A PATIENT-SPECIFIC DENTAL IMPLANT
promotes osseointegration and reduces the risk of infection

DENTAL IMPLANTS
Dental implants are used to replace missing teeth.

SHAPE
The shape of this patient-specific implant is based on the root shape of the original tooth that will be replaced. This ensures a perfect fit of the implant in the extraction socket.

POROUS STRUCTURE
The porous structure is created to promote osseointegration. Bone can grow into the pores of the structure for a good fixation.

ANTIMICROBIAL SURFACE
Silver nanoparticles are incorporated on the surface of the implant, to lower the risk of infection.

PRODUCTION
The implant is made from a titanium alloy using additive manufacturing. After manufacturing the implant is surface treated to create the antimicrobial surface.

SURGICAL PROCEDURE

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Design of a new personalized dental implant and its surgical procedure  
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Integrated Product Design

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