

PUBLICATION INFORMATION

Barekzi, et al. Effects of Low Temperature Plasma on Prostate Cancer Cells Using the Bovie® Medical J-Plasma Device. Plasma Processes and Polymers. Sept 2016.

FINANCIAL & CONTENT DISCLOSURE: This literature authored by Nazir Barekzi, Mounir Laroussi, Greg Konesky, Shawn Roman was supported by Bovie Medical (now Apyx Medical). Barekzi & Laroussi provided consulting work for this preclinical study. Greg Konesky at the time of publication was an employee of Bovie Medical. Shawn Roman is an employee of Apyx Medical.

MANUFACTURING DISCLOSURE: Apyx Medical (previously Bovie Medical) manufactures and owns the J-Plasma technology discussed in this article.

INDICATIONS FOR USE & INTENDED USE DISCLOSURES

- The Renuvion Precise, Precise Open, and J-Plasma Handpieces are intended to be used with compatible electrosurgical generators for the delivery of radiofrequency energy and/or helium plasma for cutting, coagulation, and ablation of soft tissue during open surgical procedures.
- Apyx Medical wants to present to you with current scientific discourse.

RISKS:

- Risk associated with the use of the device may include: Helium embolism into the surgical site due to inadvertent introduction into the venous or arterial blood supply system, unintended burns (deep or superficial), pneumothorax, temporary or permanent nerve injury, ischemia, fibrosis, infection, pain, discomfort, gas buildup resulting in temporary and transient crepitus or pain, bleeding, hematoma, seroma, subcutaneous induration, pigmentation changes, increased healing time, and/or unsatisfactory scarring. There may be additional risks associated with the use of other devices along with Renuvion/J-Plasma and there may be an increased risk for patients who have undergone prior surgical or aesthetic procedures in the treatment area.

As with any procedure, individual results may vary. As with all energy devices there are inherent risks associated with its use, refer to the IFU for further information.

Full Paper

Effects of low temperature plasma on prostate cancer cells using the Bovie Medical J-Plasma® device

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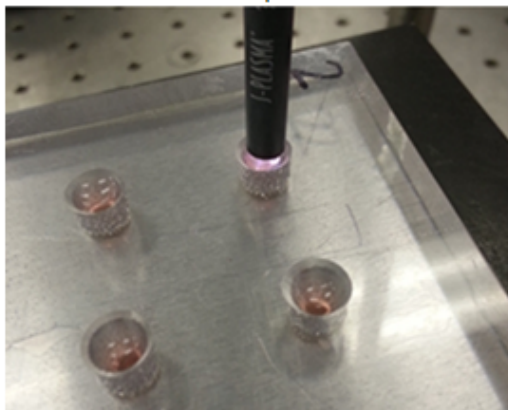
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Abstract

The efficacy of low temperature plasma generated by an atmospheric pressure plasma jet, J-Plasma system (™Bovie Medical Corporation), is studied for its therapeutic effects against the DU145 prostate cancer cell line. The DU145 cells in complete culture media were treated with different exposure times and different J-Plasma system parameters. The optimum settings of the J-Plasma system were identified based on the cancer cell viability at 0, 12, 24, 48, and 72 h post-low temperature plasma treatments. The results indicate that J-Plasma killing and cell viability was exposure time dependent and induced a reduction in cell proliferation and delayed killing effect.



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