

Efficacy and Safety of Additive Manufacturing Personalized Titanium Mesh in Guided Bone Regeneration

NCT06692244

Status	RECRUITING
Phase	Not Applicable
Sponsor	Hospital of Stomatology, Sun Yat-Sen University
Enrollment	142 participants

Key Eligibility Criteria

Inclusion (3)

- Patients missing single or multiple teeth with moderate to severe bone defects in the edentulous area requiring complex guided bone regeneration. Moderate bone defects: bone loss with residual alveolar ridge width between 1 mm and 3 mm; severe bone defects: bone loss with residual alveolar ridge width \leq 1 mm.
- The edge of the edentulous area within 1 mm is alveolar bone, with no adjacent tooth roots or nerve canals, ensuring complete retention of the personalized titanium mesh edge. The apical edge of the edentulous area within 2 mm is alveolar bone, with no nerve canals, ensuring that retention screws for the personalized titanium mesh can be designed in this area.
- The patient and/or his/her guardian agrees to participate in this trial and signs the informed consent form.

Exclusion (12)

- Patients with edentulism.
 - Patients with mild bone defects (residual alveolar ridge width greater than 3 mm).
 - Presence of acute or chronic infection in the surgical area.
 - Presence of acute or chronic infection in the teeth adjacent to the edentulous area.
 - Participation in similar trials or other interventional clinical trials within 30 days prior to signing the informed consent form.
- ... and 7 more (see full listing online)

Locations (1 total)

Hospital of Stomatology, Sun Yat-Sen University, Guangzhou, Guangdong, China