11th International Conference
on Advanced Materials

Rio de Janeiro Brazil
September 20 - 25

ICAM2009

Study of the interface of biomaterials in osteoblastic culture

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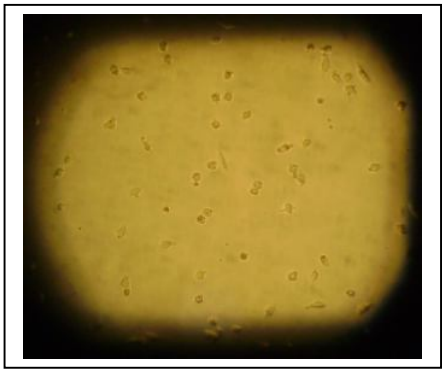
This work has as main objective to study the surface of titanium and its alloys from physico-chemical modifications made in the material to its application in health and bioactive prostheses. In order to evaluate the biocompatibility of the material, cell culture tests were performed using bone marrow cells of adult rabbit. The cultures remained in a controlled environment with a temperature of 38 ° C. Thus, it was necessary to search for protocols in accordance with International Standards ISO 10993-3, 10993-5 and 10993-6 for tests of cytotoxicity, genotoxicity and carcinogenesis. Several groups of samples were evaluated and the results of microscopy shows the variation of cell growth from culture of osteoblasts. Parallel to the research project was a study of potential market with the development and application of biomaterials. In this sense, are also described in this work fundamental to the stages, from the scientific work, a product or process is actually put on the market. The scientific results from the preliminary and the study of market potential, it was possible to direct the work taking into account the indicative and the necessary conditions for science and technology of biomaterials are processed into products and processes applicable in health.



Osteoblastic culture to the titanium surface

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