Canadian Pharmacist Smoking Cessation 
Pharmacotherapy Algorithm

1. **ASK**
   Have you used any form of tobacco in the past 30 days?

2. **ADVISE**
   As your pharmacist, I strongly advise you to quit or reduce your smoking as it is the most important thing you can do for your health, and I can help you.

3. **ACT (assess, assist, arrange)**
   1) Pharmacotherapy + Counselling
   2) Reduce to Quit + Counselling
   3) Motivational Interviewing

**Pharmacotherapy + Counselling**

1. How many cigarettes do you smoke per day?
   - □ <10
   - □ 10 - 19
   - □ 20-29
   - □ 30-39
   - □ 40+

2. How soon after waking do you have your first cigarette?
   - □ < 5 Minutes - highly addicted
   - □ < 30 Minutes
   - □ > 30 Minutes

**Reduce to Quit + Counselling**

Step 1: (0-6 weeks)
Set target number of cigarettes per day to cut down, and a date to achieve it by. Use nicotine replacement therapy (NRT) to manage cravings.

Target should be a minimum 50% reduction.

Step 2: (6 weeks - 6 months)
Continue to cut down cigarettes using NRT. Goal should be complete stop by 6 months.

Step 3: (within 9 months)
Stop all cigarettes and continue to use NRT to relieve cravings.

Step 4: (within 12 months)
Cut down the amount of NRT used, then stop NRT use completely when patient is ready.

*Note - Some patients may require NRT for longer periods - this is less harmful compared to smoking

Choose pharmacotherapy based on:
1. Evidence/Efficacy
2. Clinical suitability (medical conditions, contraindications, addiction level)
3. Potential drug interactions
4. Patient preferences, history, needs (dexterity, coverage)

**Precautions and Contraindications** (*highlights - list not exhaustive)

**Bupropion (Zyban®) Contraindications**
- □ Presently taking bupropion/Zyban® /Wellbutrin®
- □ Current seizure disorder or history of seizures
- □ Bulimia or anorexia nervosa
- □ Undergoing abrupt withdrawal from alcohol or benzo or other sedatives
- □ Currently taking either monoamine oxidase (MAO) inhibitors or thioridazine

**Precautions**
- □ History of head trauma
- □ Central nervous system (CNS) tumour
- □ The presence of severe hepatic impairment
- □ Excessive use of alcohol; addiction to opiates, cocaine, or stimulants
- □ Use of concomitant medications that lower seizure threshold, including but not limited to: antipsychotics, antidepressants, lithium, amantadine, theophylline, systemic steroids, quinolone antibiotics, antimalarials
- □ Pregnant, breast feeding or planned pregnancy
- □ Potential for reduced efficacy of tamoxifen

**Varenicline (Champix®) Contraindications**
- □ Hypersensitivity to varenicline
- □ Pregnant, breast feeding or planned pregnancy

**Precautions**
- □ Increased intoxicating effects of alcohol
- □ History of nausea/vomiting in past 2 months
- □ History of renal failure
- □ Severe renal impairment + cimetidine, trimethoprim, ranitidine or levofloxacin should be avoided

**NRT Precautions**
- □ Dentures/TMJ/Partial/Crown (avoid NRT gum)
- □ Allergy to adhesive - NRT patch (consider once a day antihistamine or corticosteroid spray applied topically to manage symptoms)
- □ Remove NRT patch before intense exercise

**Precautions Overall**
- □ Clinicians should be aware of the possible emergence of serious neuropsychiatric symptoms in patients attempting to quit smoking, with or without treatment
### 1st Line Treatment Options

#### Nicotine Replacement Therapy (12-24 weeks)

<table>
<thead>
<tr>
<th>Patch</th>
<th>7mg Patch</th>
<th>14mg Patch</th>
<th>21mg Patch</th>
<th>28mg Patch (21mg + 7mg)</th>
<th>42mg Patch (21mg X 2) or higher</th>
</tr>
</thead>
<tbody>
<tr>
<td>If time to first cig is &lt;30 mins after waking, consider higher dose NRT</td>
<td>14mg Patch</td>
<td>21mg Patch</td>
<td>28mg Patch (21mg + 7mg)</td>
<td>35mg Patch (21mg + 14mg)</td>
<td>_________</td>
</tr>
</tbody>
</table>

#### Plus**

- Short-acting NRT - may be used in combination as different types can be used for different breakthrough situations
- 24 hour patch may be removed before sleeping and used for 16 hours only if patient experiences vivid dreams or insomnia
- One cigarette delivers 1-2mg of nicotine. An individual's NRT dosing may be affected by differences in absorption and metabolism

**Patch maximum is 84mg per day (21mg x 4)

**Combination therapy provides the best statistical odds of quitting, however, monotherapy may be most appropriate for some patients.

### 2nd Line Treatment Options

- **Varenicline + NRT**
  - Varenicline - Same dosing as first line
  - NRT - Different doses over 12 weeks

- **Bupropion SR + NRT**
  - Bupropion + NRT short-acting and/or NRT patch
  - *monitor blood pressure*

- **Bupropion SR + Varenicline**
  - Varenicline - Same dosing as 1st line
  - Bupropion - Same dosing as 1st line

### 3rd Line Alternative Treatment Options

- **Clonidine**
  - PO administration: 0.1 mg qDay; increase by 0.1 mg/day to 0.15-0.75 mg/day if required
  - TD administration: 100-200 mcg/day patch q7days
  - There is insufficient evidence to recommend using this medication for smoking cessation

- **Cytisine (Cravv®)**
  - Day 1-3: 1 capsule 6 times daily every 2 hrs. with a corresponding reduction of the number of cigarettes smoked for the first 3 days
  - Day 4-12: 1 capsule every 2.5hrs - 5 capsules daily
  - Day 13-16: 1 capsule every 3hrs - 4 capsules daily
  - Day 17-20: 1 capsule every 5hrs - 3 capsules daily
  - Day 21-25: 1 to 2 capsules daily
  - * Smoking cessation should occur by the 5th day after the initiation of treatment.
  - May improve smoking cessation rates at 6 and 12 months compared to placebo

- **Nortriptyline**
  - In smoking cessation trials, the typical dose used is 75-100 mg/day; titrate dose 10-28 days prior to quit date; continue therapy for 12 weeks or more after quit date
  - May improve smoking cessation rates at 6 and 12 months compared to placebo

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### Patient Discussion Checklist

- Provide guidance on using medication or device
- Discuss potential for changes in mood related to quitting smoking
- Advise patient on how to prepare for their start date whether they are reducing or stopping to quit
- Discuss smoking routines and triggers and identified strategies for managing cravings
- Remind patient they will need to reduce their caffeine intake by 50% if they consume more than 5 cups per day
- Current medication doses may need to be adjusted once patient becomes smoke-free (eg. insulin, theophylline, warfarin)