA, Pfeifer M, Kocjan T, Janez A. A 12-week treatment with the long-acting glucagon-like peptide 1 receptor agonist liraglutide leads to significant weight loss in a subset of obese women with newly diagnosed polycystic ovary syndrome. <i>Hormones (Athens)</i> . 2015;14(1):81–90. Available from: https://doi.org/10.1007/bf03401383 .	Suspicion of lack of research integrity
18. Jensterle M, Salamun V, Kocjan T, Vrtacnik Bokal E, Janez A. Short term monotherapy with GLP-1 receptor agonist liraglutide or PDE 4 inhibitor roflumilast is superior to metformin in weight loss in obese PCOS women: a pilot randomized study. <i>J Ovarian Res</i> . 2015;8:32. Available from: https://doi.org/10.1186/s13048-015-0161-3 .	Suspicion of lack of research integrity
19. Jensterle Sever M, Kocjan T, Pfeifer M, Kravos NA, Janez A. Short-term combined treatment with liraglutide and metformin leads to significant weight loss in obese women with polycystic ovary syndrome and previous poor response to metformin. <i>Eur J Endocrinol</i> . 2014;170(3):451–9. Available from: https://doi.org/10.1530/eje-13-0797 .	Suspicion of lack of research integrity
20. Kulshreshtha B, Arora A, Pahuja I, Sharma N, Pant S. Menstrual cyclicity post OC withdrawal in PCOS: Use of non-hormonal options. <i>J Obstet Gynaecol</i> . 2016;36(6):833–8. Available from: https://doi.org/10.3109/01443615.2016.1159667 .	Unacceptably high risk of bias
21. Kumar G, Verma L, Ambedkar D, Kumar M. A Study to Assess the Efficacy and Safety of Myoinositol in PCOS Management. <i>International Journal of Toxicological and Pharmacological Research</i> . 2024;14(2):169–75.	Unacceptably high risk of bias

22. Ladson G, Dodson WC, Sweet ST, et al. The effects of metformin with lifestyle therapy in polycystic ovary syndrome: a randomized double-blind study. <i>Fertil Steril</i> . 2011;95(3):1059-1066.e7.	Included in Melin et al, excluded in current report, unacceptably high risk of bias
23. Liao WT, Huang JY, Lee MT, Yang YC, Wu CC. Higher risk of type 2 diabetes in young women with polycystic ovary syndrome: A 10-year retrospective cohort study. <i>World J Diabetes</i> . 2022;13(3):240–50. Available from: https://doi.org/10.4239/wjd.v13.i3.240 .	Unacceptably high risk of bias
24. Long T, Zhang Y, Zeng C, Zheng S, Zhou L, Liu H. Effects of Low-Dose Spironolactone Combined with Metformin or Either Drug Alone on Insulin Resistance in Patients with Polycystic Ovary Syndrome: A Pilot Study. <i>Int J Endocrinol</i> . 2022;2022:9927240. Available from: https://doi.org/10.1155/2022/9927240 .	Unacceptably high risk of bias
25. Makedos A, Goulis DG, Papanikolaou A, Panidis D. Serum high-sensitivity C-reactive protein and homocysteine changes during hormonal therapy in women with polycystic ovary syndrome: a prospective, matched study. <i>Angiology</i> . 2010;61(6):595–601. Available from: https://doi.org/10.1177/0003319709361198 .	Unacceptably high risk of bias
26. Morin-Papunen L, Rantala AS, Unkila-Kallio L, et al. Metformin improves pregnancy and live-birth rates in women with polycystic ovary syndrome (PCOS): a multicenter, double-blind, placebo- controlled randomized trial. <i>J Clin Endocrinol Metab</i> . 2012;97(5):1492-1500	Included in Melin et al, another article from same study included, no additional data presented in article
27. Onalan G, Goktolga U, Ceyhan T, Bagis T, Onalan R, Pabuccu R. Predictive value of glucose-insulin ratio in PCOS and profile of women who will benefit from metformin therapy: obese, lean, hyper or normoinsulinemic? <i>Eur J Obstet Gynecol Reprod Biol</i> . 2005;123(2): 204-211.	Included in Melin et al, excluded in current report, unacceptably high risk of bias
28. Papadakis E, Sarigianni M, Tziomalos K, Mavromatidis G, Panidis D. Oral contraceptives increase platelet microparticle levels in normal-weight women with polycystic ovary syndrome. <i>Hormones (Athens)</i> . 2020;19(4):565–71. Available from: https://doi.org/10.1007/s42000-020-00182-1 .	Unacceptably high risk of bias
29. Pasquali R, Gambineri A, Anconetani B, Vicennati V, Colitta D, Caramelli E, et al. The natural history of the metabolic syndrome in young women with the polycystic ovary syndrome and the effect of long-term oestrogen-progestagen treatment. <i>Clin Endocrinol (Oxf)</i> . 1999;50(4):517-27. Available from: https://doi.org/10.1046/j.1365-2265.1999.00701.x .	Unacceptably high risk of bias

30. Pelletier L, Baillargeon JP. Clinically significant and sustained weight loss is achievable in obese women with polycystic ovary syndrome followed in a regular medical practice. <i>Fertil Steril</i> . 2010;94(7):2665-9. Available from: https://doi.org/10.1016/j.fertnstert.2010.02.047 .	Non randomised study with less than 100 participants
31. Salamun V, Jensterle M, Janez A, Vrtacnik Bokal E. Liraglutide increases IVF pregnancy rates in obese PCOS women with poor response to first-line reproductive treatments: a pilot randomized study. <i>Eur J Endocrinol</i> . 2018;179(1):1–11. Available from: https://doi.org/10.1530/eje-18-0175 .	Suspicion of lack of research integrity
32. Seaman HE, de Vries CS, Farmer RD. Venous thromboembolism associated with cyproterone acetate in combination with ethinylestradiol (Dianette): observational studies using the UK General Practice Research Database. <i>Pharmacoepidemiol Drug Saf</i> . 2004;13(7):427–36. Available from: https://doi.org/10.1002/pds.896 .	Unacceptably high risk of bias
33. Shivangi, Singhal SR, Latika. Effect of combined oral contraceptives and cyproterone acetate-ethinyl estradiol combination on metabolic syndrome in polycystic ovarian syndrome (PCOS). <i>European Journal of Molecular and Clinical Medicine</i> . 2022;9(6):1571–8.	Unacceptably high risk of bias
34. Wang J, Ruan X, Jin F, Sun Y. Effects of exenatide combined with clomifene citrate on insulin resistance and angiotensin II/Angiotensin-(1-7) in peripheral blood in patients with polycystic ovary syndrome. <i>Biomedical Research (India)</i> . 2017;28:8406–11.	Unacceptably high risk of bias
35. Wang Y, Xiang T, Xia X, Zhang H, Geng S, Yang G, et al. Elevated circulating GPHB5 levels in women with insulin resistance and polycystic ovary syndrome: A cross-sectional study and multiple intervention studies. <i>Front Endocrinol (Lausanne)</i> . 2022;13:1010714. Available from: https://doi.org/10.3389/fendo.2022.1010714 .	Unacceptably high risk of bias
36. Yavangi M, Rabiee S, Sanavi Farimani M, Khansary S, Farhadian M, Ranjbar A, et al. The effects of green tea tablets and metformin on ovulation and menstrual cycle regularity in women with polycystic ovary syndrome. <i>J Med Life</i> . 2024;17(1):109–15. Available from: https://doi.org/10.25122/jml-2022-0066 .	Unacceptably high risk of bias
37. Zheng S, Liu E, Zhang Y, Long T, Liu X, Gong Y, et al. Circulating zinc-alpha2-glycoprotein is reduced in women with polycystic ovary syndrome, but can be increased by exenatide or	Unacceptably high risk of bias

<p>metformin treatment. Endocr J. 2019;66(6):555–62. Available from: https://doi.org/10.1507/endocrj.EJ18-0153.</p>	
<p>38. Zhou X, Wang Y, Chen W, Zhang H, He Y, Dai H, et al. Circulating HHIP Levels in Women with Insulin Resistance and PCOS: Effects of Physical Activity, Cold Stimulation and Anti-Diabetic Drug Therapy. J Clin Med. 2023;12(3). Available from: https://doi.org/10.3390/jcm12030888.</p>	<p>Unacceptably high risk of bias</p>