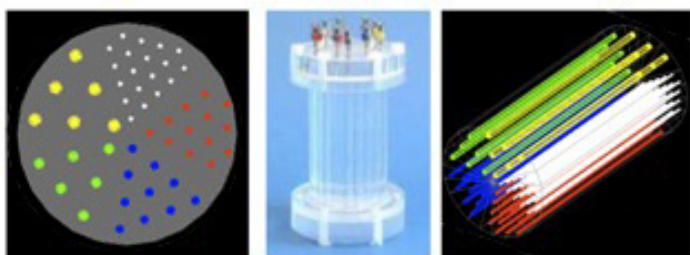




NeuroLF®

Comparison of the NeuroLF® system with conventional PET/CT devices



5 fillable inserts with different Diameter (Schoepfy):

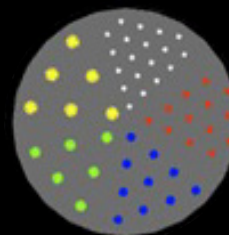
$d_5 = 3 \text{ mm}$

$d_1 = 1 \text{ mm}$

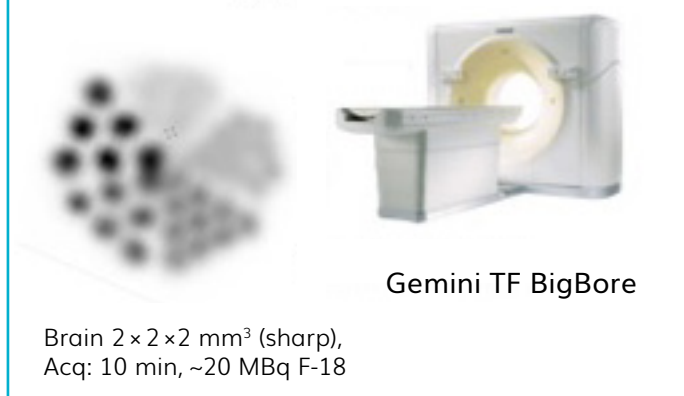
$d_2 = 1,5 \text{ mm}$

$d_4 = 2,5 \text{ mm}$

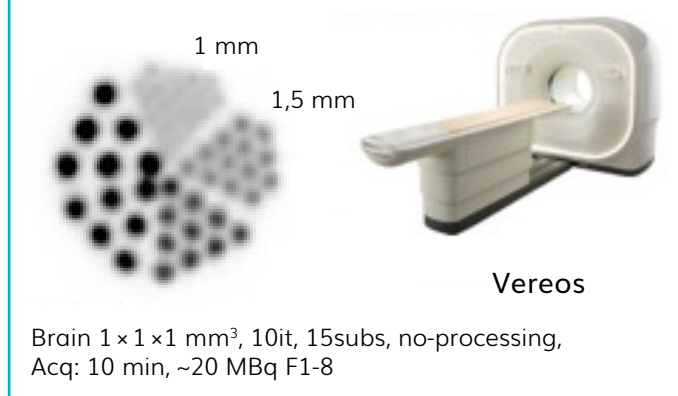
$d_3 = 2 \text{ mm}$



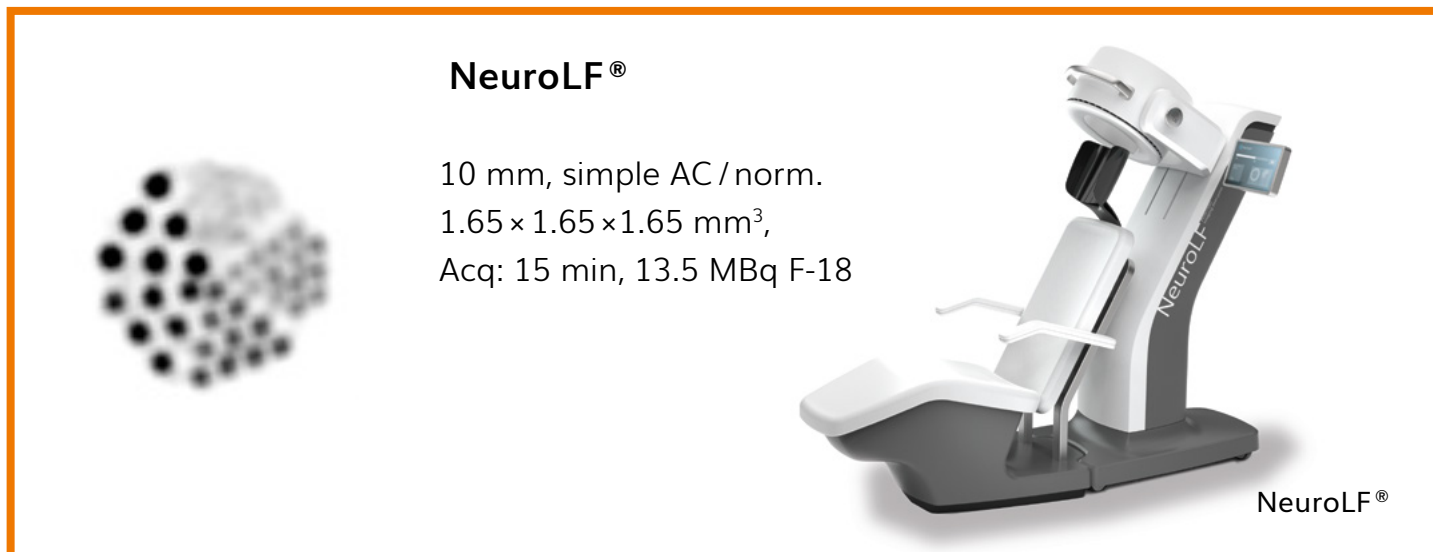
PMT PET



Digital PET



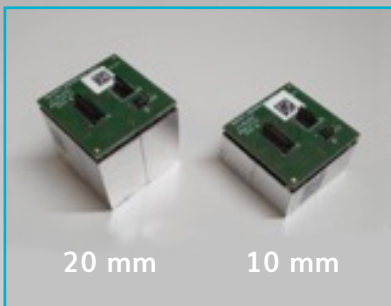
NeuroLF®



Preliminary Performance Data



NEMA NU2-2018 Spatial Resolution



Source nuclide: Na22
Source dimension: < 1 mm in each direction
Source activity: 0.7 MBq
FBP Methodology: STIR FBP2D

NeuroLF – 10 mm		FWHM / mm, FBP			
Point source radial pos. / mm	Line profile	Axial center	3/8 of axial FoV	Axial Average	
10	radial	2.1	2.3	2.2	} 2.7
	tangential	3.6	3.5	3.5	
	axial	3.2	1.9	2.5	
100	radial	2.9	2.7	2.8	} 3.5
	tangential	4.3	4.7	3.4	
	axial	3.1	3.3	3.2	

NeuroLF – 20 mm		FWHM / mm, FBP			
Point source radial pos. / mm	Line profile	Axial center	3/8 of axial FoV	Axial Average	
10	radial	3.1	3.0	3.1	} 3.1
	tangential	3.7	3.8	3.8	
	axial	1.7	2.9	2.3	
100	radial	2.9	3.8	3.3	} 3.7
	tangential	4.5	4.3	4.4	
	axial	3.3	3.3	3.3	