

# PRINCIPAL MEDICATION OPTIONS FOR RHINITIS

SEE INDICATED SUMMARY STATEMENT (SS#) DISCUSSION FOR SUPPORTING DATA

## ALLERGIC RHINITIS (AR): SEASONAL (SAR) AND PERENNIAL (PAR)

### MONOTHERAPY

	THERAPEUTIC CONSIDERATIONS
<b>ORAL AGENTS</b>	
Antihistamines, oral (H1 receptor antagonists) (SS# 61-64)	<ul style="list-style-type: none"> <li>▪ Continuous use most effective for SAR and PAR, but appropriate for PRN use in episodic AR because of relatively rapid onset of action</li> <li>▪ Less effective for nasal congestion than for other nasal symptoms</li> <li>▪ Other options, in general, are better choices for more severe AR</li> <li>▪ Less effective for AR than intranasal corticosteroids (INS) (SS# 74), with similar effectiveness to INS for associated ocular symptoms (SS# 19)</li> <li>▪ Because generally ineffective for nonallergic rhinitis other choices are typically better for <i>mixed</i> rhinitis</li> <li>▪ To avoid sedation (often subjectively unperceived), performance impairment, anticholinergic effects of 1<sup>st</sup>-generation antihistamines, 2nd generation agents generally preferred. (SS# 61)               <ul style="list-style-type: none"> <li>○ Of these, fexofenadine, loratadine, desloratadine without sedation at recommended doses. (SS# 63)</li> </ul> </li> </ul>
Corticosteroids, oral (SS# 81)	<ul style="list-style-type: none"> <li>▪ A short course (5-7 days) of oral corticosteroids may be appropriate for very severe nasal symptoms</li> <li>▪ Preferred to single or recurrent administration of intramuscular corticosteroids, which should be discouraged (SS#81)</li> </ul>
Decongestants, oral (SS# 70-72)	<ul style="list-style-type: none"> <li>▪ Pseudoephedrine reduces nasal congestion (SS# 70)</li> <li>▪ Side effects include insomnia, irritability, palpitations, hypertension.</li> </ul>
Leukotriene receptor antagonists (LTRA) (SS# 85)	<ul style="list-style-type: none"> <li>▪ Montelukast approved for SAR &amp; PAR</li> <li>▪ No significant difference in efficacy between LTRA and oral antihistamines (with loratadine as usual comparator) (SS#85)</li> <li>▪ Approved for both rhinitis and asthma; may be considered in patients who have both conditions. (SS#85)</li> <li>▪ Side effects minimal</li> </ul>

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### MONOTHERAPY (CONTINUED)

INTRANASAL AGENTS	THERAPEUTIC CONSIDERATIONS
Intranasal antihistamines (SS# 65-69)	<ul style="list-style-type: none"> <li>▪ Effective for SAR and PAR. (SS#65)</li> <li>▪ Have clinically significant rapid onset of action making them (SS# 65-69) appropriate for PRN use in episodic AR</li> <li>▪ Effectiveness for AR equal or superior to oral second-generation antihistamines (SS#64), with clinically significant effect on nasal congestion.(SS#68)</li> <li>▪ Less effective than intranasal corticosteroids (SS#69) for nasal symptoms.</li> <li>▪ Appropriate choice for mixed rhinitis, as also approved for vasomotor rhinitis</li> <li>▪ Side effects with intranasal azelastine: bitter taste, somnolence (SS#69)</li> </ul>
Intranasal anticholinergic (ipratropium) (SS# 83)	<ul style="list-style-type: none"> <li>▪ Reduces rhinorrhea but not other symptoms of SAR and PAR.</li> <li>▪ Appropriate for episodic rhinitis because of rapid onset of action</li> <li>▪ Side effects minimal, but dryness of nasal membranes may occur.</li> </ul>
Intranasal corticosteroids (INS) (SS# 74-80)	<ul style="list-style-type: none"> <li>▪ Most effective monotherapy for SAR &amp; PAR (SS#74)</li> <li>▪ Effective for all symptoms of SAR &amp; PAR, including nasal congestion</li> <li>▪ PRN use (e.g. &gt; 50 % days use) effective for SAR (SS#76)</li> <li>▪ May consider for episodic AR</li> <li>▪ Usual onset of action is less rapid than oral or intranasal antihistamines, usually occurs within 12 hours, and may start as early as 3-4 hours in some patients</li> <li>▪ More effective than combination of oral antihistamine and LTRA for SAR &amp; PAR (SS#75)</li> <li>▪ Similar effectiveness to oral antihistamines for associated ocular symptoms of AR</li> <li>▪ Appropriate choice for mixed rhinitis, as agents in class also effective for some nonallergic rhinitis</li> <li>▪ Without significant systemic side effects in adults</li> <li>▪ Growth suppression in children with PAR has not been demonstrated when used at recommended doses.</li> <li>▪ Local side effects minimal, but nasal irritation and bleeding occur, and nasal septal perforation rarely reported (SS#80)</li> </ul>

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### MONOTHERAPY (CONTINUED)

INTRANASAL AGENTS	THERAPEUTIC CONSIDERATIONS
Intranasal cromolyn (SS# 82)	<ul style="list-style-type: none"><li>▪ For maintenance treatment of AR, onset of action within 4-7 days, full benefit may take weeks</li><li>▪ For episodic rhinitis, administration just prior to allergen exposure protects for 4-8 hours against allergic response (SS#82)</li><li>▪ Less effective than nasal corticosteroids, inadequate data for comparison to leukotriene antagonists and antihistamines (SS#82)</li><li>▪ Minimal side effects (SS#82)</li></ul>
Intranasal decongestants (SS# 71,72)	<ul style="list-style-type: none"><li>▪ For short-term and possibly for episodic therapy of nasal congestion, but inappropriate for daily use because of the risk for rhinitis medicamentosa.</li><li>▪ May assist in intranasal delivery of other agents when significant nasal mucosal edema present</li></ul>

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### COMBINATION THERAPY

	THERAPEUTIC CONSIDERATIONS
Antihistamine, oral with decongestant, oral (SS# 63)	<ul style="list-style-type: none"> <li>▪ More effective relief of nasal congestion than antihistamines alone</li> </ul>
Antihistamine, oral with LTRA, oral (SS# 85)	<ul style="list-style-type: none"> <li>▪ May be more effective than monotherapy with antihistamine or LTRA</li> <li>▪ Less effective than intranasal corticosteroids</li> <li>▪ An alternative treatment for patients unresponsive to or not compliant with intranasal corticosteroids.</li> </ul>
Antihistamine, oral with intranasal antihistamine (SS# 65-69)	<ul style="list-style-type: none"> <li>▪ Combination may be considered, although controlled studies of additive benefit lacking.</li> </ul>
Antihistamine, oral with intranasal corticosteroid (SS# 74-77)	<ul style="list-style-type: none"> <li>▪ Combination may be considered, although supporting studies limited and many studies unresponsive of additive benefit of adding an antihistamine to an intranasal steroid.</li> </ul>
Intranasal anticholinergic with intranasal corticosteroid (SS# 84)	<ul style="list-style-type: none"> <li>▪ Concomitant use of ipratropium bromide nasal spray and an intranasal corticosteroid is more effective for rhinorrhea than administration of either drug alone</li> </ul>
Intranasal antihistamine with intranasal corticosteroid (SS# 65-69)	<ul style="list-style-type: none"> <li>▪ Combination may be considered based upon limited data.</li> <li>▪ Inadequate data about optimal interval between administration of the two sprays</li> <li>▪ For mixed rhinitis, there may be significant added benefit to the combination of an intranasal antihistamine with an intranasal corticosteroid.</li> </ul>
LTRA, oral with intranasal corticosteroid (SS# 85)	<ul style="list-style-type: none"> <li>▪ Subjective additive relief in limited studies, data inadequate</li> </ul>

# PRINCIPAL MEDICATION OPTIONS FOR RHINITIS

## NONALLERGIC (IDIOPATHIC) RHINITIS

### MONOTHERAPY

<b>ORAL AGENTS</b>	<b>THERAPEUTIC CONSIDERATIONS</b> (FOR SIDE EFFECTS, SEE ALLERGIC RHINITIS TABLE)
Antihistamines, oral (H1 receptor antagonists) (SS# 61-62)	<ul style="list-style-type: none"><li>▪ Generally ineffective for nonallergic rhinitis</li></ul>
Decongestants, oral (SS# 70-71)	<ul style="list-style-type: none"><li>▪ Pseudoephedrine reduces nasal congestion (SS# 70-71)</li></ul>
<b>INTRANASAL AGENTS</b>	
Intranasal antihistamines (SS# 65-69)	<ul style="list-style-type: none"><li>▪ Effective for vasomotor rhinitis</li></ul>
Intranasal anticholinergic (ipratropium) (SS#83)	<ul style="list-style-type: none"><li>▪ Effective only for rhinorrhea of non-allergic rhinitis syndromes</li><li>▪ Special role for preventing rhinorrhea of gustatory rhinitis</li></ul>
Intranasal corticosteroids (INS) (SS# 78)	<ul style="list-style-type: none"><li>▪ Effective for some forms of non-allergic rhinitis, including vasomotor rhinitis and NARES</li></ul>

### COMBINATION THERAPY

**INADEQUATE DATA TO PROVIDE FIRM RECOMMENDATIONS IN NON-ALLERGIC RHINITIS**