Welcome Packet for Advanced Pharmacy Practice Experience (APPE)

PHM 623: Outpatient Care

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Standard Operating Procedures

VascuScript Pharmacy Mission

The VascuScript pharmacy strives to be an independent community pharmacy with a focus on providing a unique combination of free in home delivery and clinical pharmacy services. By optimizing the workflow process and establishing collaborative relationships with various inpatient and outpatient practices, the VascuScript pharmacy is dedicated to committing a minimum of 50% of their hours to clinically oriented services in addition to standard dispensing functions.

Scheduling Expectations

As stipulated in the Advanced Pharmacy Practice Experience Program Manual, the minimum number of hours you can expect to commit on a weekly basis shall be 40 hours. Important to consider is that any of the VascuScript pharmacists may exceed 60-80 hours per week to maintain long-term relationships with their patients or collaborating practitioners. Concordantly, it should be your expectation that to meet the needs of your patients and your experiential requirements, there shall be no pre-specified maximum number of hours worked per week, nor will there be restrictions applied to weeknights or weekends.

Pharmacist Training Modules

All training pharmacists are required to transition through all phases of the VascuScript pharmacy. As a community pharmacy there is a clear focus on accurate and expeditious medication delivery, but there is also a strong focus on patient management and clinical pharmacy intervention that must be incorporated into the experience.

a. Prescription Intake and Dispensing
b. Compounding
c. Delivery Preparation
d. Bariatric Surgery Medication Reconciliation and Care Planning
e. Buffalo Medical Group Transitions in Care Medication Counseling & Reconciliation
f. Cardiac Rehabilitation Medication Counseling & Reconciliation
g. ECMC HIV Clinic Medication Counseling & Reconciliation
h. Independent Health Care Partners Counseling & Reconciliation
i. Mobile Primary Care Counseling and Reconciliation
j. Drug Information Retrieval and Therapeutic Recommendations
k. Business and Administration

<u>Training Pharmacist Assignments</u>

All training pharmacists are required to complete the following tasks during their time with the VascuScript Pharmacy. The assignments below are intended to be a listing of the types of assignments that you may

encounter and the preceptor shall retain the right of requesting assignments to be redone or alternatively to add assignments if the quality of work is determined to be below average or poor. It shall be the training pharmacist's responsibility to create a folder with all necessary grading forms and to engage the preceptor for completion of the mandatory and preceptor selected assignments. Failure to complete as assignment is ultimately the responsibility of the training pharmacist.

Potential Mandatory Assignments

Assignment	Total Required	Points
Pharmaceutical Care Plan (Appendix A2)	1	40
SOAP Note (A5)		
Medication Therapy Management Form (A7)		
Site Specific Documentation		

Potential Preceptor Selected Assignments

Assignment	Total Required	Points
Prescription Patient Counseling	1	20
OTC Patient Counseling	1	20
Drug Information (Long: Written formally)	1	30
Drug Information (Real-time)	1	12
Patient Case and/or Disease State Presentation (Formal)	1	20
Patient Case and/or Disease State Presentation (Informal)	1	5
Verbal Communication to Physician	1	20
Note to Prescriber (Formal)	1	20
Compounded Prescription	1	12
Medical Device Counseling	1	18
Medication Reconciliation/Discharge Counseling	1	22
Universal Assignment – Reflection & Growth (Pre-post)	1	15
		214

Mandatory Sign-Offs

Assignment	Total Required
Timetable for Assignment Completion	1 (Training Pharmacist to Develop Form)
Interim Evaluation	1
Final Evaluation	1
Assignment Submission Checklist	1
Patient Documentation Form	1
APPE Portfolio	1
Subjective Evaluation	1

Tentative Schedule of Assignment Due Dates

Students are required to have 1 Patient Care Plan and a minimum of 5 Preceptor Selected Assignments completed by the end of this rotation. It is the student's responsibility to make sure all of the assignments needed are assigned and graded. With that in mind, if you feel that something would be worth grading, please let us know BEFORE completing the task that you would like the product graded. We are requiring a minimum of 1 Patient Care Plan, 1 Formal Patient Case Presentation (same patient as your care plan), 1 Long or Short DI paper, 1 Topic Presentation, and 1 Med Rec. or Med Device Counseling. Any other assignment(s), and the corresponding due dates, will be at the discretion of the Preceptor.

Tentative Schedule

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Week 1	Day off	Orientation					
Week 2	Day off	Journal Club 7:45 am		Due: Find Patient for Care Plan			
Week 3	Day off		Med Rec. and/or Med Device Counseling should be graded by now	Bring Paperwork for Interim Evaluation		9:00am: Student Presentation	
Week 4	Day off	Patient Care Plan is Due- Presentation during this week Journal Club 7:45 am				9:00am: Student Presentation	
Week 5	Day off	Long or Short DI Paper is Due Patient Care Plan is due if revisions were needed				9:00am: Student Presentation	
Week 6	Day off	Journal Club 7:45 am			Bring Paperwork for Final Evaluation		

APPE Pharmacists in Training (Drug Information Response and Pharmaceutical Care Plan):

Formal Drug Information Response (Due 2-weeks prior to the end of the Rotation):

Sample Question: What is the impact of Roux-en-Y gastric bypass (RYGB) on the absorption and/or safety of common prescription medications?

Search Methodology:

Minimum Criteria: Embase, Medline [pubmed]

Keyword Documentation: For each search specify the keywords cross referenced to obtain results

Search Query	Database	Total Number Hits
Enalapril AND Gastric Bypass	Embase, Medline [pubmed], Other	0-??

Background: Briefly describe why this is a relevant drug information question (attached article)
Literature Review: Identify all medication in the following classes and specify the following for post RYGB:
*****NB: Must have approval of list to be searched prior to starting literature search*****
Antihypertensives (ACE-Inhibitors, Angiotensin Receptor Blocking Agents, Thiazide Diuretics, Loop Diuretics, Beta-blocking Agents, Dihydropyridine CCB Agents, Non-Dihydropyridine CCB Agents)
Anti-Arrhythmic Agents (Be sure to specify class)
Antihyperlipidemics (statins, fibrates, niacin, ezetimibe, bile acid sequestrants)
Antiplatelet Agents (aspirin, clopidogrel, cilostazol, dipyridamole)
Hypothyroid/Hyperthyroid Agents
Antidepressant Agents
Antipsychotic Agents
Anticonvulsants

Medication	Absorption Site	Onset of Action	Absorption Considerations	Management Recommendations
Antihypertensives				
ACE-Inhibitors				
Lisinopril	Duodenum Jejunum Ileum *Include Refs*	Minutes/Hours *Include Refs*	Increased/Decreased (AUC Change) *Include Refs*	Increase/Decrease/Avoid *Include Refs*

[1] Reference (JAMA Style)

Summary: Consolidate the information retrieved in a concise summary for each of the medication classes searched

Pharmaceutical Care Plan (Due 1-week prior to the end of the Rotation)

From the pool of BMG patients reviewed, select one patient hat meets the following minimum criteria:

- Obesity (BMI >30 kg/m^2)
- Type 2 Diabetes Mellitus
- Dyslipidemia
- Hypertension
- Recent laboratory data available for glucose (HbA1C), lipid (LDL, HDL, TG), and blood pressure

A formal presentation of the PCP (15-30min) to the clinical preceptor will be required.

Required Reading

The article below is required reading for students PRIOR to the first day; it may have been e-mailed to you with this document. We will discuss this on the Monday of your orientation at 7am. Please come prepared so we can enjoy an engaging discussion.

Vetter, Marion, et.al. Narrative Review: Effect of Bariatric Surgery on Type 2 Diabetes Mellitus. Annals of Internal Medicine. 2009; 150: 94-103.

APPENDIX

	Bariatric Fusion (4 tablets/day)	Bariatic Advantage (2 tablets/day)	OptiSource (4 tablets/day)	Centrum (Per tablet)	Flintstones (Per tablet)
Vitamin A	7500 IU	7500 IU	7500 IU	3500 IU	3000 IU
Vitamin C	180 mg	120 mg	60 mg	60 mg	60 mg
Vitamin D	2000 IU (D3, Cholecalciferol)	1000 IU (D3, Cholecalciferol)	400 IU (D3, Cholecalciferol)	400 IU (D2, Ergocalciferol)	400 IU (D3, Cholecalciferol)
Vitamin E	30 IU	30 IU	500 IU	30 IU	30 IU
Vitamin K	0 mg	0 mg	160 mcg	10 mcg	0 mg
Vitamin B1 (Thiamine)	12 mg	6 mg	1.5 mg	1.5 mg	1.5 mg
Vitamin B2 (Riboflavin)	1.7 mg	3.4 mg	1.7 mg	1.7 mg	1.7 mg
Vitamin B3 (Niacin)	20 mg	50 mg	20 mg	20 mg	15 mg
Vitamin B5 (Pantothenic Acid)	10 mg	20 mg	10 mg	10 mg	10 mg
Vitamin B6 (Pyridoxine)	2 mg	4 mg	2 mg	2 mg	2 mg
Vitamin B7 (Biotin)	600 mcg	600 mcg	300 mcg	45 mcg	40 mcg
Vitamin B9 (Folic Acid)	800 mcg	800 mcg	800 mcg	400 mcg	400 mcg
Vitamin B12 (Cobalamin)	560 mcg	100 mcg	500 mcg	6 mcg (Cyanocobalamin)	6 mcg
Elemental Calcium	1200 mg (Carbonate/Citrate)	200 mg (Calcium Citrate)	400 mg (Calcium Carbonate)	108 mg (Calcium Carbonate)	100 mg (Calcium Phosphate)
Elemental Iron	30 mg (Ferrous Fumarate)	0 mg	30 mg	18 mg (Carbonyl Iron)	18 mg (Ferrous Fumarate)
Phosphorous	0 mg	0 mg	50 mg	50 mg	100 mg
Iodine	150 mcg	0 mg	150 mcg	150 mcg	150 mcg
Magnesium	400 mg	50 mg	400 mg	40 mg	20 mg
Zinc	30 mg	22.5 mg	30 mg	15 mg	12 mg
Selenium	70 mcg	201 mcg	70 mcg	0 mg	0 mcg
Copper	2 mg	1.5 mg	2 mg	2 mg	2 mg
Manganese	2 mg	2 mg	2 mg	1 mg	0 mg
Chromium	120 mcg	150 mcg	120 mcg	20 mcg	0 mcg
Molybdenum	75 mcg	111 mcg	75 mcg	20 mcg	0 mcg
Vanadium	0 mcg	37.5 mcg	0 mcg	0 mcg	0 mcg
Flavinoids	0	18.6	0	0	0
Inositol	0 mg	7.5 mg	0 mg	0 mg	0 mg
Additional Vitamin B12 (QD)	No	Yes	No	Yes	Yes
Additional Calcium (BID)	No	Yes	Yes	Yes	Yes
Additional Iron (QD)	No	Yes	No	No	No
Total Tablets Per Day	4	6	6	4	4
Supplement Cost/Month	$24.99	$16.95	$27.99	$3.00	$3.50
Additional B12 Cost/Month	$0.00	$5.00	$0.00	$5.00	$5.00
Additional Calcium Cost/Month	$0.00	$10.00	$10.00	$10.00	$10.00
Additional Iron Cost/Month	$0.00	$5.00	$5.00	$0.00	$0.00
Total Supplement Cost/Month	$24.99	$36.95	$42.99	$18.00	$18.50

Salt	Elemental Conversion
Calcium Carbonate	40%
Calcium Phosphate	38%
Calcium Citrate	21%
Calcium Lactate	13%
Carbonyl Iron	100%
Ferrous Fumarate	33%
Ferrous Sulfate	20%
Ferrous Gluconate	12%

Recommendations	Amount
B12	350-500 *u* g/day
Calcium	1500-2000 mg/day
Iron	18-27 mg/day
Vitamin D	2000 IU
Thiamine	3 mg

RYGB: Absorption and Management Considerations for Select Pharmacotherapeutic Agents

Drug/Formulation	Absorption Considerations	Management Considerations
Extended or Sustained Release Formulations	Decreased absorption	Use immediate release formulations with increased dosing frequency.
NSAID's (diclofenac, ibuprofen, ketoprofen, indomethacin, ketorlac, meloxicam, naproxen, nabumetone, oxaprozin)		Ulceration, generally avoid after gastric bypass procedure. In a comparative trial with normal GI structure, Meloxicam has been shown to have fewer GI side effects versus diclofenac. May consider use of PPI to decrease risk of marginal ulceration.
Salicylates (e.g. aspirin, magnesium salicylate, salsalate)		Ulceration, consider risk:benefit ratio on an individual basis. Lack of literature to support or oppose use of daily aspirin. Co-treatment with PPI may be considered.
Antiplatelet Agents (Clopidogrel)		Clopidogrel associated with increased risk of upper GI bleeding. Co-treatment with PPI recommended if treatment is to be continued.
Oral Bisphosphonates (alendronate, etidronate, ibandronate, risedronate)		Increased risk of gastrointestinal ulceration. Consider alternative treatment options (calcitonin, teriparatide, raloxifene (women))
Zolpidem	Absorbed rapidly and completely; absorption affected by food.	Absorption time may increase, resulting in delay to take effect. Take on empty stomach.
Thyroxine	1 case report of a woman requiring 0.6 mg after JIB vs. 0.2 mg before JIB. After JIB reversed 0.2 mg dose was sufficient to normalize TSH. Additional case report suggested a 0.5 mg dose (3x's greater) to maintain normal thyr0id function.	Monitor TSH. Consider dose titration.
Oral Antibiotics	Decreased absorption	Consider liquid formulations if no response to oral formulations
Amoxicillin	1 case report of a woman w/ UTI requiring IV antibiotics after oral medication failed (Gastric Bypass).	Controlled comparisons do not show alterations for the following antibiotics: 1. Erythromycin base (250 mg single) 2. Penicillin (1 g single dose)
Ampicillin	1 case report post JIB suggest significantly reduced bioavailability.	
Sulfisoxazole	Slight reduction in bioavailability observed post JIB.	
Nitrofurantoin (Macrodantin)	1 case report of a woman w/ UTI requiring IV antibiotics after oral medication failed (Gastric Bypass).	

Antifungal Agents (Ketoconazole)	Likely absorbed in stomach because acidic medium required for absorption.	Absorption likely to be negligible; consider alternative agents.
Antihypertensive Agents		May require decreased dosages as weight loss occurs. Recommend home blood pressure monitoring (morning, evening) to determine viability of eliminating medications.
Hydrochlorothiazide	Controlled comparison suggests significant AUC reduction (JIB)	Consider alternative agent or increase dose. Monitor blood pressure.
Enalapril	Hydrolyzed to active form (enalprilat) in stomach; absorbed in small intestine	May exhibit decreased activity; consider other ACE-Inhibitors.
Ramipril	Unknown site of absorption. Decreased absorption documented in patients with steatorrhea and malabsorption.	Consider other agents; monitor blood pressure in the postoperative period; need for antihypertensive therapy may decrease with weight loss.
Metoprolol Tartrate	Absorbed rapidly and completely, indicating stomach and duodenum absorption.	Monitor blood pressure, heart rate. Medication requirements may decrease as weight loss occurs
Antidiabetic Agents		May require decreased dosages as weight loss occurs. Recommend interval blood glucose monitoring (fasting, pre-prandial, post-prandial) to determine if medications may be discontinued or require optimization.
α-glucosidase Inhibitors (acarbose, miglitol)	Gastrointestinal absorption is negligible (local action). Will inhibit carbohydrate absorption throughout small intestine.	Commonly associated with gastrointestinal adverse effect (bloating, flatulence). Alternative agents recommended.
Biguanide (metformin)	Slowly and incompletely absorbed in the duodenum.	Ensure hydration status, CrCl >60ml/min. Increase requirement for blood glucose monitoring. Drug requirements may decrease with weight loss.
Basal & Bolus Insulin	N/A (subcutaneous administration)	Insulin requirements may decrease substantially (50%-100%). Diminish basal/bolus requirements to 50% during first 1-month of management. Patient to conduct interval blood glucose monitoring (fasting, pre-prandial, post-prandial) to determine if regimen is still required or requires optimization.
Sulfonylureas (glyburide, glipizide, glimepiride)	Rapid and complete absorption from the gastrointestinal tract	Discontinue following surgery. If additional oral secretory agent is required consider meglitinide or DPP-

		IV inhibitor (sitagliptin).
Meglitinides (nateglinide, repaglinide)	Bioavailability: 50-75% Peak concentration <1-hour	Absorption likely to be affected by RYGB. May consider prior to initiating or reinitiating bolus insulin therapy. Monitor efficacy with SMBG.
Thiazolidinediones (rosiglitazone, pioglitazone)	Serum concentrations appear within 30 minutes. Food alters time to peak, but not extent. Steady state reached in approximately 7-days. RYGB not expected to significantly impact long-term dosing strategies.	Rosiglitazone associated with cardiovascular outcomes. Both rosiglitazone and pioglitazone associated with increased fat mass. If thiazolidinedione agent is required consider only after weight loss has reached a plateau.
Incretin Mimetic/DPP-IV Inhibitors (exenatide, sitagliptin)	Exenatide – N/A (subcutaneous) Sitagliptin – peak concentrations occur in 1-4 hours. Steady state is reached with repeated dosing and not expected to be altered by RYGB.	No literature to evaluate use of either agent after RYGB. Consider use of sitagliptin (+/-) metformin prior to initiation of exenatide due to known GLP-1 increases post RYGB.
Pramlintide	N/A (subcutaneous)	No literature to support use. Only indicated after failure of optimal insulin titration with or without use of metformin and/or sulfonylurea agents.
Antihyperlipidemic Agents		May require decreased dosages as weight loss occurs. Recommend lipid panel follow-up every 3-months to determine if medications may be discontinued or require optimization.
Simvastatin	Absorption site unknown, must be hydrolyzed to active form (stomach)	Consider other agents; monitor serum lipids.
Niacin	Primarily absorbed in duodenum.	Administer w/ low-fat snack to maximize absorption.
Antipsychotic Agents		
Olanzapine (Zyprexa)	Stomach.	Monitor for decreased efficacy; switching to orally disintegrating tablet will NOT increase absorption (stomach).
Quetiapine (Seroquel)	Exact location of absorption unknown. Likely location is stomach and duodenum due to rapid absorption.	Monitor for decreased efficacy.
Anticonvulsants		
Phenytoin (Dilantin)	2 case reports suggest the potential for decreased drug absorption with JIB. 1 controlled comparison confirms significant AUC reduction.	Monitor for decreased efficacy. May require increased dosage.
Ethosuximide (Zarontin)	1 case reports suggest the potential for decreased drug absorption w/JIB	Monitor for decreased efficacy. May require increased dosage.
Lamotrigine (Lamictal)	Likely to be stomach and proximal small intestine secondary to rapid and complete absorption.	Monitor for decreased efficacy.
Digoxin	Conflicting evidence (1/1) that	Consider monitoring serum drug

	serum AUC may be decreased	concentrations
Oral Contraceptives		Consider patches, vaginal rings, injectable contraceptives, intrauterine devices, and barrier contraception.
Norethisterone/L-norgestrel	Controlled analysis suggests diminished absorption	Consider alternative agents or strategies for contraception.
D-norgestral/oestradiol	No significant change in absorption	Consider secondary protection.

Availability of Liquid Formulations

Category	Drug Name	Liquid Available	Dose
Antidepressant Agents			
SSRI	**citalopram**	Y	10mg/5ml
SSRI	**escitalopram**	Y	5mg/5ml
SSRI	**fluoxetine**	Y	20mg/5ml
SSRI	**fluvoxamine**	N	
SSRI	**paroxetine**	Y	10mg/5ml
SSRI	**sertraline**	Y	20mg/1ml
Dopamine Reuptake Inhibitor	**buproprion**	N	
Serotonin/Norepinephrine Reuptake Inhibitors	**duloxetine**	N	
Serotonin/Norepinephrine Reuptake Inhibitors	**desvenlafaxine**	N	
Serotonin/Norepinephrine Reuptake Inhibitors	**venlafaxine**	N	
5HT2 Receptor Antagonists	**nefazodone**	N	
5HT2 Receptor Antagonists	**trazadone**	N	
Noradrenergic Antagonist	**mirtazapine**	N	
Monoamine Oxidase Inhibitors	**isocarboxazid**	N	
Monoamine Oxidase Inhibitors	**phenelzine**	N	
Monoamine Oxidase Inhibitors	**tranylcypromine**	N	
Tricyclic Antidepressants	**amitryptiline**	N	
Tricyclic Antidepressants	**clomipramine**	N	
Tricyclic Antidepressants	**desipramine**	N	
Tricyclic Antidepressants	**doxepin**	N	
Tricyclic Antidepressants	**imipramine**	N	
Tricyclic Antidepressants	**maprotiline**	N	
Tricyclic Antidepressants	**nortriptyline**	Y	10mg/5ml
Tricyclic Antidepressants	**protriptyline**	N	
Tricyclic Antidepressants	**amoxapine**	N	
Anti-Diabetic Agents			
Alpha-Glucosidase Inhibitors	**acarbose**	N	
Alpha-Glucosidase Inhibitors	**miglitol**	N	
Biguanides	**metformin**	Y	500mg/5ml (Riomet)
Dipeptidyl Peptidase-4 inhibitor	**saxagliptin**	N	
Dipeptidyl Peptidase-4 inhibitor	**sitagliptin**	N	
Meglitinides	**nateglinide**	N	
Meglitinides	**repaglinide**	N	
Sulfonylureas	**chlorpropamide**	N	

Sulfonylureas	**glimepiride**	N	
Sulfonylureas	**glipizide**	N	
Sulfonylureas	**glyburide**	N	
Sulfonylureas	**tolazamide**	N	
Sulfonylureas	**tolbutamide**	N	
Thiazolidinediones	**pioglitazone**	N	
Thiazolidinediones	**rosiglitazone**	N	
Antihyperlipidemic Agents			
Bile Acid Sequestrants	**cholestyramine**	Y	4g Powder for Oral Susp.
Bile Acid Sequestrants	**colesevelam**	Y	3.75g Powder for Oral Susp.
Bile Acid Sequestrants	**colestipol**	Y	5g Granules for Oral Susp.
Cholesterol absorption inhibitor	**ezetimibe**	N	
Fibrates	**fenofibrate**	N	
Fibrates	**gemfibrozil**	N	
HMG-CoA Reductase Inhibitors	**atorvastatin**	N	
HMG-CoA Reductase Inhibitors	**fluvastatin**	N	
HMG-CoA Reductase Inhibitors	**lovastatin**	N	
HMG-CoA Reductase Inhibitors	**rosuvastatin**	N	
HMG-CoA Reductase Inhibitors	**simvastatin**	N	
Nicotinic Acid	**Niacin**	N	
Antihypertensive Agents			
Loop Diuretics	**bumetanide**	N	
Loop Diuretics	**furosemide**	Y	40mg/5ml, 40mg/5ml
Loop Diuretics	**torsemide**	N	
Thiazide diuretics	**chlorothiazide**	Y	250mg/ml
Thiazide diuretics	**HCTZ**	N	50mg/5ml
Thiazide diuretics	**indapamide**	N	
Thiazide diuretics	**metolazone**	N	
ACE Inhibitors	**benazepril**	N	
ACE Inhibitors	**captopril**	N	
ACE Inhibitors	**enalapril**	N	
ACE Inhibitors	**enalaprilat**	N	
ACE Inhibitors	**fosinopril**	N	
ACE Inhibitors	**lisinopril**	N	
ACE Inhibitors	**moexipril**	N	
ACE Inhibitors	**perindopril**	N	
ACE Inhibitors	**quinapril**	N	
ACE Inhibitors	**Ramipril**	N	
ACE Inhibitors	**trandolapril**	N	
Angiotensin II Receptor Blockers	**candasartan**	N	
Angiotensin II Receptor Blockers	**eprosartan**	N	

Angiotensin II Receptor Blockers	**irbesartan**	N	
Angiotensin II Receptor Blockers	**Losartan**	N	
Angiotensin II Receptor Blockers	**olmesartan**	N	
Angiotensin II Receptor Blockers	**telmisartan**	N	
Angiotensin II Receptor Blockers	**valsartan**	N	
Direct Renin Inhibitor	**Aliskiren**	N	
Beta Blockers	**acebutolol**	N	
Beta Blockers	**atenolol**	N	
Beta Blockers	**betaxolol**	N	
Beta Blockers	**bisoprolol**	N	
Beta Blockers	**carteolol**	N	
Beta Blockers	**carvedilol**	N	
Beta Blockers	**esmolol**	N	
Beta Blockers	**labetalol**	N	
Beta Blockers	**metoprolol**	N	
Beta Blockers	**nadolol**	N	
Beta Blockers	**penbutolol**	N	
Beta Blockers	**pindolol**	N	
Beta Blockers	**propranolol**	Y	40mg/5ml
Beta Blockers	**sotalol**	N	
Beta Blockers	**timolol**	N	
Calcium Channel Blockers	**amlodipine**	N	
Calcium Channel Blockers	**felodipine**	N	
Calcium Channel Blockers	**isradipine**	N	
Calcium Channel Blockers	**nicardipine**	N	
Calcium Channel Blockers	**nifedipine**	N	
Calcium Channel Blockers	**nimodipine**	N	
Calcium Channel Blockers	**nisoldipine**	N	
Calcium Channel Blockers	**verapamil**	N	
Calcium Channel Blockers	**diltiazem**	N	
Central Acting Antiadrenergic Agents	**clonidine**	N	
Central Acting Antiadrenergic Agents	**guanabenz**	N	
Central Acting Antiadrenergic Agents	**guanfacine**	N	
Central Acting Antiadrenergic Agents	**methyldopa**	N	
Alpha- Adrenergic Blockers	**alfuzosin**	N	
Alpha- Adrenergic Blockers	**doxazosin**	N	
Alpha- Adrenergic Blockers	**prazosin**	N	
Alpha- Adrenergic Blockers	**silodosin**	N	
Alpha- Adrenergic Blockers	**tamsulosin**	N	
Alpha- Adrenergic Blockers	**terazosin**	N	
Aldosterone Antagonist	**epleronone**	N	
Potassium Sparing Diuretics	**amiloride**	N	
Potassium Sparing Diuretics	**spironolactone**	N	
Potassium Sparing Diuretics	**triamterene**	N	