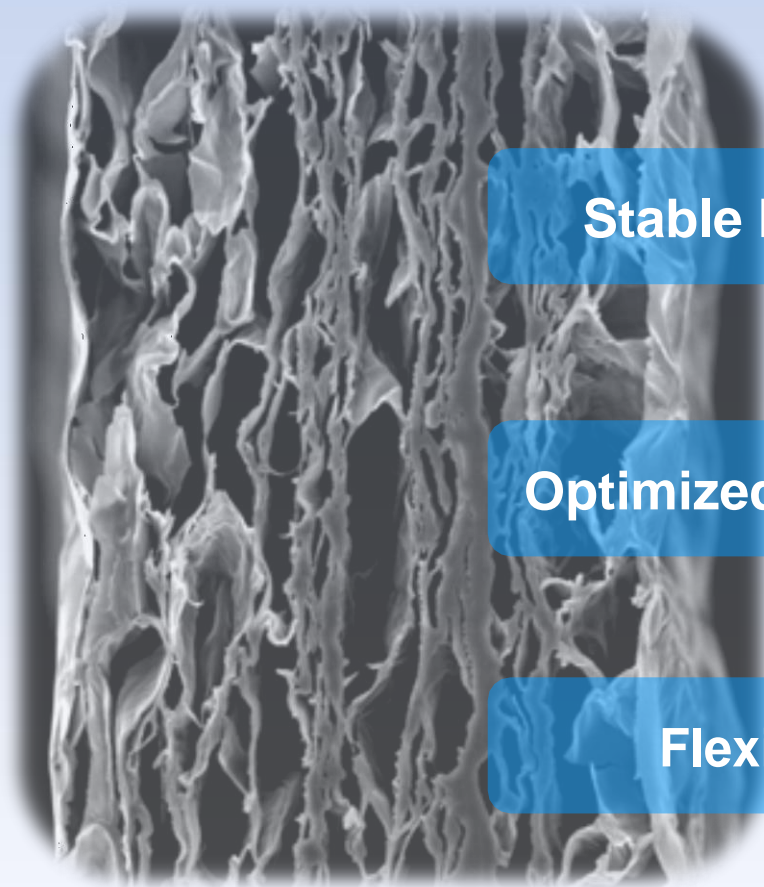


# Ti-oss Guide<sup>®</sup>

Biodegradable Atelocollagen Membrane

## Basic Information on Specification and Scientific Evidence



Stable Property

Optimized Structure

Flexibility

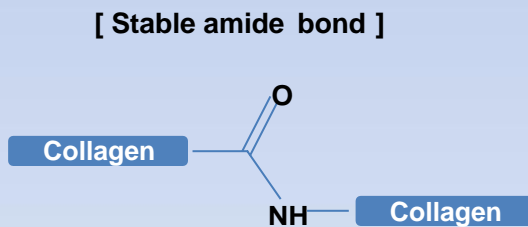
# Specification

## Intended Use and Overview

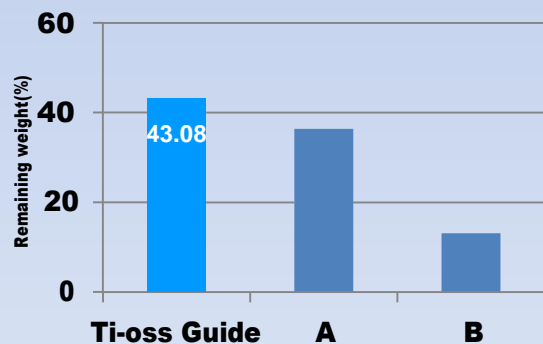
**Ti-oss Guide® is an absorbable and implantable collagen membrane that is intended for tissue regeneration procedures in periodontal defects to enhance regeneration of the periodontal apparatus.**

**Ti-oss Guide® is crosslinked using 1-ethyl-3-(3-dimethylaminopropyl) carbodiimide (EDC) for the resistance to enzymatic degradation. Ti-oss-Guide® provides a stable barrier for 3~6 months and optimized physical property.**

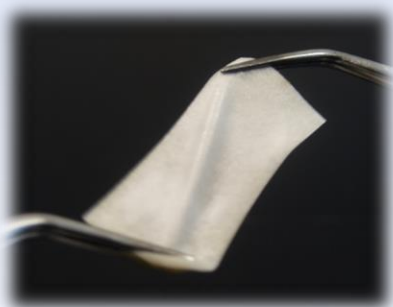
## Stable Property of Ti-oss Guide®



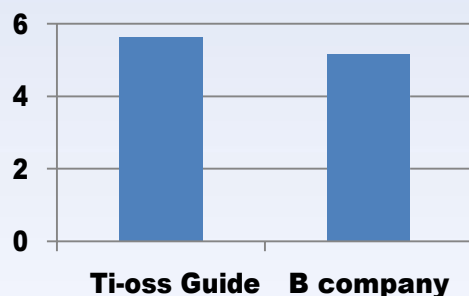
[ Enzymatic Degradation Test ]



**In enzyme resistance test, Ti-oss Guide® showed significant resistance to degradation compare to other company's products.**



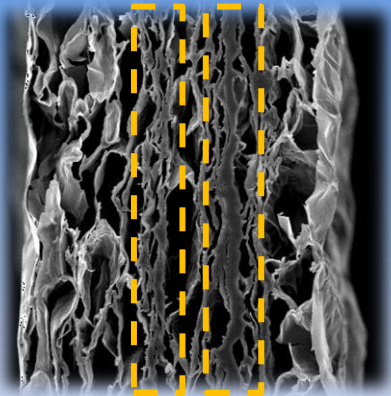
[ Tensile strength ]



**The result of tensile test suggested that Ti-oss Guide® has suitable tensile strength.**

# Specification

## Optimized structure

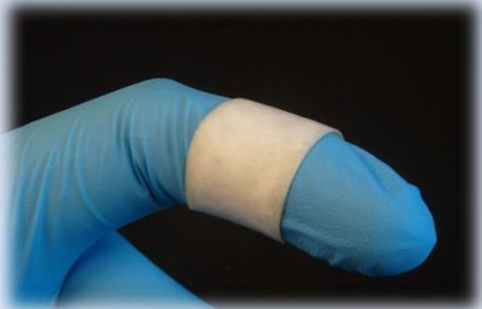


SEM image :

The cross-sectional view of Ti-oss Guide®

**Ti-oss Guide® has optimized structure for GBR/GTR. This unique structure allows Ti-oss Guide® to achieve stable regeneration of periodontal tissue and prevent undesirable cell infiltration into bone tissue.**

## Flexibility



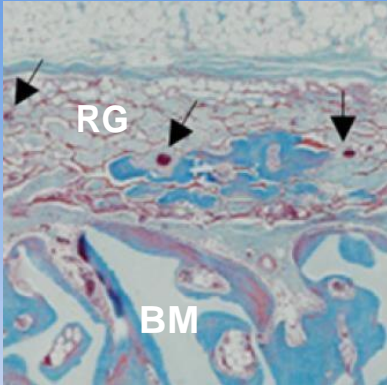
**Ti-oss Guide® provides appropriate flexibility for handling after rehydration.**

## Product Description

Type	Reorder No.	Size(cm)
<b>Ti-oss Guide®</b>	<b>DTG-10002</b>	<b>1.5 X 3</b>

# Scientific Evidence

## Animal Test



Histological analysis shows newly generated vasculature and new bone integration into the bone defect site at PO 8 weeks.

Ref. Park et al. Guided bone regeneration using 1-ethyl-3-(3-dimethylaminopropyl) Carbodiimide (EDC)-cross-linked type-I collagen membrane with biphasic calcium phosphate at rabbit calvarial defects. *Biomaterials Research* (2015) 19:15.

## Clinical Case



Surgical presentation of the bone defect



Lateral augmentation with bone materials



Application of Ti-oss Guide®



Close with healing abutment



After 4 months, increased bone formation and implant integration were confirmed

Ref. Lee et al. Guided Bone Regeneration Using Type-I Collagen Membrane Cross-Linked by 1-ethyl-3-(3-dimethyl aminopropyl) Carbodiimide in Two Implant Dehiscence Cases. *Implantology* 2015; 19(1): 16~25.