

# Large Retrospective Study Reports No Implant Loss in More Than 600 Thommen Medical Implants

Lin G et al, J Clin Periodontol. 2018;45:733-43



## Background

Long-term studies have shown improved implant survival rates since the 1980s. However, implant failures are still not completely avoidable.

### Early implant loss

"A loss occurring before occlusal loading due to failed osseointegration"

### Occlusal loading



### Late implant loss

"A loss occurring after occlusal loading due to failed maintenance of pre-established osseointegration"



## Aim

Assess the patient- and implant-related risk factors for early and late implant loss



## Study Design



18 199  
patients



30 959 implants  
from 7 brands



15  
dentists



1-6 years  
follow-up\*

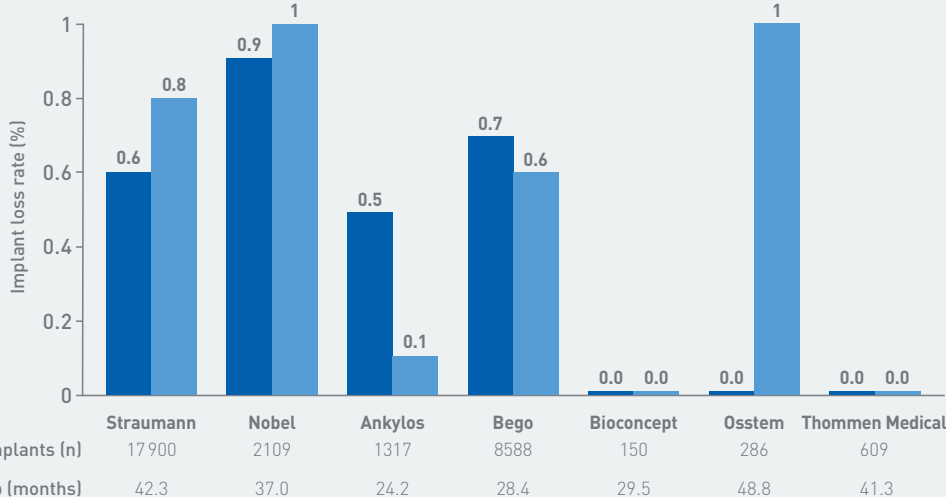


## Results

No early or late implant loss in 609 Thommen Medical implants\*\*

● Early loss

● Late loss



**Risk factors for early loss:<sup>†</sup>**  
 Male sex (OR:1.97)  
 Patients aged ≥41 years (OR:1.68)  
 Mandibular anterior (OR:2.17)

**Risk factors for late loss:<sup>††</sup>**  
 Male sex (OR:2.57)  
 Patients aged ≥41 years (OR:2.22)  
 Bone augmentation (OR:1.68)  
 Short implant length (<10 mm; OR:1.69)

**98.7%**  
Cumulative  
implant survival

**100%**  
Thommen Medical  
implant survival



## Key Takeaways

✓ This retrospective study on more than 30 000 implants from 7 different brands demonstrates a favorable 100% implant survival rate for Thommen Medical implants.<sup>‡</sup> The authors identify patient age, male sex, mandibular anterior implant location, bone augmentation, and short implant length as general risk factors for implant loss.

\*In cases where bone grafting was performed, patients were recalled for restoration after 6 months. Patients who did not require grafting were recalled for restoration after 3 months \*\*An implant was considered a loss if presented signs and symptoms led to implant removal †Male patients (p < 0.01), age of the patient at the time of surgery (patients aged <40 years as the reference category; 41-60 years, p < 0.01; ≥61 years, p < 0.01), OR value presented for 41-60 years category, and mandibular anterior (mandibular posterior as the reference category, p < 0.01) ††Male patients (p < 0.01), age of the patient at the time of surgery (patients aged <40 years as the reference category; 41-60 years, p < 0.01; ≥61 years, p < 0.01), OR value presented for 41-60 years category, bone augmentation (p = 0.01), and implant length (regular as the reference category; short <10 mm, p < 0.01) ‡Statistical tests revealed no significant correlation between implant brands and implant loss.