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to build a predictive model to identify possible associations with the pathophysiology of the tumor. The proposed study aims to provide a complete radiomics model for the selection and classification of features, based on machine learning algorithms. To evaluate the method efficacy in providing decision support in the clinical setting, we analyzed MET-PET images of patients with brain tumors and with known histopathological analysis.

atticon12768

● **Characterization of PVA-GTA Fricke gels dosimeters using MRI and optical techniques in X-rays external radiation therapy.**

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The purpose of this work is to study the dependence of the dosimetric properties of poly(vinyl-alcohol)-glutaraldehyde Fricke gel dosimeters (PVA-GTA-FG) both on the irradiation temperature and on temperature changes possibly occurring between the irradiation and readout phases. Such effects were investigated by means of MRI and optical absorbance measurements. The results did not reveal any significant dependence of the sensitivity of the dosimeters on the irradiation temperature in the investigated interval (20°C-35°C). In contrast, the effect of the holding temperature may be not negligible. Additionally, PVA-GTA-FG proved to be nearly tissue-equivalent and characterized by a response independent on the energies and dose-rates in the investigated intervals (0-15 Gy). These findings suggested that PVA-GTA-FG are promising tools for clinical dosimetry.

atticon12758

● **Multimodal approach for the study of mouse CNS.**

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Many serious pathologies of the CNS are related to anomalous development or damages of the vascular and neuronal networks. A detailed structural characterization from this point of view turns out to be useful especially when we want to improve our knowledge of pathological processes effects following a neurological disease as well as an injury. Within this framework, we developed a multidisciplinary network between X-ray advanced imaging techniques, functional magnetic resonance imaging, histology and new algorithms with the final aim to tune up a solid multimodal method for pre-clinical research.

atticon12786

● **Clenbuterol-sensitive delayed outward potassium currents in SBMA cell model.**

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