



PET CT Amyloid

Approval: K. Shamlou, MD

rev:2

7/15/2026

PET/CT Amyloid

Radiopharmaceutical: 18F-Florbetapir (Amyvid)

T ½: 110 min

Dose: 10 mCi +/- 20%

Energy: 511 keV

CPT: 78814

HCPCS: A9586

Indications

Clinical indications for PET/CT scan for brain metabolism include, but are not limited to:

1. Evaluation for Beta Amyloid plaque burden.
2. Evaluation of Alzheimer's disease (AD) and other causes of cognitive decline
3. Selection of patients who are indicated for amyloid beta-directed therapy as described in the prescribing information of the therapeutic products

Patient Instructions

- Total time at facility is 2 to 2 ½ hrs.
 - Upon scheduling, if the patient has any pertinent studies, please instruct either the patient or the ordering physician's office to make them available for correlation.
- Patient is to hydrate well prior to and following administration of Amyvid

Equipment

Philips Vereos PET/CT

Procedure

- Patient history and initial IV placement to be performed prior to being placed in secluded room.
- Inject 10mCi Amyvid and flush with minimum mL saline
- Remove IV and show patient to uptake room, provide patient with cup of water to continue hydration
- Patient to be scanned 50 min post injection

Acquisition Protocol

Scan Type:

- Position patient supine and head first on scan table and move patient into scanner until innermost positioning laser is below the chin. Ensure vertical, horizontal and rotational aspects of the head are properly aligned. Bed should be at a height of 190

- Enter patient data on acquisition computer.

- Select PET/CT Amyloid protocol:

Brain = 20 min per bed position for a total of 1 bed position OR 4x5 dynamic 1 bed position.

- Again, ensure vertical, horizontal and rotational aspects of the head are properly aligned.

- Perform dual plane CT Surview at 90° and 180° (Scout views).

- Set parameters for CT and PET.

- Perform Low Dose CT Scan for attenuation correction and follow prompts to move patient into PET gantry to perform PET scan

- When scanning is complete follow prompts to 'End Study'.



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CT Parameters

- Scout:

Brain

Length 350 mm

kV 120

mA 30

- Low Dose CT scan:

Brain

Slice Thickness 2 mm

Increment 2 mm

kV 120

mAs (mA) 49 (81) For average adult

iDose level 3

Collimation 64 x 0.625

Pitch 0.828

Matrix 512

Filter Brain Standard (UB)

FOV 600 mm

Second CT recon with 256mm FOV.

PET Parameters:

4 x 5 minute dynamic frame or 1 x 20 minute static frame acquisition in 3D mode

FOV 256mm

3 iterations/21 subsets. Gaussian ON: FWHM: 1mm. PSF: OFF

Processing

Image intensity should be set using the 10 band color scale. Set intensity such that there is 1 white pixel in the brain.

Save screens include:

AXIAL AC RECON, AXIAL CT, AXIAL NOAC RECON

COR AC RECON, COR CT

SAG AC RECON, SAG CT

FUSED AXIAL SMART RGB, FUSED AXIAL RAINBOW 2

FUSED COR SMART RGB

FUSED SAG SMART RGB

Fused data sets should be maximized when saving in a secondary capture format.

Ensure “activity concentration” is checked for all AC data sets.

Everything except for the “Raw” AC and NOAC data sets are sent to PACS