

**Quantitative Clinical Evaluation of the Occlusal  
Contact Trueness Affected by Six Chairside CAD/CAM  
Ceramic Materials: a Self-control Study**

**ID: 2019028**

**NCT number: not yet assigned**

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## **Study protocol**

Ten individuals (aged 20–30) will be selected to participate in the study. Selected patients should agree to participate in this study by signing a written consent stating, approved by the Fujian Medical University Ethics Committee (Code 2019-28), that they had been informed of the study. The selection criteria for the participants are as follows: (1)with one mandibular first molar requiring crown restoration that have undergone root canal treatment; (2)with complete permanent dentition; (3) without carious lesions, abrasions, attrition, erosions or any kind of tooth defects; (4) without any kind of restorations in occlusal surfaces; (5)without any sign of temporomandibular dysfunction.

InCoris TZl(ZIR), Celtra Duo(CD), IPS e.max(EMA), UPCERA LICI (LC), Vita enamic(ENA), UPCERA RUNCi (RC) were used to produce crowns for everyone by CEREC chairside CAD/CAM system. The milling trueness, postprocessing trueness and clinical adjustment of occlusal contact were quantitatively analyzed by the ATOS high-precision scanner and Geomagic reverse engineering software.

## **Statistical Analysis Plan**

Statistical analysis will perform using SPSS software (SPSS version 26.0; SPSS) at a significance level of  $p=0.05$ . Descriptive statistics will perform first to obtain an overview of the data. A one-way analysis of variance (ANOVA)with randomized block design will perform to determine the significant differences on the milling trueness, postprocessing trueness and clinical adjustment of occlusal contact. Six groups will then be subsequently analyzed with the Bonferroni post hoc test. PASS 15.0 software (NCSS LLC, USA) will be used for the power test.