The training program for paramedics on this module will include:

- Overview and description of the nausea/vomiting protocol
- Description, use, indications and contraindications of the medication.
- Medication safety
- ALS Protocol
- CQI Process
- Written Evaluation
The History of Zofran

- Zofran was developed around 1984 by scientists working at Glaxo’s laboratories in London.
- The FDA approved of its use in the USA in 1991.
What is ondansetron?

- Trade name is Zofran.
- Zofran is used to prevent and treat nausea and vomiting.
- Zofran has been primarily used to prevent N/V in cancer patients.
How does it work?

- Zofran blocks the actions of chemicals in the body that can trigger nausea and vomiting.
- Zofran is a serotonin 5-HT3 receptor antagonist.
- One part is to reduce the activity of the vagus nerve.
- The vagus nerve activates the vomiting center in the medulla oblongata.
- Zofran does NOT have an effect on the dopamine or muscarinic receptors.
Zofran’s Effects on Diseases

- **Schizophrenia**: A 2006 trial indicated that Zofran may have value in the treatment of schizophrenia, as an adjunct to haloperidol.
- **Parkinson’s**: Studies have indicated that Zofran may be a possible treatment for psychosis resulting from advanced Parkinson’s disease.
- **Alcoholism**: Zofran has been found to lower the cravings for alcohol, especially in early onset alcoholics.
Zofran Protocol

Indications:

- Treat intractable vomiting
- Prevent and control nausea and vomiting in adults and pediatrics:
  1. resulting from motion sickness
  2. from pain medication
Adverse Effects

- Zofran is a well tolerated drug with few side effects.
- Headache, constipation and dizziness are the most common.
- There have been no significant drug interactions reported with Zofran.
- Unusual but possible side effects include: fatigue, diarrhea and blurred vision.
- May cause syncope if given rapidly IV.
- Prolonged QT segment has been reported, observe patient on cardiac monitor.
How Supplied?

- 4mg sublingual wafer
- 2mg/ml in 2 ml vial (total = 4mg)
Dosages

- Adult Dose: 4mg increments, may give up to 12 mg
- Route: IV/IO, IM, ODT
- When giving IV, give slowly over 30 seconds
- Contact base hospital physician if additional doses are needed
- Consider other treatable causes.
- Pediatric Dose: 4mg
- Route: IV/IO, IM, ODT
- Pediatric Max dose is 4mg, contact base hospital physician if additional doses are needed
Unlike other antiemetics, Zofran typically doesn’t cause sedation.

Peak plasma concentrations of the drug occur 10 minutes after IV doses, and 40 minutes after IM injection.

Positive reactions should occur within 3-5 minutes with both routes.

All routes have the same mean elimination half-life of four hours.
Treat suspected causes of nausea/vomiting:

- Nausea/vomiting may be a symptom of coronary artery syndrome and a 12 lead EKG is indicated.

- Prolonged vomiting may cause severe dehydration especially in pediatrics or compromised adults.

- Treat for signs of shock according to shock protocol as indicated.

- Rule out ingestion or poisoning as a cause of Nausea/vomiting.
Medication safety

Five rights

1. Right patient
2. Right drug
3. Right route
4. Right dose
5. Right time
Documentation:

- Complete a skills/meds usage form and forward to NorCal EMS within 7 calendar days.
Questions???