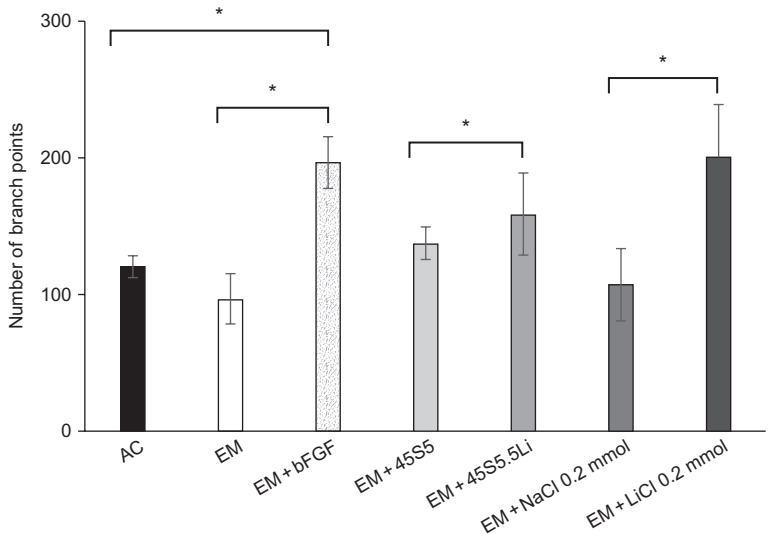

FIG. 7.11 Number of bifurcation points at 5 days posttreatment (*$P < .05$).

TABLE 7.1 Glass Compositions (mol%)

	SiO_2	P_2O_2	CaO	Na_2O	Li_2O
Li0 (45S5)	46.1	2.6	26.9	24.4	–
Li100	46.1	2.6	26.9	–	24.4
Li75	46.1	2.6	26.9	6.1	18.3
Li50	46.1	2.6	26.9	12.2	12.2
Li25	46.1	2.6	26.9	18.3	6.1

(da Silva, J.G., Babb, R., Salzlechner, C., Sharpe, P.T., Brauer, D.S., Gentleman, E., 2017. Optimisation of lithium-substituted bioactive glasses to tailor cell response for hard tissue repair. J. Mater. Sci. 52 8832–8844).

biological response by varying BG composition (Table 7.1), particle size, and concentration (da Silva et al., 2017).

The metabolic activities of mouse osteoblast MC3T3-E1 cells after 24-h treatment with dissolution media from large (0.1–1 mm) BG particles at 1× concentration (6 mg mL^{-1}) were all similar to that of the negative control and were significantly different from that of the positive (cytotoxic) control, confirming their lack of toxicity (Fig. 7.12) (da Silva et al., 2017).

Cells treated with dissolution medium from large (0.1–1 mm) BG particles at 50× concentration (300 mg mL^{-1}), however, showed significantly lower