

ANTIDEPRESSANT MEDS

- All are equally effective but they have different side effect profiles.
- All will take 4-8 weeks to work.
- They have NO ABUSE POTENTIAL.

TYPES

- Selective Serotonin Reuptake Inhibitors (SSRI's)
- Tricyclic Antidepressants (TCA's)
- Monoamine oxidase inhibitors (MAOI's)
- Atypical Antidepressants
 - Do have Abuse potential
 - Only use for patients who do not respond to traditional medications.

SSRIs

<ul style="list-style-type: none"> • Most commonly prescribed • Low incidence of side effects • No food restrictions. • Safe in overdose. 	<ul style="list-style-type: none"> • Inhibit presynaptic serotonin pumps • Increased availability of serotonin in synaptic cleft. 	<p>Examples</p> <ul style="list-style-type: none"> • Fluoxetine (Prozac) • Sertraline (Zoloft) • Paroxetine (Paxil) • Citalopram (Celexa) • Escitalopram (Lexapro) 	<ul style="list-style-type: none"> • Sexual dysfunction • GI disturbance • Insomnia • Headache • Anorexia, Weight loss • Serotonin Syndrome when used with MAOI's
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Atypical Antidepressants

<p>Tricyclic Antidepressants (TCA's)</p> <p>• Venlafaxine (Effexor) • Desipramine (Cymbalta)</p> <p>• Low drug interaction potential</p> <p>• Side effects similar to SSRI</p> <p>• Can increase BP</p>	<p>Norepinephrine and serotonin antagonists (NAR)</p> <p>• Bupropion (Wellbutrin)</p> <p>• Low of sexual side effects</p> <p>• Lowers seizure threshold</p> <p>• Contraindicated in patients with seizure disorder, or on MAOI</p>	<p>• Mirtazapine (Remeron)</p> <p>• Useful in treatment refractory depression</p> <p>• Useful in patients with an anorexia/bulimic</p> <p>• Serotonin antagonists and reuptake inhibitors</p>	<p>• Many side effects: sedation, nausea, constipation, hypotension, cardiac arrhythmias</p> <p>• Tricyclics: Dry mouth, constipation, blurred vision</p> <p>• Mirtazapine (Remeron)</p>
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MAOIs

<ul style="list-style-type: none"> • NOT FIRST LINE. • They are effective for refractory depression. • Patients must be on a tyramine-restricted diet. 	<ul style="list-style-type: none"> • Prevent the inactivation of biogenic amines such as norepinephrine, serotonin, dopamine, and tyramine. • MAO-A preferentially deactivates serotonin. • MAO-B preferentially deactivates norepinephrine. 	<p>Examples:</p> <ul style="list-style-type: none"> • Orthostatic hypotension • Drowsiness • Weight gain • Sexual dysfunction • Dry mouth • Serotonin Syndrome • Hypertensive crisis. <ul style="list-style-type: none"> • Red Chianti wine, cheese, liver, fava beans, cured meats
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Electroconvulsive Therapy

- Indications:
 - Patient who is unresponsive to pharmacotherapy
 - Patient who can not tolerate pharmacotherapy
 - Rapid symptom reduction.
- How it's done:
 - Premedicate patient with atropine, general anesthesia, and a muscle relaxant.
 - Induce a generalized seizure lasting less than 1 minute.
- Side effects: Cognitive, usually short-term

Serotonin Syndrome

- Occurs when SSRI's and MAOI's are taken together.
- Can occur with use of SSRI and opiates, amphetamines
- Rarely occurs when only one SSRI, TCA, MAOI is given
- Initial presentation
 - Lethargy, Confusion, Restlessness
 - Flushing, Diaphoresis
 - Tremor, Myoclonic jerks
- Progression
 - Hypertonicity
 - Rhabdomyolysis
 - Renal Failure
 - Seizure—Coma— Death
- Treatment
 - Stop the medication.
 - Supportive medical treatment and possibly cyproheptadine

TABLE 5-7 Selective Serotonin Reuptake Inhibitors and Serotonin and Norepinephrine Reuptake Inhibitors

Medication and Route	Initial Dose (Dosing Range, mg/day)	Cost per Month (Average Dose)
Selective Serotonin Reuptake Inhibitors		
Citalopram (Celexa): 10-, 20-, and 40-mg tablets	10-20 (20-60)	\$10 (20 mg/day) Celexa: \$81
Escitalopram (Lexapro): 10- and 20-mg tablets 5-mg / 5 mL solution	5-10 (10-20)	\$84 (20 mg/day) No generic
Fluoxetine (Prozac): 10- and 20-mg tablets 20-mg / 5 mL solution. 90-mg tablets (weekly)	10-20 (20-80)	\$10 (20 mg/day) Prozac: \$66 Weekly: \$88 (30 mg)
Fluvoxamine (Luvox,-CR): 25-, 50-, and 100-mg tablets CR 100- and 150-mg tablets	25-50 (50-300)	\$35 (100 mg/day) Luvox: \$109 CR: \$117
Paroxetine (Paxil, -CR): 10-, 20-, 30-, and 40-mg suspension CR 12.5, 25, 37.5 mg tablets	10-20 (20-60) (CR: 2.5-62.5)	\$53 (30 mg/day), Paxil \$90, CR \$94
Sertraline (Zoloft): 25-, 50-, and 100-mg tablets	25-50 (50-200)	\$13 (50 mg/day) Zoloft: \$87
Serotonin and Norepinephrine Reuptake Inhibitors		
Desvenlafaxine (Pristiq): 50-mg tablets	50 (50-100)	\$122 (50 mg/day)
Duloxetine (Cymbalta): 20-, 30-, and 60-mg tablets	20 (40-120)	\$125 (60 mg/day)
Venlafaxine (Effexor, Effexor XR): regular: 25-, 37.5-, 50-, 75-, and 100-mg tablets XR: 150- and 300-mg tablets	75 (25-175) (TID dosing) XR: 25-50 (75-175)	\$50 (\$75 BID) Effexor: \$135 XR: \$107

TABLE 5-11 Alternative and Adjunctive Agents for the Treatment of Depression

Generic (Brand) and Formulations	Initial Dose (mg/day)	Dosing Range (Total mg/day)	Cost per Month (Average Dose)	Clinical Considerations
Bupropion: Wellbutrin-SR, Wellbutrin-XL, Zyban) 75-, and 100-mg tablets SR: 100- and 150-mg tablets XL: 150-, and 300-mg tablets	25-50 (TID dosing) SR: 50-100 (BID dosing) XL: 150 (QD dosing)	150-450 (TID dosing) SR: 100-400 (BID dosing) XL: 150-450 (QD dosing)	\$86 (300 mg) \$116 (300 mg as brand-SR) \$125 (300 mg as brand-XL)	<ul style="list-style-type: none"> Often used as adjunctive medication with SSRIs and SNRIs Fewer sexual side effects than with SSRIs and SNRIs Lowers seizure threshold
Buspirone (BuSpar as an adjunct): 5-, 10-, 15-, and 30-mg tablets	15	15-60	\$23 (20 mg)	<ul style="list-style-type: none"> Often used as an adjunctive medication for anxiety and depression
Mirtazapine (Remeron): 15-, 30-, and 45-mg tablets	15	15-45	\$46 (generic 30 mg) \$93 (brand 30 mg)	<ul style="list-style-type: none"> Used as an adjunctive medication or as second-line agent, particularly for patients with insomnia
Nefazodone (Serzone): 50-, 100-, 150-, 200-, and 250-mg tablets	100	100-600	\$50 (150 mg)	<ul style="list-style-type: none"> Limited use because of cases of hepatotoxicity (need to follow LFTs in patients)
Olanzapine + fluoxetine (ODC, Symbyax): 6 + 25-mg, 6 + 50-mg, 12 + 5-mg, 12 +	6 + 25	6 + 25-12 + 50	\$300 (6 + 25 mg)	<ul style="list-style-type: none"> Recently released agent See side effects for olanzapine

TABLE 5-10 Tricyclic Antidepressants and Monoamine Oxidase Inhibitors

Medication and Formulations	Initial Dose (mg/day)	Dosing Range (mg/day)	Cost per Month (Average Dose)
Tricyclic Antidepressants			
Amitriptyline (Elavil): 10-, 25-, 50-, 75-, 100-, and 150-mg tablets	25	50-300	\$4 (75 mg/day)
Clomipramine (Anafranil): 25-, 50-, and 75-mg tablets	25	25-300	\$35 (generic: 75 mg/day) \$167 (brand: 75 mg/day)
Desipramine (Norpramin): 10-, 25-, 50-, 75-, 100-, and 150-mg tablets	25	25-300	\$40 (100 mg/day)
Doxepin (Sinequan): 10-, 25-, 50-, 75-, 100-, and 150-mg tablets	25	25-300	\$9 (generic: 75 mg/day) \$28 (brand: 75 mg/day)
Imipramine (Tofranil): 10-, 25- and 5-mg tablets	25	50-300	\$9 (50 mg/day) Tofranil: \$173
Nortriptyline (Pamelor): 10-, 25-, 50-, and 75-mg tablets	25	75-150	\$18 (generic: 150 mg/day) \$622 (brand: 150 mg/day)
Protriptyline (Vivactil): 5-, and 10-mg tablets	10-15	15-60	\$155 (30 mg/day)
Trimipramine (Surmontil): 25-, 50-, and 100-mg tablets	20-30	50-300	\$97 (100 mg/day)
Monoamine Oxidase Inhibitors			
Phenelzine (Nardil): 15 mg tablets	30	50 mg	\$60 (75 mg/day)
Tranylcypromine (Parnate): 10-mg tablets	30	40-120	\$100 (30 mg/day)
Selegiline patch (EMSAM): 6-, 9-, and 12-mg patches	6-12 q24 hr	6-12 q24 hr	\$460 (6 mg/day)