

EA2182: FDG-PET/MRI Imaging Protocol Recommendations

1. Whole body PET acquisition: three-minute PET acquisition per bed position. Coverage including skull base to mid thighs. MR portion of the study include two-point DIXON spoiled gradient echo (LAVA-FLEX or VIBE DIXON) at each bed position. T2 weighted images preferred at each bed position, which can be performed using a single shot fast spin echo technique (SSFSE or HASTE). These can be performed with or without fat saturation. Contrast does not have to be administered for the whole-body imaging
2. Pelvis bed position: a dedicated PET/MRI of the pelvis is required, which can be either done in combination with the WB acquisition or done separately (ie one can do a WB acquisition starting in the pelvis and the first bed can include the additional images). This bed position should be centered on the primary tumor. The MRI acquisition at this bed position should include three plane T2 weighted images with a small field of view covering the tumor. DWI and DCE is optional in this bed position, but DWI is preferred if only one is to be acquired. If possible, a prolonged PET acquisition should be acquired at this bed position concurrent with the acquisition of the MRI images, aiming for a 10 minute PET acquisition.
3. Liver acquisition (optional): many centers like to acquire an abbreviated liver MRI in addition, but this is not required and will not likely be billed for. This can be done per site preference.