

# ONDANSETRON (ZOFRAN) FACT SHEET

## HYPEREMESIS GRAVIDARUM & ONDANESTRON

Hyperemesis Gravidarum (HG) is a potentially life-threatening pregnancy disease that may cause weight loss, malnutrition, dehydration, and debility due to severe nausea and/or vomiting, and may cause long-term health issues for mother and baby(ies). Our research found the hormone GDF15 increases nausea and vomiting in pregnancy. This hormone increases with infections, poor nutrition, and dehydration.

The decision to take medication for vomiting (antiemetic) or nausea during pregnancy is difficult. However, the risks of dehydration & malnutrition due to HG are generally much greater than the small possible risks of medications. **Those taking medication have been found to have fewer losses and terminations, and more term births. (Fejzo MS, et al. Ondansetron in pregnancy and risk of adverse fetal outcomes in the United States. *Reprod Toxicol.* 2016;62:87–91.)**

How does it work? Ondandestron blocks serotonin signals in the brain that cause vomiting. It decreases the number of times patients vomit, but may not greatly reduce nausea.

## ONDANESTRON USAGE GUIDELINES



Ondandestron lasts about 4–6 hours, so it needs to be taken regularly to be effective.



A daily stool softener like magnesium citrate or docusate (or both) is often needed to prevent constipation. IV fluids and a bowel stimulant (enema) up to 3x a week might also be needed.



Take on a strict schedule, exactly every 6–8 hours as prescribed for maximum effect. Set an alarm for your nighttime dose.



Typical dosing:  
4 mg every 3–6 hours  
8 mg every 6 hours  
maximum 32 mg/day



Options that may be available:

- Tablets
- Oral disintegrating tablets (ODT)
- Compounded cream
- Subcutaneous or IV infusion
- Injection (shot/jab)
- Liquid

Always consult your healthcare provider before making any changes to your treatment or lifestyle. This information is for educational purposes only and does not constitute medical advice.

## SAFETY NOTES

- Research finds minimal if any risk to mom and baby.
- At 8 weeks, the risk of birth defects from medications drops because the baby's organs are mostly developed.
- Risks taking typical doses of medications are low.
- Zofran does not appear to have added risk if taken until delivery.
- Constipation prevention is very important!
- Use with caution and consider an EKG if you have underlying heart issues or electrolyte deficiencies.
- If you are taking an antidepressant medication, please let your healthcare team know.

## Zofran Safety Research



**2018 JAMA STUDY**  
showed **minimal** increase in oral cleft  
for Zofran usage in the 1st trimester

**3 in 10,000** births

“In this large, multicenter cohort study, there was no association between ondansetron exposure during pregnancy and increased risk of fetal death, spontaneous abortion, stillbirth, or major congenital malformations compared with exposure to other antiemetic drugs.”

—JAMA Network Open. 2021 Apr;4(4):e215329.

## Wean Medications for HG

When stopping any medication for HG, reduce the dose very slowly over 1–2 weeks. If symptoms worsen, you will likely need to go back up on your dose until you are feeling better and eating/drinking for 2+ weeks.

## Kimber's Rule of 2's



+



+



Wean each medication  
in 2nd trimester or later

After 2 weeks with  
minimal symptoms

Over  
2+ weeks

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## MORE WAYS TO GET RELIEF

- Request IV fluids with vitamins with electrolytes be given regularly for a few days or weeks if needed.
- If Ondandestron pills are not tolerated, ask about taking the oral disintegrating tablets (ODT) vaginally with a drop of water or a compounded form (e.g. cream).
- If symptoms persist, ask to switch from Ondandestron to granisetron (pill, transdermal) or mirtazapine (pill, ODT), especially if you have headaches.
- Talk to your OB about adding medications such as an antihistamine, promethazine or metoclopramide, and steroids. See our [hyperemesis.org/tools](https://hyperemesis.org/tools) page for treatment guides.
- Make an hourly list of your medications and set alarms even at night to keep your medications on a schedule.
- Discuss famotadine (Pepcid) to reduce acid. Change to lansoprazole or pantoprazole for severe reflux.
- Add vitamin B1 (thiamin). See [hyperemesis.org/b1](https://hyperemesis.org/b1) for info.
- Ask about an infusion pump which offers a slow, continuous dose of medication and may be more effective. Ondandestron and metoclopramide can be given subcutaneously (see below) or intravenously (IV). Note there may be discomfort and significant expense with the subcutaneous pump. A syringe pump can also be used to infuse medication into a PICC line.
- REMEMBER: No medication(s) will resolve all nausea and vomiting immediately, and multiple medications may be needed for months or until delivery.

## GET MORE INFORMATION

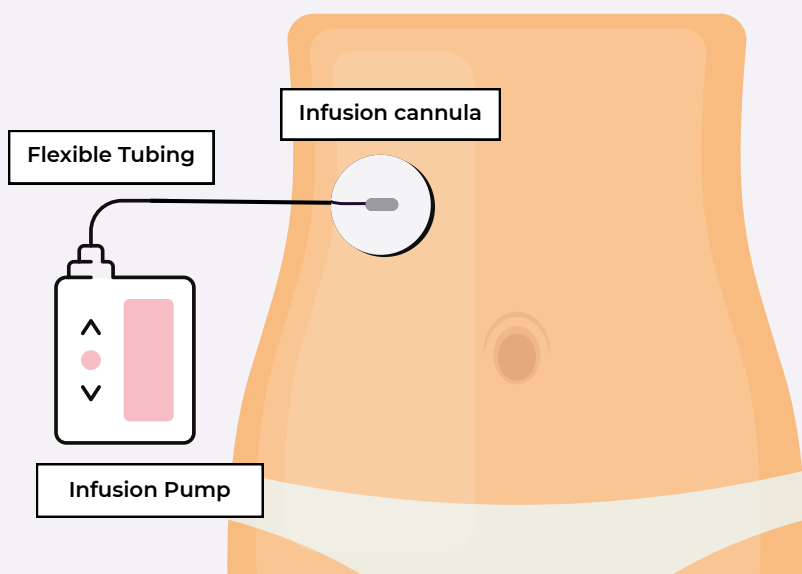


Check out [hyperemesis.org/zofran](https://hyperemesis.org/zofran) for more information about Ondansetron.

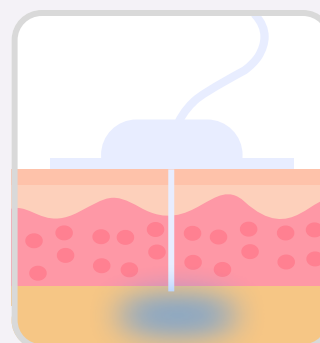
## SUBCUTANEOUS INFUSION SITE & SET-UP

When should a subcutaneous pump be considered:

- When multiple medication options and combinations are consistently taken on a schedule and are not tolerated or do not give adequate relief.
- Studies find more success with Ondandestron infusions than metoclopramide. Klauser et al., J Perinatal. 2011 Oct; 28(9): 715-721.
- Ask about trying less common medications on our Treatment Algorithm before trying the pump at [hyperemesis.org/tools](https://hyperemesis.org/tools).
- Also consider options such as a transdermal patch (granisetron) and Ondandestron oral disintegrating tablets vaginally.



## INFUSION SITE



Cannula

Skin

Fat

Medication