

INTERIM FLUORODEOXYGLUCOSE (^{18}F [FDG]) POSITRON EMISSION TOMOGRAPHY IN PATIENTS WITH DIFFUSE LARGE B-CELL LYMPHOMA

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Positron emission tomography (PET) is a nuclear medicine imaging technique which produces a three-dimensional image or picture of functional processes in the body. The system detects pairs of gamma rays emitted indirectly by a positron-emitting radionuclide (tracer), which is introduced into the body on a biologically active molecule. Images of tracer concentration in 3-dimensional space within the body are then reconstructed by computer analysis. In modern scanners, this reconstruction is often accomplished with the aid of a CT X-ray scan performed on the patient during the same session, in the same machine.

Diffuse Large B-Cell Lymphoma (DLBCL) is the most frequent aggressive non-Hodgkin's Lymphoma (NHL) in adults. Presently, prognostic stratification relies on clinical characteristics and International Prognostic Index (IPI) is currently the most useful tool to identify high-risk patients (pts). Positron Emission Tomography (PET) with fluorodeoxyglucose (^{18}F [FDG]) has been used to assess chemosensitivity in Hodgkin's lymphoma.



Figure 1. Image of a typical positron emission tomography (PET)

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