that received industry funding, the median amount was $50,000. A total of 220 of 269 respondents (81.8%) answering questions about COI indicated that these issues are very or moderately relevant to patient advocacy organizations, and 94 of 171 (55.0%) responding believed that their organizations' COI policies were very good. A total of 22 of 285 leaders (7.7%) reported pressure to conform their positions to the interests of corporate donors.

*JAMA Internal Medicine*

## Plasma Tau and Sports Concussions

In an article e-published on January 6 in *Neurology*, Gill et al. from the National Institute of Nursing Research (NINR; Bethesda, MD), the University of Rochester School of Medicine and Dentistry (NY), and Quanterix Corporation (Lexington, MA) reported on a study designed to determine whether plasma tau changes after sport-related concussions in collegiate athletes correlate with elapsed time before returning to play. The study included 632 soccer, football, basketball, hockey, and lacrosse athletes from the University of Rochester who underwent preseason blood plasma sampling and cognitive testing. Forty-three athletes experienced a concussion during the season, and, for comparison, a control group of 37 teammate athletes without concussions was also included, as well as a group of 21 healthy nonathletes. The 43 athletes who experienced concussions underwent plasma tau sampling at 6, 24, and 72 hours and at 7 days after injury. Athletes who returned to play after concussions were categorized as having long ($>$10 d; $n = 23$) or short ($\leq$10 d; $n = 18$) recovery periods. Total tau was measured using an ultrasensitive immunoassay. The authors found that both those with concussions and athlete controls had significantly higher mean tau at baseline than nonathletes. Elevated plasma tau concentrations within 6 hours after a sports-related concussion were significantly correlated with prolonged time before returning to the sport, "suggesting that tau levels may help inform" or predict recovery. The correlations between plasma tau concentrations and time required for recovery were consistent across all sports and both sexes. "Keeping athletes safer from long-term consequences of concussions is important to players, coaches, parents, and fans. In the future, this research may help to develop a reliable and fast clinical lab test that can identify athletes at higher risk for chronic postconcussion symptoms," said NINR Director Patricia A. Grady, PhD, RN, in a related press release.

*Neurology*

# FROM THE LITERATURE

*Each month the editor of Newsline selects articles on diagnostic, therapeutic, research, and practice issues from a range of international publications. Most selections come from outside the standard canon of nuclear medicine and radiology journals. These briefs are offered as a monthly window on the broad arena of medical and scientific endeavor in which nuclear medicine now plays an essential role. The lines between diagnosis and therapy are sometimes blurred, as radiolabels are increasingly used as adjuncts to therapy and/or as active agents in therapeutic regimens, and these shifting lines are reflected in the briefs presented here. We have also added a small section on noteworthy reviews of the literature.*

## 11C-MET PET/CT and Parathyroid Adenomas

In an article e-published on January 14 in *Langenbeck's Archives of Surgery*, Noltes et al. from the University of Groningen (The Netherlands) reported on the diagnostic utility of 11C-methionine (11C-MET) PET/CT after initial inconclusive or negative localization in preoperative primary hyperparathyroidism. The retrospective study looked at the records of 28 such patients in whom preoperative localization by 11C-MET PET/CT was correlated with later surgical localization, duration of surgery, histopathology, and follow-up data. Differences in duration of surgery with and without correct preoperative localization were also analyzed. PET/CT accurately localized the parathyroid adenoma in 18 (64%) patients after previously negative or inconclusive imaging, with 3 false-positives and 7 false-negatives. The sensitivity of 11C-MET PET/CT was 72%, and the duration of surgery was significantly shorter in patients with accurate imaging localization. The authors concluded that "a preoperatively correct localized adenoma leads to a more focused surgical approach…potentially reducing duration of surgery and potentially health care costs."

*Langenbeck's Archives of Surgery*

## 18F-Flutemetamol PET and Early-Onset Dementia

Zwan et al. from the VU University Medical Center (Amsterdam, The Netherlands) and Maastricht University (The Netherlands) reported in the January 17 issue of *Alzheimer's Research and Therapy* (2017;9:2) on a study assessing the diagnostic significance and management results of 18F-flutemetamol PET imaging in patients with early-onset dementia. The study included 211 patients with a suspected diagnosis of early-onset dementia on the basis of Mini Mental State Examination scores $\geq$18 and age at assessment $\leq$70 y, with diagnostic confidence at $<$90% after routine clinical work-up. All patients underwent 18F-flutemetamol PET imaging, with results visually categorized as

amyloid-negative or -positive. Diagnostic confidence was rated before and after PET imaging, and the effects of PET results on subsequent management were noted. Imaging results were amyloid-positive in 133 (63%) patients. Out of 144 patients with preimaging diagnoses of Alzheimer disease (AD), 110 (76%) were amyloid-positive. Out of 67 patients with non-AD diagnoses before imaging, 23 (34%) were amyloid-positive. ^{18}F-flutemetamol PET imaging changed existing diagnoses in 41 (19%) patients and raised diagnostic confidence from 69% ± 12% to 88% ± 15%. PET imaging led to changes in management in 79 (37%) patients, mainly in initiation of AD medication. The authors concluded that these results "suggest that amyloid PET may have added value over the standardized diagnostic work-up in early-onset dementia patients with uncertain clinical diagnosis."

*Alzheimer's Research and Therapy*

## ^{11}C-MET PET and High-Grade Glioma Recurrence

In an article e-published on January 11 ahead of print in the *Journal of Neuro-Oncology*, Lucas et al. from St. Jude Children's Research Hospital (Memphis, TN), Virginia Commonwealth University (Richmond, VA), Thomas Jefferson University (Philadelphia, PA), and the University of Tennessee Health Services Center (Memphis, TN) reported on the predictive potential of ^{11}C-methionine (^{11}C-MET) PET in children with high-grade gliomas. The study included 31 children who underwent ^{11}C-MET PET imaging at diagnosis and again at treatment failure. MR imaging results were coregistered with PET to assess agreement in areas with ^{11}C-MET uptake. The prognostic significance of PET-delineated noncontrast-enhancing tumor, defined as the region of tumor that did not enhance on MR FLAIR but showed ^{11}C-MET avidity, was assessed. The agreement between PET and MR varied with MR sequence, but PET did not add to the assessed tumor volume in most cases. The initial PET-identified region overlapped with recurrent tumor

in 90% of patients. A >10% PET-delineated noncontrast-enhancing portion in a tumor was associated with average earlier time to progression (5.8 mo for >10%, 10.5 mo for ≤10%). The authors concluded that ^{11}C-MET PET "delineates regions at increased risk for recurrence and may improve the definition of failure, prognostic assessment, and target definition for radiotherapy."

*Journal of Neuro-Oncology*

## PET/CT and Chemotherapy Response in Early-Stage HL

Milgrom et al. from the MD Anderson Cancer Center (Houston, TX) and Baylor College of Medicine (Houston, TX) reported on February 1 in the *International Journal of Radiation Oncology, Biology, Physics* (2017;97:333–338) on the incremental utility of PET/CT parameters beyond the 5-point Deauville score for risk stratification in chemotherapy for early-stage classical Hodgkin lymphoma. The retrospective study included 202 patients treated for stage I–II Hodgkin lymphoma who had undergone ^{18}F-FDG PET/CT imaging before and after chemotherapy. Among the variables assessed were soft tissue volumes, $SUV_{max}$, metabolic tumor volume, and total lesion glycolysis. The primary study endpoint was freedom from progression (FFP). For all patients in the study, the 5-y FFP rate was 89%. All PET/CT parameters were strongly associated with both Deauville scores and FFP rates. Although overall Deauville scores were highly predictive for FFP, this was less apparent in the Deauville 1–4 subset (187 patients). The authors focused on specific PET/CT parameters that might improve risk stratification for this group. They found that the amount of reduction in soft tissue volume on PET/CT was predictive of outcome. A subsequent model combining the Deauville score and soft tissue volume reduction predicted FFP more accurately than either measurement alone in this subgroup of patients. The authors concluded

that "the relative reduction in tumor size is an independent predictor of outcome" and that "combined with the Deauville score, it might improve risk stratification and contribute to response-adapted individualization of therapy."

*International Journal of Radiation Oncology, Biology, Physics*

## Imaging Periprosthetic Knee Infection

In an article e-published on January 3 ahead of print in *Clinical Orthopaedics and Related Research*, Verberne et al. from the Noordwest Ziekenhuisgroep (Alkmaar, The Netherlands) and the VU University Medical Center (Amsterdam, The Netherlands) detailed the results of a metaanalysis of published reports comparing the accuracy of bone scintigraphy, ^{18}F-FDG PET, antigranulocyte scintigraphy, leukocyte scintigraphy, and combined leukocyte and bone marrow scintigraphy in assessment of periprosthetic knee infection. The authors searched major international medical databases, for information on clinical studies identifying the sensitivity and specificity of each imaging technique, comparable microbiologic and histologic analyses, intraoperative findings, and clinical follow-up >6 mo. Twenty-three studies (1990–2015) reporting on a total of 1,027 diagnostic images of symptomatic knee prostheses were included. In assessing quality of studies for inclusion, the authors noted lack of uniform criteria for diagnosis of periprosthetic infection and inconsistencies in descriptions of flow and diagnostic timing. The metaanalysis showed bone scintigraphy to be the least specific modality (at 56%), compared to leukocyte scintigraphy (77%), antigranulocyte scintigraphy (95%), combined leukocyte and bone marrow scintigraphy (93%), and ^{18}F-FDG PET (84%). Leukocyte scintigraphy (88%) and antigranulocyte scintigraphy (90%) were more sensitive than PET (70%). Because the reported data included broad overlaps in confidence intervals, no differences in sensitivity were found between combined bone scintigraphy or combined leukocyte

and bone marrow scintigraphy. The authors summarized their findings: "Based on current evidence, antigranulocyte scintigraphy and combined leukocyte and bone marrow scintigraphy appear to be highly specific imaging modalities in confirming periprosthetic knee infection." Although highly sensitive, bone scintigraphy lacked the specificity needed to differentiate among various conditions that cause painful knee prostheses. In addition, PET "may not be the preferred imaging modality because it is more expensive and not more effective in confirming periprosthetic knee infection."

*Clinical Orthopaedics and Related Research*

## Autopsy and ^{123}I-FP-CT SPECT in DLB

Thomas et al. from Newcastle University (Newcastle Upon Tyne), the University of Cambridge School of Clinical Medicine, Royal London Hospital, University College London, and the North Essex Partnership University NHS Foundation Trust (all in the UK) reported in the January 17 issue of *Neurology* (2017;88:276–283) on a study correlating autopsy findings with those from dopaminergic imaging with [123]I-*N*-fluoropropyl-2b-carbomethoxy-3b-(4-iodophenyl) nortropane (^{123}I-FP-CIT) SPECT in patients diagnosed with dementia with Lewy bodies (DLB) or Alzheimer disease (AD). The study included 55 patients (33 diagnosed with DLB, 22 with AD) who were older than 60 y, had undergone ^{123}I-FP-CIT imaging at baseline diagnosis, and who were then followed in prospective studies until death. Detailed autopsies were conducted, and postmortem neuropathology-based diagnoses were correlated with earlier imaging and clinical findings. When compared with autopsy results, ^{123}I-FP-CIT showed a balanced diagnostic accuracy of 86% (sensitivity 80%, specificity 92%) compared with clinical diagnosis at 79% (sensitivity 87%, specificity 72%). Among patients originally diagnosed with DLB, 3 patients (10%) met the pathologic criteria for DLB but had normal ^{123}I-FP-CIT

findings. The authors concluded that these data suggest that ^{123}I-FP-CIT imaging "is a valid and accurate biomarker for DLB" in dementia and that "the high specificity compared with clinical diagnosis (20% higher) is clinically important." They added that although "an abnormal ^{123}I-FP-CIT scan strongly supports Lewy body disease, a normal scan does not exclude DLB with minimal brainstem involvement."

*Neurology*

## SPECT/CT and Lung Perfusion After Breast RT

In an article in the February 1 issue of the *International Journal of Radiation Oncology, Biology, Physics* (2017;97:296–302) Liss et al. from the University of Michigan (Ann Arbor) and the Dartmouth Hitchcock Medical Center (Lebanon, NH) reported on the use of pre- and postradiation therapy attenuation-corrected SPECT/CT scans to quantify lung perfusion changes after breast/chest wall radiation and correlate decreased perfusion with adjuvant radiation dose for breast cancer. The study was conducted as part of a larger clinical trial focusing on radiation therapy techniques and lung function in node-positive breast cancer. In this trial, patients received breast/chest wall and regional nodal irradiation including superior internal mammary node radiation (50–52.2 Gy with boost to tumor bed/mastectomy scar). All patients underwent quantitative SPECT/CT lung perfusion scanning before and 1 y after radiation. For this substudy, pre- and postradiation scans from 50 patients were coregistered and compared for SPECT/CT perfusion changes (assessed in 10-Gy increments) and their relation to radiation dose. Almost all patients showed decreased perfusion in the left lung on SPECT/CT after therapy. For each 10-Gy increase in radiation to the left lung, the lung perfusion ratio decreased by 0.06. The authors noted the potential utility of this technique in quantification of lung perfusion defects in breast cancer patients by registering attenuation-corrected

SPECT/CT scans directly with radiation treatment fields for precise dose estimates.

*International Journal of Radiation Oncology, Biology, Physics*

## PET/CT and Interval Mets in Esophageal Cancer

Gabriel et al. from the Roswell Park Cancer Institute (Buffalo, NY) reported on January 5 ahead of print in the *Annals of Surgical Oncology* on the ability of ^{18}F-FDG PET/CT to accurately identify interval metastatic disease after neoadjuvant chemoradiation in patients with esophageal cancer. The study included 258 such patients who had been treated with neoadjuvant chemoradiation and had available pre- and posttreatment PET/CT results. Of these, 64 patients (24.8%) had interval findings suggesting metastatic disease. Only 10 (15.6%) had true-positive findings of metastatic disease (bone 4, liver 3, peritoneum 1, mediastinal lymph nodes 1, and cervical lymph nodes 1). With a postneoadjuvant chemoradiation positive predictive value of PET/CT for interval metastases at 15.6%, the overall yield for detecting metastases in the interval after pretherapy imaging was 3.9% (10/258). Of the 54 patients (20.9% of the initial starting group) with false-positive post therapy imaging findings, 24.6% underwent biopsy and 45.2% underwent immediate additional imaging. Of the total of 208 patients who proceeded to surgery, 163 (78.4%) had no new findings on post therapy PET/CT, and 45 (21.6%) had new false-positive findings, mainly in the lung (15) and liver (14). The authors concluded by emphasizing the poor yield for PET/CT detection of new metastatic disease and that "postneoadjuvant chemoradiation PET/CT often leads to a high proportion of false-positives and subsequent investigational work-up."

*Annals of Surgical Oncology*

## Clinical Trials and PET

In an article in the January 1 issue of *Theranostics* (2017;7:390–399) Chen et al. from Sun Yat-sen University

Cancer Center (Guangzhou, People's Republic of China) and the University of Michigan (Ann Arbor) reported on a large analysis based on review of ClinicalTrials.gov data on the role of PET imaging in oncology clinical trials over a 10-y period. Out of 25,599 oncology trials registered, the authors classified only 519 as trials assessing the utility or contributions of PET. For part of the analysis, PET-based trials were compared with non–PET-based clinical trials. PET trials were found to be predominantly phase 1 or 2 studies (86.2%) and were more likely to be single-arm (78.9%) with nonrandomized assignment (90.1%) than other oncology trials (57.9% and 66.7%, respectively). PET trials were generally smaller in scale than other oncology studies, often enrolling <100 participants. The authors noted that these smaller numbers may lack the power to detect theranostic effects. As with all oncology trials, funding for PET studies decreased by ~5% over the study period, but PET trials were more likely to be conducted in a single region without international collaboration. The authors concluded that "these findings raise concerns that clinical trials evaluating PET imaging in oncology are not receiving the attention or efforts necessary to generate high-quality evidence."

*Theranostics*

## 68Ga-PSMA PET and Biochemical Failure in Prostate Cancer

Hruby et al. from the University of Sydney, the University of New South Wales (Sydney), and Royal North Shore Hospital (Sydney) (all in Australia) reported on December 28 ahead of print in *Radiotherapy and Oncology* on a study of the utility of 68Ga–prostate-specific membrane antigen (68Ga-PSMA) PET in determining the location of disease recurrence in patients with rising prostate-specific antigen levels after definitive external-beam radiation. The study included 419 men treated with image-guided radiation (78 or 82 Gy). Those who experi-

enced biochemical failure after at least 24 mo underwent 68Ga-PSMA PET imaging. Local recurrence was defined as increased uptake within the prostate or seminal vesicles; distant disease was defined as lymph node, bone, or visceral metastases. At a median follow-up of 50 mo, 70 patients (17%) had experienced biochemical failure, 13 of whom had died. Of the other 57, 5 had metastases detected on conventional imaging and 2 were lost to follow-up. Of the remaining 50 men, 48 underwent 68Ga-PSMA PET. In all 48 (100%), imaging was unequivocally positive, with metastases detected beyond the prostate in 25 (52%): 5 in bones, 16 in the lymph nodes, 3 in both lungs and lymph nodes, and 1 in the lungs. Fifteen men (31%) experienced recurrences within the prostate or in the lymph nodes (11), bones (3), or both (1). Eight (17%) men experienced an isolated local recurrence.

*Radiotherapy and Oncology*

## 18F-Flortaucipir PET in AD

In an article e-published on January 11 ahead of print in *Brain*, Pontecorvo et al. from Avid Radiopharmaceuticals (Philadelphia, PA), Butler Hospital (Providence, RI), Neuropsychiatric Research Center of Southwest Florida (Fort Myers), and Molecular Neuroimaging Inc. (New Haven, CT) reported on a study of 18F-flortaucipir (18F-AV-1451, also known as 18F-T807) tau binding on PET in relation to amyloid accumulation, age, cognitive impairment, and other factors. Both 18F-flortaucipir and 18F-florbetapir PET imaging were performed in 217 individuals (16 young and 58 older cognitively normal subjects, 95 individuals with mild cognitive impairment [MCI], and 48 individuals with clinically defined possible or probable Alzheimer disease [AD]). Images were evaluated both visually and quantitatively. In subjects in whom 18F-florbetapir PET was positive (Aβ+), the 18F-flortaucipir SUV ratio was higher with more advanced clinical stage and was significantly higher for Aβ+ MCI and AD subjects than for Aβ– subjects. Older cognitively normal individuals who were Aβ– had higher

18F-flortaucipir SUV ratios in mesial temporal lobe regions (amygdala, hippocampus/choroid plexus region of interest) than younger cognitively normal subjects, but with no increased SUV ratios in neocortical regions. Analysis of results showed no differences in regional or composite posterior neocortical 18F-flortaucipir SUV ratios in Aβ– older cognitively normal adults or those diagnosed with AD or MCI. 18F-flortaucipir distribution in Aβ+ subjects was closely related to the distribution of tau reported in postmortem pathology studies, with the inferior and lateral temporal lobes most often affected (the same regions in which the first signs of increased 18F-florbetapir retention appeared in Aβ+ cognitively normal subjects). Large variability was noted in the extent and density of 18F-flortaucipir tau binding among Aβ+ subjects. Not all Aβ+ subjects had elevated 18F-flortaucipir SUV ratios. Within the Aβ+ group, increasing levels of 18F-florbetapir uptake were associated with increased cognitive impairment. The authors concluded that these results suggest that "development of tau beyond the mesial temporal lobe is associated with, and may be dependent on, amyloid accumulation" and "are consistent with the hypothesis that cortical tau is associated with cognitive impairment."

*Brain*

## Metabolic Nodal Response on PET in Esophageal Cancer

Findlay et al. from the Oxford OesophagoGastric Centre, the Oxford Biomedical Research Centre, Churchill Hospital, John Radcliffe Hospital, and the University of Oxford (all in Oxford, UK) reported on January 17 ahead of print in the *British Journal of Surgery* on the potential role of 18F-FDG PET/CT in assessing tumor and nodal response as a prognostic marker of recurrence and survival after neoadjuvant chemotherapy and surgery in esophageal cancer. The study included 294 patients who were staged with PET/CT before neoadjuvant chemotherapy and then restaged before surgery. Pathologic tumor, metabolic tumor,

and metabolic nodal responses were quantified. Metabolic tumor and metabolic nodal responses before resection were found to be independently prognostic. After surgery, metabolic nodal rate (but not metabolic tumor rate), pathologic tumor response, resection margin status, and pathology node category were prognostic. Patients with ^{18}F-FDG–avid nodal disease after neoadjuvant chemotherapy were found to be at higher risk of recurrence and/or death at 1 and 2 y (43% and 71%, respectively) than patients with nonavid nodal metastases. The authors concluded that metabolic nodal response is "a novel prognostic factor, independent of conventional N status," that primary and nodal tumors may respond discordantly," and that patients with ^{18}F-FDG–avid nodes after neoadjuvant chemotherapy have poor prognoses.

*British Journal of Surgery*

## Bone SPECT Timing After Fracture

In an article e-published on January 6 ahead of print in the *Journal of Orthopaedic Science*, Kim et al. from Inje University College of Medicine (Busan), the University of Ulsan College of Medicine (Seoul), Hallym University College of Medicine (Seoul), and CHA University (Pangyo) (all in the Republic of Korea) reported on a study designed to assess the comparative utility of early and late bone SPECT imaging to predict osteonecrosis of the femoral head after internal fixation of femoral neck fractures. The retrospective study included 44 patients (33 women, 11 men; mean age, 66.9 y) who underwent such fixation as well as early (within 2 wk after surgery) and late (at 3 mo after surgery) bone SPECT. Patients were followed for an average of 34 mo. Nine patients developed osteonecrosis of the femoral head, but no patient experienced nonunion. Early SPECT showed normal femoral head uptake in 17 patients and decreased uptake in 27. None of the patients with normal uptake experienced osteonecrosis. Two of the patients with decreased femoral head uptake on early

bone SPECT developed osteonecrosis before the 3-mo assessment, 18 had recovered to normal uptake at 3-mo SPECT, and the remaining 7 still showed decreased uptake on 3-mo SPECT. All 7 of these patients developed osteonecrosis. The authors concluded that "bone SPECT can reliably predict the possibility of osteonecrosis of the femoral head after femoral neck fracture at least 3 mo after surgery, while early bone SPECT showed low specificity."

*Journal of Orthopaedic Science*

## PET/CT and Sarcoidosis Monitoring

Maturu et al. from the Postgraduate Institute of Medical Education and Research (Chandigarh, India) reported in the December 23 issue of *Sarcoidosis, Vasculitis, and Diffuse Lung Diseases* (2016;33:372–380) on the potential role of serial ^{18}F-FDG PET/CT imaging in monitoring disease activity in sarcoidosis. The study included 27 patients with sarcoidosis treated with systemic corticosteroids. Each patient underwent PET/CT imaging before initiation of therapy and at end of therapy. Metabolic responses on PET imaging were classified as: complete metabolic response, partial metabolic response, stable metabolic disease, or progressive metabolic disease. Those with complete or partial metabolic responses were considered to be PET responders, and the remaining groups were considered to be PET nonresponders. Follow-up data were acquired at 3, 6, and 12 mo after completion of therapy. The authors noted significant declines in the median $SUV_{max}$ of the mediastinal lymph nodes, peripheral lymph nodes, and lung parenchyma at follow-up imaging. Eight patients achieved complete metabolic response, 6 patients achieved partial metabolic response, and 13 patients were PET nonresponders. Clinical remission rates did not differ in responders and nonresponders. The relapse rate was significantly higher in nonresponders than responders (61.5% and 14.2%, respec-

tively). No patient who experienced a complete metabolic response experienced a relapse during the study period.

*Sarcoidosis, Vasculitis, and Diffuse Lung Diseases*

## PET/CT and HCC Radioembolization

In an article in the December 21 issue of the *World Journal of Gastroenterology* (2016;22:10406–10414) Abuodeh et al. from the H. Lee Moffitt Cancer Center and Research Institute (Tampa, FL) reported on a study designed to assess the prognostic value of ^{18}F-FDG PET/CT before hepatic radioembolization in patients with hepatocellular cancer. The retrospective study included 34 patients (25 men, 9 women; median age, 68 y) who underwent PET/CT before radioembolization and were then evaluated clinically after 1 mo and at 2–3-mo intervals (median total follow-up of 12 mo). PET/CT was positive in 19 (56%) patients with $SUV_{max}$ of 3–20. Women were more likely than men to be PET/CT positive. ^{18}F-FDG–avid results were associated with worsened local and distant liver control and poorer progression-free survival after radioembolization. The authors called for larger studies to validate and further explore the role of PET/CT as an imaging biomarker in this setting.

*World Journal of Gastroenterology*

## PET/CT, Peritoneal Cancer, and Peritonitis

Wang et al. from the First People's Hospital of Yunnan Province (Kunming), and Southern Medical University (Guangzhou) (both in China) reported in the January issue of *Medicine (Baltimore)* (2017;96: e5867) on the ability of ^{18}F-FDG PET/CT to differentiate between tuberculous peritonitis and peritoneal carcinomatosis in the parietal peritoneum. The retrospective study included PET/CT results from the parietal peritoneum from 25 patients with tuberculous peritonitis and 51 with peritoneal carcinomatosis. Lesion

locations and distribution characteristics were noted along with PET and CT patterns. The most common findings characterizing tuberculous peritonitis compared with peritoneal cancer were: ≥4 involved regions (80.0% and 19.6%, respectively), uniform distribution (72.0% and 5.9%, respectively), string-of-beads ^{18}F-FDG uptake pattern (76.0% and 7.8%, respectively), and smooth, uniform thickening (60.0% and 7.8%, respectively). More frequent findings in peritoneal cancer compared with tuberculous peritonitis were: susceptible areas for peritoneal implantation distribution (78.4% and 28.0%, respectively), clustered ^{18}F-FDG uptake (56.9% and 20.0%, respectively), focal ^{18}F-FDG uptake (21.6% and 4.0%, respectively), irregular thickening (51.0% and 12.0%, respectively), and nodules (21.6% and 4.0%, respectively). The authors concluded that these data showed "that PET/CT findings in the parietal peritoneum are useful for differentiating between tuberculous peritonitis and peritoneal cancer."

*Medicine (Baltimore)*

## Reviews

Review articles provide an important way to stay up to date on the latest topics and approaches by providing valuable summaries of pertinent literature. The Newsline editor recommends several systematic and general reviews accessioned into the PubMed database in January. In a 2-part review in the January 15 issue of *Oncology (Williston Park)*, Cheson and Kostakoglu from Georgetown University Hospital (Washington, DC) and Mount Sinai Medical Center (New York, NY), respectively, reported on "FDG PET for early response assessment in lymphomas." The first article covered PET imaging in Hodgkin lymphoma, and the second reviewed the utility of quantitative PET evaluation in diffuse large B-cell lymphomas. Schelhaas et al. from the Westfälische Wilhelms-Universität Münster (Germany), Imperial College London (UK), European Organisation for Research and Treatment of Cancer Headquarters (Brussels, Belgium), VU University Medical Center (Amsterdam, The Netherlands), the University of Manchester (UK), Wayne State University (Detroit, MI), and the University of Cambridge (UK) published "Preclinical applications of 3'-deoxy-3'-^{18}F-fluorothymidine in oncology: a systematic review" in the January 1 issue of *Theranostics* (2017;7:40–50). In the January 5 issue of the *Journal of Psychiatric Research* (2017;88:72–79), Kirino et al. from Keio University School of Medicine (Tokyo, Japan), Inokashira Hospital (Tokyo, Japan), the University of Toronto (Canada), and the Center for Addiction and Mental Health (Toronto, Canada) reported results on "Representativeness of clinical PET study participants with schizophrenia: a systematic review." In an article e-published on January 12 ahead of print in *JAMA Oncology*, Lindenberg et al. from the National Institutes of Health (Bethesda, MD) described "Imaging locally advanced, recurrent, and metastatic prostate cancer: a review." Travin, from the Albert Einstein College of Medicine (Bronx, NY) reviewed "Current clinical applications and next steps for cardiac innervation imaging" in the January issue of *Current Cardiology Reports* (2017;19:1).