ArterialPET[™] Scanner



Unlock the true potential of theranostics treatments

Providing improved data quantification for PET imaging protocols*

The ArterialPET[™] is a compact, non-invasive Positron Emission Tomograph (PET) scanner that circles the wrist or ankle. It determines the arterial input function essential for quantitative PET imaging, allowing all PET to provide additional information on the state of a disease or effectiveness of therapy. ArterialPET[™] is a non-invasive alternative to the arterial catheter and allows the use of quantitative metabolic modeling which is a substantial improvement on the estimates that Standard Uptake Value (SUV) provides.



ArterialPET[™] Wrist Ring



(a) Transaxial View Cross section of wrist arteryt

Using PET to Improve PET

This small, light-weight PET scanner placed around the wrist or ankle allows tomographic imaging of the patient artery away from core background counts completely independent of the clinical PET scanner. The accurate measurement of the radiotracer Input Function from these images allows improved quantification for the PET diagnostics already being used today, and is a key parameter in emerging theranostic treatments.

Non-Invasive and More Accurate Input Function*

- ✓ Small PET Detector Ring for wrist or ankle, depending on protocol
- ✓ Light Weight: Detector Ring Assembly ~1.8 lbs (0.82kg)
- ✓ Input Function modeling without catheter sampling

*Initial unit(s) in beta testing. Currently for investigational purposes only.

ArterialPET[™] Scanner

Time Activity Curve - Blood Sample Analysis TAC vs. Wrist Scanner TAC



Patient Input Function Curve, ArterialPET[™] Prototype*

Detector Specifications

| Ring Specification | Value |
|---------------------------|------------------|
| Scintillator Material | LYSO |
| Outer Diameter | 152mm |
| Bore Diameter | 88mm |
| Transaxial FOV | 75mm |
| Axial FOV | 18mm |
| Crystal Size | 2.2 x 2.2 x 20mm |
| Block Array Size | 4 x 8 |
| Total Detector Blocks | 24 |
| Resolution Center FOV | <1.8 mm |
| Energy Resolution | 18% |

†Courtesy Brookhaven National Laboratory

Corporate Office

25 Health Sciences Drive Stony Brook, NY 11790

Phone: (631) 775-8909 Email: info@synchropet.com

© Copyright 2020 SynchroPet



Lightweight, low power detector ring provides multiple options for patient placementt

System Specifications

| System Specification | Value |
|----------------------|----------------------------------|
| Detector Ring Weight | 1.8 lbs. (0.82 kg) |
| System Cart Weight | 90 lbs. (23 kg) |
| Power Input | 110 - 240VAC, 50/60Hz 10 Amps |

Preliminary Specifications subject to change⁸⁰

*INVESTIGATIONAL DEVICES, CURRENTLY IN DEVELOPMENT. LIMITED BY FEDERAL (OR UNITED STATES) LAW TO INVESTIGATIONAL USE. NOT CURRENTLY AVAILABLE FOR COMMERCIAL SALE



Creating new opportunities in PET & MRI imaging.