Easy to Use

Bioscaff™ Alvelac™ is available in various sizes. It is easy to use as illustrated below:

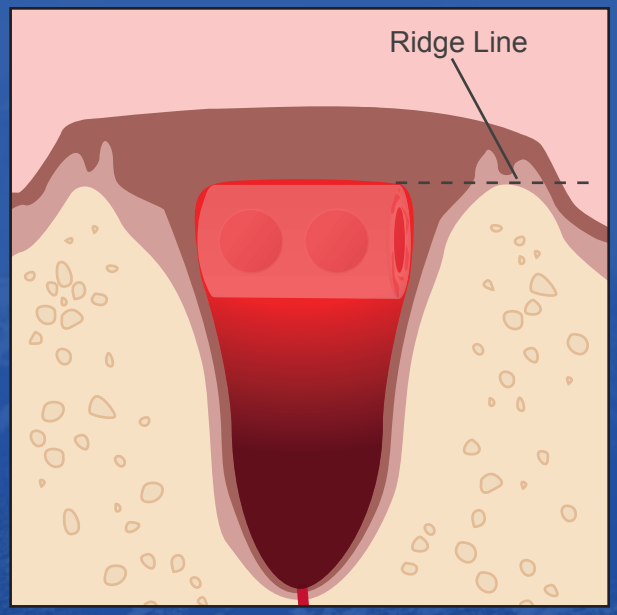
Product Application in 3 easy steps:

1. Select right scaffold size by using suitable gauge
2. Insert scaffold into socket
3. Suture flaps, if necessary

Scaffold Placement

Scaffolds can be placed horizontally or vertically to meet two placement criterias:

1. Close to ridge line
2. Engage the facial walls (buccal and lingual walls)



BSI
serving mankind globally

bio-scaffold International

An innovative Singapore biotechnology company specializing in the development of bioscaffolds for the replacement of human tissues including bones, joints and ligaments. With her corporate headquarter strategically located in Singapore and through mutually rewarding collaboration with her esteem partners, BSI is well positioned to provide such innovations.

For more details, visit our website at www.bio-scaffold.com

Bioscaff™
ALVELAC™

Alveolar Ridge Preservation

The Innovative and Natural Way

Distributor

MBR08-001-REV.02

61 Science Park Road, #02-01/10 The Galen, Singapore Science Park III,
Singapore 117525. Tel: (+65) 6465 5395 Fax: (+65) 6465 5394

Bioscaff™ Alvelac™

Meeting Dentists' Need

Bioscaff™ Alvelac™ addresses dentists' need for alveolar bone preservation in terms of its **width**, **height**, **density** and **speed** of bone regeneration after tooth extraction.

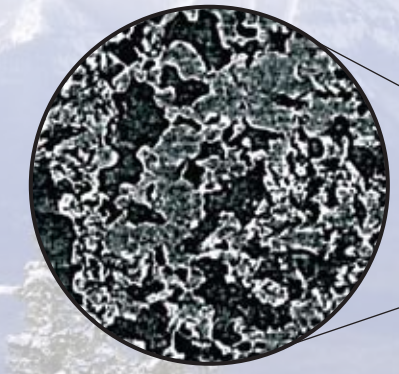
Firstly, Bioscaff™ Alvelac™ is a rigid structure, specifically designed to prevent collapse of the buccal and lingual walls in achieving **WIDTH** maintenance. It is strategically placed in the extraction socket with the top of the scaffold close to the ridge line in order to raise the forming blood clot to that level, thus achieving **HEIGHT** maintenance.

Bioscaff™ Alvelac™'s rigid-structure design also serves to exert a strain greater than 200 micro-strains against the alveolar socket walls, thus promoting bone growth of a higher **DENSITY** (*in accordance with the principle of bio-mechanics as expressed by Wolff's Law*).

The scaffold, constructed with *macro-channels and micropores*, is of a size that does not occupy the whole socket thus allowing **maximum space** for blood to fill the socket. This allows the **patients' own bone** to **form naturally** within that space. Furthermore, Bioscaff™ Alvelac™ will start to biodegrade from 2 months onwards up to 6 months (typically), vacating more needed space for patients' own bone to grow into. So within a short period of time, the patients' own bone will form fully in the socket, achieving the **SPEED** of alveolar ridge preservation required by dentists to implement patients' choice of prosthesis.

Bioscaff™ Alvelac™ is able to achieve all these as a result of careful selection of materials and many years of research into a manufacturing technology (*patented by Bio-Scaffold International*) that is able to make rigid scaffolds with the exact *structural strength* and *high porosity* for good **vascularisation** during the bone remodelling process.

The selected material, poly lactic co-glycolic acid (**PLGA**), is a **widely-used** copolymer with strong mechanical adhesion to the surface of bone which suppresses bleeding and leads to enhanced haemostasis. This material is approved by **US FDA** and is both *biocompatible* and *bioabsorbable*. When in contact with blood or body fluids, it undergoes hydrolytic and enzymatic decomposition that results in the production of two by-products, *carbon dioxide* and *water*, which are easily absorbed by the body. Therefore, these make Bioscaff™ Alvelac™ safe to use.



Micropores - *500*μm
(X-ray CT image)