

Last Updated: December, 2024

GLP1-RAs: The New Era of Diabetes and Weight Loss Management, FAQs in Pregnancy and Lactation

Authored by Dr. Judith Zarek and Dr. Cynthia Maxwell and reviewed by First Exposure Medical Review Team.

This information is current as of the “Last Updated” date above. Readers are advised to verify whether more recent updates have been made and published onto the website.

For more information and links to other resources, visit firstexposure.ca/glp1-ras-the-new-era-of-diabetes-and-weight-loss-management-faqs-in-pregnancy-and-lactation/ or scan the QR code.



Scan the QR Codes

To listen to the podcast on Spotify



or to watch on Youtube



Clinical Scenario

I am taking Ozempic® (semaglutide), and I would like to try to become pregnant soon. Can I continue taking it during pregnancy?

Q. What is semaglutide (Ozempic®)?

A. Semaglutide belongs to a group of medications called glucagon-like peptide-1 receptor agonists (GLP1-RAs).

Q. What are GLP1-RAs?

A. GLP1-RAs are a group of medications used to treat type 2 diabetes and obesity. GLP1-RAs currently available in Canada include semaglutide (Ozempic®, Ryblesus®, Wegovy®), liraglutide (Victoza®, Saxenda, Xultophy®), dulaglutide (Trulicity®), lixisenatide (Soliqua®) and tirzepatide (Mounjaro®, Zepbound®). Some of these medications might include other active ingredient(s) in addition to the GLP1-RA. The information in this health topic applies only to GLP1-RAs. For information on how to find the active ingredients in your medication please go to [How to Find Active Ingredients](#).

Q. Will GLP1-RAs affect the chances of getting pregnant?

A. Studies reported that GLP1-RAs improve metabolic and reproductive parameters (such as menstrual regularity) in women with polycystic ovarian syndrome (PCOS), raising the possibility that GLP1-RAs may improve fertility in women with PCOS.

More research is needed to determine if the reported improvements in the reproductive parameters are directly related to the GLP1-RA or are due to weight loss, or both.

To avoid an unplanned pregnancy, please speak to a healthcare provider about contraception when starting a GLP1-RA.

Q. Do GLP1-RAs in pregnancy increase the chances of miscarriage, birth defects, or other pregnancy complications?

A. Most pregnancies result in healthy babies, but there are chances of complications and unexpected outcomes. These chances are called baseline risks. In Canada, the baseline risk of major birth defects is 3-5%. This means that 3-5 out of 100 babies born in the general population will be born with a major birth defect. There are also baseline risks for miscarriages (15-25 out of 100 pregnancies), premature birth and other outcomes.

Animal studies showed that exposure to GLP1-RAs was associated with small-for-gestational age pups (birthweight that is lower than expected at the time of delivery), and there was an increased risk of birth defects compared to unexposed animals. It is not clear how relevant these effects are to human pregnancies. In humans, it is expected that there is minimal transfer of these medications across the placenta. Limited data from unintentional exposures to GLP1-RAs in early pregnancy (at least 500 pregnancies) suggest no increased risk of birth defects compared to pregnancies in women with similar conditions.

The available information is too limited to draw conclusions on whether GLP1-RAs increase risks for miscarriage or other pregnancy complications.

Q. Can I use GLP1-RAs while trying to get pregnant or during pregnancy?

A. GLP1-RAs are not recommended during pregnancy. As currently there is not enough information about the safety of GLP1-RAs during pregnancy, it is recommended to stop GLP1-RAs when planning pregnancy. Determining when to stop depends on the specific medication, as they each stay in the body for different lengths of time. For information on recommended timing of when to stop GLP1-RAs prior to pregnancy please see [Glucagon-like peptide-1 receptor agonists during pregnancy and lactation](#). Stopping GLP1-RAs without a management plan may lead to worsening control of diabetes and excessive weight gain, both of which are associated with pregnancy complications. Speak to your health care provider before stopping GLP1-RAs to discuss when to stop and how to manage your condition.

Q. Can you use GLP1-RAs while nursing?

A. GLP1-RAs are large molecules and are unlikely to transfer to breastmilk in large amounts. Because they are large proteins, GLP1-RAs that transfer into breastmilk are likely to be broken down in the infant's digestive system and not absorbed into their blood stream. Information available to date on the use of GLP1-RA's during lactation is limited to one study which included eight women on weekly semaglutide. The study reported that no semaglutide was detected in the breastmilk, and that no adverse effects on infant growth or milestones were reported by the mothers.

GLP1-RAs decrease a person's food intake. In general, if maternal nutrient intake is substantially decreased, breastmilk supply might decrease, and its composition might be affected. Until more information becomes available and out of an abundance of caution, alternative medications should be used while nursing.

Q. Do GLP1-RAs have an effect on birth control pills?

A. Although we do not have clinical evidence regarding an impact on the effectiveness of oral contraceptives, there are some pharmacologic data to suggest that both tirzepatide (Mounjaro®) and lixisenatide (Soliqua®) may alter the absorption of oral contraceptives. The current evidence on semaglutide (Ozempic®, Ryblesus®, Wegovy®), liraglutide (Saxenda®, Victoza®, Xultophy®), and dulaglutide (Trulicity®) does not show a similar effect. Speak to a healthcare provider about contraception when starting a GLP1-RA.

About the First Exposure Medical Advisors

Dr. Judith Zarek MSc, PhD is a Knowledge Mobilization Specialist with First Exposure. She completed a Master of Science degree in Pharmacology followed by a PhD in Pharmaceutical Sciences at the University of Toronto.

Dr. Cynthia Maxwell MD, MBA, FRCSC, DABOM (Obesity Medicine), is the Medical Content Director of First Exposure, the Vice President, Medical Affairs & System Transformation and Lead Medical Executive at Women's College Hospital and Professor, Faculty of Medicine, Department of Obstetrics and Gynaecology and Division of Maternal Fetal Medicine at the University of Toronto.

Key References

For a complete list of references, please visit our website at firstexposure.ca/glp1-ras-the-new-era-of-diabetes-and-weight-loss-management-faqs-in-pregnancy-and-lactation/

Disclaimer

The information provided is the expert opinion of the First Exposure Medical Advisors. It is for informational purposes only and does not replace medical care and advice from a healthcare provider. Please, contact your healthcare provider if you have any concerns or wish to discuss any questions that you believe may be relevant to you or your baby. In case of emergency, please go to the emergency room or call 911.

If you do not have a healthcare provider, please go to: firstexposure.ca/how-to