Sinus surgery is only part of the battle.

Add PROPEL to your ACTION PLAN

ARM YOURSELF TO MAINTAIN SINUS PATENCY AND REDUCE¹-³:
postoperative interventions + frank polyposis + occlusion/restenosis + inflammation

ADD PROPEL TO YOUR SINUS ACTION PLAN

As measured by plasma concentration of drug from intranasal vs. intravenous route.

* Lipophilicity numbers normalized relative to triamcinolone acetonide.

† As measured by relative receptor binding affinity compared to dexamethasone, which is set to a value of 100. Higher values designate greater potency.

‡ Corticosteroid Lipophilicity²⁶*

- Dexamethasone
- Triamcinolone (Kenalog)
- Budesonide

As measured by plasma concentration of drug from intranasal vs. intravenous route.

- Mometasone furoate delivers the ideal combination of potency and safety
- Pituitary and adrenal axis suppression is low with PROPEL
- Low systemic side effect profile
- Minimizes systemic effects
- Local activity
- Low (1.0) Low (233) Medium (46%)
- High glucocorticoid receptor affinity
- Highly lipophilic
- Readily absorbs into tissue
- Low (1.6) Intermediate (935) Medium (34%)
- High potency
- Low (1.0) Low (233) Medium (46%)
- High potency
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- High potency

As measured by relative receptor binding affinity compared to dexamethasone, which is set to a value of 100. Higher values designate greater potency.
Patients with CRS may benefit from postoperative care that reduces inflammation, in order to achieve improved sinus surgery outcomes

CRS is an inflammatory disease with often chronic and debilitating sinonasal symptoms such as:

- **BLOCKAGE**
- **NASAL DISCHARGE**
- **FACIAL PAIN/PRESSURE**

Consider the impact. CRS attacks patients from within, causing substantial burden. Patients with CRS report:

**GREATER BODILY PAIN + IMPAIRED SOCIAL FUNCTIONING** than those with angina, congestive heart failure, back pain, and chronic obstructive pulmonary disease.

Ultimately, CRS exacts a tremendous economic impact that burdens healthcare systems and patients.

**DIRECT COSTS RELATED TO CRS**

- $10-$13 billion per year in the USA
- are primarily driven by outpatient doctor visits, prescription medical therapy, and sinus surgery

**INDIRECT COSTS RELATED TO CRS**

- >$20 billion per year in the USA
- are primarily driven by lost work capabilities

Challenges may hold your patients back from realizing optimal sinus surgery outcomes

Although some patients may achieve symptom control by medical management, others may benefit from endoscopic sinus surgery (ESS). However, despite optimal surgical technique, postoperative challenges can limit sinus surgery outcomes. Common challenges include:

- Scarring or stenosis of surgical opening
- Recurrent inflammation and polyps
- Inadequate delivery of topical therapy

**MAY HOLD YOUR PATIENTS FROM OPTIMAL SINUS SURGERY OUTCOMES**

CRS, chronic rhinosinusitis.
Each sinus has unique challenges during sinus surgery

**FRONTAL**
Restenosis is a common challenge, independent of polyps, partly due to the anatomically narrow boundaries of the frontal sinus, leading to limited sinusotomy size\(^1\)

| 38% reduction in FSO diameter | Average diameter of the FSO decreased by 38% (3.5 mm vs 5.6 mm) after 13 months, in patients who underwent traditional ESS\(^1\) |

**ETHMOID**
A common complication is middle turbinate lateralization (MTL), which may be associated with an increased risk of revision surgery\(^1\)

| 25% frequency of MTL | MTL may occur in as many as 25% of patients who had ESS at ≥6 months follow-up\(^1\) |
| Revision surgery is >2X more likely | 21% of patients with MTL required revision surgery vs 9% in patients without MTL\(^1\) |

**MAXILLARY**
The causes of sinus surgery failure can be attributed to 3 main reasons. Overall, nearly 1 in 5 patients will require revision surgery\(^1\)

| Top 3 reasons for failure | 1. Obstructed natural ostia 2. Disease in the anterior ethmoid or frontal sinus 3. Resistant organisms\(^1\) |
| Up to 18% need revision surgery | It is estimated that between 2% and 18% of maxillary cases require revision surgery\(^1\) |

Overall, *postoperative inflammation related to surgery and the underlying disease is hard to predict* and can hinder the benefits of surgery. So, safe and effective postoperative care options are needed that effectively deliver corticosteroids to the sinus and minimize reliance on patient compliance.

Reducing postoperative inflammation and scarring is essential to help improve long-term patient outcomes and reduce the need for additional interventions\(^15,16\)

**POSTOPERATIVE CARE DICTATES LONG-TERM OUTCOMES:**
Improvements in quality of life after ESS at 6 months are indicative of results seen at 1.6 years\(^17\)

*PROPEL*
Elevate your postoperative care regimen beyond traditional options

In order to maintain the benefits achieved with surgery, postoperative care regimens are needed that ensure that newly opened sinuses remain open and inflammation is controlled from both the underlying disease and the procedure. Common postoperative regimens include topical steroid sprays, oral steroids, and mechanical spacers. Although these regimens have an established role in postoperative care, they do not provide an optimal solution.

**TOPICAL STEROID SPRAYS**
- Poor penetration into the sinus: ~60% of active drug in a metered dose of nasal steroid spray is removed by mucociliary clearance within 15 minutes
- Poor patient compliance: Only 40% of patients use intranasal corticosteroids as directed

**ORAL STEROIDS**
- Effective in addressing inflammation but carry significant systemic risks such as:
  - hyperglycemia
  - infections
  - bone loss
  - adrenal suppression
  - ophthalmic complications
  - gastrointestinal symptoms
  - psychiatric symptoms

**MECHANICAL SPACERS ± STEROIDS**
- Obstruction impairs drainage
- Notable variability in steroid dose
- Unknown release duration of steroid
- Painful removal
- Absence of efficacy/safety data from clinical trials

Historically, there has been an unmet need for postoperative care options proven in randomized controlled trials to significantly improve sinus surgery outcomes.

Add PROPEL to your action plan
Strengthen your sinus surgery armamentarium with the PROPEL family of implants

The PROPEL family of implants offers 3 steroid-eluting implants under one brand, allowing ENTs to select the best option that conforms to the anatomical needs of their patients\(^1\)\(^-\)\(^3\)

**PROPEL OVERVIEW**

- For ethmoid sinus\(^1\)
- For ethmoid sinus and frontal sinus recess\(^2\)
- For sinus ostia: frontal and maxillary\(^3\)

**TOPICAL STEROID SPRAYS**
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- Painful removal
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**UNMET NEEDS**

Historically, there has been an unmet need for postoperative care options proven in randomized controlled trials to significantly improve sinus surgery outcomes.
Reasons to add the PROPEL family of implants to your sinus surgery armamentarium

REASON 1
Provides your sinus surgery patients with individualized treatment options. Promotes a tailored approach to post-operative care with options on implants' indication, size, shape, and delivery system.

REASON 2
Breakthrough technology that opens the sinuses and delivers MF. Dual-action platform which provides both mechanical spacing and localized drug delivery.

REASON 3
Delivers the power of robust, clinically proven benefits. Clinically proven to improve sinus surgery outcomes in 350+ patients across 6 clinical studies.

REASON 4
Proven success in the real world. FIRST and ONLY steroid-eluting sinus implant backed by clinical evidence and used in >300k patients since 2011 across all PROPEL implants.

REASON 5
Efficacious regardless of disease severity. Demonstrated efficacy in patients ± nasal polyps, undergoing primary/revision surgery by traditional/ballooning methods.

REASON 6
Intersect ENT partnership and collaboration. One of the only companies specifically dedicated to innovation in the field of otolaryngology.

Arm yourself with the PROPEL family of implants, an innovation in sinus technology

PROPEL is the FIRST and ONLY PMA-approved steroid-eluting sinus implant. PROPEL implants feature an innovative 2-in-1 mechanism that opens the sinuses while delivering mometasone furoate, a potent corticosteroid, directly where it is needed.

OPENS the sinus cavity
- Self-expanding design that opens and supports the sinus cavity
- Non-obstructive design allows for nasal clearance and the delivery of topical rinses
- Dissolvable frame over 30-45 days after placement as the sinus cavity heals

DELIVERS MF locally
- Delivers 370 µg of MF over 30 days
- MF present in the mucosal tissue for up to 60 days

PROPEL keeps the sinuses open while releasing MF.
Mometasone furoate delivers the ideal combination of potency and safety

Drug characteristics comparison\textsuperscript{26-28}

<table>
<thead>
<tr>
<th>Topical Corticosteroid</th>
<th>Lipophilicity\textsuperscript{26}</th>
<th>Potency (Receptor Affinity)\textsuperscript{27}</th>
<th>Systemic Bioavailability\textsuperscript{28}</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dexamethasone</td>
<td>Very Low (&lt;1.0)\textsuperscript{29}</td>
<td>Very Low (100)</td>
<td>High (76%)</td>
</tr>
<tr>
<td>Triamcinolone (Kenalog)</td>
<td>Low (1.0)</td>
<td>Low (233)</td>
<td>Medium (46%)</td>
</tr>
<tr>
<td>Budesonide</td>
<td>Low (1.6)</td>
<td>Intermediate (935)</td>
<td>Medium (34%)</td>
</tr>
<tr>
<td><strong>Mometasone furoate</strong></td>
<td>High (20.0)</td>
<td>High (2300)</td>
<td>Very Low (&lt;1%)</td>
</tr>
</tbody>
</table>

\textsuperscript{26}Lipophilicity numbers normalized relative to triamcinolone acetonide.
\textsuperscript{27}As measured by relative receptor binding affinity compared to dexamethasone, which is set to a value of 100. Higher values designate greater potency.
\textsuperscript{28}As measured by plasma concentration of drug from intranasal vs. intravenous route.

Mometasone furoate was selected for use in PROPEL implant for its optimal sinonasal drug characteristics\textsuperscript{30}:

- **Highly lipophilic**
  - Readily absorbs into tissue
- **Targeted + potent**
  - High glucocorticoid receptor affinity
- **Low systemic bioavailability**
  - Minimizes systemic effects

PROPEL implants are clinically proven to maintain patency and improve patient outcomes following ESS by targeting inflammation, the underlying cause of CRS

PROPEL implants have a demonstrated safety profile

- The safety of PROPEL was established across three prospective clinical trials including 205 patients\textsuperscript{1}
- The safety of PROPEL Mini and PROPEL Contour was established in the PROGRESS study, which included a total of 160 patients\textsuperscript{2,3}

**Your Patient + PROPEL = Improved Outcomes**
The PROPEL sinus implants are indicated to maintain patency and locally deliver steroid to the sinus mucosa in patients ≥18 years of age after sinus surgery: PROPEL for the ethmoid sinus, PROPEL Mini for the ethmoid sinus/frontal sinus opening, and PROPEL Contour for the frontal/maxillary sinus ostia.

Contraindications include patients with intolerance to mometasone furoate (MF) or hypersensitivity to bioabsorbable polymers. Safety and effectiveness of the implant in pregnant or nursing females have not been studied. Risks may include, but are not limited to, pain/pressure, displacement of the implant, possible side effects of intranasal MF, sinusitis, epistaxis, and infection.

For full prescribing information see IFU at www.IntersectENT.com/technologies/. Rx only.

REFERENCES

YOUR ACTION PLAN FOR ETHMOID SINUS

Factors to consider when selecting your PROPEL tool of choice

- Cylindrical-shaped implant
- Indicated for the ethmoid sinuses

Patients appropriate for PROPEL and PROPEL Mini
- ≥18 years of age
- With and without polyps
- Undergoing primary or revision ethmoid sinus surgery

PROVEN SUCCESS: PROPEL is the only sinus surgery implant clinically proven and supported by Level 1-A evidence to significantly improve outcomes of ethmoid sinus surgery

Efficacy Endpoints
Delivers significant reduction in the need for postoperative interventions

35% RELATIVE REDUCTION (N=143)
PROPEL reduced the need for postoperative interventions vs a non-drug implant, at 30 days following ethmoid sinus surgery (32.8% vs 50.8%; P=0.0008)*†

36% RELATIVE REDUCTION (n=52)
With Polyps: (32.5% vs 50.6%; P=0.0071)
In a subgroup analysis, proven efficacious regardless of polyp status

35% RELATIVE REDUCTION (n=91)
Without Polyps: (33.3% vs 51.1%; P=0.0455)

CRS, chronic rhinosinusitis.
*Postoperative intervention was a composite endpoint that included surgical intervention required to separate an adhesion and/or oral steroid intervention to resolve recurrent ethmoid sinus inflammation, edema, and/or polyp recurrence.
†Judged by independent panel.

Study Design: Data presented here represent a meta-analysis of two prospective, randomized, double-blinded multicenter studies (Pilot and ADVANCE II) that enrolled a total of 143 patients. The studies evaluated outcomes of ethmoid sinus surgery with PROPEL compared to a non-drug implant, both with standard postoperative care. The studies used an intra-patient control design to evaluate clinical outcomes.

For more information, visit PROPELOpens.com
PROPEL delivers added benefits to patients undergoing ethmoid sinus surgery

**ADDITIONAL EFFICACY ENDPOINTS**
Relative reductions at Day 30 for PROPEL vs non-drug implant

- **40% REDUCTION** \( (22.1\% \text{ vs } 37.2\%; \ P=0.0023; \ n=113) \)
- **46% REDUCTION** \( (19.8\% \text{ vs } 36.9\%; \ P<0.0001; \ n=111) \)
- **70% REDUCTION** \( (4.2\% \text{ vs } 14.1\%; \ P=0.0013; \ n=142) \)
- **75% REDUCTION** \( (2.1\% \text{ vs } 8.4\%; \ P=0.0225; \ n=143) \)

**PROPEL positively impacts patients’ symptoms**
Surgery + PROPEL significantly reduced patient-reported disease symptoms through 6 months following sinus surgery, as reported by SNOT-22 and RSDI.

For significant improvements to patient outcomes following sinus surgery, add PROPEL to your battle for the ethmoid sinus

Optimal treatment following ethmoid sinus surgery with a full arsenal of options, including PROPEL and PROPEL Mini, can help improve patient outcomes.

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**References:**

YOUR ACTION PLAN FOR
FRONTAL SINUS

Factors to consider when selecting your PROPEL tool of choice\textsuperscript{1,2}

• Hourglass-shaped implant
• Indicated for the frontal and/or maxillary sinus ostia
• Optimal for an hourglass-shaped frontal sinus opening

• Cylindrical-shaped implant
• Indicated for ethmoid sinus and the frontal sinus recess
• Optimal for cylindrical-shaped frontal sinus openings

Patients appropriate for PROPEL Contour or PROPEL Mini
• ≥18 years of age\textsuperscript{1,2}
• With and without polyps\textsuperscript{3,4}
• Undergoing primary or revision surgery\textsuperscript{3,4}
• Frontal sinus surgery by traditional instrumentation, balloon dilation, or a hybrid of both\textsuperscript{3,4}

PROVEN SUCCESS: PROPEL Contour and PROPEL Mini are clinically proven to improve outcomes of frontal sinus surgery\textsuperscript{3,4}

PRIMARY ENDPOINT
PROPEL Contour and PROPEL Mini deliver significant reduction in the need for postoperative interventions at 30 days following frontal sinus surgery, vs surgery alone\textsuperscript{1,2}

- PROPEL CONTOUR: 65% RELATIVE REDUCTION (11.5\% vs 32.8\%; \(P=0.0023; N=80\))\textsuperscript{++}
- PROPEL MINI: 38% RELATIVE REDUCTION (38.8\% vs 62.7\%; \(P=0.0070; N=80\))\textsuperscript{++}

The relative reduction in occlusion/restenosis was maintained through Day 90, as per clinical investigators, for PROPEL Contour\textsuperscript{4}

CRS, chronic rhinosinusitis.
\textsuperscript{++}Postoperative intervention was a composite endpoint that included surgical intervention required to separate an adhesion and/or oral steroid intervention to resolve recurrent frontal sinus inflammation, edema, and/or polyp recurrence.
\textsuperscript{1}Judged by independent reviewer.

Study Design: The PROGRESS study was a 160-patient prospective, randomized, controlled, blinded clinical trial with two consecutive cohorts. The study evaluated outcomes of frontal sinus surgery (using balloons and/or traditional instruments) with PROPEL Mini (N=80) and PROPEL Contour (N=80) compared to surgery alone, both with standard postoperative care. The study used an intra-patient control design to evaluate clinical outcomes. Implants were removed at Day 21 to facilitate blinded independent assessment at Day 30.\textsuperscript{3,4}

For more information, visit PROPELOpens.com
PROPEL Contour and PROPEL Mini deliver added benefits to patients undergoing frontal sinus surgery\(^3,4\)

### SECONDARY ENDPOINTS

Relative improvements at Day 30 for PROPEL Contour or PROPEL Mini vs surgery alone\(^1,3,4\)*

<table>
<thead>
<tr>
<th></th>
<th>+PROPEL Contour(^4)</th>
<th>+PROPEL Mini(^1,3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Need for surgical interventions</td>
<td>73% reduction</td>
<td>75% reduction</td>
</tr>
<tr>
<td>Need for oral steroids(^1)</td>
<td>35% reduction</td>
<td>56% reduction</td>
</tr>
<tr>
<td>Mean inflammation</td>
<td>35% reduction</td>
<td>40% reduction</td>
</tr>
<tr>
<td>Occlusion/restenosis</td>
<td>63% reduction</td>
<td>54% reduction</td>
</tr>
<tr>
<td>Mean FSO diameter</td>
<td>43% increase</td>
<td>32% increase</td>
</tr>
</tbody>
</table>

For significant improvements to patient outcomes following sinus surgery, add PROPEL Contour and PROPEL Mini to your battle for the frontal sinus

**Optimal treatment following frontal sinus surgery with a full arsenal of options, including PROPEL Mini and PROPEL Contour, can help improve patient outcomes.**

FSO, frontal sinus ostia.

*Judged by on-site clinical investigators.

\(^1\)PROGRESS Contour secondary endpoints were prespecified. All secondary endpoints for PROPEL Mini and PROPEL Contour reached statistical significance, except for the need for oral steroids in the PROPEL Contour cohort.

\(^2\)Representative outcomes in contralateral sinuses of two patients from the PROPEL clinical studies. Individual results may vary.

The PROPEL sinus implants are indicated to maintain patency and locally deliver steroid to the sinus mucosa in patients ≥18 years of age after sinus surgery. PROPEL for the ethmoid sinus, PROPEL Mini for the ethmoid sinus/frontal sinus opening, and PROPEL Contour for the frontal/maxillary sinus ostia. Contraindications include patients with intolerance to mometasone furoate (MF) or hypersensitivity to bioabsorbable polymers. Safety and effectiveness of the implant in pregnant or nursing females have not been studied. Risks may include, but are not limited to, pain/pressure, displacement of the implant, possible side effects of intranasal MF, sinusitis, epistaxis, and infection. For full prescribing information see IFU at [www.IntersectENT.com/technologies/](http://www.IntersectENT.com/technologies/). Rx only.

**References:**


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YOUR ACTION PLAN FOR MAXILLARY SINUS

Only PROPEL Contour combines mechanical spacing and localized drug delivery to the maxillary sinus, thereby maintaining sinus patency.

Surgery + PROPEL Contour provides benefits following maxillary sinus surgery

- PROPEL Contour delivery success rate (primary endpoint) in maxillary sinuses was 95.2% (N=15)
- 100% maxillary sinus ostial patency (secondary endpoint) was achieved at Day 30 (N=15)
- Reduction in inflammation was observed at Day 90

Study Design: EXCEED was a 15-patient, prospective, single-arm, open-label feasibility trial. Patients were implanted with PROPEL Contour into the maxillary sinus ostia following sinus surgery with traditional instrumentation, balloon dilation, or a hybrid of both.

For significant improvements to patient outcomes following sinus surgery, add PROPEL Contour to your battle for the maxillary sinus*

ESS, endoscopic sinus surgery.

*Representative outcomes of a single patient from an EXCEED clinical study. Individual results may vary.

Optimal treatment following maxillary sinus surgery with a full arsenal of options, including PROPEL Contour, can help improve patient outcomes.

The PROPEL Contour sinus implant is indicated to maintain patency of the frontal and maxillary sinus ostia and locally deliver steroid to the sinus mucosa in patients ≥18 years of age after sinus surgery. Contraindications include patients with intolerance to mometasone furoate (MF) or hypersensitivity to bioabsorbable polymers. Safety and effectiveness of the implant in pregnant or nursing females have not been studied. Risks may include, but are not limited to, pain/pressure, displacement of the implant, possible side effects of intranasal MF, sinusitis, epistaxis, and infection. For full prescribing information see IFU at www.IntersectENT.com/technologies/. Rx only.

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