

Place label here

PET Phantom – Site Scanning Data Forms

Please complete one copy of these data forms for each unit being evaluated. Photocopy the forms for additional units. Detailed instructions for scanning the PET phantom are attached. Please print or type. Please place your Phantom Data Form Label in the space above. Return completed form with phantom images.

Equipment

PET or PET/CT INFORMATION

Unit Vendors: check one					
<input type="radio"/> PHIL Philips		<input type="radio"/> GEMS GE		<input type="radio"/> SIEC Siemens (or CTI)	
<input type="radio"/> OTH Other, specify: _____					
PET Model Name	CT Model Name/Slices	Year of Manufacture	Year of Installation	Date of Last Hardware Upgrade	Serial Number
	/				

PROCESSING SOFTWARE

Version of Software	Vendor	Date of Last Software Upgrade	Operating System (e.g., UNIX)

Has all submitted data from the PET system been processed with this computer system? Y N

TRANSMISSION SOURCES (if used)

Type / Number of Sources	Vendor	Total Activity, mCi	Date of Installation	Time since Installation	Frequency of Updates
/					

Make corrects to fields below based on the actual resolution test pattern of phantom model being used:

Rod sizes (small to large):	4.8	6.4	7.9	9.5	11.1	12.7	mm
Cylinder sizes (small to large):	8	12	16	25			

Other information or comments: _____

Acquisition and Reconstruction Parameters (Whole Body Protocol)

Type of PET(/CT) unit: _____

Enter all appropriate acquisition parameters below (list other parameters that may be relevant):

Time per bed position:

Transmission scan: _____ Emission scan: _____

Number of bed positions: _____

Matrix size: _____ Zoom: _____

For CT:

Topogram: mAs _____, kVp _____

CT: mAs _____, kVp _____, Num. Slices _____, Thickness _____ mm

Are different protocols used for children? Y N

Describe any modified pediatric protocols and dose reduction techniques: _____

Enter all reconstruction parameters below:

Transmission Reconstruction Parameters

Type of reconstruction (OSEM, FBP, etc.): _____

OSEM: iterations _____, Subsets _____

Processing Filter: _____, Setting: _____

Slice Thickness: _____ cm

Additional information:

SUV Analysis Worksheet

Date: ___ / ___ / ___

Patient Dose: _____

PET(/CT) Model: _____

From the ROI data of minimum (min.), maximum (max.) and mean SUVs (SUV parameters: patient dose and 70 kg weight) fill in Table 1 and 2 below. If the smallest vials are not visible, leave entries blank.

A) Contrast – Table 1

	Hot Vial 8 mm	Hot Vial 12 mm	Hot Vial 16 mm	Hot Vial 25 mm
<u>max.</u> SUV				

B) Scatter/Attenuation – Table 2

	Background	Bone	Air	Water
<u>mean</u> SUV				
<u>min.</u> SUV				

C) Ratio Calculations (using data from Tables 1 & 2 above):

<u>max.</u> vial SUV to <u>mean</u> background SUV e.g., Contrast = 8mm SUV / bkgd SUV	8mm/bkgd	12mm/bkgd	16mm/bkgd	25mm/bkgd

<u>max.</u> vial SUV to <u>max.</u> 25 mm vial e.g., Contrast = max16 mm SUV / max 25 mm SUV	8mm/25mm	12mm/25mm	16mm/25mm

<u>min.</u> air or water to <u>min.</u> bone e.g., ratio = min air SUV / min bone SUV	air/bone	water/bone