Limit uncertainty with the most studied and proven collagen-based dural grafts
The Fibroblasts Use the Pores on the Matrix to Lay Down Endogenous Collagen. By 6-8 Weeks, the Collagen Matrix (DuraGen Matrix) is Resorbed and is Integrated to the Endogenous Dura Mater. The Compact Structure of the (Other) Xenogenic Materials May Limit the Fibroblast Migration to the Edges or to the Suture Holes. These Processes do not Constitute an Ideal Situation with Regards to the Sealing Quality of the Material.”

- Sade et al 9

An Investment in Data

Patient outcomes are very important to you and your patients—DuraGen Matrix has more published clinical data than any other collagen-based dural graft.

Date: As of January 1, 2012
The DuraGen Matrix Studies

### Over 1,400 Patients in 10 Published Clinical Studies

- 0% Foreign body response
- 1.9% Infection rate
- 2.1% Leakage rate

<table>
<thead>
<tr>
<th>Author</th>
<th>Study Name</th>
<th>DuraGen Patients Studied</th>
<th>Procedure Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Danish et al</td>
<td>Experience with acellular human dura and bovine collagen matrix for duraplasty after posterior fossa decompression for Chiari malformations</td>
<td>56</td>
<td>Posterior Fossa Decompression</td>
</tr>
<tr>
<td>Harvey et al</td>
<td>Closure of large skull base defects after endoscopic transnasal craniotomy</td>
<td>30</td>
<td>Endoscopic Transnasal Craniotomy</td>
</tr>
<tr>
<td>Horaczek et al</td>
<td>Collagen matrix in decompressive hemicraniectomy</td>
<td>18</td>
<td>Decompressive Hemicraniectomy, Cranioplasty</td>
</tr>
<tr>
<td>Lee et al</td>
<td>Dural reconstruction in meningioma surgery</td>
<td>237</td>
<td>Intracranial Meningioma Resection</td>
</tr>
<tr>
<td>Narotam et al</td>
<td>Collagen matrix (DuraGen) in dural repair: analysis of a new modified technique</td>
<td>110</td>
<td>Spinal Surgery</td>
</tr>
<tr>
<td>Narotam et al</td>
<td>Collagen matrix duraplasty for cranial and spinal surgery: a clinical and imaging study</td>
<td>79</td>
<td>Posterior Fossa Cranietomy, Lumbar Laminectomy, Supratentorial Craniotomy</td>
</tr>
<tr>
<td>Narotam et al</td>
<td>Collagen matrix duraplasty for posterior fossa surgery: evaluation of surgical technique in 52 adult patients</td>
<td>52</td>
<td>Posterior Fossa Surgery</td>
</tr>
<tr>
<td>Sade et al</td>
<td>Non-watertight dural reconstruction in meningioma surgery results in 439 consecutive patients and a review of the literature</td>
<td>439</td>
<td>Intracranial Meningioma Resection</td>
</tr>
<tr>
<td>Stendel et al</td>
<td>Efficacy and safety of a collagen matrix for cranial and spinal dural reconstruction using different fixation techniques</td>
<td>112</td>
<td>Cranial and Spinal Procedures</td>
</tr>
</tbody>
</table>

**TOTAL:** 1,453

These studies represent the use of DuraGen matrix without the use of dural sealants.
1 Million Dural Grafts and Counting
Only Integra DuraGen graft provides the confidence of utilizing a dural matrix which has been implanted over one million times.

10 Million Collagen Implants and Counting
Our leading technology collagen products have been implanted over 10 million times in a variety of procedures throughout the world.

DuraGen Dural Regenerative Matrix

• Made from Ultra Pure Collagen™
• Precisely engineered porosity for complete and natural repair
• Superior conformability

Summary outcome statistics derived from the following 10 clinical studies:
