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# In-vitro cytocompatibility of dental resin monomers on osteoblast-like cells

**Short title:** Resin monomers and osteoblast-like cells

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## ABSTRACT

*Objectives.* Dental resin-based materials are widely used in modern dentistry. Especially, resin cements enjoy great popularity and are utilized in many applications. Nevertheless, monomers could be released from the resinous matrix, thus interact with surrounding tissues, cause adverse biological reactions and may lead in cases of implant retained restorations to peri-implant bone destruction. Hence, we performed an in-vitro study to determine cytotoxicity of resin monomers on osteoblast-like cells.

*Methods.* Three permanent osteoblast-like cell lines from tumor origin (MG-63 and Saos-2) as well as immortalized human fetal osteoblasts (hFOB 1.19) were used and treated with different concentrations of the main monomers: BisGMA, UDMA, TEGDMA and HEMA. The impact on cell viability was monitored using

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