

Dimethyl Fumarate

Selected References:

- Amato MP, et al. 2015. Fertility, pregnancy and childbirth in patients with multiple sclerosis: Impact of disease-modifying drugs. *CNS Drugs*. 29:207-220.
- Andersen JB, et al. 2023. Pregnancy outcomes after early fetal exposure to injectable first-line treatments, dimethyl fumarate, or natalizumab in Danish women with multiple sclerosis. *Eur J Neurol* 30(1):162-171.
- Bridel C, et al. 2014. Update on multiple sclerosis treatments. *Swiss Med Wkly*. 144:w14012.
- Ciplea AI, et al. 2020. Dimethyl fumarate transfer into breast milk. *Ther Adv Neurol Disord*. 13:1756286420968414.
- Gold R, et al. 2015. Delayed-release dimethyl fumarate and pregnancy: Preclinical studies and pregnancy outcomes from clinical trials and postmarketing experience. *Neurol Ther*. 4(2):93-104.
- Hellwig K, et al. 2024. Final analysis of 379 pregnancy outcomes after exposure to dimethyl fumarate in a prospective international registry. *Mult Scler* 30(2):209-215.
- Landi D, et al. 2024. Maternal and fetal outcomes in an Italian multicentric cohort of women with multiple sclerosis exposed to dimethyl fumarate during pregnancy. *Mult Scler* 30(11-12):1503-1513.
- Leroy C, et al. 2015. Immunosuppressive drugs and fertility. *Orphanet J Rare Dis*. 10:136.
- Lu E, et al. 2014. A review of safety-related pregnancy data surrounding the oral disease-modifying drugs for multiple sclerosis. *CNS Drugs*; 28(2):89-94.
- Moccia M, et al. 2023. Fertility, pregnancy and childbirth in women with multiple sclerosis: a population-based study from 2018 to 2020. *J Neurol Neurosurg Psychiatry*. 94(9):689-697.
- Tecfidera prescribing information. 2024. Available online at:
https://www.tecfiderahcp.com/content/dam/commercial/multiple-sclerosis/tecfidera/hcp/en_us/pdf/Tecfidera_PI.pdf.
- Van Neste M, et al. 20 Very low monomethyl fumarate exposure via human milk: a case report-a contribution from the ConcePTION project. *Front Public Health*. 2;12:1393752.
- Yeh WZ, et al. 2021. Natalizumab, fingolimod and dimethyl fumarate use and pregnancy-related relapse and disability in women with multiple sclerosis. *Neurology*. 96(24):e2989-e3002.

Des questions? Appelez le 866.626.6847 | Envoyez un SMS au 855.999.3525 | Envoyez un e-mail ou discutez sur [MotherToBaby.org](https://www.mothertobaby.org).

Disclaimer: MotherToBaby Fact Sheets are meant for general information purposes and should not replace the advice of your health care provider. MotherToBaby is a service of the non-profit Organization of Teratology Information Specialists (OTIS). Copyright by OTIS, 1 décembre 2024.

Dimethyl Fumarate

Selected References:

- Alwan S, et al. 2005. Angiotensin II receptor antagonist treatment during pregnancy. *Birth Defects Res A Clin Mol Teratol.* 73:123-130.
- Bass JK, Faix RG. 2006. Gestational Therapy with an Angiotensin II Receptor Antagonist and Transient Renal Failure in a Premature Infant. *Am J Perinatol.* 23:313-318.
- Centers for Disease Control and Prevention. 2020. Facts about craniosynostosis. Centers for Disease Control and Prevention. Available online at <https://www.cdc.gov/ncbddd/birthdefects/craniosynostosis.html>. [Accessed Jan 2023].
- Daikha-Dahmane F, et al. 2006. Foetal kidney maldevelopment in maternal use of angiotensin II type I receptor antagonists. *Pediatr Nephrol.* 21(5):729-32.
- Diav-Citrin O, et al. 2011. Pregnancy outcome after in utero exposure to angiotensin converting enzyme inhibitors or angiotensin receptor blockers. *Reprod Toxicol.* 31(4):540-545.
- Gersak K, et al. 2009. Angiotensin II receptor blockers in pregnancy: a report of 5 cases. *Reprod Toxicol.* 28(1):109-12.
- Lambot M, et al. 2001. Angiotensin-II-receptor inhibitors in pregnancy. *Lancet.* 357:1619-1620.
- Marin EC, et al. 2014. The role of oxidative stress in renal injury induced in rats by losartan exposure during lactation. *J Renin Angiotensin Aldosterone Syst.* 15(4): 362-377.
- Martinovic J, et al. 2001. Fetal toxic effects and angiotensin-II-receptor antagonists. *Lancet.* 358:241-242.
- Mulla S, Siddiqui WJ. Losartan. [Updated 2022 Jul 18]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2022 Jan-.
- Saji H, et al. 2001. Losartan and fetal toxic effects. *Lancet.* 357:363.
- Schaefer C. 2003. Angiotensin II-receptor-antagonists: further evidence of fetotoxicity but not teratogenicity. *Birth Defects Res Part A Clin Mol Teratol.* 67:591-594.
- Sergesketter AR, et al. 2019. Characterization of Perinatal Risk Factors and Complications Associated with Nonsyndromic Craniosynostosis. *J Craniofac Surg;* 30(2):334-338.
- Serreau R, et al. 2005. Developmental toxicity of the angiotensin II type 1 receptor antagonists during human pregnancy: a report of 10 cases. *BJOG.* 112(6):710-712.
- Sica DA, et al. 2005. Clinical pharmacokinetics of losartan. *Clin Pharmacokinet.* 44(8):797-814.
- Spaggiari E, et al. 2012. Renin-Angiotensin System Blockers Study Group, Muller F. Prognosis and outcome of pregnancies exposed to renin-angiotensin system blockers. *Prenat Diagn.* 18:1-6.
- Spence SG, et al. 1995. Evaluation of the reproductive and developmental toxicity of the AT1-selective angiotensin II receptor antagonist losartan in rats. *Teratology.* 51:383-97.
- Stevenson KM, et al. 1996. Effects of losartan on the cardiovascular system, renal haemodynamics and function and lung liquid flow in fetal sheep. *Clin Exp Pharmacol Physiol.* 23:125-33.
- Wei Q, et al. 2021. Use of angiotensin II receptor blocker during pregnancy: A case report. *Medicine (Baltimore).* 22;100(3):e24304.
- Xie M, et al. 2023. Efficacy of single-pill combination in uncontrolled essential hypertension: a systematic review and network meta-analysis. *Clin Cardiol,* 46:886-898.American College of Obstetricians and Gynecologists (ACOG). 2018. Committee Opinion No. 753: Assessment and Treatment of Pregnant Women with Suspected or Confirmed Influenza. *Obstet Gyn* 132(4):e169-e173.

Des questions? Appelez le 866.626.6847 | Envoyez un SMS au 855.999.3525 | Envoyez un e-mail ou discutez sur [MotherToBaby.org](https://www.MotherToBaby.org).

Disclaimer: MotherToBaby Fact Sheets are meant for general information purposes and should not replace the advice of your health care provider. MotherToBaby is a service of the non-profit Organization of Teratology Information Specialists (OTIS). Copyright by OTIS, 1 décembre 2024.

Dimethyl Fumarate

Selected References:

- Andrade C. 2022 Psychotropic drugs with long half-lives: implications for drug discontinuation, occasional missed doses, dosing interval, and pregnancy planning. *J Clin Psychiatry*, 83:22f14593.
- Athinarayanan P, et al. 1976. Chlordiazepoxide withdrawal in the neonate. *Am J Obstet Gynecol*, 124:212-213.
- Crombie DL, et al. 1975. Fetal effects of tranquilizers in pregnancy. *New Eng J Med*, 293:198-199.
- Czeizel A. 1988. Lack of evidence of teratogenicity of benzodiazepine drugs in Hungary. *Reprod Toxicol*, 1:183-188.
- Czeizel AE, et al. 1997. Teratologic evaluation of 178 infants born to mothers who attempted suicide by drugs during pregnancy. *Obstet Gynecol*, 90:195-201.
- Czeizel AE, et al. 2004. A population-based case-control study of oral chlordiazepoxide use during pregnancy and risk of congenital abnormalities. *Neurotoxicology & Teratology*, 26(4):593-598.
- Czeizel AE, Mosonyi A. 1997. Monitoring of early human fetal development in women exposed to large doses of chemicals. *Environ Mol Mutagen*, 30:240-244.
- Gidai J, et al. 2008. A study of the teratogenic and fetotoxic effects of large doses of chlordiazepoxide used for self-poisoning by 35 pregnant women. *Toxicol Ind Health*, 24(1-2):41-51.
- Hartz SC, et al. 1975. Antenatal exposure to meprobamate and chlordiazepoxide in relation to malformations, mental development and childhood mortality. *New Eng J Med*, 292:726-728.
- Hughes JM. 1964. Failure to ejaculate with chlordiazepoxide. *Am J Psychiatry*, 121:610-611.
- Martino V, Mas M, Davidson JM. 1987. Chlordiazepoxide facilitates erections and inhibits seminal emission in rats. *Psychopharmacology*, 91:85-89.
- Milkovich L, Van den Berg BJ. 1974. Effects of prenatal meprobamate and chlordiazepoxide hydrochloride on human embryonic and fetal development. *New Eng J Med*, 291:1268-1271.
- Stirrat GM, et al. 1974. Transplacental passage of chlordiazepoxide. *Br Med J*, 2:729.

Des questions? Appelez le 866.626.6847 | Envoyez un SMS au 855.999.3525 | Envoyez un e-mail ou discutez sur [MotherToBaby.org](https://www.MotherToBaby.org).

Disclaimer: MotherToBaby Fact Sheets are meant for general information purposes and should not replace the advice of your health care provider. MotherToBaby is a service of the non-profit Organization of Teratology Information Specialists (OTIS). Copyright by OTIS, 1 décembre 2024.

Dimethyl Fumarate

Selected References:

- Flurazepam Drug Label. 2023. <https://www.drugs.com/pro/flurazepam.html>
- Gentile, S. 2015. Pharmacological management of borderline personality disorder in a pregnant woman with a previous history of alcohol addiction: a case report. Clin Drug Investig, 35(11):761-763.
- Kelly LE, et al. 2012. Neonatal benzodiazepines exposure during breastfeeding. J Pediatr, 161:448-451.

Des questions? Appelez le 866.626.6847 | Envoyez un SMS au 855.999.3525 | Envoyez un e-mail ou discutez sur [MotherToBaby.org](https://www.MotherToBaby.org).

Disclaimer: MotherToBaby Fact Sheets are meant for general information purposes and should not replace the advice of your health care provider. MotherToBaby is a service of the non-profit Organization of Teratology Information Specialists (OTIS). Copyright by OTIS, 1 décembre 2024.

Dimethyl Fumarate

Selected References:

- Athinarayanan P, et al. 1976. Chlordizaepoxide withdrawal in the neonate. Am J Obstet Gynecol 124:212-3.
- Brunaud M, et al. 1970. Pharmacological, toxicological, and teratological studies on dipotassium-7-chloro-3-carboxy-1, 3-dihydro-2, 2-dihydroxy-5-phenyl-2H-1, 4-benzodiazepine-cloraz-epate (dipotassium chlorazepate, 4306 CB), a new tranquilizer. Arzneim Forsch 20:123-5.
- Cole AP, Hailey DM: Diazepam and active metabolites in breast milk and their transfer to the neonate. Arch Dis Child 50:741, 1975.
- Corwin H, DeMyer W. 1980. Failure of chlorazepate to cause malformations or fetal wastage in the rat. Arch Neurol 37:347-9.
- Rey E, et al. 1979. Pharmacokinetics of the placental transfer and distribution of clorazepate and its metabolite nordiazepam into the feto-placental unit and in the neonate. Eur J Clin Pharmacol 15:181-5.
- Wesson DR, et al. 1975. Diazepam and desmethyldiazepam in breast milk. J Psychoactive Drugs 17:55-6.

Des questions? Appelez le 866.626.6847 | Envoyez un SMS au 855.999.3525 | Envoyez un e-mail ou discutez sur [MotherToBaby.org](https://www.MotherToBaby.org).

Disclaimer: MotherToBaby Fact Sheets are meant for general information purposes and should not replace the advice of your health care provider. MotherToBaby is a service of the non-profit Organization of Teratology Information Specialists (OTIS). Copyright by OTIS, 1 décembre 2024.