

Chemotherapy

Selected References:

- Aman F, et al. 2012. Long-term cognitive and cardiac outcomes after prenatal exposure to chemotherapy in children aged 18 months or older: an observational study. *Lancet Oncol*, 9:256-264.
- Amant F, et al. 2019. Gynecologic cancers in pregnancy: guidelines based on a third international consensus meeting. *Ann Oncol*, 30(10):1601-1612.
- Aviles A, et al. 2001. Hematological malignancies and pregnancy: a final report of 84 children who received chemotherapy in utero. *Clin Lymphoma*, 2(3):173-177.
- Cardonick EH, et al. 2015. Development of children born to mothers with cancer during pregnancy: comparing in utero chemotherapy-exposed children with nonexposed controls. *Am J Obstet Gynecol*, 212(5):658.e1-658.e8.
- de Haan J et al. 2018. Oncological management and obstetric and neonatal outcomes for women diagnosed with cancer during pregnancy: a 20-year international cohort study of 1170 patients. *Lancet Oncol*, 19:337-346.
- Hahn KM, et al. 2006. Treatment of pregnant breast cancer patients and outcomes of children exposed to chemotherapy in utero. *Cancer*, 107(6):1219-1226.
- Huis In 't Veld EA, Van Assche IA, Amant F. Long-term outcomes of children after prenatal exposure to maternal cancer and its treatment. *Acta Obstet Gynecol Scand*. 2024;103(4):757-760.
- Ebert U, et al. 1997. Cytotoxic therapy and pregnancy. *Pharmacology & Therapeutics* 74(2):207-220. Hope For Two: The Pregnant with Cancer Network. [Cited 2010 August 16]. Available at URL: <http://www.pregnantwithcancer.org>.
- Imai A, et al. 2008. Preservation of female fertility during cancer treatment. *Reprod Med Biol*, 7(1):17-27.
- National Cancer Institute. 2009. General information about breast cancer and pregnancy. [Cited 2010 August 16]. Available at URL: <http://www.cancer.gov/cancertopics/pdq/treatment/breast-cancer-and-pregnancy/Patient>.
- National Cancer Institute. 2009. Understanding chemotherapy: a guide for patients and families. [Cited 2010 August 16]. Available at URL: <https://www.cancer.org/cancer/treatment-types/chemotherapy.html>
- Ngu SF, et al. 2016. Chemotherapy in pregnancy. *Best Pract Res Clin Obstet Gynaecol*, 33:86-10.
- Signorello LB, et al. 2012. Congenital anomalies in the children of cancer survivors: a report from the childhood cancer survivor study. *J Clin Oncol*, 30(3):239-4
- Welt CK and Shapiro CL. 2010. Ovarian failure due to anticancer drugs and radiation. [Updated Sep. 2019].

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Chemotherapy

Selected References:

- Babuna Kobaner G, Polat Ekinici A. 2020. Infliximab for the treatment of recalcitrant generalized pustular psoriasis of pregnancy: Report of a challenging case. *Dermatologic Therapy*. 33(4): e13571
- Bendaoud, S, et al. 2024. Risk of anti-TNF therapy on pregnancy, breastfeeding, live vaccines and related information in patients with inflammatory bowel disease: Real-world data from a nationwide study. *Digestive and liver disease: official journal of the Italian Society of Gastroenterology and the Italian Association for the Study of the Liver*, 56(12), 2038-2044.
- Bröms G, et al. 2020. Anti-TNF treatment during pregnancy and birth outcomes: A population-based study from Denmark, Finland, and Sweden. *Pharmacoepidemiol Drug Saf*. 29(3):316-327.
- Beaulieu DB, et al. 2018. Use of biologic therapy by pregnant women with inflammatory bowel disease does not affect infant response to vaccines. *Clin Gastroenterol Hepatol*. 16:99-105. Carter JD, et al. 2009. A safety assessment of tumor necrosis factor antagonists during pregnancy: a review of the Food and Drug Administration database. *J Rheumatol*. 36(3):635-41. Chaparro M, Gisbet JP. 2014. How safe is infliximab therapy during pregnancy and lactation in inflammatory bowel disease. *Expert Opin Drug Saf*. 13(12):1749-62.
- Dernoncourt A, et al. 2023. Fetal and neonatal adverse drug reactions associated with biologics taken during pregnancy by women with autoimmune diseases: insights from an analysis of the World Health Organization Pharmacovigilance Database (VigiBase®). *BioDrugs*. 37(1):73-87.
- Geldhof A, et al. 2020. Exposure to infliximab during pregnancy: Post-marketing experience. *Drug Saf*. 43(2):147-161.
- Goulden B, et al. 2022. A systematic review of live vaccine outcomes in infants exposed to biologic disease modifying anti-rheumatic drugs in utero. *Rheumatology (Oxford)*. 6;61(10):3902-3906.
- Grgić, D., et al. 2020. Pregnancy-onset acute severe colitis after in vitro fertilization embryo transfer. *Case reports in gastroenterology*. 14(3):477-482.
- Heller MM, et al. 2011. Fatal case of disseminated BCG infection after vaccination of an infant with in utero exposure to infliximab. *J Am Acad Dermatol*. 65(4):870.
- Kanis SL, et al. 2021. Health outcomes of 1000 children born to mothers with inflammatory bowel disease in their first 5 years of life. *Gut*. 70(7):1266-1274.
- Kimberlin, D, et al. 2021. "Rotavirus Infections", Red Book: 2021-2024 Report of the Committee on Infectious Diseases, Committee on Infectious Diseases, American Academy of Pediatrics.
- Mahadevan U, et al. 2013. Placental transfer of anti-tumor necrosis factor agents in pregnant patients with inflammatory bowel disease. *Clin Gastroenterol Hepatol*. 11(3):286-92.
- Mahadevan U, et al. 2021. Pregnancy and neonatal outcomes after fetal exposure to biologics and thiopurines among women with inflammatory bowel disease. *Gastroenterology*. 160(4):1131-1139.
- Meserve J, et al. 2021. Paternal exposure to immunosuppressive and/or biologic agents and birth outcomes in patients with immune-mediated inflammatory diseases. *Gastroenterology*. 161(1):107-115.e3.
- Micu MC, et al. 2014. TNF- α inhibitors do not impair sperm quality in males with ankylosing spondylitis after short-term or long-term treatment. *Rheumatology (Oxford)*. 53(7):1250-5.
- Mouyis M, et al. 2019. Safety of anti-rheumatic drugs in men trying to conceive: A systematic review and analysis of published evidence. *Semin Arthritis Rheum*. 48(5):911-920.
- Saougou I, et al. 2013. Fertility in male patients with seronegative spondyloarthropathies treated with infliximab. *Joint Bone Spine*. 80(1):34-37.
- Snoeckx Y, et al. 2008. Pregnancy outcomes in women taking infliximab: The infliximab safety database. *Arthr*

Rheum. 58:S426.

- Weber-Schoendorfer C, et al. 2015. Pregnancy outcome after TNF- α inhibitor therapy during the first trimester: a prospective multicentre cohort study. *British Journal of Clinical Pharmacology*. 80(4):727-739.

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Chemotherapy

Selected References:

- American College of Obstetrics and Gynecology. 2018. ACOG Practice Bulletin No. 189: nausea and vomiting of pregnancy. *Obstet Gynecol*, 131(1):e15-e30.
- Arsenault MY, et al. 2002. The management of nausea and vomiting of pregnancy. *J Obstet Gynaecol Can*, 24(10):817-831.
- Ashkenazi-Hoffnung L, et al. 2013. Evaluation of the efficacy and safety of bi-daily combination therapy with pyridoxine and doxylamine for nausea and vomiting of pregnancy. *Isr Med Assoc J*, 15(1):23-26.
- Atanackovic G. 2001. The safety of higher than standard dose of doxylamine-pyridoxine (Diclectin) for nausea and vomiting of pregnancy. *J Clin Pharmacol*, 41(8):842-845.
- Banihani S. A. (2017). A Systematic Review Evaluating the Effect of Vitamin B6 on Semen Quality. *Urology journal*, 15(1), 1-5.
- Berard A, et al. 2019. New evidence for concern over the risk of birth defects from medications for nausea and vomiting of pregnancy. *J Clin Epidemiol*, 116: 39-48.
- Brent RL. 1995. Bendectin: review of the medical literature of a comprehensively studied human nonteratogen and the most prevalent tortogen-litigen. *Reprod Toxicol*, 9(4):337-349.
- Dayan-Schwartz A, et al. 2024. The efficiency of cabergoline vs pyridoxine for lactation inhibition-a randomized controlled trial. *Am J Obstet Gynecol*. 2024 May;230(5):561.e1-561.e8.
- Einarson TR, et al. 1988. A method for meta-analysis of epidemiological studies. *Drug Intell Clin Pharm*, 22:813-824.

- Faraoni L, et al. 2020. Doxylamine use in pregnancy and neonatal abstinence syndrome: A case report. *Reprod Toxicol*, 97:6.
- Fisher A, et al. 2022. Patterns of antiemetic medication use during pregnancy: a multi-country retrospective cohort study. *Plos One*, 17(12):1-14.
- Guala, A, et al. 2022. Vitamin B6 Neonatal Toxicity. *Case reports in pediatrics*, 2022,
- Hansen C, et al. 2020. Use of antihistamine medications during early pregnancy and selected birth defects: The National Birth Defects Prevention Study, 1997-2011. *Birth Defects Res*, 112:1234-1252.
- He L, et al. 2024 The potential hazards of high doses of vitamin B6 in treating nausea and vomiting in pregnancy: A systematic review. *Int J Gynaecol Obstet*. 10.1002/ijgo.16032
- Ito S, et al. 1993. Prospective follow-up of adverse reactions in breast-fed infants exposed to maternal medication. *Am J Obstet Gynecol*, 168:1393-1399.
- Koren G, et al. 2015. Maternal safety of the delayed-release doxylamine and pyridoxine combination for nausea and vomiting of pregnancy; a randomized placebo controlled trial. *BMC Pregnancy Childbirth*, 15:59.
- Kutcher JS, et al. 2003. Bendectin and birth defects. II: Ecological analyses. *Birth Defects Res A Clin Mol Teratol*, 67:88-97.
- Madjunkova S, et al. 2014. The delayed-release combination of doxylamine and pyridoxine (Diclegis®/Diclectin®) for the treatment of nausea and vomiting of pregnancy. *Pediatr Drugs*, 16:199-211.
- Matthews A, et al. 2015. Interventions for nausea and vomiting in early pregnancy. *Cochrane Database Syst Rev*, (9):CD007575.
- McKeigue PM, et al. 1994. Bendectin and birth defects: I. A meta-analysis of the epidemiologic studies. *Teratology*, 50:27-37.
- Nuangchamnong N, Niebyl J. 2014. Doxylamine succinate-pyridoxine hydrochloride (Diclegis) for the management of nausea and vomiting in pregnancy: an overview. *Int J Wom Health*, 6:401-9.
- Nulman I, et al. 2009. Long-term neurodevelopment of children exposed to maternal nausea and vomiting of pregnancy and Diclectin. *J Pediatr*, 155(1):45-50.
- Nulman I, Koren G. 2009. Pharmacokinetic comparison of a delayed-release combination of doxylamine succinate and pyridoxine hydrochloride (Diclectin) and oral solutions of these drugs in healthy women of childbearing age. *Can J Clin Pharmacol*. 16(3):29.
- Persaud N, et al. 2018. Doxylamine-pyridoxine for nausea and vomiting of pregnancy randomized placebo controlled trial: Prespecified analyses and reanalysis. *Plos One*, 13(1):e0189978.
- Schragger, N. L., et al. & for the National Birth Defects Prevention Study. 2023. The association of nausea and vomiting of pregnancy, its treatments, and select birth defects: Findings from the National Birth Defect Prevention Study. *Birth defects research*, **115**(3), 275–289.
- Shratch ON, et al. 2024. Comparing pyridoxine with dopaminergic agonists (cabergoline and bromocriptine): Unveiling the strategy for lactation inhibition – A systematic review of clinical trials. *J Gynecol Obstet Hum Reprod*. 2024 Jun;53(6):102783.
- Tyl RW, et al. 1988. Developmental toxicity evaluation of Bendectin in CD rats. *Teratology*, 37:539-552.
- Wu, X., et al. 2023. Acupuncture and Doxylamine-Pyridoxine for Nausea and Vomiting in Pregnancy : A Randomized, Controlled, 2 × 2 Factorial Trial. *Annals of internal medicine*, 176(7), 922–933.

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Chemotherapy

Selected References:

- Ali Sakr Esa W, et al. 2009. Epidural analgesia in labor for a woman with an intrathecal baclofen pump. *Int J Obstet Anesth*. 2009 Jan;18(1):64-6.
- Andrade C. 2020. Individualized, High-Dose Baclofen for Reduction in Alcohol Intake in Persons With High Levels of Consumption, *J Clin Psychiatry*. Aug 4;81(4):20f13606.
- Baclofen Product Label. 2023: <https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=04dac0f6-cc6c-4959-9bca-a6e4a99690f3>. Accessed 11/2024.
- Balakirouchenane D, et al. 2021. Pharmacokinetics of Baclofen in a Full-Term Newborn after Intrauterine Exposure: A Case Report. *Neonatology*; 118(5):624-627.
- Barker KDD, et al. 2025. Three consecutive pregnancies in a woman with spastic cerebral palsy being treated with intrathecal baclofen therapy. *Int J Gynaecol Obstet*;168(3):893-895.
- Bernard N, et al. 2012. Pregnancy outcomes after in utero exposure to baclofen. *Reprod Toxicol*; 34(2):157.
- Briggs, GG and Freeman RK. 2016. *Drugs in Pregnancy and Lactation*, Tenth Edition; Wolters Kluwer. 122-3.
- Dalton CM, et al. 2008. The safety of baclofen in pregnancy: intrathecal therapy in multiple sclerosis. *Mult Scler*; 14(4):571-2.
- Delhaas EM, Verhagen J. 1992. Pregnancy in a quadriplegic patient treated with continuous intrathecal baclofen infusion to manage her severe spasticity. *Case report. Paraplegia*; 30: 527-8.
- Engrand N, et al. 2001. Intrathecal baclofen for severe tetanus in a pregnant woman. *Eur J Anaesthesiol*; 18:261-3.
- Eriksson G, Swahn CG. 1981. Concentrations of baclofen in serum and breast milk from a lactating woman. *Scand J Clin Lab Invest*; 41(2):185-7.
- Freeman, EH and Delaney, RM. 2016. Neonatal Baclofen Withdrawal: A Case Report of an Infant Presenting with Severe Feeding Difficulties. *J Pediatr Nurs*. May-Jun: 31(3):346-9.
- Goldkamp J, et al. 2011. Stiff person syndrome and pregnancy. *Obstet Gynecol*; 118(2 Pt 2):454-457.
- Hale TW and Rowe HE. 2015. *Medications and Mother's Milk 2017*. Springer Publishing Co. 93-4.
- Hara T, et al. 2018. Pregnancy and breastfeeding during intrathecal baclofen therapy – A case study and review. *NMC Case Rep J*. Jun 25;5(3):65-8.
- Hyser, CL and Drake, ME. 1984. Status Epilepticus after Baclofen Withdrawal. *J Natl Med Assoc*; 76(5):533, 537-8.
- Lin HH, et al. 2014. Baclofen distribution into breast milk-a potential for toxicity? *J Med Toxicol*; 10:86.
- Lin HH, et al. 2014. Prevention of neonatal abstinence syndrome in the setting of intrauterine baclofen exposure. *J Med Toxicol*; 10:85-6.
- Logge WB, et al. 2020. Baclofen modulates cardiovascular responses to appetitive cues in treatment-seeking

alcohol use disorder individuals. Hum Psychopharmacol. Mar;35(2):e2722.

- Mahdavinab SM, et al. 2019. Baclofen as an adjuvant therapy for autism: a randomized, double-blind, placebo-controlled trial. Eur Child Adolesc Psychiatry. Dec;28(12):1619-1628.
- Mendez-Lucena C, et al. 2014. Intrathecal baclofen for dystonia treatment during pregnancy: A case report. Neurologia; 31(2): 131-132.
- Moran LR, et al. 2004. Intrauterine Baclofen Exposure: A Multidisciplinary Approach. Pediatrics; 114(2): e267-8.
- Morton CM, et al. 2009. Intrathecal baclofen administration during pregnancy: a case series and focused clinical review. PM R. Nov;1(11):1025-9.
- Mousigian MA, et al. 2022. Neonatal baclofen withdrawal following intrauterine exposure. J Pediatr Rehabil Med; 15(2):389-394.
- Muñoz FC et al. 2020. Pregnancy outcome in a woman exposed to continuous intrathecal baclofen infusion. Ann Pharmacother. Jul-Aug 2000;34(7-8):956
- Ratnayaka BD, et al. 2001. Drug points: Neonatal convulsions after withdrawal of baclofen. BMJ. Jul 14;323(7304):85.
- Roberts AG, et al. 2003. Intrathecal baclofen pump implantation during pregnancy. Neurology; 61:1156-7.
- Weatherby SJ, et al. 2004. Pregnancy in stiff-limb syndrome. Mov Disord; 19(7):852-4.
- Yang K, et al. 2024. Intrathecal baclofen pump in pregnancy: case report, literature review, and management considerations. Reg Anesth Pain Med; 49(12):919-922.

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Chemotherapy

Selected References:

- American Academy of Pediatrics. 2009. Varicella-zoster infections. In: Pickering LK, Baker CJ, Kimberlin DW, Long SS, eds. Red Book: 2009. Report of the Committee on Infectious Diseases. 28th ed. Elk Grove Village, IL: American Academy of Pediatrics;714-727

- Arthur I. Eidelman, et al. 2012. Breastfeeding and the Use of Human Milk. *Pediatrics* March 2012; 129 (3): e827-e841.
- Bohlke K, et al. 2003. Postpartum varicella vaccination: is the vaccine virus excreted in breast milk? *Obstet Gynecol* 102(5 Pt 1):970-977.
- Centers for Disease Control and Prevention. 1996. Prevention of varicella. *MMWR*; 45(RR-11);1-36.
- Centers for Disease Control and Prevention. 2013. Updated Recommendations for Use of VariZIG — United States, 2013. *MMWR*. 62(28)574-576.
- Centers for Disease Control and Prevention. 2016. Guidelines for vaccinating pregnant women (2012, updated 2016). <https://www.cdc.gov/vaccines-pregnancy/hcp/vaccination-guidelines/index.html>
- Chan DYL, et al. 2017. Human varicella zoster virus is not present in the semen of a man affected by chickenpox during the in vitro fertilisation of his wife. *Andrologia* 49(10):e12822.
- Cohen A, et al. Congenital varicella syndrome: the evidence for secondary prevention with varicella-zoster immune globulin. *CMAJ*;183(2):204-208.
- Committee on Infectious Diseases, American Academy of Pediatrics. 1995. Recommendations for the use of live attenuated varicella vaccine. *Pediatrics*; 95:791-796.
- Enders, G et al. 1994. Consequences of varicella and herpes zoster in pregnancy: prospective study of 1739 cases." *Lancet (London, England)* vol. 343,8912: 1548-51.
- Fabiano, Valentina et al. 2013. Herpes zoster in an immunocompetent boy following intrauterine exposure to varicella-zoster virus." *Cutis* vol. 91,3: 127-8, 140.
- Frederick IB, et al. 1986. Excretion of varicella-herpeszoster in breast milk. *Am J Obstet Gynecol*; 154:1116-1117.
- Gruslin A, et al; SOGC. 2008. Immunization in pregnancy: No. 220, December 2008. *Int J Gynaecol Obstet*; 105(2):187-191.
- Harger, James H et al. 2002. Frequency of congenital varicella syndrome in a prospective cohort of 347 pregnant women." *Obstetrics and gynecology* vol. 100,2: 260-5.
- Hayward K, et al. 2018. Management of herpes zoster (shingles) during pregnancy. *J Obstet Gynaecol* 38(7):887-894.
- Konopka, A., Szczepaniak, Z., Wdowiak, N., Lissak, K., Komarów, M., Choinka, M., ... Kalisiak, J. (2024). A Comprehensive Review of TORCH Syndrome: Characterization and Prevention Strategies. *Quality in Sport*, 21, 53987.
- Lamont, Ronald F et al. 2011. Varicella-zoster virus (chickenpox) infection in pregnancy." *BJOG : an international journal of obstetrics and gynaecology* vol. 118,10: 1155-62.
- Marin M, et al. 2013. Closure of Varicella-Zoster Virus-Containing Vaccines Pregnancy Registry – United States. *MMWR*. 63(33);732-733.
- Mohsin, M. S., Gaballa, N. F., & Elsayed, W. (2024). Varicella Orchitis: A Case Report and Literature Review. *Cureus*, 16(8), e66978.
- National Center for Immunization and Respiratory Diseases. 2011. General recommendations on immunization — recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR Recomm Rep*. 60(2):1-64. Erratum in: *MMWR Recomm Rep*. 2011;60:993.
- Petignat, P et al. 2001. Fetal varicella-herpes zoster syndrome in early pregnancy: ultrasonographic and morphological correlation. *Prenatal diagnosis* vol. 21,2 (2001): 121-4.
- Tan MP, Koren G. 2006. Chickenpox in pregnancy: revisited. *Reprod Toxicol*; 21(4):410-20.

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