

Press Release 10th of November 2010

New study published:

## ***Lactobacillus reuteri* Prodentis effective in the treatment of periodontitis**

The study shows that *L. reuteri* Prodentis acts synergistically with standard treatment (scaling and root planing, SRP) to significantly reduce probing pocket depth (PPD) and clinical attachment level (CAL) which are the two most important parameters to assess the severity of periodontitis. Furthermore *L. reuteri* Prodentis reveals – as the first probiotic ever – significant reductions of three different pathogens in patients with chronic periodontitis. The study also confirms the anti-inflammatory effects of *L. reuteri* Prodentis on gum inflammation (gingivitis).

Chronic periodontitis occurs in up to 40 % of the adult population. The standard treatment aims at removing plaque in the dental pockets to reduce the periodontal pathogens and thereby prevent disease progression.

Thirty chronic periodontitis patients were included in the double blind, randomized, placebo-controlled clinical trial that lasted for 42 days. On day 0 the teeth in one half of the mouth were treated with SRP whereas the teeth in the other half were left untreated. From day 21 to day 42 the patients were supplemented with either *L. reuteri* Prodentis lozenges ( $1 \times 10^8$  CFU DSM 17938 and  $1 \times 10^8$  CFU ATCC PTA 5289) or placebo lozenges twice daily.

The result showed that a combination of *L. reuteri* Prodentis and SRP was significantly better than all other modalities in reducing gingivitis and plaque. Moreover, *L. reuteri* Prodentis, either alone or following SRP, significantly reduced the pathogens *Aggregibacter actinomycetemcomitans*, *Porphyromonas gingivalis* and *Prevotella intermedia* by up to 90 % as compared to the treatments that did not include *L. reuteri* Prodentis. The combination of *L. reuteri* Prodentis and SRP was also significantly better than SRP alone in reducing both PPD ( $p < 0.001$ ) and CAL ( $p < 0.001$ ), see attachment.

– This short-term study proves that *L. reuteri* Prodentis by itself has a powerful effect on the pathogens of periodontitis and that the combination of *L. reuteri* Prodentis and SRP synergistically improves both PPD and CAL, says Professor Vandana at the College of Dental Science in Davangere, India.

– The results strengthen *L. reuteri* Prodentis position as a proven treatment option for patients with periodontal disease, says Peter Rothschild, President, BioGaia AB.

The results of the study were published online on the 2nd of November 2010 in the Journal of Oral Microbiology, doi: 10.3402/jom.v2i0.5344. The study can be accessed at: <http://www.journaloforalmicrobiology.net/index.php/jom/article/view/5344>

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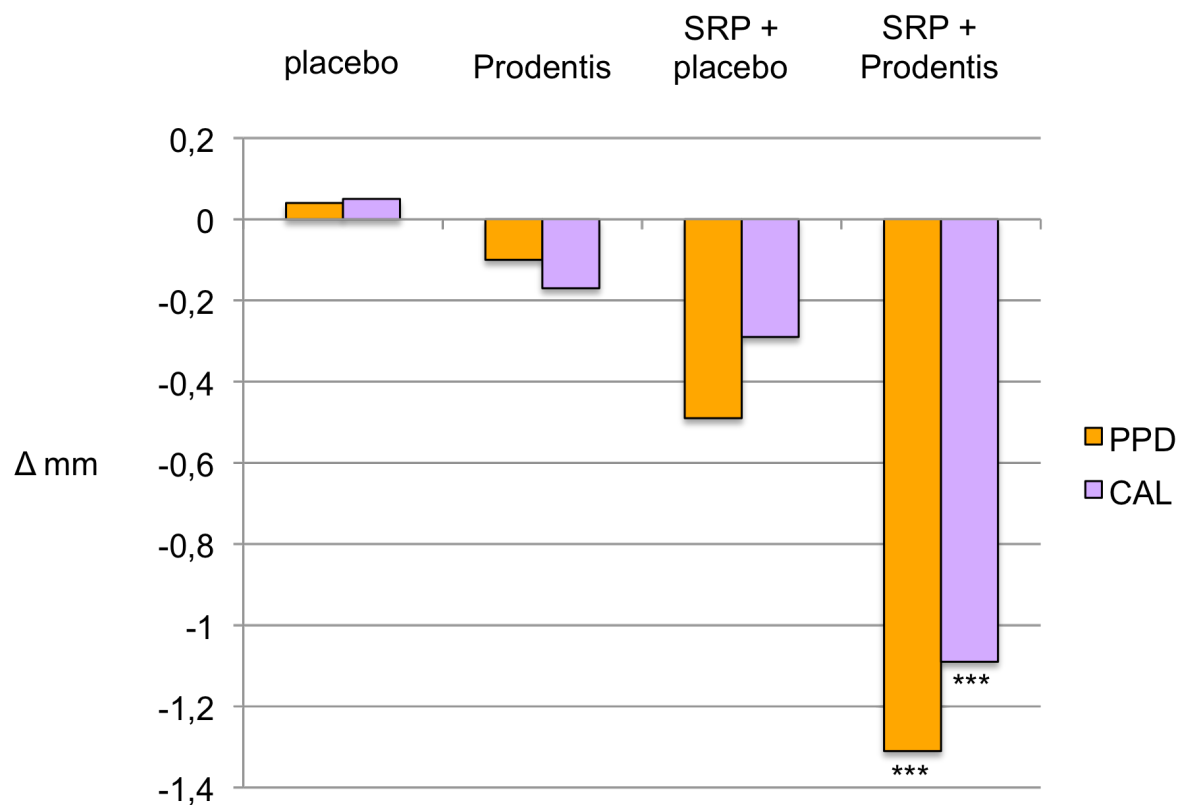
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***BioGaia is a biotechnology company that develops, markets and sells probiotic products with documented health benefits. The products are primarily based on the lactic acid bacterium Lactobacillus reuteri (Reuteri), which has probiotic, health-enhancing effects. The class B share of the Parent Company BioGaia AB is quoted on the Small Cap list of the NASDAQ OMX Nordic Exchange Stockholm. [www.biogaia.com](http://www.biogaia.com)***

## ***L. reuteri* Prodentis in combination with standard treatment significantly reduced probing pocket depth and clinical attachment level**

### **Change in PPD and CAL after treatment**



Adapted from table 2 in: Effect of the probiotic *Lactobacilli reuteri* (Prodentis) in the management of periodontal disease: a preliminary randomized clinical trial. Vivekananda et al. J Oral Microbiol 2010, 2: 5344 – DOI: 10.3402/jom.v2i0.5344