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

