The search identified 811 publications without overlap. 15 articles were considered relevant and were included in the meta-analysis. The results are given in Figures 1 to 5.

### Background
The use of adjunct antimicrobial photodynamic therapy (aPDT) for the treatment of chronic or aggressive periodontitis is well documented in the literature (Andersen et al. 2007, Al-Zaharani et al. 2009, Berakdar et al. 2012, Campos et al. 2013), and the additional outcome benefits of gain in attachment level and reduction of probing depth through adjunctive aPDT to scaling and root planing have been confirmed by meta-analyses (Sgolastra et al. 2011, Sgolastra et al. 2013).

### Aim
To investigate the efficacy of adjunctive antimicrobial photodynamic therapy (aPDT) in patients suffering from chronic periodontitis.

### Material and Methods
A comprehensive literature search of electronic databases was performed to identify relevant studies followed by a manual search of several dental journals (Tab. 1). For this purpose, a recommended structured approach was used using five components commonly known by the acronym “PICO” (O’Connor et al. 2009), Tab. 2. The primary outcomes for the analysis were probing depth reduction and attachment gain. The effect size was estimated and reported as the mean difference, and the 95% confidence interval (CI) was calculated.

### Results
The search identified 811 publications without overlap. 15 articles were considered relevant and were included in the meta-analysis. The results are given in Figures 1 to 5.

### Conclusion
While there is strong clinical evidence of short-term benefits for PD reduction (mm) and AL gain (mm), weak evidence is available for long-term benefits of adjunctive antimicrobial photodynamic therapy in chronic periodontitis.