Materials List for Finite Element Analysis Model for Assessing Expansion Patterns from Surgically Assisted Rapid Palatal **Expansion**

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Materials

Name	Company	Catalog Number	Comments
Ansys	Ansys	Version 2019	Ansys is a software for finite element analysis that can solve complicated models based on differential equations. The expansion results of different buccal osteotomy angles were analyzed through this software.
Geomagic Studio	3D Systems	Version 10	Geomagic Studio is a software for reverse engineering that can generate digital models based on physical scanning points. This study built cancellous bone and periodontal ligaments through this software.
Mimics	Materialise	Version 16	Mimics is a medical 3D image-based engineering software that efficiently converts CT images to a 3D model. This study reconstructed a maxilla complex through the patient's DICOM images.
SolidWorks	Dassault Systèmes	Version 2018	SolidWorks is a computer-aided design software for designers and engineers to create 3D models. A Haas expander was designed and drawn through this software in this study.