

14. Authors: Tarantino C, Rossi G, Flamini G, Fortuna D

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Place:

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Purpose: to assess the stimulating capacity of the cytoproliferation of HILT Therapy in vitro.

Discussion: HCT-8 ileocecal adenocarcinoma cells were exposed to single 7,69 J/cm² (12 sec) doses of irradiation; VERO kidney cells were treated with doses of 2.7 watt and 15 Hz for 12 sec, through Nd:YAG laser

Method: The assessment of cell proliferation was carried out by means of spectrophotometry, immunohistochemistry and direct cell counts.

Results: HCT-8 cells showed an increase of cell proliferation, while in VERO cells there wasn't significant effects on proliferation.

Conclusion: this study indicate that irradiation with Nd:YAG 1064 nm pulsed wave induces the cell proliferation in vitro and there is a direct specificity between the dosimeter and the cellular line.