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Selected References:

- Asghar FA, et al. 2024. LTRA use in pregnancy: a systematic review on their safety and association with congenital anomalies'. JRGM, 13(2):1-8.
- Committee on Drugs. American Academy of Pediatrics. 2001. The transfer of drugs and other chemicals into human milk. Pediatrics. 108:776-789.
- Cossette B, et al. 2014. Relative perinatal safety of salmeterol vs formoterol and fluticasone vs budesonide use during pregnancy. Ann Allergy Asthma Immunol. 112(5):459-464.
- Eltonsy S, et al. 2011. Beta2-agonists use during pregnancy and the risk of congenital malformations. Birth Defects Research Clin Mol Teratol. 91(11):937-947.
- Gregersen TL, Ulrik CS. 2013. Safety of bronchodilators and corticosteroids for asthma during pregnancy: what we know and what we need to do better. J Asthma Allergy. 6:117-125.
- Lim A, et al. 2013. Asthma drugs in pregnancy and lactation. Aust Prescr. 36(5):150-153.
- Lim A, et al. 2011. Systematic review of the safety of regular preventive asthma medications during pregnancy. Ann Pharmacother. 45(7-8):931-945.
- Namazy J, Schatz M. 2018. Management of asthma during pregnancy: optimizing outcomes and minimizing risk. Semin Respir Crit Care Med. 39(01):29-35.
- National Asthma Education and Prevention Program. Working Group. 2004. Report on managing asthma during pregnancy: Recommendations for pharmacologic treatment. Update 2004. NIH publication NO.05-5236. Bethesda, MD: US Department of Health and Human Services; National Institutes of Health; National Heart, Lung and Blood Institute.
- Peterka M, ET AL. 2021. Anti-asthma Drugs Formoterol and Budesonide (Symbicort) Induce Orofacial Clefts, Gastroschisis and Heart Septum Defects in an In Vivo Model. In Vivo. 35(3):1451-1460.
- Tamasi L, et al. 2005. The management of bronchial asthma during pregnancy - Hungarian experiences. [Article in Hungarian] Orv Hetil. 146(45):2035-2039.
- Wilton LV, Shakir SA. 2002. A post-marketing surveillance study of formoterol (Foradil). Its use in general practice in England. Drug Saf. 25:213-223.

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Selected References:

- Aase JM, et al. 1970. Children of mothers who took LSD in pregnancy. *Lancet*; 1:100-1.
- Alexander GJ, et al. 1970. Lysergic acid diethylamide intake in pregnancy: fetal damage in rats. *J Pharmacol Exp Ther*; 173(1):48-59.
- Baquiran M, et al. 2023. Lysergic acid diethylamide toxicity. [Updated 2023 Dec 17]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK553216/>
- Cohen MM, et al. 1968. The effect of LSD-25 on the chromosomes of children exposed in utero. *Pediat Res* 2:486-492.
- Das, Saibal et al. 2016. Lysergic acid diethylamide: a drug of 'use'?. *Therapeutic advances in psychopharmacology*; 6(3):214-28.
- Fabro S, Sieber SM. 1968. Is lysergide a teratogen? *Lancet* 1(7543):639.
- Fuentes Jet al. 2020. Therapeutic Use of LSD in Psychiatry: A Systematic Review of Randomized-Controlled Clinical Trials. *Frontiers in Psychiatry*; 10:943.
- Jacobson CB, Berlin CM. 1972. Possible reproductive detriment in LSD users. *JAMA* 222(11):1367-1373.
- Haden, M, & Woods, B. 2020. LSD overdoses: three case reports. *Journal of Studies on Alcohol and Drugs*; 81(1), 115-118.
- Long SY. 1972. Does LSD induce chromosomal damage and malformations? A review of the literature. *Teratology*; 6(1):75-90.
- McElhatton PR. 2000. Fetal effects of substances of abuse. *J Toxicol Clin Toxicol*; 38:194-5.
- McGlothlin WH, et al. 1970. Effect of LSD on human pregnancy. *JAMA*.1; 212(9):1483-7.
- Mueller, B. A., Daling, J. R., Weiss, N. S., & Moore, D. E. (1990). Recreational drug use and the risk of primary infertility. *Epidemiology (Cambridge, Mass.)*, 1(3), 195-200.
- Papac DI and Foltz RL. 1990. Measurement of lysergic acid diethylamide (LSD) in human plasma by gas chromatography/negative ion chemical ionization mass spectrometry. *J Anal Toxicol*; 14(3):189-90.
- Robinson JT, et al. 1974. Chromosome aberrations and LSD. A controlled study in 50 psychiatric patients. *J Psychiatry*. 125(0):238-44.
- Zellweger H, et al. 1967. Is lysergic-acid diethylamide a teratogen? *Lancet*; 2(7525):1066-1068.

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Formoterol (Foradil®)

Selected References:

- Alwan S, et al. 2016. Safety of selective serotonin reuptake inhibitors in pregnancy: a review of current evidence. *CNS Drugs*, 30(6):499-515.
- Andersen JT, et al. 2014. Exposure to selective serotonin reuptake inhibitors in early pregnancy and the risk of miscarriage. *Obstet Gynecol*, 124:655-661.
- Bandoli G, et al. 2020. Prenatal antidepressant use and risk of adverse neonatal outcomes. *Pediatrics*, 146(1):e20192493.
- Berard A, et al. 2017. Antidepressant use during pregnancy and the risk of major congenital malformations in a cohort of depressed pregnant women: an updated analysis of the Quebec Pregnancy Cohort. *BMJ Open*, 7:e013372.
- Bonari L, et al. 2004. Perinatal risks of untreated depression during pregnancy. *Can J Psychiatry*, 49(11):726-735.
- Burch KJ and Wells BG. 1992. Fluoxetine/norfluoxetine concentrations in human milk. *Pediatrics*, 89:676-677.
- Chambers CD, et al. 1999. Weight gain in infants breastfed by mothers who take fluoxetine. *Pediatrics*, 104(5):11-15.
- Chambers C, et al. 2006. Selective serotonin-reuptake inhibitors and risk of persistent pulmonary hypertension of the newborn. *N Engl J Med*, 354(6):579-587.
- Desautay P, Eude LG, Dreyfus M, Alexandre C, Fedrizzi S, Alexandre J, Uguz F, Guénolé F. Benefits and Risks of Antidepressant Drugs During Pregnancy: A Systematic Review of Meta-analyses. *Paediatr Drugs*. 2023 May;25(3):247-265. doi: 10.1007/s40272-023-00561-2. Epub 2023 Feb 28. PMID: 36853497.
- Diav-Citrin O, et al. 2008. Paroxetine and fluoxetine in pregnancy: a prospective, multicenter, controlled, observational study. *Br J Clin Pharmacol*, 66(5):695-705.
- Gao SY, et al. 2017. Fluoxetine and congenital malformations: a systematic review and meta-analysis of cohort studies. *Br J Clin Pharmacol*, 83(10):2134-2147.
- Goldstein DJ, Marvel DE. 1993. Psychotropic medications during pregnancy: risk to the fetus. *JAMA*, 270:2177.
- Goldstein DJ, et al. 1997. Effects of first-trimester fluoxetine exposure on the newborn. *Obstet Gynecol*, 89:713-8.
- Grigoriadis S, et al. 2013. The effect of prenatal antidepressant exposure on neonatal adaptation: a systematic review and meta-analysis. *J Clin Psychiatry*, 74(4):e309-20.
- Grigoriadis S, et al. 2019. Benzodiazepine use during pregnancy alone or in combination with an antidepressant and congenital malformations: systematic review and meta-analysis. *J Clin Psychiatry*, 80(4):18r12412.
- Huybrechts KF, et al. 2014. Antidepressant use in pregnancy and the risk of cardiac defects. *N Engl J Med*, 370:2397-2407.
- Huybrechts KF, et al. 2015. Antidepressant use late in pregnancy and risk of persistent pulmonary hypertension

of the newborn. JAMA, 313(21):2142-2151.

- Isenberg KE. 1990. Excretion of fluoxetine in human breast milk. J Clin Psychiatry, 51:169.
- Jimenez-Solem E et al. 2012. Exposure to selective serotonin reuptake inhibitors and the risk of congenital malformations: a nationwide cohort study. BMJ, 2:e001148.
- Jordan S, et al. 2019. Antidepressant prescriptions, discontinuation, depression, and perinatal outcomes, including breastfeeding: a population cohort analysis. PLoS One, 14(11):e0225133.
- Kaplan et al. 2017. Maternal SSRI discontinuation, use, psychiatric disorder and the risk of autism in children: a meta-analysis of cohort studies. Br J Clin Pharmacol, 83(12):2798-2806.
- Kieviet N, et al. 2015. Risk factors for poor neonatal adaptation after exposure to antidepressants in utero. Acta Paediatr, 104(4):384-391.
- Kristensen JH, et al. 1999. Distribution and excretion of fluoxetine and norfluoxetine in human milk. Br J Clin Pharmacol, 48(4):521-527.
- Levinson-Castiel R, et al. 2006. Neonatal abstinence syndrome after in utero exposure to selective serotonin reuptake inhibitors in term infants. Arch Pediatr Adolesc Med, 160:173-176.
- Louik C, et al. 2007. First-trimester use of selective serotonin-reuptake inhibitors and the risk of birth defects. N Engl J Med, 356:2675-2683.
- Lusskin SI, et al. 2018. Pharmacotherapy for Perinatal Depression. Clin Obstet Gynecol, 61(3):544-561.
- Masarwa R, et al. 2019. Prenatal exposure to selective serotonin reuptake inhibitors and risk for persistent pulmonary hypertension of the newborn: a systematic review, meta-analysis, and network meta-analysis. Am J Obstet Gynecol, 220(1):57.e1-57.e13.
- Morris R, Matthes J. 2015. Serotonin syndrome in a breast-fed neonate. BMJ Case Rep, doi:10.1136/bcr-2015-209418.
- Moses-Kolko, E.L. et al. 2005. Neonatal signs after late in utero exposure to serotonin reuptake inhibitors. Literature review and implications for clinical applications. J Am Med Assoc, 293: 2372-2383.
- Nulman I, et al. 1997. Neurodevelopment of children exposed in utero to antidepressant drugs. NEJM, 336(4):258-262.
- Nulman I, et al. 2002. Child development following exposure to tricyclic antidepressants or fluoxetine throughout fetal life: a prospective, controlled study. Am J Psychiatry, 159(11):1889-1895.
- Ornoy A. 2017. Neurobehavioral risks of SSRIs in pregnancy: Comparing human and animal data. Reprod Toxicol, 72:191-200.
- PD-Rx Pharmaceuticals, Inc. 2025. *Fluoxetine capsules: Prescribing information*. DailyMed. [Accessed August 2026]. <https://dailymed.nlm.nih.gov/dailymed/fda/fdaDrugXsl.cfm?setid=d26f7450-7650-43df-a63b-1fe2472882a9&type=display>
- Pedersen LH, et al. 2009. Selective serotonin inhibitors in pregnancy and congenital malformations: population based cohort study. BMJ, 339:b3569.
- Rampono J, et al. 2009. Placental transfer of SSRI and SNRI antidepressants and effects on the neonate. Pharmacopsychiatry, 42(3):95-100.
- Ruchkin V, Martin A. 2005. SSRIs and the developing brain. Lancet, 365:451-453.
- Sanz E, et al. 2005. Selective serotonin reuptake inhibitors in pregnant women and neonatal withdrawal syndrome: a database analysis. Lancet, 365:482-487.
- Sjaarda LS et al. 2020. Urinary selective serotonin reuptake inhibitors across critical windows of pregnancy establishment: a prospective cohort study of fecundability and pregnancy loss. Fertil Steril, 114(6):1278-1287.
- Strain, SL. 1994. Fluoxetine-initiated ovulatory cycles in two clomiphene-resistant women. J Am J Psychiatry, 151(4):620.
- Salisbury AL, et al. 2016. The roles of maternal depression, serotonin reuptake inhibitor treatment, and concomitant benzodiazepine use on infant neurobehavioral functioning over the first postnatal month. Am J Psychiatry, 173(2):147-157.
- Sylvester C, et al. 2019. selective serotonin reuptake inhibitors and fertility: considerations for couples trying to

conceive. Harv Rev Psychiatry, 27(2):108-118.

- Taddio A, Ito S, and Koren G. 1996. Excretion of fluoxetine and its metabolite, norfluoxetine, in human breastmilk. J Clin Pharmacol, 36(1):42-47.
- Vaidya R, et al. 2024. Non epileptiform abnormal neurologic signs in newborns following in-utero psychotropic medication exposure. Journal of Neonatal-Perinatal Medicine. 17(5):717-722.
- Wang S, et al. 2015. Selective serotonin reuptake inhibitors (SSRIs) and the risk of congenital heart defects: a meta-analysis of prospective cohort studies. Journal of the American Heart Association, 4(5):e001681.
- Wen SW, et al. 2006. Selective serotonin reuptake inhibitors and adverse pregnancy outcomes. Am J Obstet Gynecol, 194(4):961-966.
- Wisner KL, Avram MJ, George AL Jr, Abramova TV, Yang A, Caritis SN, Costantine MM, Stika CS. Concentrations of Fluoxetine Enantiomers Decline During Pregnancy and Increase After Birth. J Clin Psychopharmacol. 2024 Mar-Apr 01;44(2):100-106.
- Yang F, et al. 2017. Risk of autism spectrum disorder in offspring following paternal use of selective serotonin reuptake inhibitors before conception: a population-based cohort study. BMJ Open, 7(12):e016368.
- Yang F, et al. 2018. Prenatal paternal selective serotonin reuptake inhibitors use and risk of ADHD in offspring. Pediatrics, 141(1):e20171081.
- Yonkers KA, et al. 2009. The management of depression during pregnancy: a report from the American Psychiatric Association and the American College of Obstetricians and Gynecologists. Obstet Gynecol, 114(3):703-713.
- Yoshida, K, et al. 1998. Fluoxetine in breastmilk and developmental outcome of breastfed infants. Br J Psychiatry, 172:175-178. Pregnant Women with Suspected or Confirmed Influenza. Obstet Gyn, 132(4):e169-e173.

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Selected References:

- Akbari M, et al. 2013. Systematic review and meta-analysis on the effects of thiopurines on birth outcomes from female and male patients with inflammatory bowel disease. *Inflamm Bowel Dis*, 19(1):15-22.
- Alami Z, et al. 2018. Pregnancy outcome following in utero exposure to azathioprine: a French comparative observational study. *Therapie*, 73(3):199-207.
- Alshwairikh LA, Zeneb B. 2022. A 25-year-old Saudi woman with a 2-year history of antisynthetase syndrome with interstitial lung disease who commenced azathioprine treatment in the third trimester of pregnancy and had a successful birth at term. *Am J Case Rep*, 7:23:e936833.
- Balevic S, et al. 2024. Azathioprine metabolite levels and outcomes during pregnancies with rheumatic disease. *Lupus Sci Med*, 11(1):e0011036.
- Casanova MJ, et al. 2013. Safety of thiopurines and anti-TNF-alpha drugs during pregnancy in patients with inflammatory bowel disease. *Am J Gastroenterol*, 108(3):433-440.
- Christensen LA, et al. 2008. Azathioprine treatment during lactation. *Aliment Pharmacol Ther*, 28(10):1209-1213.
- Davison JM et al. 1985. Maternal azathioprine therapy and depressed haematopoiesis in the babies of renal allograft patients. *Br J Obstet Gynaecol*, 92:233-239.
- de Meij TG, et al. 2013. Dutch Initiative on crohn and colitis. Long-term follow-up of children exposed intrauterine to maternal thiopurine therapy during pregnancy in females with inflammatory bowel disease. *Aliment Pharmacol Ther*, 38(1):38-43.
- Dejaco C, et al. 2001. Azathioprine treatment and male fertility in inflammatory bowel disease. *Gastroenterology*, 121:1048-53.
- Francella A, et al. 2003. The safety of 6-mercaptopurine for childbearing patients with inflammatory bowel disease: a retrospective cohort study. *Gastroenterology*, 124(1):9-17.
- Friedman S, et al. 2017. Paternal use of azathioprine/6-mercaptopurine or methotrexate within 3 months before conception and long-term health outcomes in the offspring: a nationwide cohort study. *Reproductive Toxicology*, 73:196-200.
- Götestam Skorpen C, et al. 2016. The EULAR points to consider for use of antirheumatic drugs before pregnancy, and during pregnancy and lactation. *Ann Rheum Dis*, 75(5):795-810.
- Goldstein LH, et al. 2007. Pregnancy outcome of women exposed to azathioprine during pregnancy. *Birth Defects Res A Clin Mol Teratol*, 79(10):696-701.
- Hoeltzenbein M, et al. 2012. Pregnancy outcome after paternal exposure to azathioprine/6-mercaptopurine. *Reprod Toxicol*, 34(3):364-369.
- Ikram N, et al. 2021. Breastfeeding in women with rheumatic diseases. *Lupus Sci Med*, 8(1):e000491.
- Khedr L, Ekram M. 2024. *Eur J Case Rep Intern Med*, 11(4):004385.
- Kinnucan J, Kane S. 2021. Editorial: thiopurines but not anti-TNF monotherapy are linked to worse pregnancy outcomes in a large population-based study. *Aliment Pharmacol Ther*, 54(3):343-344.
- Langagergaard V, et al. 2007. Birth outcome in women treated with azathioprine or mercaptopurine during pregnancy: a Danish nationwide cohort study. *Aliment Pharmacol Ther*, 25(1):73-81.
- Matalon ST, et al. 2004. Review of the potential effects of three commonly used antineoplastic and immunosuppressive drugs (cyclophosphamide, azathioprine, doxorubicin on the embryo and placenta). *Reprod Toxicol*, 18(2):219-230.
- Matarazzo L, et al. 2021. Pregnancy outcome in women with childhood onset autoimmune hepatitis and autoimmune sclerosing cholangitis on long-term immunosuppressive treatment. *Eur J Obstet Gynecol Reprod Biol*, 268:7-11.
- Moretti ME et al. 2006. Breast-feeding during maternal use of azathioprine. *Ann Pharmacother*,

40(12):2269-2272.

- Motta M, et al. 2007. Immune system development in infants born to mothers with autoimmune disease, exposed in utero to immunosuppressive agents. *Am J Perinatol*, 24(8):441-447.
- Myer A, et al. 2021. Comparative study of pregnancy outcomes in women with inflammatory bowel disease treated with thiopurines and/or anti-TNF: a French nationwide study 2010-2018. *Aliment Pharmacol Ther*, 54(3):302-311.
- Nørgård B, et al. 2004. The risk of congenital abnormalities in children fathered by men treated with azathioprine or mercaptopurine before conception. *Aliment Pharmacol Ther*, 19(6):679-685.
- Reynolds JA, et al. 2023. Outcomes of children born to mothers with systemic lupus erythematosus exposed to hydroxychloroquine or azathioprine. *Rheumatology (Oxford)*, 62(3):1124-1135.
- Skejo C, et al. 2024. Early onset sepsis and lobar pneumonia in a newborn exposed in utero to Ustekinumab and azathioprine. *Inflamm Bowel Dis*, 30(2):314-315.
- Wolf MF, et al. 2023. Azathioprine and 6-mercaptopurine-induced intrahepatic cholestasis of pregnancy: case report and review of literature: Taiwan J Obstet Gynecol, 63(5):761-764.

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Selected References:

- Adank MC, et al. 2019. Is maternal lipid profile in early pregnancy associated with pregnancy complications and blood pressure in pregnancy and long term postpartum?. *Obstet Gynecol*; 221(2): 150-e1.
- Agarwala A, et al. 2024. Dyslipidemia management in women of reproductive potential: An Expert Clinical Consensus from the National Lipid Association. *J Clin Lipidol*; 18(5):e664-e684.
- Arias A, et al. 2022. Implications of High-Density Cholesterol Metabolism for Oocyte Biology and Female Fertility. *Frontiers in cell and developmental biology*; 10:941539.

- Berge LN, et al. 1996. Pregnancy related changes in some cardiovascular risk factors. *Acta Obstet Gynecol Scand*; 75:439-442.
- Brizzi P, et al. 1999. Lipoprotein metabolism during normal pregnancy. *Obstet Gynecol*; 181(2):430-34.
- Christensen S, et al. 2023. Maternal inflammatory, lipid and metabolic markers and associations with birth and breastfeeding outcomes. *Frontiers in nutrition*; 10:1223753.
- Christopher BA, et al. 2019. Evaluation and management of lipid disorders: summary. *Clinical Updates in Women's Health Care. American College of Obstetricians and Gynecologists. Obstet Gynecol*; 133:609.
- Cristodoro M, et al. 2024. Dietary Patterns and Fertility. *Biology*; 13(2),131.
- Dal Pino B, et al. 2026. Severe familial hypercholesterolemia and pregnancy: handle with care. *Nutr Metab Cardiovasc Dis*; 104767.
- de Oliveira AA, et al. 2026. Excessive hypercholesterolaemia during pregnancy as a risk factor for endothelial dysfunction in pre-eclampsia. *J Physiol*; 604(11):4302-4317.
- France M, et al. 2016. HEART UK statement on the management of homozygous familial hypercholesterolaemia in the United Kingdom. *Atherosclerosis*; 255:128-139.
- Graham DF, et al. 2021. Management of familial hypercholesterolemia in pregnancy. *Curr Opin Lipidol*; 32(6):370-377.
- Goharkhay N, et al. 2008. Maternal hypercholesterolemia leads to activation of endogenous cholesterol synthesis in the offspring. *Amer J Obstet Gynecol*; 199(3): 273-e1.
- Goldberg AC et al. 2011. Familial hypercholesterolemia: screening, diagnosis and management of pediatric and adult patients: clinical guidance from the National Lipid Association Expert Panel on Familial Hypercholesterolemia. *J Clin Lipidol*; 5(3 Suppl):S1-8.
- Gootjes D, et al. 2022. Maternal lipid profile in pregnancy and embryonic size: a population-based prospective cohort study. *BMC pregnancy and childbirth*; 22(1):333.
- Grandi SM, et al. 2026. Elevated lipid levels and altered semen parameters in men of couples seeking fertility care. *Am J Epidemiol*; May 12:kwag103.
- Holven KB, et al. 2026. Challenges in the care of women with familial hypercholesterolaemia during the reproductive period – current evidence and practical guidance. *Atherosclerosis*; 415:120679.
- Jiang S et al. 2017. Maternal dyslipidemia during pregnancy may increase the risk of preterm birth: A meta-analysis. *Taiwan J Obstet Gynecol*; 56(1):9-15.
- Kaneko K, et al. 2022. High Maternal Total Cholesterol Is Associated With No-Catch-up Growth in Full-Term SGA Infants: The Japan Environment and Children's Study. *Frontiers in endocrinology*; 13:939366.
- Klevmoen M, et al. 2021. Loss of statin treatment years during pregnancy and breastfeeding periods in women with familial hypercholesterolemia. *Atherosclerosis*; 335:8-15.
- Liberis A, et al. 2021. Lipid Disorders in Pregnancy. *Curr Pharm Des*. 27(36):3804-3807.
- Mauri M, et al. 2021. Dyslipemias and pregnancy, an update. *Clin Investig Arterioscler*. 33(1):41-52.
- Moayeri M, et al. 2017. Maternal lipid profile and the relation with spontaneous preterm delivery: a systematic review. *Arch Gynecol Obstet*; 295(2):313-323.
- Mulder J, et al. 2024. Lipid metabolism during pregnancy: consequences for mother and child. *Current opinion in lipidology*; 35(3): 133-140.
- Napoli C, et al. 1999. Influence of maternal hypercholesterolaemia during pregnancy on progression of early atherosclerotic lesions in childhood: Fate of Early Lesions in Children (FELIC) study. *Lancet*; 354(9186): 1234-41.
- Nasioudis D, et al. 2018. Dyslipidemia in pregnancy and maternal-fetal outcome. *Minerva ginecologica*. 71(2):155-62.
- Ogura et al. 2016. Lipoprotein apheresis is essential for managing pregnancies in patients with homozygous familial hypercholesterolemia: Seven case series and discussion. *Atherosclerosis*; 254:179-183.
- Omolaoye T, et al. 2022. Statins and Male Fertility: Is There a Cause for Concern?. *Toxics*; 10(10):627.
- Pugh et al. 2017. Preconception maternal lipoprotein levels in relation to fecundability. *Hum Reprod*. 15:1-9.

- Pushpendra A, et al. 2015. Hyper-lipidemia and male fertility: a critical review of literature. *Andrology*; 4(2).
- Schisterman EF, et al. 2014. Lipid concentrations and couple fecundity: the LIFE study. *J Clin Endocrinol Metab*; 99(8):2786-94.
- Schisterman EF, et al. 2014. Lipid concentrations and semen quality: the LIFE study. *Andrology*; 2(3):408-15.
- Sharami SH, 2019. The relationship of hyperlipidemia with maternal and neonatal outcomes in pregnancy: A cross-sectional study. *International Journal of Reproductive BioMedicine*; 17(10): 739.
- Smith CJ, et al. 2018. Maternal dyslipidemia and risk for preterm birth. *PloS one*; 13(12): e0209579.
- Toleikyte I, et al. 2011. Pregnancy outcomes in familial hypercholesterolemia: a registry-based study. *Circulation*; 124(15):1606-14.
- Varnier NA, et al. 2015. Coronary artery disease secondary to familial hypercholesterolaemia: An infrequent cause of increasingly common pregnancy co-morbidity. *Obstet Med*; 8(3):152-4.
- Vrijkotte TG, et al. 2012. Maternal lipid profile during early pregnancy and pregnancy complications and outcomes: the ABCD study. *The Journal of Clinical Endocrinology & Metabolism*; 97(11): 3917-25.
- Wang C, et al. 2016. The associations between early pregnancy lipid profiles and pregnancy outcomes. *J Perinatol*. 37(2):127-133.
- Whitfield M, et al. 2015. Posttesticular sperm maturation, infertility, and hypercholesterolemia. *Asian J Androl*; 17(5):742-8.
- Wild R, et al. 2015. Dyslipidemia in pregnancy. *Cardiology clinics*; 33(2): 209-15.
- Wojcik-Baszko D, et al. 2018. Role of dyslipidemia in preeclampsia—A review of lipidomic analysis of blood, placenta, syncytiotrophoblast microvesicles and umbilical cord artery from women with preeclampsia. *Prostaglandins & Other Lipid Mediators*; 139: 19-23.
- Zhao X, et al. 2024. 27-Hydroxycholesterol inhibits trophoblast fusion during placenta development by activating PI3K/AKT/mTOR signaling pathway. *Arch Toxicol*; 98(3):849-863.

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