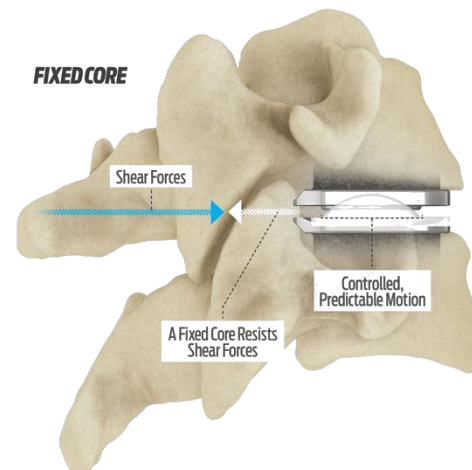


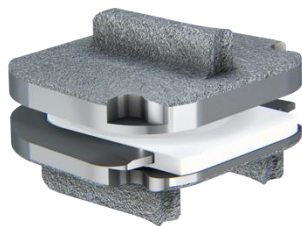
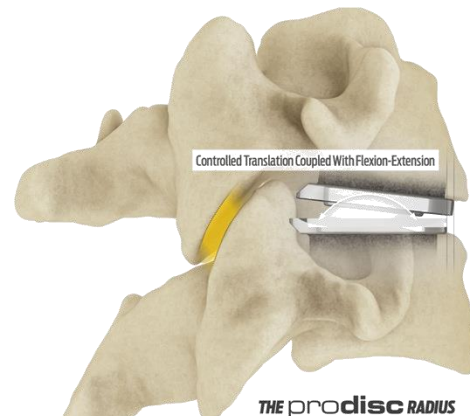
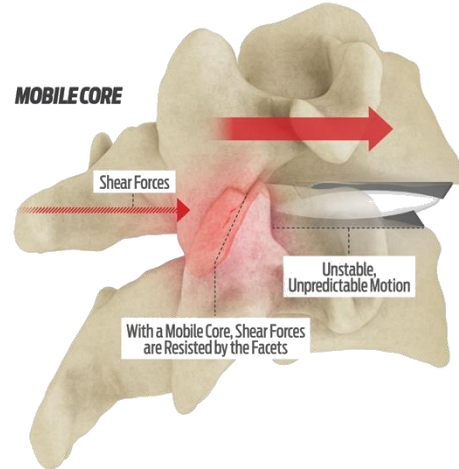
## prodisc® Messaging Points

- **prodisc** is one of the most widely used artificial discs in the world. Since the first generation was implanted in Montpellier, France in November 1990, **prodisc** has been implanted in more than 240,000 spinal levels in 43 countries.
- Centinel Spine is the only provider of artificial discs in the US for both lumbar and cervical disc replacement.
- **prodisc** is the most studied total disc, with over 540 published studies, detailing over 13,000 patient results<sup>1</sup>.
- **prodisc** is the only disc system world-wide that provides multiple endplate options for cervical patients, enabling surgeons to intraoperatively select a different disc to better match the implant to patient anatomy.
- **prodisc C Vivo** has been implanted outside the U.S. since 2009 and utilizes a domed, superior endplate. The implant's keel-less endplates allow for streamlined one-step implantation and incorporate unique spikes that provide equivalent fixation to keeled devices<sup>1</sup>.
- **prodisc C SK** utilizes the time-tested flat endplates and keel fixation of **prodisc C** but with a smaller keel and simplified keel preparation technique.
- **prodisc C Nova** has been implanted outside the U.S. since 2009 and utilizes the time-tested flat endplates of **prodisc C**, incorporating unique tri-keels designed to improve fixation in certain endplate morphologies.
- The **prodisc** Cervical total disc replacement system is the only cervical disc replacement solution that advances patient care by enabling **Matching of the Disc to the Needs of the Patient & Surgeon**.
- The **prodisc** line of discs consists of 5 separate discs for the cervical and lumbar spine – four cervical and one lumbar disc are available in the U.S.
- **prodisc** is differentiated from other discs with its mechanism of action, designed to protect the facets from shear forces.

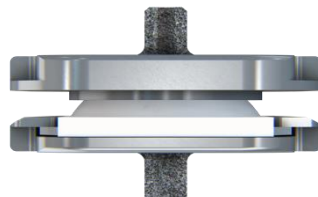


<sup>1</sup> DiAngelo D, Chung C, Hoyer D, Carson T, Foley K. Biomechanical Analysis of the Endplate Fixation Methods of Cervical Total Disc Replacement (TDR) Prostheses to Shear Force Expulsion. Presented at NASS Annual conference. Sept 29-Oct 2, 2021, Boston, USA.

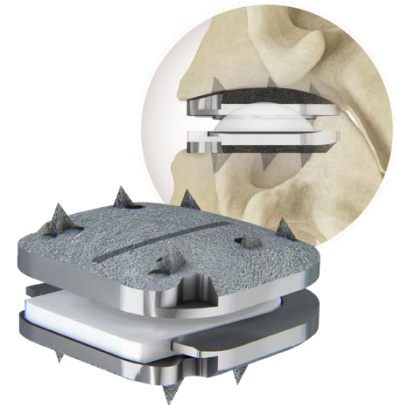
- **prodisc** is designed to restore a normal (or physiologic) range of motion and functionality by replacing a diseased spinal disc.
- **prodisc** designs are intended to restore stability, providing controlled and predictable motion, as diseased motion segments can be subject to hypermobility.
- Highly conforming surfaces between the endplate and the inlay prevent the endplates from translating independently. Translation is limited to rotation of the superior endplate around the ball on the inlay – intended to protect the facets from shear forces.
- **prodisc** is composed of three components: two cobalt chromium alloy endplates (US only), and an ultra-high-molecular-weight polyethylene inlay.
- At the heart of **prodisc CORE** technology is a fixed center of rotation intentionally designed to stabilize the motion segment and resist shear forces<sup>ii</sup>.
- Conversely, total disc replacement implants with a mobile core do not provide stability or resist shear forces<sup>ii</sup>.
- When a shear force is applied to a total disc replacement implant with a mobile core, free translation may occur. Shear forces are therefore resisted by the facets<sup>ii</sup>.
- The radius of the **prodisc CORE** was engineered with intention, to provide coupled motion—controlled translation with flexion-extension—protecting the facet complex and resisting shear.



*prodisc C Nova*

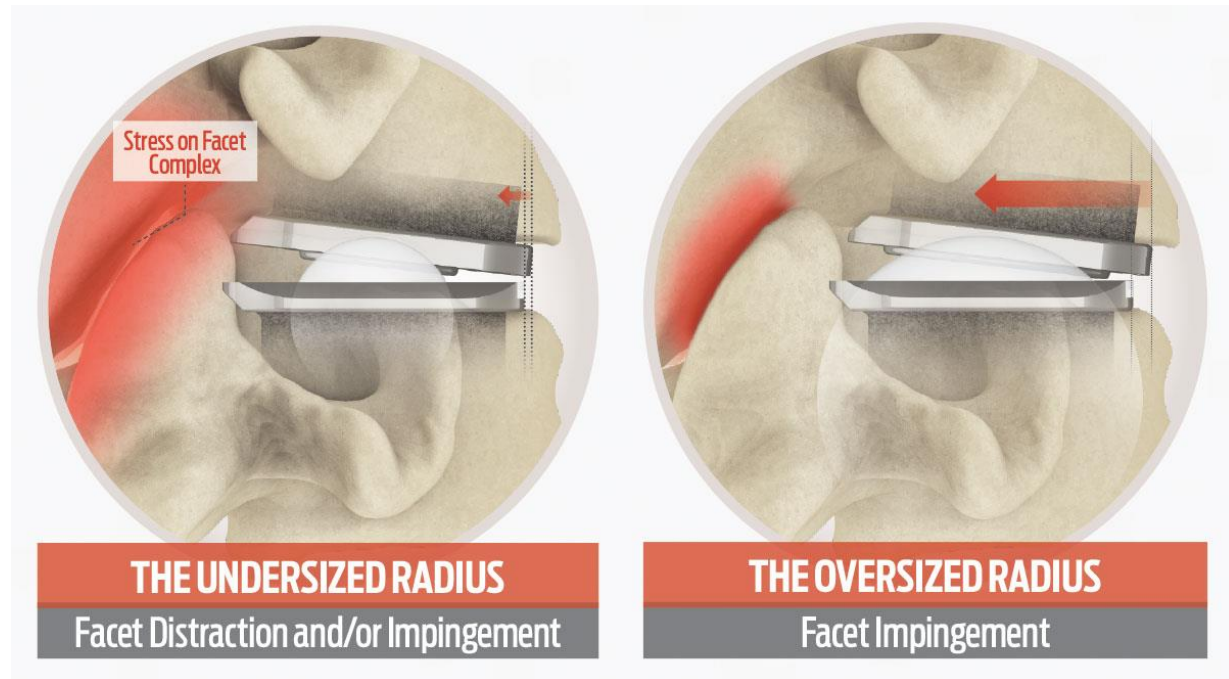


*prodisc C SK*



*prodisc C Vivo*

- An undersized radius allows minimal translation along with flexion-extension of the implant, while an oversized radius allows translation with minimal flexion-extension<sup>iii</sup>.



<sup>i</sup> Search performed on Pubmed, Embase, Ovid Medline® covering 1988 – 2017.

<sup>ii</sup> Sears, R., et al., Kinematics of Cervical and Lumbar Total Disc Replacement, Semin Spine Surg, 2006, 18:117-129

<sup>iii</sup> Bertagnoli, R., Marnay, T., Mayer, H.M., The PRODISC Book, 2003.

Note: Not all products are available in all markets.