

TABLE ONE: Drug Armamentarium for AMOS Procedures** 3, 7-17

Generic Name (Brand Names)	Hydroxyzine (Atarax, Vistaril)	Midazolam (Versed)	Triazolam (Halcion)	Lorazepam (Ativan)	Zolpidem (Ambien)	Zaleplon (Sonata)	Flumazenil (Romazicon)
Drug Class	Antihistamine (H ₁ receptor antagonist)	Benzodiazepine	Benzodiazepine	Benzodiazepine	Nonbenzo- diazepine hypnotic	Nonbenzo- diazepine hypnotic	Benzodiazepine antagonist
Dosage Range (mg)	50-100	10-20	0.125-0.5	2-4	5-10	5-20	0.2
Onset (minutes)	15-60	10-20	15-30	30-60	30	20	1
Half-life (hours)	6-14	1.5-3.0	1.5-5	14-16	1-3	0.5-1	0.6-1.3
Formulations	Syrup: 10mg/5ml Capsules: 10, 25, 50, 100mg Oral Suspension: 25mg/5ml	Syrup: 2mg/ml Ampule: 5mg/ml	Tablets: 0.125 and 0.25mg	Oral solution: 2mg/ml Tablets: 0.5, 1, 2mg	Tablets: 5, 10mg	Capsules: 5,10mg	Ampule: 0.1mg/ml
Comments	-Good for substance abuse patient and heavy smokers -Significant anticholinergic effects favors use in asthma and COPD patients -Antisialagogue (reduces salivary flow) -Antiemetic (reduces nausea and vomiting)	-Prepare and administer as oral cocktail in apple juice, Liquid Tylenol®, Liquid Advil © -Rapid onset -Short duration -No active metabolites	-Good for short to moderate cases (2- 4 hours) -Sublingual dosing (bitter) produces faster onset and increased bioavailability -No active metabolites	-Good for longer cases (>3hrs) -Excellent anxiolytic (night before dosing for severe phobics) -Good for patients with active liver disease and smokers -No active metabolites	-Good for moderate (1-3 hr) length cases -Not contraindicated in pregnancy -No active metabolites	-Good for short appointments -Not contraindicated in pregnancy -No active metabolites	-Rapidly reverses sedative effects of BZ and Z-drugs -Deliver initial 2cc dose (0.2mg) sublingually via 16 gauge needle unless IV port is available
Antihistamine precautions	1) Cannot be reversed 2) Potentiates opioids, barbiturates and anti-anxiety drugs 3) Does not reduce seizure threshold 4) Blurred vision, dizziness and xerostomia 5) Decrease dosage in elderly due to exaggerated effects or extrapyramidal reactions 6) Avoid during early pregnancy						
Benzodiazepine precautions	1) Exercise caution with concurrent use of antifungals, macrolide antibiotics (erythromycin), proton pump inhibitors, protease inhibitors, SSRIs, contraceptives, and grapefruit juice as concurrent use can significantly increase sedative clearance time 2) Powerful anterograde amnesia properties 3) Contraindicated with narrow angle glaucoma 4) Past reports of relatively high addictive liability 5) Rebound anxiety, amnesia, confusion, and psychiatric symptoms reported (especially Triazolam) 6) Flumazenil will reverse 7) BZ abusers, seizure patients, tricyclic antidepressant user/abusers can exhibit withdrawal/seizures with BZ reversal 8) Decrease dosage in elderly (50% reduction over age 65)						
Z-Drug precautions	1) Poor anticonvulsant and muscle relaxant properties 2) Some anterograde amnesia reported 3) May be habit-forming 4) Exercise caution with impaired renal or hepatic function 4) Increased CNS depression when given with benzodiazepines 5) Flumazenil will reverse (same precautions as with BZ reversal) 6) Decrease dosage in elderly (50% reduction over age 65)						
Reversal precautions	1) Initiation of convulsion is potential adverse event after reversal, especially in epileptics 2) Severe cardiac arrhythmias possible when used with high-dose tricyclic antidepressants 3) Withdrawal symptoms possible in patients with long-term exposure to benzodiazepines 4) Residual benzodiazepine in the circulation after reversal can lead to re-sedation (extended monitoring prior to discharge)						

**Guidelines only- seek appropriate training and physician input