# NR 546 Week 5 Case Study: Lorazepam for Alcohol Use Disorder and Major Depressive Disorder

#### Week 6 Case Study

#### a. Select one drug to treat the diagnosis(es) or symptoms.

Based on the symptoms the patient is presenting with, the patient requires a medication to safely withdrawal and prevent seizures related to his alcohol use. Although, the patient requires treatment for both Alcohol use disorder and Major depressive disorder, the patient needs to be stabilized before starting long term treatment, which will begin prior to discharge. At this time, the patient presents to the emergency department with suicidal ideation, exhausted and disheveled. The results of his alcohol exam are elevated, indicating he more than likely consumed an alcoholic beverage within the last 48 hours, placing him at risk for seizure related withdrawal activity. The patient needs to be closely monitored for risk of self-harm, placed on the CIWA scale, and started on a benzodiazepine, such as **Lorazepam**.

### b. List medication class and mechanism of action for the chosen medication.

Lorazepam is a part of a class of medications called benzodiazepines. Benzodiazepines are a group of central nervous system depressants that facilitate binding of the inhibitory neurotransmitter 'GABA' also known as gamma- aminobutyric acid, thereby inducing feelings of calmness and/or drowsiness.

Additionally, Lorazepam binds to benzodiazepine receptors on the postsynaptic GABA-A ligand-gated chloride channel neuron at several sites within the central nervous system (CNS). It enhances the inhibitory effects of GABA, which increases the conductance of chloride ions in the cell.

## c. Write the prescription in prescription format.

For this case study specifically, the patient would not be given a prescription, unless prescribing