

# **Abstract: The influence of rhBMP-2 on secondary implant stability after a sinus floor elevation with simultaneous Straumann-BLX implant placement.**

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## **Background:**

A bone level Straumann-BLX novel type implant has been developed for high primary stability and is conceived for the simultaneous implant placement in atrophic maxilla with sinus floor elevation (SFE). However, secondary stability is developed from osseointegration after insertion and affected by the primary stability. RhBMP-2 has osteo-inductive potential with similar property to autogenous bone grafting and increases osseointegration.

## **Purpose:**

The aim of this abstract is to provide a systematic review of the effect of using rhBMP-2 to increase secondary implant stability after a sinus floor elevation with simultaneous Straumann-BLX implant placement.

## **Materials and methods:**

This Abstract will focus on evaluation, comparison and systematic review of the available literature of rhBMP-2, implant stability and Straumann-BLX dental implants.

## **Results:**

Implant macro-geometry influences osseointegration and in an SFE simulated ex vivo model, BLX group showed the highest values of primary stability.

The osteo- inductive potential of rhBMP-2 is enhanced in the presence of a compatible carrier material at even lower concentrations and rhBMP-2 can be a good alternative to autogenous bone, promoting bone regeneration in height and width.

## **Conclusion:**

Evidence from the presented abstract indicates that the use of rhBMP-2 during sinus floor elevation with simultaneous Straumann-BLX insertion may play a significant role to increase the secondary implant stability compared to conventional methods.