

# MEDICATIONS FOR TREATING TOBACCO DEPENDENCE

Medication	Pros and Cons	Considerations	Recommended and "Off-Label" Use
<b>NICOTINE REPLACEMENT THERAPY – FDA APPROVED 1<sup>ST</sup> LINE MEDICATIONS</b>			
<b>All NRT Products</b>	<ul style="list-style-type: none"> <li>+ No new substance introduced</li> </ul>	<p><b>Med Interactions:</b> Bupropion, caffeine, ergots, insulin, some antipsychotics</p> <p><b>Contraindications / Warnings:</b> MI &lt; 6 weeks ago, serious CV disease (e.g., arrhythmias, unstable angina), pregnancy, uncontrolled HTN, uncontrolled DM</p> <p><b>Side Effects:</b> vivid dreams, insomnia, application site reactions, diarrhea / dyspepsia / nausea, dizziness, headache, treatment emergent HTN</p>	<p><b>Recommended Usage</b></p> <ul style="list-style-type: none"> <li>• Stop tobacco</li> <li>• 9 - 12 weeks standard</li> </ul> <p><b>"Off Label" Trends</b></p> <ul style="list-style-type: none"> <li>• Start 1-2 weeks prior to quit date</li> <li>• Combo with other NRT or Bupropion; possibly varenicline</li> <li>• Can use &gt; 12 weeks (6 mo, possibly longer)</li> </ul>
<b>Nicotine Transdermal Patch</b> (Nicoderm, Nicotrol, Habitrol)	<ul style="list-style-type: none"> <li>+ Simplest to use</li> <li>+ OTC, Relatively low cost</li> <li>+ Best adherence: once daily</li> <li>+ Steady, high plasma levels</li> <li>- 1-2 hours to achieve blood levels</li> <li>- Fewer dosing options</li> <li>- Max dose may be insufficient</li> </ul>	<p><b>Med Interactions:</b> (see "All NRT")</p> <p><b>Contraindications / Warnings:</b> (see "All NRT")</p> <p><b>Side Effects:</b> (see "All NRT"), skin rash</p> <p><b>Other:</b> Membrane version may yield fewer skin-related side effects than non-membrane version, but may cost more; Can be taken off at night if disrupts sleep</p>	<p><b>Recommended Usage</b> (see "All NRT")</p> <ul style="list-style-type: none"> <li>• 1 per day, on awakening</li> <li>• Start at 21mg unless &lt;100 lbs or &lt;10 cpd</li> <li>• Below neck, above waist, above elbow; shift site each day</li> <li>• Remove at bedtime if sleep is disturbed</li> <li>• If patch does not stick – use surgical tape; Ace bandage</li> </ul> <p><b>"Off Label" Trends</b> (see "All NRT")</p> <ul style="list-style-type: none"> <li>• &lt;15 cpd: 14mg; 15-20: 14-21mg</li> <li>• 21-39 cpd: 28-35 mg; 40+ cpd: 42mg</li> <li>• Cut (Habitrol) or partially cover (membrane) to adjust delivery</li> <li>• Can use &gt; 12 weeks (6 mo, longer?)</li> </ul>
<b>Nicotine Polacrilex Gum</b> (Nicorette)	<ul style="list-style-type: none"> <li>+ Flexible dosing / use prn</li> <li>+ OTC, Various flavors, Oral substitute</li> <li>+ Good for 'irregular' smoker</li> <li>+ Non-stick, sugarless</li> <li>- Insufficient use is common</li> <li>- Chewing increases S/E's</li> <li>- Costly as monotherapy</li> <li>- Minor dependence liability</li> </ul>	<p><b>Med Interactions:</b> (see "All NRT")</p> <p><b>Contraindications / Warnings:</b> (see "All NRT")</p> <p><b>Side Effects:</b> (see "All NRT"), oral sores, jaw muscle ache</p> <p><b>Other:</b> should not be chewed vigorously</p>	<p><b>Recommended Usage</b> (see "All NRT")</p> <ul style="list-style-type: none"> <li>• 2 mg (≤ 24 cigs per day); 4 mg (25+ cigs per day)</li> <li>• No food or drink before or while using</li> <li>• Chew and park for 30 minutes</li> <li>• 1 piece per 45 min - 2 hrs, max 24 / day</li> <li>• 12 weeks</li> </ul> <p><b>"Off Label" Trends</b> (see "All NRT")</p> <ul style="list-style-type: none"> <li>• Cut 4mg in half to save money</li> <li>• Can taper</li> <li>• Use prn with pregnant smokers</li> </ul>
<b>Nicotine Inhaler</b> (Nicotrol)	<ul style="list-style-type: none"> <li>+ Flexible dosing / use prn</li> <li>+ Oral substitute most like cigarette</li> <li>+ Lower level of delivery, Good for 'irregular' / low rate smoker</li> <li>- Requires frequent puffing</li> <li>- Costly, Prescription only</li> </ul>	<p><b>Med Interactions:</b> (see "All NRT")</p> <p><b>Contraindications / Warnings:</b> (see "All NRT"), caution with reactive airway disease</p> <p><b>Side Effects:</b> (see "All NRT"), throat/mouth irritation, coughing, rhinitis</p>	<p><b>Recommended Usage</b> (see "All NRT")</p> <ul style="list-style-type: none"> <li>• 6 - 16 cartridges / day</li> <li>• 12 weeks; optional additional 6-12 weeks</li> <li>• Puff into mouth; do not inhale</li> <li>• 1 cartridge yield 20 min of puffing</li> <li>• Cartridge good for 24 hr once opened</li> <li>• Stop if not quit in 4 weeks</li> </ul> <p><b>"Off Label" Trends</b> (see "All NRT")</p>

<p><b>Nicotine Nasal Spray</b> (Nicotrol NS)</p>	<ul style="list-style-type: none"> <li>+ Flexible dosing / use prn</li> <li>+ High dose – good for heavier users</li> <li>- Costly, Prescription only</li> </ul>	<p><b>Med Interactions:</b> (see “All NRT”)  <b>Contraindications / Warnings:</b> (see “All NRT”), caution with reactive airway disease  <b>Side Effects:</b> (see “All NRT”), nasal congestion, nasal tract irritation, temporary change in smell / taste</p>	<p><b>Recommended Usage</b> (see “All NRT”)</p> <ul style="list-style-type: none"> <li>• 1-2 doses / hr; Max 5 / hr or 40 / day</li> <li>• Most average 1 dose per hour (1 dose = 1 spray in ea nostril)</li> <li>• Do not inhale while spraying</li> <li>• Spray towards outer nasal walls</li> <li>• 12 weeks; Stop if not quit in 4 weeks</li> </ul> <p><b>“Off Label” Trends</b> (see “All NRT”)</p>
<p><b>Nicotine Lozenge</b> (Commit)</p>	<ul style="list-style-type: none"> <li>+ OTC, Flexible dosing / use prn</li> <li>+ Good for ‘irregular’ smoker</li> <li>+ Oral substitute</li> <li>+ 25% higher delivery vs gum</li> <li>- Consuming too fast increases S/E’s</li> <li>- Costly as monotherapy</li> </ul>	<p><b>Med Interactions:</b> (see “All NRT”)  <b>Contraindications / Warnings:</b> (see “All NRT”)  <b>Side Effects:</b> (see “All NRT”), throat/mouth irritation, coughing, rhinitis</p>	<p><b>Recommended Usage</b> (see “All NRT”)</p> <ul style="list-style-type: none"> <li>• 2 mg: 1<sup>st</sup> cig &gt; 30 min after awakening</li> <li>• 4 mg: 1<sup>st</sup> cig &lt; 30 min after awakening</li> <li>• No food or drink before or while using</li> <li>• Max 6 / 5-hr period, max 20 / day</li> <li>• 12 weeks</li> </ul> <p><b>“Off Label” Trends</b> (see “All NRT”)</p> <ul style="list-style-type: none"> <li>• Can taper</li> </ul>

**NON-NICOTINE PRODUCTS – FDA APPROVED 1<sup>ST</sup> LINE MEDICATIONS**

<p><b>Bupropion SR / XL</b> (Zyban, Wellbutrin, Bupropion)</p>	<ul style="list-style-type: none"> <li>+ Ease of use</li> <li>+ Mood elevating effect</li> <li>+ Attenuates weight gain</li> <li>+ May be best choice for patient with higher depressive symptoms at BL</li> <li>- 1-2 weeks to achieve therapeutic effect</li> </ul>	<p style="text-align: center;"><b>FDA BOXED WARNING</b></p> <p><b>Med Interactions:</b> MAOIs, TCAs, NRT, protease inhibitors, OK with SSRIs (limited data)  <b>Contraindications / Warnings:</b> seizure risk, pregnancy, eating disorder, psychosis  <b>Side Effects:</b> Depressed mood or Depression, suicidal ideation / attempt / completion, changes in thinking or behavior, hostility, agitation, worsening pre-existing psych illness, anxiety, insomnia, dry mouth, shakiness, sedation, tx emerg HTN  <b>Evaluate seizure risk:</b> any h/o seizures, anorex / bulimia, head trauma, loss of consciousness, other meds that lower seizure threshold, brain lesions, abrupt d/c alcohol, sedatives</p>	<p><b>Recommended Usage</b></p> <ul style="list-style-type: none"> <li>• Daily for 3 days, twice /day 7-12 weeks (XL is once daily)</li> <li>• Set quit date for 7 days after starting</li> <li>• Can use up to 24 weeks; Tapering not necessary</li> <li>• Discontinue if no progress in 7 weeks</li> </ul> <p><b>“Off Label” Trends</b></p> <ul style="list-style-type: none"> <li>• Keep at qd dose for 1 week before increasing</li> <li>• Set quit date for 14 days after starting</li> <li>• Can use up to 12 months</li> <li>• Combine with NRT, Varenicline</li> </ul>
<p><b>Varenicline</b> (Chantix)</p>	<ul style="list-style-type: none"> <li>+ Ease of use</li> <li>+ No CYP450 (liver) concerns; minimal renal concerns</li> <li>+ No drug-drug interactions</li> <li>+ Starter / Continuation Paks; bottles</li> <li>- 1-2 weeks to achieve therapeutic effect (at least)</li> </ul>	<p style="text-align: center;"><b>FDA BOXED WARNING</b></p> <p><b>Med Interactions:</b> none  <b>Contraindications / Warnings:</b> caution with severe ESRD  <b>Side Effects:</b> Changes in thinking / behavior / mood, hostility, agitation, depression / depressed mood, suicidal thoughts / actions, anxiety / panic, aggression, anger, mania, abnormal sensations, hallucinations, paranoia, confusion, worsening psych symptoms; sleep disturbance; vivid dreaming; serious / life-threatening skin reactions (rash, swelling, redness, peeling), allergic reactions (swelling of face, mouth, throat), blisters in mouth, caution driving / operating machinery nausea, insomnia, abnormal dreaming, flatulence, constipation, vomiting</p>	<p><b>Recommended Usage</b></p> <ul style="list-style-type: none"> <li>• 0.5mg per day for 3 days, then 0.5mg twice per day for 4 days, then 1mg twice per day for 11 weeks</li> <li>• If quit at 12 weeks, consider additional 12 weeks</li> <li>• Eat a meal and drink full glass of water</li> </ul> <p><b>“Off Label” Trends</b></p> <ul style="list-style-type: none"> <li>• Can use for 1 year (safety data available)</li> <li>• Combine with NRT, Bupropion</li> <li>• More rapid up-titration to maximal dose (0.5mg qd, 0.5mg bid, 1.0mg bid) over as few as 3 days</li> </ul>

**OTHER OPTIONS – 2<sup>ND</sup> LINE MEDICATIONS (NOT FDA APPROVED)**

<p><b>Nortriptyline</b></p>	<ul style="list-style-type: none"> <li>- Must monitor closely</li> </ul>	<p>Higher level of side effects; Significant risk for CV patients</p>	<ul style="list-style-type: none"> <li>• 25 mg /day, gradual increase to 75-100 mg /day</li> <li>• 12 weeks</li> </ul>
<p><b>Clonidine</b></p>	<ul style="list-style-type: none"> <li>+ Transdermal (tts) or oral (po) forms</li> <li>- Must monitor closely</li> </ul>	<p>Higher level of side effects, especially with abrupt discontinuation</p>	<ul style="list-style-type: none"> <li>• 3 – 10 weeks</li> <li>• PO: 0.10mg, increase by 0.10mg as needed up to 0.75 mg</li> <li>• TTS: 0.10 mg, can increase to 0.20 mg</li> </ul>