

## Comparison of the Response of TLD-100 and TLD-100H Dosimeters in Diagnostic Radiology

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**Abstract :** Proper dosimetry is very essential in diagnostic radiology. The goal of this study is to verify the application of LiF:Mg, Cu, P (TLD100H) in obtaining the entrance skin dose (ESD) of patients undergoing diagnostic radiology. The results of dosimetry performed by TLD-100H were compared with those obtained by TLD100, which is a common dosimeter in diagnostic radiology. The results show a close agreement between the dose measured by the two dosimeters. According to the results of this study, the TLD-100H dosimeters have higher sensitivities (i.e. signal(nc)/dose) than TLD-100. Therefore, it is suggested that the TLD-100H are effective dosimeters for dosimetry in low dose fields.

**Keywords :** entrance skin dose, TLD, diagnostic radiology, dosimeter

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