

Tech Offer – Intelligent Systems

3D-Printed Keratoprosthesis for Severe to End-Stage Corneal Blindness

- TP has developed a synthetic keratoprosthesis featuring a 3D-printed titanium skirt and a medical-grade transparent optic. This technology targets a critical gap in treating severe to end-stage corneal blindness — where patients are no longer eligible for conventional corneal transplants due to repeated graft failures or severe ocular surface disease.
- This design offers a non-biological, readily manufacturable alternative to the traditional osteo-odonto-keratoprosthesis (OOKP). The design also contributes to:
 - Reducing the total procedure time from 3–4 months to just 3–4 hours
 - Achieving up to 40% healthcare cost savings by eliminating the need for a dental surgeon
 - Minimizing surgical morbidity

