Summary

✓ Eleven peptides were screened against pathogens involved in various clinical infections and two peptides were found to be highly potent and chosen for the further study.

✓ Peptides (VSL2&VS2) exhibited good antimicrobial activity against *E.faecalis* and *C.albicans* on infected tooth samples. VSL2 also exhibited good *in vivo* efficacy in localized thigh infection model by showing a dose dependent decrease in the *E.faecalis* load.

✓ These peptides (VSL2&VS2) were not toxic to normal fibroblast cells and hemocompatible at their MIC concentrations.

✓ The mechanism of action of peptides on *E.faecalis* and *C.albicans* was proved using SEM, which showed membrane damage.

✓ The Peptides did not exhibit any genotoxicity as confirmed by CBMN and WING SPOT assay.

✓ Hence CAMPs are safe and can be a promising agent to treat infections caused by *E.faecalis*, *C.albicans* and also as an antimicrobial agent in root canal infections.