A dedicated device to safely remove Nasal Foreign Bodies (NFBs) with minimal training and skill requirement

A tool to address the high failure rate of the 25M annual NFB cases in India
Market Gap

Current standard of care

Where possible, Nasal Foreign Body (NFB) removal cases are typically referred to ENTs, who use a variety of tools. Where ENTs are not available, Paediatricians or GPs typically attempt the procedure.

- Given the limited number of ENTs, referral of NFB cases is often not an option.
- In these cases, Paediatricians or GPs attempt to treat the patient themselves. This is especially the case in rural areas.
- With limited experience/skill and inappropriate instrumentation, the majority of first attempts for removal fail. This can lead to clinical complications and expensive, time-consuming referrals.

Pain Points

- Limited ENT referral pathway
- Lack of experience and skill among Ped/GPs
- Inappropriate instrumentation
Features & Benefits

Noxeno is the world’s first dedicated tool for Nasal Foreign Body removal in low-resource settings

Benefits

- Simple, modular system for easy assembly and reprocessing
- Designed for safe use to reduce the risk of complications – ergonomic palmer grip, soft/atraumatic sterile sheath, atraumatic tip design
- Integrated light for superior visualization
- Reusable and replaceable components to reduce per patient cost, thus ensuring affordability
## Competitive Analysis

<table>
<thead>
<tr>
<th></th>
<th>Katz Extractor</th>
<th>InnAccel Noxeno</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Removal Mechanism</strong></td>
<td>Inflatable balloon</td>
<td>90° hinge</td>
</tr>
<tr>
<td><strong>Reusable Components</strong></td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Single-Use Components</strong></td>
<td>Complete device</td>
<td>Only sheath</td>
</tr>
<tr>
<td><strong>Skill Level Required</strong></td>
<td>Medium</td>
<td>Low</td>
</tr>
<tr>
<td><strong>Light for Visualization</strong></td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Country of Origin</strong></td>
<td>Germany</td>
<td>India</td>
</tr>
<tr>
<td><strong>Estimated Cost per Use</strong></td>
<td>Rs. 4000</td>
<td>Rs. 70</td>
</tr>
</tbody>
</table>

Noxeno is the only affordable solution designed specifically for NFB removal.
IP & Regulatory

**IP:** 3838/DEL/2012, 12/Dec/2012, India patent filing  
**Description:** Removing Foreign Objects from a Body Cavity  
**Status:** Pending review

**IP:** PCT1496-SNK, 23/Jan/2015, India PCT  
**Description:** Removing Foreign Objects from a Body Cavity  
**Status:** Pending review
### Grants, Awards, & Media

#### Grants
- SBIRI (BIRAC) Grant Award 2016
- BIG (BIRAC) Grant Award 2014

#### Showcase
- Featured product in BIRAC (Govt. of India) 5th anniversary showcase

#### Media
Clinical Evaluation & Publications

Key Statistics

<table>
<thead>
<tr>
<th>Study Category</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ongoing Clinical Studies</td>
<td>3</td>
</tr>
<tr>
<td>Patients Enrolled as of Nov 2018</td>
<td>56</td>
</tr>
<tr>
<td>Removal Success Rate</td>
<td>93%</td>
</tr>
<tr>
<td>Adverse Events</td>
<td>0</td>
</tr>
</tbody>
</table>

Study Design

3 single-arm, prospective interventional studies on-going until February 2019
- Outcomes measured: rate of removal success, usability, adverse events
- Sites: AIIMS Delhi (IERB approved), Apollo Hyderabad (IERB approved), Private clinic Bangalore

Publications

- Incidence of Nasal Foreign Body Impaction in India: Determined using Literature Search, Interviews and Surveys; Global Journal of Otolaryngology 15(1); GJO.MS.ID.555903 (2018)
Summary

Noxeno for Government Healthcare

- Shifts effective point of care to Healthcare providers in non-specialized settings such as PHCs
- Improves clinical outcomes by reducing first attempt failure rate
- Improved removal success rate will reduce referral burden to Tertiary care centers
- Noxeno helps save time, money, and resources for patients, their families, and Government healthcare systems