

***In vivo* and *In vitro* properties evaluation of curcumin loaded MgO doped 3D printed TCP scaffolds**

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Supplementary information

Table S1: values of parameters obtained from the Weibull model fit of 24 h release kinetics data (Figs. 1c, e and equation 1)

pH	Sample	a	b
7.4	TCP-Cur	3.5	1.2
7.4	Mg-TCP-Cur	3.4	1.6
5.0	TCP-Cur	6.9	3.8
5.0	Mg-TCP-Cur	6.7	5.0

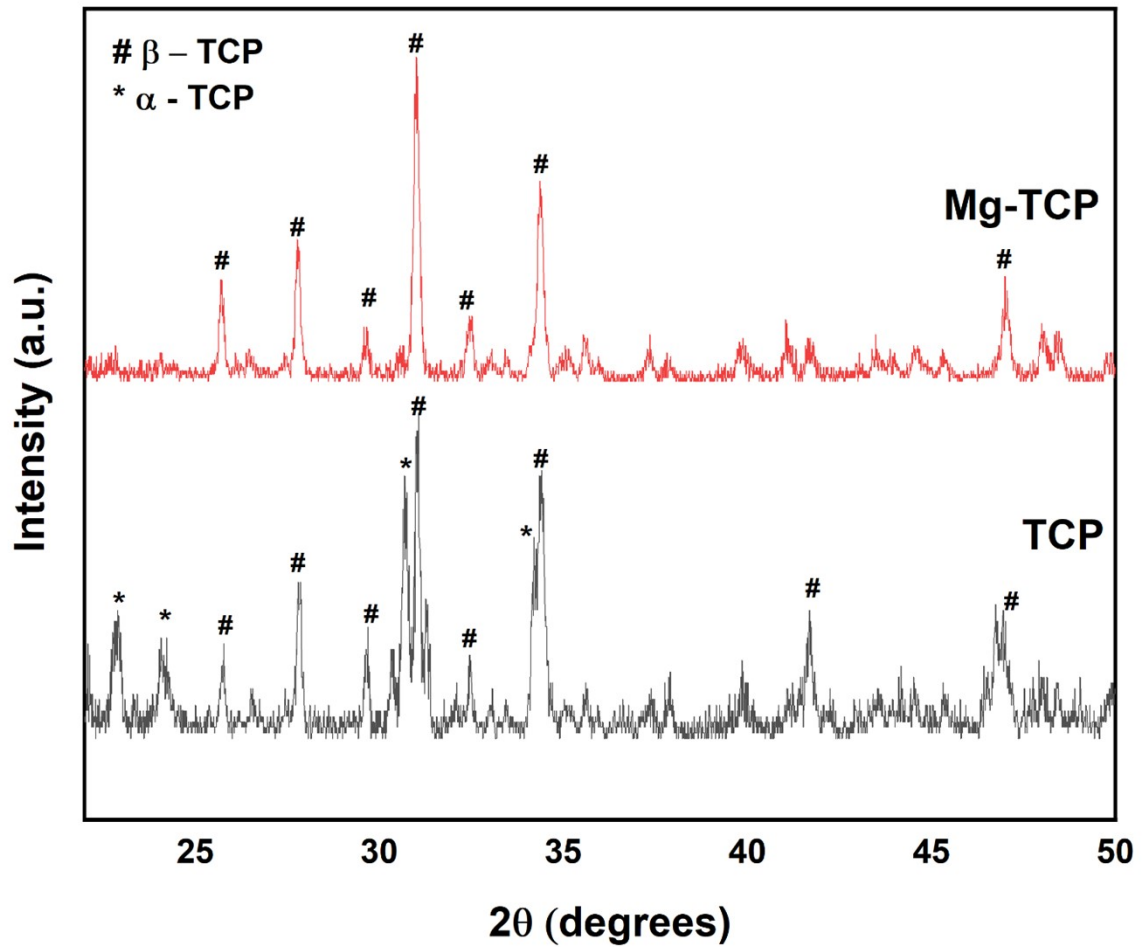


Fig. S1: XRD results of TCP indicate predominantly β - TCP (JCPDS # 09-0169) phases after sintering with some α - TCP (JCPDS # 09-0348) phases. The Mg-TCP sample shows only β - TCP phase.

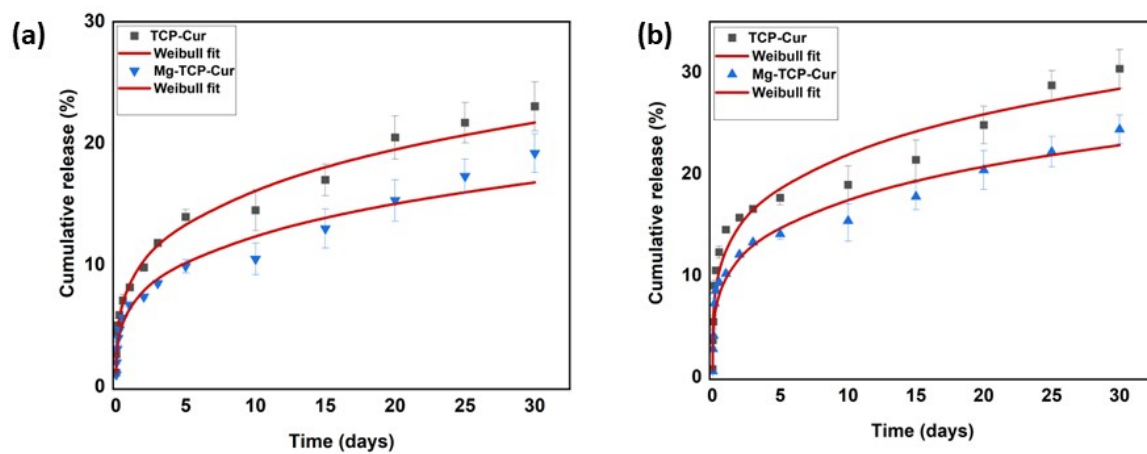


Fig. S2: Weibull fitting of obtained drug release data after 30 days of release (a) at pH 7.4 (b) at pH 5.0.

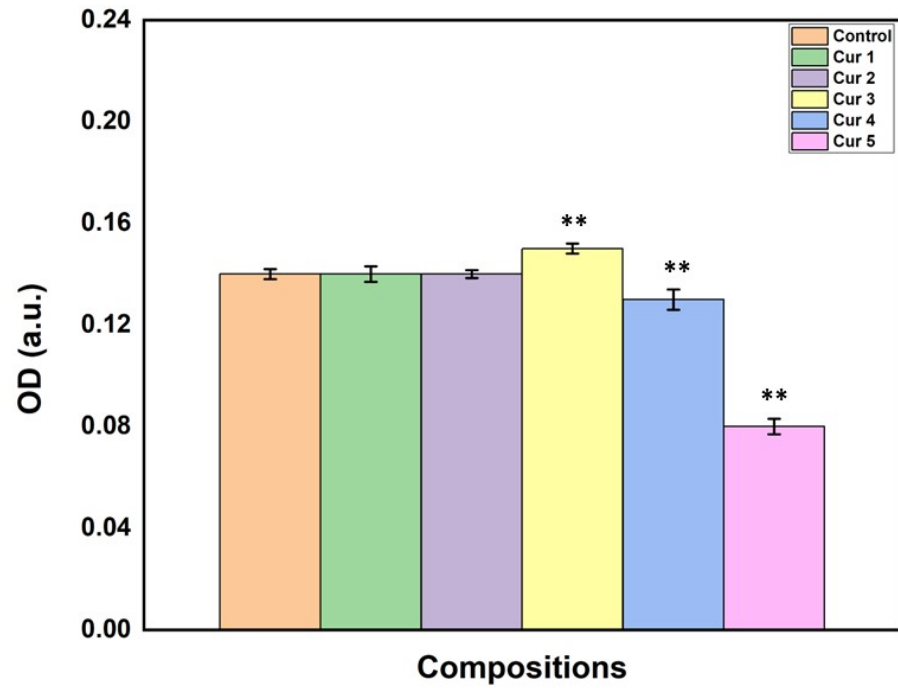


Fig. S3: MTT assay results after interaction with different amounts of curcumin-loaded scaffolds and osteoblast on day 5 show that the Cur 3 sample shows a significant increase in cellular viability, which decreases for the compositions Cur 4 and Cur 5.

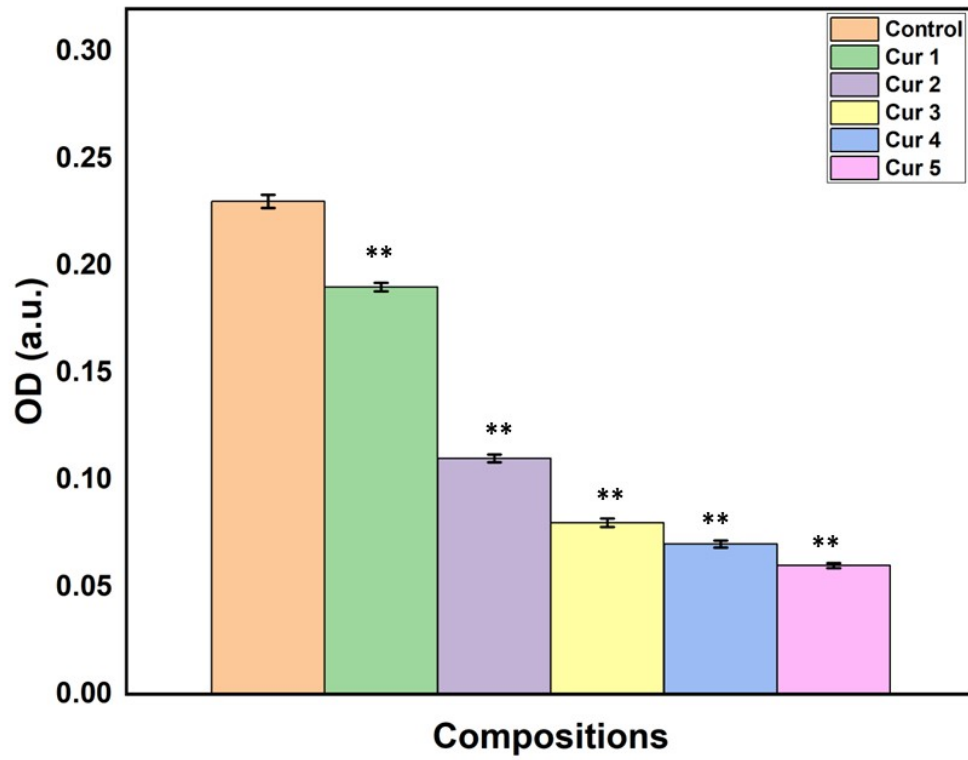


Fig. S4: MTT assay results after interaction of osteosarcoma with different amounts of curcumin-loaded scaffolds show that the presence of curcumin leads to a significant reduction in osteosarcoma cell viability on day 5.