



Supplementary Table 2. Characteristics of banana-shaped cage and straight bullet cage

Characteristic	Banana-shaped cage (Crescent)	Straight bullet cage (Opal)
Image		
Design	<p>Lordosis: 6°</p> <p>Length: 25–36 mm</p> <p>Height: 7–15 mm</p> <p>Surface area: 133–180 mm²</p>	<p>Lordosis: 0°</p> <p>Length: 28–32 mm</p> <p>Height: 7–17 mm</p> <p>Surface area: 135–175 mm²</p>
Advantages	<p>Mimic the natural lordotic curve of the lumbar spine, providing a closer anatomical match</p> <p>Increase the contact area between the cage and the vertebral endplates, promoting stability and fusion</p> <p>Distribute loads more evenly across the intervertebral disc space</p>	<p>The straight design offers versatility in placement and may be suitable for various lumbar levels</p> <p>The straight configuration may facilitate easier insertion into the disc space during surgery</p>
Drawbacks	<p>The curved design may limit the versatility of banana-shaped cages, making them more suitable for specific lumbar levels or anatomies</p> <p>Achieving optimal placement of banana-shaped cages may pose challenges during surgery due to the curvature, requiring precise alignment and a learning curve</p> <p>Higher costs</p>	<p>The linear shape of straight bullet cages may not precisely mimic the natural lordotic curve of the lumbar spine, potentially affecting the restoration of normal anatomy</p> <p>The contact area with the vertebral endplates may be comparatively smaller, impacting stability</p> <p>Straight cages may distribute loads differently, potentially affecting load-bearing characteristics within the intervertebral space</p>