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1 IMPACT OF BONE QUALITY ON THE PERFORMANCE OF INTEGRATED
2 FIXATION CAGE SCREWS

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30 **Abstract**

31 **BACKGROUND CONTEXT:** Commercially available lumbar integrated fixation cages (IFC)
32 have variable designs. For example screw based designs have up to four screws inserted at
33 different locations across the vertebral endplate as well as at different angles in the sagittal and
34 transverse planes. This is important as endplate and trabecular bone quality may vary across the
35 vertebra and affect the screw's fixation ability, particularly if bone purchase at the bone-screw
36 interface is poor.

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