

Summary

^{18}F -FDG Injections Produced by a Solid Phase ^{18}F -Fluorination (FDG MicroLabTM): Effects of ^{18}F -FDG and the Components on Endotoxin and Sterility Tests

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Effects of ^{18}F -FDG and components of the injections on endotoxin tests (Limulus tests) and sterility tests (Blood culture system) were determined with ^{18}F -FDG injections produced by a solid phase ^{18}F -fluorination (FDG MicroLabTM, GE). ^{18}F -FDG injections with endotoxins shortened the time for gelling (turbidimetry), compared with that of the control (saline). Blood culture systems inoculated with ^{18}F -FDG injections and microorganisms showed positive results within 72 h of incubation for every species of microorganisms used in the present study (*Bacillus*

subtilis, *Candida albicans*, *Clostridium sporogenes*, *Micrococcus luteus*). These results were quite similar to those for the control samples inoculated with saline and the microorganisms. Consequently, ^{18}F -FDG and the components of the injections produced by the present methods may not significantly affect the endotoxin tests and sterility tests.

Key words: ^{18}F -FDG, Bacterial endotoxins, Sterility, FDG MicroLabTM, Positron emission tomography.