A Stepwise Approach to Nasal Polyp Treatment is Emerging in the Age of Biologics
Dr. Han and Mr. Rothrock are paid consultants of Optinose.
Today’s Objectives

Evaluate an emerging approach for stepped-care management of nasal polyps

Discuss each step’s impact on coverage and cost

Highlight a second-line therapy in the stepped-care approach
Nasal Polyp Management: Challenges You Face

- Nasal polyps cost $5.7 billion annually and affect up to 4% of the population
- Traditional treatments often do not resolve symptoms
- Patients seek more costly treatments (surgery, biologics)
- Surgery may not be a permanent solution
- The approvals of dupilumab and omalizumab for nasal polyps are likely to drive up payor costs
- More biologics are on the horizon

Historical Approach to Treatment of Nasal Polyps

**Recommended**
- Intranasal steroids
- Saline irrigation
- Oral corticosteroids (1 short course)
- Aspirin desensitization for AERD patients

**Symptom relief?**
- **yes**
  - Continue medical management
- **no**
  - **Recommended**
    - ESS followed by *continued medical management*

---

AERD=aspirin-exacerbated respiratory disease; ESS=endoscopic sinus surgery.

Emergence of a Stepped-Care Treatment Paradigm for Nasal Polyps

First-line Medications
- Saline rinse
- Nasal steroid sprays
- Oral steroids ± antibiotics

Second-line Medications
- Alternative steroid delivery methods (XHANCE, steroid rinses)

Additional Considerations:
- Sinus surgery
- Multidisciplinary evaluation
- Aspirin desensitization
- Steroid-eluting stents
- Biologics

Sinus surgery and biologics

Nasal steroid sprays

Treatment options are informed by factors such as disease severity, risk-benefit assessment, cost, response to prior treatment, and patient preference.

Emergence of a Stepped-Care Treatment Paradigm for Nasal Polyps

First-line Medications
- Saline rinse
- Nasal steroid sprays
- Oral steroids ± antibiotics

Second-line Medications
- Alternative steroid delivery methods (XHANCE, steroid rinses)

Additional Considerations:
- Sinus surgery
- Multidisciplinary evaluation
- Aspirin desensitization
- Steroid-eluting stents
- Biologics

Sinus surgery and biologics

Nasal steroid sprays

Treatment options are informed by factors such as disease severity, risk-benefit assessment, cost, response to prior treatment, and patient preference.

Nasal Steroid Sprays

$0-$6,100/year (WAC)$^1$

- Only one conventional nasal steroid spray has an indication for nasal polyps$^2$
- $>80\%$ of patients with nasal polyps reported frustration with symptom relief when using a conventional nasal steroid$^3$

Inhaled Nasal Steroids May Not Reach Target Sites High and Deep In the Nasal Cavity

References:

*Market research interviews of 402 ENTs and allergists commissioned by Optinose. Approximately 75% of ENTs/allergists indicated they at least "somewhat agreed" with the following statement: "Intra-nasal corticosteroids (e.g., Flonase) often do not work well in chronic sinusitis because not enough medication reaches the intended target site of inflammation."

Conventional Sprays Show Similar Deposition Patterns, Concentrating in the Anterior/Inferior Regions of the Nasal Cavity

Example SPECT/MRI images for QNASL®, Flonase®, and Nasonex®.
(Figures show 2 of the 3 external fiducial markers used to align SPECT with MRI data).*

*The clinical relevance of different deposition patterns has not been established.

All brand names are registered trademarks of their respective owners. MRI=magnetic resonance imaging; SPECT=single photon emission computed tomography.

Emergence of a Stepped-Care Treatment Paradigm for Nasal Polyps

Treatment options are informed by factors such as disease severity, risk-benefit assessment, cost, response to prior treatment, and patient preference.

First-line Medications
- Saline rinse
- Nasal steroid sprays
- Oral steroids ± antibiotics

Second-line Medications
- Alternative steroid delivery methods (XHANCE, steroid rinses)

Additional Considerations:
- Sinus surgery
- Multidisciplinary evaluation
- Aspirin desensitization
- Steroid-eluting stents
- Biologics

Sinus surgery and biologics

XHANCE is the only FDA-approved prescription nasal spray that uses an Exhalation Delivery System to treat nasal polyps in adults and is:

- Non-surgical
- Non-biologic
- Non-systemic

Please see Important Safety Information on slides 22-23.

XHANCE Leverages the Optinose Exhaled Delivery System (EDS)

Exhalation elevates the soft palate, creating an airtight seal that separates the nasal cavity from the oropharynx.

Air then enters the nostril through the sealing nosepiece, helping expand narrow nasal passages.

Medication entrained in the breath is deposited high and deep in the nasal passages.

Air then escapes out of the opposite nostril.

Please see Important Safety Information on slides 22-23.

Deposition is Different With an Optinose Exhalation Delivery System (EDS)

Exhalation helps deliver medication high and deep into the nose

Gamma camera images after using a nasal spray without exhalation (left) or an Optinose EDS with exhalation (right). Both images are from the same healthy subject taken 2 minutes after administration with radiolabeled solution and are representative of the overall findings from 211 images and 56 subjects.

The clinical relevance of different deposition patterns has not been established.

Please see Important Safety Information on slides 22-23.

A single pharmacokinetic study was conducted in healthy subjects to establish a bridge between XHANCE and Flonase®.

3-way, 3-treatment, crossover study
- XHANCE 186 mcg
- XHANCE 372 mcg
- Flonase 400 mcg

Primary objective was to assess and compare the systemic exposure of a single dose of 186 and 372 mcg of XHANCE with 400 mcg of Flonase (fluticasone propionate) in healthy subjects.

Please see Important Safety Information on slides 22-23.

All brand names are registered trademarks of their respective owners.
AUC=area under the curve; $C_{\text{max}}$= maximum serum concentration; FP=fluticasone propionate.

NAVIGATE I & II: Phase III studies demonstrated XHANCE efficacy and safety\(^1\)

Similar randomized, placebo-controlled, multicenter studies to assess XHANCE in the treatment of nasal polyps (N=646)\(^1\)

**Treatment-experienced study population\(^1\)**
- Majority (91%) reported prior nasal steroid use
- More than half (54%) reported prior sinus surgery or polypectomy

**Double-blind Studies (16 weeks)\(^1\)**
- EDS-placebo BID (n=162)
- XHANCE 186 mcg BID (n=160)
- XHANCE 372 mcg BID (n=162)

**Coprimary endpoints:**
- Reduction in total polyp grade at Week 16
- Reduction of nasal congestion/obstruction symptoms at Week 4

**Open-label Extension Study (8 weeks)\(^2-4\)**
- XHANCE 372 mcg BID (n=82)

**Secondary endpoints** (not controlled for multiplicity):
- Complete response (polyps eliminated)
- Reduction in surgical eligibility assessed using standardized criteria
- Sino-Nasal Outcomes Test – 22 items
- Defining symptoms
- Work productivity
- Quality of sleep
- Patient global impression of change

Please see Important Safety Information on slides 22-23.

BID=twice a day, EDS=exhalation delivery system.

**References:**
Improvement in All 4 Defining Symptoms

Coprimary Endpoint

Statistically significant onset of action was generally observed within 2 weeks for congestion score

Secondary Endpoints*

*Although secondary endpoints were pre-specified, they were not adjusted for multiplicity; therefore, results require cautious interpretation.

BID=twice a day; LS=least square; mcg=mcg micrograms.
Reduction in Nasal Polyp Grade (NAVIGATE II)

LS mean change in bilateral polyp grade—coprimary endpoint, week 16 (N=242)

<table>
<thead>
<tr>
<th>Week</th>
<th>-2</th>
<th>-1.8</th>
<th>-1.6</th>
<th>-1.4</th>
<th>-1.2</th>
<th>-1.0</th>
<th>-0.8</th>
<th>-0.6</th>
<th>-0.4</th>
<th>-0.2</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Double-blind period

Open-label extension: All patients received XHANCE 372 mcg BID

XHANCE 186-mcg BID treatment group (Secondary Endpoint)*

63% of patients experienced a ≥1-point reduction in polyp grade vs 43.5% with EDS-placebo at week 16.

* Multiplicity adjustments were not applied for secondary endpoints; therefore, results require cautious interpretation.

Furthermore, open label results may be confounded by evaluator bias.

Baseline grade: placebo, 3.8; XHANCE 186 mcg BID, 3.9; XHANCE 372 mcg BID, 3.8. Results shown are from NAVIGATE II and are consistent with results observed in NAVIGATE I.

**Improvement in Congestion**

Response in Patients Previously on a Conventional Nasal Steroid Spray vs Overall Study Population

Patients Who Were on a Conventional Nasal Steroid Spray
(N = 218)

<table>
<thead>
<tr>
<th>Week</th>
<th>EDS-placebo (n = 77)</th>
<th>XHANCE 186 mcg BID (n = 69)</th>
<th>XHANCE 372 mcg BID (n = 72)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>-0.58</td>
<td>-0.85</td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td>-0.6</td>
<td>-1.01</td>
</tr>
<tr>
<td>8</td>
<td>0</td>
<td>-0.75</td>
<td>-1.2</td>
</tr>
<tr>
<td>12</td>
<td>0</td>
<td>-0.85</td>
<td>-1.2</td>
</tr>
<tr>
<td>16</td>
<td>0</td>
<td>-0.85</td>
<td>-1.01</td>
</tr>
</tbody>
</table>

*Least squares mean change from baseline in patient-reported AM instantaneous diary scores for nasal symptoms on a scale from 0-3 (0=none, 1=mild, 2=moderate, 3=severe).

Overall Study Population
(N = 482)

<table>
<thead>
<tr>
<th>Week</th>
<th>EDS-placebo (n = 161)</th>
<th>XHANCE 186 mcg BID (n = 160)</th>
<th>XHANCE 372 mcg BID (n = 161)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>0</td>
<td>-0.53</td>
<td>-0.98</td>
</tr>
<tr>
<td>8</td>
<td>0</td>
<td>-0.8</td>
<td>-1.03</td>
</tr>
<tr>
<td>12</td>
<td>0</td>
<td>-0.85</td>
<td>-1.2</td>
</tr>
<tr>
<td>16</td>
<td>0</td>
<td>-0.85</td>
<td>-1.01</td>
</tr>
</tbody>
</table>

These results are descriptive and should be interpreted with caution.

Please see Important Safety Information on slides 22-23.

Reduction in Bilateral Polyp Grade
Response in Patients Previously on a Conventional Nasal Steroid Spray vs Overall Study Population

Patients Who Were on a Conventional Nasal Steroid Spray¹ (N = 218)

<table>
<thead>
<tr>
<th>Week</th>
<th>EDS-placebo (n = 77)</th>
<th>XHANCE 186 mcg BID (n = 69)</th>
<th>XHANCE 372 mcg BID (n = 72)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>-0.46</td>
<td>-1.13</td>
<td>-1.47</td>
</tr>
<tr>
<td>8</td>
<td>-0.9</td>
<td>-1.3</td>
<td>-1.1</td>
</tr>
<tr>
<td>12</td>
<td>-1.1</td>
<td>-0.7</td>
<td>-0.9</td>
</tr>
<tr>
<td>16</td>
<td>-1.3</td>
<td>-0.5</td>
<td>-0.7</td>
</tr>
</tbody>
</table>

Overall Study Population² (N = 482)

<table>
<thead>
<tr>
<th>Week</th>
<th>EDS-placebo (n = 161)</th>
<th>XHANCE 186 mcg BID (n = 160)</th>
<th>XHANCE 372 mcg BID (n = 161)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>-0.59</td>
<td>-1.18</td>
<td>-1.28</td>
</tr>
<tr>
<td>8</td>
<td>-1.1</td>
<td>-1.3</td>
<td>-1.1</td>
</tr>
<tr>
<td>12</td>
<td>-1.3</td>
<td>-0.9</td>
<td>-0.9</td>
</tr>
<tr>
<td>16</td>
<td>-1.5</td>
<td>-0.7</td>
<td>-0.7</td>
</tr>
</tbody>
</table>

*Least squares mean change from baseline in bilateral polyp grade.

These results are descriptive and should be interpreted with caution.

Please see Important Safety Information on slides 22-23.

Well-characterized Safety Profile (NAVIGATE I and II)

AEs occurring in ≥3% of patients and more common than placebo¹*

<table>
<thead>
<tr>
<th>Adverse Event (AE)</th>
<th>EDS-placebo BID (N=161) n (%)</th>
<th>XHANCE 186 mcg BID (N=160) n (%)</th>
<th>XHANCE 372 mcg BID (N=161) n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epistaxis</td>
<td>4 (2.5)</td>
<td>19 (11.9)</td>
<td>16 (9.9)</td>
</tr>
<tr>
<td>Nasopharyngitis</td>
<td>8 (5.0)</td>
<td>3 (1.9)</td>
<td>12 (7.5)</td>
</tr>
<tr>
<td>Nasal septal erosion/ulceration</td>
<td>3 (1.9)</td>
<td>11 (6.9)</td>
<td>12 (7.5)</td>
</tr>
<tr>
<td>Nasal congestion</td>
<td>6 (3.7)</td>
<td>7 (4.4)</td>
<td>9 (5.6)</td>
</tr>
<tr>
<td>Acute sinusitis</td>
<td>6 (3.7)</td>
<td>7 (4.4)</td>
<td>8 (5.0)</td>
</tr>
<tr>
<td>Headache</td>
<td>5 (3.1)</td>
<td>8 (5.0)</td>
<td>6 (3.7)</td>
</tr>
<tr>
<td>Pharyngitis</td>
<td>2 (1.2)</td>
<td>2 (1.3)</td>
<td>5 (3.1)</td>
</tr>
<tr>
<td>Nasal mucosal ulceration</td>
<td>2 (1.3)</td>
<td>6 (3.8)</td>
<td>4 (2.5)</td>
</tr>
<tr>
<td>Nasal mucosal erythema</td>
<td>6 (3.7)</td>
<td>9 (5.6)</td>
<td>8 (5.0)</td>
</tr>
<tr>
<td>Nasal septal erythema</td>
<td>3 (1.9)</td>
<td>6 (3.8)</td>
<td>7 (4.3)</td>
</tr>
</tbody>
</table>

Data characterizing safety for up to 1 year were also obtained in 2 open-label studies in 928 patients with chronic sinusitis with or without nasal polyps²,³

Please see Important Safety Information on slides 22-23.

*AEs reported in patients with nasal polyps in placebo-controlled studies.

Important Safety Information

Contraindications

Hypersensitivity to any ingredient in XHANCE.

Warnings and Precautions

- Local Nasal Effects: epistaxis, erosion, ulceration, septal perforation, *Candida albicans* infection, and impaired wound healing. Monitor patients periodically for signs of possible changes on the nasal mucosa. Avoid use in patients with recent nasal ulcerations, nasal surgery, or nasal trauma.
- Close monitoring for glaucoma and cataracts is warranted.
- Hypersensitivity reactions (e.g., anaphylaxis, angioedema, urticaria, contact dermatitis, rash, hypotension, and bronchospasm) have been reported after administration of fluticasone propionate. Discontinue XHANCE if such reactions occur.
- Immunosuppression: potential increased susceptibility to or worsening of infections (e.g., existing tuberculosis; fungal, bacterial, viral, or parasitic infection; ocular herpes simplex). Use with caution in patients with these infections. More serious or even fatal course of chickenpox or measles can occur in susceptible patients.
- Hypercorticism and adrenal suppression may occur with very high dosages or at the regular dosage in susceptible individuals. If such changes occur, discontinue XHANCE slowly.
- Patients with major risk factors for decreased bone mineral content should be monitored and treated with established standards of care.

Please see Important Safety Information continued on slide 23.

Important Safety Information (cont’d)

Adverse Reactions
The most common adverse reactions (incidence ≥ 3%) are epistaxis, nasal septal ulceration, nasopharyngitis, nasal mucosal erythema, nasal mucosal ulcerations, nasal congestion, acute sinusitis, nasal septal erythema, headache, and pharyngitis.

Drug Interactions
Strong cytochrome P450 3A4 inhibitors (e.g., ritonavir, ketoconazole): Use not recommended. May increase risk of systemic corticosteroid effects.

Use in Specific Populations
Hepatic impairment. Monitor patients for signs of increased drug exposure.

Please see accompanying full Prescribing Information.

Please see additional Important Safety Information on slide 22.

Emergence of a Stepped-Care Treatment Paradigm for Nasal Polyps

First-line Medications
- Saline rinse
- Nasal steroid sprays
- Oral steroids ± antibiotics

Second-line Medications
- Alternative steroid delivery methods (XHANCE, steroid rinses)

Additional Considerations:
- Sinus surgery
- Multidisciplinary evaluation
- Aspirin desensitization
- Steroid-eluting stents
- Biologics

Sinus surgery and biologics

Nasal steroid sprays

Treatment options are informed by factors such as disease severity, risk-benefit assessment, cost, response to prior treatment, and patient preference.

Patients Often Progress to Costly Options In Search of Symptom Relief\textsuperscript{1-3}

\textbf{Sinus surgery remains frequent} despite broad use of conventional inhaled nasal steroids

- Among patients with nasal polyps, 52% reported having undergone surgery for sinus symptoms\textsuperscript{1}

\textbf{Endoscopic sinus surgery (ESS) charges exclusive of professional fees}\textsuperscript{3}

\begin{center}
\textbf{$17,300^*}$
\end{center}

\textbf{\textasciitilde 500K} ESS performed every year (estimate includes all ESS procedures, regardless of presence of nasal polyps)\textsuperscript{4}

\*Average charge for all ESS procedures in patients with or without nasal polyps from 2009-2011, adjusted for inflation (2021) based on a 2.69\% average annual medical inflation rate. Data from reference 3.

Costly Surgery May Not Be a Permanent Solution

Patients with nasal polyps may require multiple ESS procedures due to recurrent or incompletely resolved symptoms

An estimated 60% of patients had symptoms reappear within 1 year

Despite surgery, 35% recurrence of polyps at 6 months

Approximately 20% of patients will require revision surgery within 5 years

**XHANCE Showed a Reduction in the Number of Patients Eligible for Surgery from Baseline** (NAVIGATE I & II)

**Secondary endpoint**

<table>
<thead>
<tr>
<th>Week 16</th>
<th>NAVIGATE I¹</th>
<th>NAVIGATE II²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduction in % of Patients Eligible for Surgery</td>
<td>(n=82)</td>
<td>(n=80)</td>
</tr>
<tr>
<td>(0%)</td>
<td>(10%)</td>
<td>(20%)</td>
</tr>
<tr>
<td>(39%)</td>
<td>(45%)</td>
<td>(42%)</td>
</tr>
</tbody>
</table>

* Surgical eligibility was study defined and assessed using standardized criteria, occurring concurrently: moderate-to-severe congestion ≥3 months, use of conventional topical steroids ≥6 weeks, current or previous use of saline lavage for ≥6 weeks, and bilateral nasal polyposis with an NP grading score of ≥2 in at least 1 nostril. The patients deemed "eligible" may or may not have been offered surgery.

** Multiplicity adjustments were not applied for secondary endpoints; therefore, results require cautious interpretation.

Please see Important Safety Information on slides 22-23.

BID=twice a day; EDS= exhalation delivery system.

Use Of Biologics for Nasal Polyp Treatment Is Likely to Drive An Increase In Payor Costs\(^1,2\)

Cost drivers for biologics\(^1,2\):
- Acquisition cost
- Multiple indications drive utilization
- Office visits/clinical follow-ups

\(\$30,200^* - \$41,600^\dagger/\text{year} (\text{WAC})^3\)

Nasal polyp indications are approved/expected for multiple biologics\(^4-7\)

<table>
<thead>
<tr>
<th>Biologic</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>dupilumab</td>
<td>Approved</td>
</tr>
<tr>
<td>omalizumab</td>
<td>Approved</td>
</tr>
<tr>
<td>mepolizumab</td>
<td>Phase III Completed</td>
</tr>
<tr>
<td>benralizumab</td>
<td>Phase III Completed</td>
</tr>
</tbody>
</table>

\(*^\text{Based on a Xolair}^\text{®} \text{dose of 300mg every 4 weeks.}\)

\(\dagger\text{Based on a Dupixent}^\text{®} \text{dose of 300mg every 2 weeks.}\)

All brand names are registered trademarks of their respective owners.

Emergence of a Stepped-Care Treatment Paradigm for Nasal Polyps

First-line Medications
- Saline rinse
- Nasal steroid sprays
- Oral steroids ± antibiotics

Second-line Medications
- Alternative steroid delivery methods (XHANCE, steroid rinses)

Additional Considerations:
- Sinus surgery
- Multidisciplinary evaluation
- Aspirin desensitization
- Steroid-eluting stents
- Biologics

Sinus surgery and biologics

Nasal steroid sprays

Treatment options are informed by factors such as disease severity, risk-benefit assessment, cost, response to prior treatment, and patient preference.

References:
### Biologics

<table>
<thead>
<tr>
<th>Cost Range</th>
<th>Description</th>
<th>References</th>
</tr>
</thead>
</table>

### Endoscopic Sinus Surgery (ESS)

<table>
<thead>
<tr>
<th>Cost</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>$17,300‡</td>
<td>Costly, invasive, and frequent³,⁴</td>
</tr>
</tbody>
</table>

ESS charges exclusive of professional fees³

$6,606/year¹ (WAC)                             >> Approved for the treatment of nasal polyps⁵

<table>
<thead>
<tr>
<th>Cost Range</th>
<th>Description</th>
<th>References</th>
</tr>
</thead>
</table>

### Inhaled Nasal Steroids (INS)

<table>
<thead>
<tr>
<th>Cost Range</th>
<th>Description</th>
<th>References</th>
</tr>
</thead>
</table>
Consider Positioning XHANCE After Conventional Nasal Steroid Sprays and Before Biologics for the Management of Nasal Polyps

- Progression directly from conventional INS to surgery and biologics represents the costly lengths that patients will go in search of symptom relief.1-3
- XHANCE offers a different way to deliver a nasal steroid, using the Optinose EDS to deposit fluticasone high and deep in the nasal passages where polyps originate.4,5
- The annual cost of XHANCE is substantially less than biologics or sinus surgery.6,7
- The approvals of dupilumab and omalizumab and the anticipated approval of other biologics for nasal polyps are likely to drive costs through acquisition, utilization driven by multiple indications and clinical follow-ups.8,9

CONTRAINDICATIONS: Hypersensitivity to any ingredient in XHANCE.

WARNINGS AND PRECAUTIONS:
• Local Nasal Effects: epistaxis, erosion, ulceration, septal perforation, Candida albicans infection, and impaired wound healing.
  Monitor patients periodically for signs of possible changes on the nasal mucosa. Avoid use in patients with recent nasal ulcerations, nasal surgery, or nasal trauma.

Please see Important Safety Information on slides 22-23.

EDS=exhalation delivery system, INS=intranasal steroids.

Considerations for Implementing Policy Changes to Limit the Rising Costs of Biologics

1. Calculate the number of patients treated by a specialist for nasal polyps who are likely candidates for biologics.

2. Model the impact of shifting share from biologics to XHANCE.

3. Consider changing policy language to position XHANCE before biologics.

Example UM criteria for implementing step edits to restrict the use of biologics:

<table>
<thead>
<tr>
<th>TARGET AGENT</th>
<th>Dupixent® (dupilumab)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRIOR AUTHORIZATION CRITERIA FOR APPROVAL</td>
<td></td>
</tr>
<tr>
<td>1. The patient has a diagnosis of chronic rhinosinusitis with nasal polyposis AND the following:</td>
<td></td>
</tr>
<tr>
<td>A. The patient has had an inadequate response to sinonasal surgery OR</td>
<td></td>
</tr>
<tr>
<td>B. The patient is NOT a candidate for sinonasal surgery OR</td>
<td></td>
</tr>
<tr>
<td>C. The patient has had an inadequate response to oral systemic corticosteroids in the past 90 days OR</td>
<td></td>
</tr>
<tr>
<td>D. The patient has a documented intolerance to oral systemic corticosteroids AND</td>
<td></td>
</tr>
<tr>
<td>2. The patient will continue standard maintenance therapy (e.g., nasal saline irrigation, intranasal corticosteroids) in combination with the requested agent AND</td>
<td></td>
</tr>
<tr>
<td>3. The patient has had an inadequate response to XHANCE for minimum of 3 months OR</td>
<td></td>
</tr>
<tr>
<td>4. The patient has a documented intolerance to XHANCE</td>
<td></td>
</tr>
</tbody>
</table>

Please see Important Safety Information on slides 22-23.

UM=utilization management.
Q&A
THANK YOU