

Drug Effectiveness Review Project – Literature Scan Summary

Month/Year of Review: January 2015

PDL Class: Second-generation Antihistamines

Date of Last Review: January 2013

Source Document: DERP Scan Reports

Current Status of PDL Class:

See **Appendix 1**.

Conclusions and Recommendations:

- Comparative systematic reviews and trials have found insufficient evidence to support superior efficacy/effectiveness or harms of any single second-generation antihistamine.
- No further review or research needed at this time. Only minor administrative edits to the current PA criteria are needed (see **Appendix 2**). Review comparative drug costs in the executive session.

Previous Conclusions and Recommendations:

- There is insufficient evidence for differences in efficacy/effectiveness or harms between newer antihistamines. Prior Authorization (PA) criteria are currently in place to assure use of these drugs are for conditions funded by the OHP, or in situations where conditions funded by the OHP are complicated by allergic rhinitis or urticaria (see **Appendix 2**).

Research Questions:

- For outpatients with seasonal or perennial allergic rhinitis or urticaria, do newer antihistamines differ in effectiveness?
- For outpatients with seasonal or perennial allergic rhinitis or urticaria, do newer antihistamines differ in harms?
- Are there subgroups of patients based on demographics (age, racial groups, gender), socioeconomic status, other medications (drug-drug interactions), co-morbidities (drug-disease interactions), or pregnancy for which one newer antihistamine is more effective or associated with fewer harms?

Methods:

The Drug Effectiveness Review Program (DERP) has published two literature scans since the P&T committee last reviewed this drug class in January 2013.^{1,2} The 2015 scan is available for P&T review and contains all pertinent evidence identified in the 2014 scan. These scans were used to identify any new comparative research of oral second-generation antihistamines. Randomized controlled trials (RCTs), controlled clinical trials and systematic reviews were used to assess efficacy and effectiveness outcomes. Controlled clinical trials, RCTs, pre- and post-studies, and observational studies were used to assess harms outcomes.

Summary:

No systematic reviews evaluating antihistamines for either allergic rhinitis or urticarial were identified. However, an evidence-based practice center systematic review protocol on the treatments for seasonal allergic rhinitis sponsored by the Agency for Healthcare Research and Quality (AHRQ) was identified. No differences in the efficacy or safety with the second-generation oral antihistamines were noted. The choice of which second-generation antihistamine to use should therefore be influenced by cost, insurance coverage, and drug interactions. The optimal treatment of seasonal allergic rhinitis during pregnancy is unknown. The risk of congenital malformation is greatest during organogenesis in the first trimester. If medication cannot be avoided during this time, intranasal treatments with minimal systemic effects, such as intranasal cromolyn (pregnancy category B) and nasal saline, are preferred. Pregnancy category B oral second-generation antihistamines that may be considered for use after the first trimester include loratadine, cetirizine, and

levocetirizine. Children with occasional symptoms may be treated with antihistamines on days when symptoms are present or expected. The second-generation antihistamines loratadine, desloratadine, and cetirizine are approved by the FDA for use in children older than 2 years of age.

From the DERP scans, four head-to-head studies directly comparing two oral second-generation antihistamines were identified (levocetirizine vs. cetirizine and desloratidine for allergic rhinitis and two studies of levocetirizine vs. desloratidine for urticaria).

No new oral antihistamines were identified.

No new serious harms with oral antihistamines were identified.

References:

1. Holzhammer B and Selph S. Drug Class Review on Newer Antihistamines, Preliminary Scan Report #3, February 2015. Drug Effectiveness Review Project. Pacific Northwest Evidence-based Practice Center, Oregon Health & Science University.
2. Thakurta S. Drug Class Review on Newer Antihistamines, Preliminary Scan Report #2, January 2014. Drug Effectiveness Review Project. Pacific Northwest Evidence-based Practice Center, Oregon Health & Science University.

Appendix 1. Current Status of PDL Class.

Route	FormDesc	Brand	Generic	PDL
ORAL	TABLET	ALL DAY ALLERGY	CETIRIZINE HCL	Y
ORAL	TABLET	ALL DAY ALLERGY RELIEF	CETIRIZINE HCL	Y
ORAL	TABLET	ALLERGY	CETIRIZINE HCL	Y
ORAL	TABLET	ALLERGY RELIEF	CETIRIZINE HCL	Y
ORAL	TABLET	ALLER-TEC	CETIRIZINE HCL	Y
ORAL	TABLET	CETIRIZINE HCL	CETIRIZINE HCL	Y
ORAL	TABLET	WAL-ZYR	CETIRIZINE HCL	Y
ORAL	TABLET	ZYRTEC	CETIRIZINE HCL	Y
ORAL	SOLUTION	ALL DAY ALLERGY	CETIRIZINE HCL	Y
ORAL	SOLUTION	CETIRIZINE HCL	CETIRIZINE HCL	Y
ORAL	SOLUTION	CHILDREN'S ALL DAY ALLERGY	CETIRIZINE HCL	Y
ORAL	SOLUTION	CHILDREN'S ALLERGY	CETIRIZINE HCL	Y
ORAL	SOLUTION	CHILDREN'S ALLERGY COMPLETE	CETIRIZINE HCL	Y
ORAL	SOLUTION	CHILDREN'S ALLERGY RELIEF	CETIRIZINE HCL	Y
ORAL	SOLUTION	CHILDREN'S ALLER-TEC	CETIRIZINE HCL	Y
ORAL	SOLUTION	CHILDREN'S CETIRIZINE HCL	CETIRIZINE HCL	Y
ORAL	SOLUTION	CHILDREN'S WAL-ZYR	CETIRIZINE HCL	Y
ORAL	SOLUTION	WAL-ZYR	CETIRIZINE HCL	Y
ORAL	SOLUTION	ALLERGY RELIEF	LORATADINE	Y
ORAL	SOLUTION	CHILDREN'S ALLERGY RELIEF	LORATADINE	Y
ORAL	SOLUTION	CHILDREN'S CLARITIN	LORATADINE	Y
ORAL	SOLUTION	CHILDREN'S LORATADINE	LORATADINE	Y
ORAL	SOLUTION	CLARITIN	LORATADINE	Y
ORAL	SOLUTION	LORATADINE	LORATADINE	Y
ORAL	SOLUTION	LORATADINE ALLERGY	LORATADINE	Y
ORAL	SOLUTION	LORATADINE HIVES RELIEF	LORATADINE	Y
ORAL	SOLUTION	WAL-ITIN	LORATADINE	Y
ORAL	TABLET	ALLERCLEAR	LORATADINE	Y
ORAL	TABLET	ALLERGY	LORATADINE	Y
ORAL	TABLET	ALLERGY RELIEF	LORATADINE	Y
ORAL	TABLET	CLARITIN	LORATADINE	Y
ORAL	TABLET	LORADAMED	LORATADINE	Y
ORAL	TABLET	LORATADINE	LORATADINE	Y
ORAL	TABLET	NON-DROWSY ALLERGY	LORATADINE	Y
ORAL	TABLET	VICKS QLEARQUIL ALLERGY	LORATADINE	Y
ORAL	TABLET	WAL-ITIN	LORATADINE	Y
ORAL	TAB RAPDIS	ALAVERT	LORATADINE	Y
ORAL	TAB RAPDIS	ALLERGY RELIEF	LORATADINE	Y
ORAL	TAB RAPDIS	CLARITIN	LORATADINE	Y
ORAL	TAB RAPDIS	LORATADINE	LORATADINE	Y
ORAL	TAB RAPDIS	WAL-ITIN	LORATADINE	Y
ORAL	TAB CHEW	CHILDREN'S CLARITIN	LORATADINE	N
ORAL	TAB RAPDIS	CLARITIN	LORATADINE	N
ORAL	CAPSULE	CLARITIN	LORATADINE	N
ORAL	TABLET	ALLEGRA ALLERGY	FEXOFENADINE HCL	N
ORAL	TABLET	ALLER-EASE	FEXOFENADINE HCL	N
ORAL	TABLET	ALLERGY RELIEF	FEXOFENADINE HCL	N
ORAL	TABLET	FEXOFENADINE HCL	FEXOFENADINE HCL	N
ORAL	TABLET	WAL-FEX ALLERGY	FEXOFENADINE HCL	N
ORAL	TABLET	ALLEGRA ALLERGY	FEXOFENADINE HCL	N
ORAL	TABLET	ALLER-EASE	FEXOFENADINE HCL	N

ORAL	TABLET	ALLER-FEX	FEXOFENADINE HCL	N
ORAL	TABLET	ALLERGY RELIEF	FEXOFENADINE HCL	N
ORAL	TABLET	FEXOFENADINE HCL	FEXOFENADINE HCL	N
ORAL	TABLET	MUCINEX ALLERGY	FEXOFENADINE HCL	N
ORAL	TABLET	WAL-FEX ALLERGY	FEXOFENADINE HCL	N
ORAL	TABLET	CHILDREN'S ALLEGRA ALLERGY	FEXOFENADINE HCL	N
ORAL	ORAL SUSP	CHILDREN'S ALLEGRA ALLERGY	FEXOFENADINE HCL	N
ORAL	ORAL SUSP	CHILDREN'S ALLERGY RELIEF	FEXOFENADINE HCL	N
ORAL	ORAL SUSP	FEXOFENADINE HCL	FEXOFENADINE HCL	N
ORAL	TAB RAPDIS	CHILDREN'S ALLEGRA ALLERGY	FEXOFENADINE HCL	N
ORAL	TABLET	CLARINEX	DES Loratadine	N
ORAL	TABLET	DES Loratadine	DES Loratadine	N
ORAL	TAB RAPDIS	DES Loratadine	DES Loratadine	N
ORAL	SYRUP	CLARINEX	DES Loratadine	N
ORAL	TABLET	LEVOCETIRIZINE DIHYDROCHLORIDE	LEVOCETIRIZINE DIHYDROCHLORIDE	N
ORAL	TABLET	XYZAL	LEVOCETIRIZINE DIHYDROCHLORIDE	N
ORAL	SOLUTION	LEVOCETIRIZINE DIHYDROCHLORIDE	LEVOCETIRIZINE DIHYDROCHLORIDE	N
ORAL	SOLUTION	XYZAL	LEVOCETIRIZINE DIHYDROCHLORIDE	N

Appendix 2. Current Prior Authorization Criteria.

Antihistamines

Goal(s):

- Approve antihistamines only for conditions funded by the OHP.
- Allergic rhinitis treatment is covered by the OHP only when complicated by other diagnoses (e.g. asthma, sleep apnea).
- Promote use that is consistent with Oregon Asthma Guidelines and medical evidence.
<http://public.health.oregon.gov/DiseasesConditions/ChronicDisease/Asthma/Pages/index.aspx>

Length of Authorization:

6 months

Requires PA:

- Non-preferred oral antihistamines and combinations

Covered Alternatives:

Preferred alternatives listed at www.orpdl.org

Approval Criteria

1. What diagnosis is being treated?	Record ICD9 code.	
2. Will the prescriber consider a change to a preferred product? Message: <ul style="list-style-type: none">• Preferred products do not require a PA.• Preferred products are evidence-based reviewed for comparative effectiveness and safety by the Health Resource Commission (HRC).	Yes: Inform provider of covered alternatives in class.	No: Go to #3.
3. Does client have diagnosis of allergic rhinitis, allergic conjunctivitis, or chronic rhinitis/pharyngitis/nasopharyngitis? (372.14, 472.x, 477.x)	Yes: Go to #4.	No: Go to #8.
4. Does the client have asthma or reactive airway disease exacerbated by chronic/allergic rhinitis or allergies (493.xx)?	Yes: Go to #5.	No: Go to #6.

Approval Criteria

<p>5. Does the drug profile show an asthma controller medication (e.g. ORAL inhaled corticosteroid, leukotriene antagonist, etc.) and/or inhaled rescue beta-agonist (e.g. albuterol) within the last 6 months?</p> <p><i>Keep in mind: albuterol may not need to be used as often if asthma is controlled on other medications.</i></p>	<p>Yes: Approve for 6 months.</p>	<p>No: Pass to RPH; Deny, (Medical Appropriateness) <i>Oregon Asthma guidelines recommend all asthma clients have access to rescue inhalers and those with persistent disease should use anti-inflammatory medicines daily (preferably orally inhaled corticosteroids).</i></p>
<p>6. Does client have other co-morbid conditions or complications that are above the line?</p> <ul style="list-style-type: none"> • Acute or chronic inflammation of the orbit (376.00-376.10) • Chronic Sinusitis (473.xx) • Acute Sinusitis (461.xx) • Sleep apnea (327.20,327.21,327.23, 327.27, 327.29, 780.51, 780.53, 780.57) • Wegener's Granulomatosis (446.4) 	<p>Yes: Document ICD-9 codes and Go to #7.</p>	<p>No: Pass to RPH; Deny, (Not Covered by the OHP).</p>
<p>7. Does client have contraindications (e.g. Pregnant), or had insufficient response to available alternatives? Document.</p>	<p>Yes, Approve 6 months.</p>	<p>No: Pass to RPH; Deny, (Cost-Effectiveness).</p>
<p>8. Is the diagnosis COPD (496) or Obstructive Chronic Bronchitis (491.20-491.22)?</p>	<p>Yes: Pass to RPH; Deny, (Medical Appropriateness). Antihistamine not indicated.</p>	<p>No: Go to #9.</p>
<p>9. Is the diagnosis Chronic Bronchitis (491.0, 491.1, 491.8, 491.9)?</p>	<p>Yes: Pass to RPH; Deny, (Not Covered by the OHP).</p>	<p>No: Pass to RPH; Go to #10.</p>
<p>10. RPH only: Is the diagnosis above the line or below the line?</p> <ul style="list-style-type: none"> • Above: Deny, Medical Appropriateness • Below: Deny, Not Covered by the OHP (e.g., acute upper respiratory infections (465.9) or urticaria (708.0, 708.1, 708.5, 708.8, and 708.9 should be denied). 		

P&T / DUR Action: 5/15 (AG), 9/10, 9/08, 2/06, 9/04, 5/04, 2/02

Last Revision(s): 1/11, 7/09, 7/06, 3/06, 10/04, 8/02, 9/06

Initiation:

Author: A Gibler, Pharm.D.

Date: May 2015