215 QUANTITATIVE INTERIM PET IS MORE ACCURATE THAN QUALITATIVE ASSESSMENT IN PREDICTING OUTCOME IN DLBCL

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Background: Approximately half of patients with diffuse large B cell lymphoma (DLBCL) are cured with standard initial therapy. Although the International Prognostic Index (IPI) defines prognostic groups, it does not predict outcome for an individual patient. In Hodgkin lymphoma, functional imaging with FDG-PET is highly predictive of outcome when performed early in treatment. In DLBCL, however, positive vs. negative interim FDG-PET has been less useful.

We explored the utility of evaluating quantitative change in FDG uptake, rather than achievement of metabolic complete response, at early interim PET as a predictor of outcome in DLBCL.

Materials and Methods: Patients with newly diagnosed DLBCL who were to receive standard R-CHOP chemotherapy were prospectively enrolled and provided informed consent. FDG PET scans were performed prior to treatment (PET-1) and after 2 cycles (PET-2) of R-CHOP. Interim scans were scored as positive or negative according to ECOC criteria. For quantitative analysis, percent change in SUV was calculated after correcting for background.

Results: Thirty-five patients have been enrolled to date, of which 6 are not yet evaluable. Median follow up of evaluable patients is 24 months (range 0.5-47 months). All patients achieved complete remission (CR) by PET criteria at end of treatment. All patients achieved complete remission (CR) by PET criteria at end of treatment.

Conclusion: This study demonstrates that quantitative evaluation in SUV on interim PET may be more predictive of outcome than qualitative assessment (positive or negative) and that this approach should be prospectively tested in comparison to other risk-definition strategies.

216 DISCRIMINATORY POWER OF THE 111-INDIUM SCAN (111-IN) IN THE PREDICTION OF ALTERED BIODISTRIBUTION OF RADIO-IMMUNOCONJUGATE IN THE 90-YTTRIUM IBRITUMOMAB TIUXETAN THERAPEUTIC REGIMEN: DATA FROM 5 TRIALS AND 9 YEARS OF CLINICAL EXPERIENCE IN 45 COUNTRIES

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Background: At the time of regulatory approval of ibritumomab tiuxetan (Zevalin™-Z) in 2002 (USA) and subsequently elsewhere, 3 countries (USA, Switzerland, Japan) required imaging with the radio-immunoconjugate could cause unintended end organ damage; 42 other countries (incl. EU, Canada) approved Z without requiring a 111-In scan.

Methods: Establishment of the false positive and true positive rate (positive predictive value) of the 111-In scan by a trained reader in central review. 3/233 (1.3%) were found to have true AB and 7/233 (3%) were found to have had a false positive local judgement of AB. Three pts with true AB on central review who had proceeded with 90-Y Z treatment based on a scan result locally judged normal, showed safety and efficacy outcomes within the range of those shown by other pts on study. Comparison of post-marketing safety databases between countries with (USA, CH, JP) and without (Rest of World) 111-In requirement showed no differences in the general pattern of safety signals reported, with resp 3% and 4% of pts reporting grade III/IV bone marrow suppressive states, and anaphylactoid responses reported at 0.3% in both geographic clusters.

Conclusion: The 111-In scan shows poor discriminatory power in identifying cases of AB. Analysis of safety results of pts treated with 90-Y Z despite true AB does not indicate that removal of the 111-In requirement from the Z labeling in countries currently requiring it would constitute a safety risk.

217 18FDG UPTAKE CHANGES IN LIVER AND MEDIASTINUM DURING CHEMOTHERAPY IN DIFFUSE LARGE B-CELL LYMPHOMA (DLBCL): IMPACT ON THE EVALUATION OF INTERIM PET-CT

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Background: 18F-FDG PET scan performed early during the therapy of DLBCL has emerged as a prognostic tool with a great potential in predicting treatment outcome. However, the standardization of interpretation rules for the interim PET-CT scan still remains an unsolved issue. The mediastinum blood pool (MBP)18F-FDG activity and the liver (LIV) 18F-FDG uptake have been proposed as references for the visual analysis of interim-PET scans in lymphoma patients during chemotherapy but consensus about their integration into standardized criteria has not yet reached. Nevertheless, it has been recently suggested that the use of LIV background should replace the MBP (which is currently the international reference for end-of-therapy evaluation) in the analysis of interim PET (Itti et al, JNM 2010). This study aimed at assessing the inter- and intra-subjects variability of MBP and LIV uptakes in patients with DLBCL treated with the R-CHOP regimen.

Materials and Methods: Twenty-five DLBCL patients with 18F-FDG PET-CT performed at baseline, after 2 cycles (interim-PET) and after the end of therapy (final-PET) were analysed retrospectively. SUV/mean values (SUVm) for LIV and MBP, their difference (LIV-SUVm – MBP-SUVm) and their changes were calculated, respectively.

Results: The inter-subjects variability (SD/mean x 100) of MBP-SUVm and LIV-SUVm ranged from 13%-18.5% and 12%-14%, respectively. The LIV-SUVm significantly increased in the interim as compared with baseline-PET and slightly decreased at the final-PET. Viceversa, the MBP-SUVm showed no significant changes during chemotherapy. The difference between LIV-SUVm and MBP-SUVm ranged -0.170 to 0.121, 0.3 to 0.36.08 to 0.76 in basal, interim and final-PET examinations, respectively. The inter-subjects variability was 88%, 41% and 42%, in basal, interim and final PET respectively. In two cases the MBP-SUVm was higher than LIV-SUVm and in 7 the difference was 0.25. An increase in this difference was found in final and particularly, in the interim-PET examination (p<0.05).

Conclusions: Our data suggest that both liver and mediastinum 18F-FDG uptake may be inadequate as references for the evaluation of different degrees of early response to R-CHOP. Particularly, the intra-subject variability of the liver uptake during immunochemotherapy recommends great caution in employing it as a gatekeeper in risk-adapted therapeutic strategies.

218 FIRST RESULTS OF A PROSPECTIVE EVALUATION OF INTERIM PET IN PATIENTS WITH DLBCL TREATED WITH R-CHOP-14 (SAKK 38/07)

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FDG-PET provides functional tissue characterisation and has been used in patients with various lymphomas. Early assessment of therapeutic response by a robust imaging tool is potentially useful in order to stratify patients for risk-adapted therapy strategies. Our main objective was to determine the prognostic value of FDG-PET after 2 cycles of R-CHOP-14, prospectively and under standardized conditions.
Patients with all stages of DLBCL were treated with 6 cycles of R-CHOP-14, followed by 2 cycles of rituximab. FDG-PET exams were performed at baseline, after 2 cycles, after 4 cycles (positive PET after 2 cycles) and at the end of treatment. PET positivity was defined as a measurable and evaluable lesion(s) with a SUVmax (lesion) > SUVmax (blood pool). A modified definition subtracted 15% of the lesion SUVmax and added 15% to the blood pool value. PET exams are evaluated locally and by central review. The primary endpoint was Event Free Survival (EFS) at 2 years.

Between 01/2008 and 02/2010, 156 patients with newly diagnosed DLBCL were prospectively enrolled. By Dec 2010, data from 114 patients were available. Median age was 60 years with a WHO performance status (PS) of 0 in 55%, PS1 in 37% and PS2 in 8% of cases. According to IPI, low risk was found in 54 patients (49%), low-intermediate risk in 22 (20%), high-intermediate risk in 18 (17%), and high risk in 15 (14%) with missing information of 5 patients. PET exams of all patients before and after 2 cycles of R-CHOP-14 are available for this analysis, while 51 patients had an additional PET exam after 4 cycles. 61% (for modified definition > 43%) of PET exams were defined as positive after 2 cycles by local institution, 71% (59%) of these exams remained positive after 4 cycles of therapy while 29% (41%) changed to negative. 100% (90%) of patients with a negative PET after 2 cycles reached a complete response (CR) at the end of treatment. For PET positive patients a CR was achieved in 52% (45%), respectively. Updated results on response will be presented at the conference. Data on EFS at 2 years are not mature at the time of this analysis.

We conclude from this preliminary analysis, that a negative PET after 2 cycles of R-CHOP-14 predicts a very high probability of CR. However, a positive PET cannot be used as a reliable exclusion criterion. PET has to confirm its usefulness in standardized studies like this one before it can be used in risk-adapted therapies.

219 POSITIVE INTERIM 18F[FDG] POSITRON EMISSION TOMOGRAPHY SEEMS NOT TO PREDICT RELAPSE IN PATIENTS WITH DIFFUSE LARGE B-CELL LYMPHOMA

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Diffuse Large B-Cell Lymphoma (DLBCL) is the most frequent aggressive non-Hodgkin’s Lymphoma in adults. Prognostic stratification relies on clinical characteristics and International Prognostic Index (IPI) is the most useful tool to identify high-risk patients (pts), Positron Emission Tomography (PET) with fluorodeoxyglucose (18F[FDG]) has been used to assess chemosensitivity in Hodgkin’s Lymphoma: we investigated the role of 18F[FDG] PET as prognostic tool in DLBCL treated with a R-CHOP-like treatment.

42 pts with newly diagnosed DLBCL treated in our Institute from 2006 to 2008 were enrolled in this prospective study. Median age was 59 years (24-80), 17 pts were male. Stage I-II in 18 and III-IV in 24 pts: IPI was low in 20 pts, intermediate in 17 pts and high in 4. Pts received 6 cycles of R-CHOP-like therapy every 21 days. An interim 18F[FDG]-PET was performed after 3 cycles (interim PET) and at the end of therapy (PET6).

Interim PET result did not modify the treatment; response was assessed with 1997 Cheson’s criteria. 36 pts obtained a complete response (CR). Median follow-up was 32 months, 3 pts relapsed and 8 pts died, 2 of them in CR. Overall survival at 52 months was 81% and event-free survival (EFS) at 52 months was 81%. Interim PET was performed after a median interval from the last therapy of 13 days and was negative in 30 pts and positive in 12. In positive interim PET pts a prognostic stratification was performed based on EFS and the point for the 5-years survival: 4 pts obtained a CR at cycle 2 in the next 30 pts.

30 pts had a complete response (CR). Median follow-up was 32 months, 3 pts relapsed and 8 pts died, 2 of them in CR. Overall survival at 52 months was 81% and event-free survival (EFS) at 52 months was 81%. Interim PET was performed after a median interval from the last therapy of 13 days and was negative in 30 pts and positive in 12. In positive interim PET pts a prognostic stratification was performed based on EFS and the point for the 5-years survival: 4 pts obtained a CR at cycle 2 in the next 30 pts.

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222 PROGNOSTIC SIGNIFICANCE OF INTERIM 18F-FDG PET/CT AFTER THREE OR FOUR CYCLES OF R-CHOP CHEMOTHERAPY IN THE TREATMENT OF DIFFUSE LARGE B-CELL LYMPHOMA

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18F-fluoro-2-deoxy-D-glucose-positron emission tomography (FDG-PET)/computed tomography (CT) has been used for staging and monitoring responses to treatment in patients with diffuse large B cell lymphoma (DLBCL). The sequential interim PET/CT was prospectively investigated to determine whether it provided additional prognostic information and could be a positive predictive value within patients with the same international prognostic index (IPI) after the use of rituximab in DLBCL.

Patients and Methods: One hundred and sixty-one patients with newly diagnosed DLBCL were enrolled between August 2004 and December 2009 in a single institution. The assessment of PET/CT was performed at the time of diagnosis, the mid-treatment and completion of R-CHOP chemotherapy. The clinical stage and response of the patients were assessed according to revised response criteria for aggressive lymphomas (Cheson, J Clin Oncol, 2007). Patients that had mild or diffuse FDG uptake at any site were considered negative for intensities lower than or equal to that of the mediastinal blood pool structures with SUVmax cut-off value of 3.0.

Results: Sixty-seven patients (41.6%) presented with advanced stage disease and 27 (16.8%) had bulky lesions. At diagnosis, 53 patients (32.9%) were classified as high/ intermediate-risk by the IPI and two patients could not check the interim response due to treatment-related mortality (TRM). Forty-three patients (26.7%) continued to have positive metabolic uptakes with a significantly high relapse rate (62.8%) compared to the patients with a negative interim PET/CT (12.1% (P<0.01). After a median follow-up of 30.8 months, the positivity of interim PET/CT was found to be a prognostic factor for both OS and PFS, with a hazard ratio of 4.07 (2.62 – 6.32) and 5.46 (3.49 – 8.52), respectively. In the low-risk IPI group, the 3-year OS and PFS rate was significantly different in the patients with positive (53.3 and 52.5%) and negative (93.8 and 88.3%) interim PET/CT, respectively (P<0.01). These significant positive differences of interim PET/CT responses were consistent with the results of the patients with high-risk IPI group (P<0.01).

Conclusions: Interim PET/CT scanning had a significant predictive value for disease progression and survival of DLBCL in post-rituximab treatment: it might be the single most important determinant of clinical outcome in patients with the same IPI risk.

223 PREDICTIVE VALUE OF INTERIM PET IN ELDERLY PATIENTS WITH DIFFUSE LARGE B-CELL LYMPHOMA (DLBCL): A SUB-GROUP ANALYSIS OF THE LHNOH-26 GB GEA STUDY

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Introduction: Use of PET in response assessment after completion of immunotherapy for patients with DLBCL is now a standard. In contrast, predictive value of interim PET is a major issue and is still under investigation. We report here the prognostic value of interim PET, i.e. after CR, in the prospective LHNH-26 GB protocol.

Methods: 602 pts between 60 and 80 years old with DLBCL and aaIPI=2 were randomized between R-CHOP14 and R-CHOP21 for 8 cycles. Response assessment was planned after the C4 and at the end of treatment, based on CT scans and IWF response criteria 1999. Within the database, 180 patients were identified with a post-C4 PET evaluation. Result of this interim PET was recorded, based on local interpretation, with visual assessment (positive or negative). The primary endpoint of this analysis was to evaluate FFS according to interim PET result.

Results: Baseline patients characteristics did not differ from the overall LHNH-03 GB population: median age (69y), Ann-Arbor stage III-IV (88%), elevated LDH (67%), aaIPI 2-3 (63%). Among baseline characteristics, only bulky mass (>10 cm) was predictive of positive interim PET (p=0.001). After C4, based on CT scans, 65% of pts were in CR or CRu, among them 66% were PET negative. There was no correlation between response according to CT scans and PET results. Response according to IWF response criteria 1999 (CR or CRu vs PR) was not statically significantly associated with outcome (FFS or OS). In contrast, with a median follow-up of 44 months, PET negativity after C4 was strongly associated with FFS (median not reached vs 4.3 months; HR 0.52; CI 95% 0.32-0.85; p=0.006) and also OS (HR 0.57 (95% CI 0.34-0.96; p=0.046).

Conclusions: In the context of a local and visual evaluation, negativity of interim PET was a powerful predictor of FFS and OS for elderly patients receiving immunotherapy for DLBCL, justifying on going studies with a PET-driven strategy.

224 18FDG PET / CT AFTER INTENSIFIED CHEMOTHERAPY: IMMUNOTHERAPY IN DIFFUSE LARGE B-CELL LYMPHOMA (DLBCL), AGED 18-65 YEARS WITH AAIP 2-3. POSITIVE OR INDETERMINATE LESIONS HAVE A LOW POSITIVE PREDICTIVE VALUE. A NORDIC PHASE II SUBSTUDY


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In a phase II study for patients with DLBCL aged 18-65 and high-risk disease, (aaIPI 2-3), we evaluated end-therapy FDG PET analysis at five of the centres and a score using internal standards.

Methods: 18FDG PET / CT were scored as negative, indeterminate or positive. Retrospectively, PET intensity was scored as follows (Barrington protocol): 1: no uptake, 2: uptake ≤ mediastinum, 3: uptake > mediastinum and ≤ liver, 4: moderately- and 5: markedly increased uptake compared to liver.

Results: PET scan was done in 53 patients post-therapy of 156 eligible patients. Median observation time for live patients: 30 months. Radiotheraphy given: 9 patients. OS and FFS at 30 months: 91.3% (95% CI 82.7-99.9%) and 88.4% (95% CI 78.0-98.8%), respectively. 18FDG PET / CT were originally considered negative in 39 cases (1 relapse, indeterminate in 6 cases (1 relapse) and positive in 8 cases (2 relapses, 1 secondary cancer). Only 1 of 17 cases had a positive biopsy, 3 were undetermined (necrotic). 48 of the cases were scored according to the Barrington protocol: 1: 14 cases, 2: 17 cases, 3: 8 cases, 4: 3 cases, 5: 6 cases. For 1-3 scored as negative and 4-5 as positive, there were 2 out of 39 and 2 out of 9 relapses, respectively. Four of the 17 cases with PET of higher grade showed, in these cases, a CR. The original and the Barrington score dichotomising for neg. and pos. cases between 3 and 4 were equally effective in predicting FFS (p = 0.03).

Conclusions: Patients with a negative FDG PET / CT have an excellent prognosis. PET negative lesions have a low positive predictive value although, in a few patients, radiotherapy may have prevented relapse. The Barrington score seems useful for multicenter analysis. Positive lesions should be documented with a biopsy or with a follow-up PET before further chemotherapy is initiated.
for PET/CT scan + pts (P=0.722). Among other prognostic factors analyzed, (histology, number or size of masses, first vs salvage treatment program) no correlation with DSI or overall survival (OS) emerged. With a median follow-up of 3 years, the DSI and OS were 79.2% and 89.1%, respectively.

Conclusions: In our study we did not observe any significant difference in DFS among PET negative pts with or without CT scan residual masses after lymphoma therapy. This suggest that residual disease at CT scan is not a significant prognostic factor for relapse/ progression disease. Further analysis will be performed in order to identify a possible dimensional cut-off at CT scan predictive for disease progression. This could imply the submission to consolidative radiotherapy on largest residual masses.

226 EARLY INTERIM 18F-FDG PET IN EARLY AND ADVANCED STAGE HODGKIN’S LYMPHOMA: EVALUATION ON 304 PATIENTS

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Background: The use of early (interim) positron emission tomography (PET) restaging during the first line treatment of Hodgkin’s lymphoma (HL) has considerably increased in clinical practice as an early recognition of treatment failure allows patients to be addressed to more intensive treatment regimens.

Patients and Methods: Between June 1997 and June 2009, 304 newly-diagnosed Hodgkin’s lymphoma patients (147 early-stage and 157 advanced-stage) were treated with the ABVD regimen at two Italian institutions. Patients underwent to a PET staging and restaging at baseline, after 2 cycles of therapy and at the end of the treatment.

Results: 35 patients showed a positive interim PET and only 13/35 (24.5%) achieved a complete response (CR), whereas 231 patients showed a negative PET and 231/231 (92%) remained in CR. Comparison between interim PET-positive and interim PET-negative patients indicated a significant association between PET findings and 10-year progression-free survival (p=0.0000) and 10-year overall survival (p=0.0000), with negative patients indicated a significant association between PET findings and 10-year overall survival.

Conclusions: Our results confirm the role of early PET as a significant step forward for the management of both early and advanced-stage HL patients, offering the potential for an immediate switch to high-dose treatments, if required.

227 RESPONSE ASSESSMENT AFTER 4 CYCLES OF BEACOPP USING FDG-PET IN PATIENTS WITH ADVANCED-STAGE HODGKIN LYMPHOMA

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Background: Positron emission tomography (PET) has been proven to be a powerful prognostic marker during the treatment of Hodgkin lymphoma with ABVD. Here, we analysed the prognostic value of PET after 4 cycles of BEACOPP in patients with advanced-stage Hodgkin lymphoma.

Patients and Methods: Between January 2004 and February 2008, 69 patients with newly-diagnosed HL in clinical stages IIIb with large mediastinal mass or extranodal disease, III and IV were treated in or according to the HD15 protocol of the German Hodgkin Study Group. In addition to the protocol of the HD15 trial all patients received a PET scan after 4 cycles of BEACOPP (PET-4) in the treatment consistent of 6-8 cycles of BEACOPP.

Results: Of the overall group (n=69), 18 patients had a positive PET-4 while 51 had a negative PET-4. At a median observation time of 55 months, 4 of the 18 patients with a positive PET-4 had progressed or relapsed, while there was one relapse in the group of PET-4 negative patients. The negative predictive value of PET-4 was 98%; the positive predictive value of PET-4 was 22%. There was a significant arm difference between PET-4 negative and positive patients concerning the time to progression or relapse starting from the point of diagnosis (p=0.004).

Conclusion: The results of the present analysis underline the clinical impact of PET-4 scan in advanced-stage Hodgkin lymphoma. A negative PET-4 scan has a high negative predictive value and predicts a significant longer non-progression than PET-4 positive patients.

228 PET/CT SURVEILLANCE IN PATIENTS WITH HODGKIN LYMPHOMA IN FIRST REMISSION

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Background: Although controversial, surveillance imaging is widely used during follow-up of Hodgkin Lymphoma (HL). Recent studies indicate that PET surveillance detects preclinical relapse in a number of patients.

Patients and Methods: We performed a single center retrospective study. HL patients entering follow-up after first-line treatment were included if PET/CTs were performed at some point during follow-up.

Results: Fifty-three patients with classical HL and two patients with nodular lymphocyte predominant HL were included. Disease was characterized as early stage (15), intermediate stage (10) or advanced stage (30). During a median follow-up of 962 days (59-2722), 143 surveillance PET/CTs were performed, of which 127 were routine PET/CTs and 16 were evaluation of suspected relapse. Eighteen PET/CTs were suspicious for recurrent lymphoma while 125 PET/CTs showed continuous remission. Four patients with advanced stage disease relapsed during follow-up. In three patients, preclinical relapses were diagnosed by routine PET/CTs while the fourth patient was diagnosed due to reported symptoms. The PET/CT detected relapses all occurred within 7 month after response assessment and interim PET/CT was PET positive in two out of three patients. Fourteen PET/CTs incorrectly suggested relapse which was subsequently disproved by biopsy (4), additional imaging (3) and a clinical course incompatible with recurrent HL (7). The causes of false positive results were PET (11), CT (1) and concomitant PET and CT pathology (3). True and false positive PET/CT rates were 3 % and 10 %, respectively. Sensitivity and specificity of routine PET/CT were 100 % and 90 %, respectively. The positive predictive value (PPV) and negative predictive value (NPV) of routine PET/CT were 19 % and 100 %, respectively. PPV and NPV of clinical indication were 50 % and 100 %, respectively. SUVmax in true and false positive PET/CTs did not differ significantly (p=0.18).

The costs of detecting three preclinical relapses by use of routine PET/CT surveillance in our cohort were 97.856 USD per relapse.

Conclusions: Routine PET/CT surveillance detects preclinical relapse and has high NPV, but its general use is compromised by false positive results and high costs. Indiscriminate use of routine PET/CT surveillance for all patients is not efficacious, although it may be valuable in specific subgroups such as patients with advanced stage disease or interim PET positive.

229 FDG-PET IN THE STAGING AND PROGNOSIS OF T-CELL LYMPHOMA

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Background: We have previously reported that fluoro-deoxy-glucose positron emission tomography scan (FDG-PET) is almost universally positive in patients with T-cell lymphoma (Feeney, Amer J Roentgenol, 2010 195: 333). In the current analysis we examined the role of FDG-PET in initial staging and at interim evaluation as a prognostic factor for patients with peripheral T-cell lymphoma (PTCL).

Methods: We reviewed the PTCL database at Memorial Sloan Kettering Cancer Center to identify patients (pts) with mature T or NK lymphomas with PET scans as part of initial staging or relapse (N=91), and a subset of pts with repeat PET for interim restaging while treated with curative intent (N=30).

Results: The frequency of specific T-cell histologies included in this analysis were: PTCL-NOS (N=35); anaplasticioinoblastic T-cell lymphoma (N=17); anaplastic large cell lymphoma, ALK-1+ (N=10) and ALK-1- (N=11); HTLV-1 associated lymphoma (N=7); NK/T cell lymphoma (N=5); others (N=4). Seventy three pts were newly diagnosed, 18 had relapsed disease. FDG-PET during pre-treatment staging was positive in 97% of pts. Compared to CT-based evaluation, stage, if PET-based, would be altered in 10 pts (11%): 3 pts were upstaged and 7 pts downstaged. PET-based staging did not alter treatment for any pt. PET identified new disease sites in 46 pts (50%). Most frequently identified additional sites were: nodal (N=24); bone (N=8); skin (N=7); nasopharynx (N=3); spleen (N=3); and lung (N=2). After a median of 4 cycles of chemotherapy, 50 pts underwent interim PET. Treatment regimens included: CHOP (N=19); CHOP/ICE (N=24); other (N=7). At median follow up of 2.2 years, pts with negative interim PET had superior OS and DFS compared to pts with positive interim PET. Eighty five percent of pts with negative interim PET were alive at median follow up vs. 44% with positive interim PET, and 73% of pts with negative interim PET were progression free vs. 24.3% with positive interim PET.

Conclusions: In this data set, PET was positive at initial staging in most pts with PTCL. Additional disease sites were found by PET in 50% of pts but stage was impacted on only 11% of pts, with no alteration in treatment. Intermediate FDG-PET predicted for both OS and DFS. The ability to achieve a negative interim PET seems to be an important predictor of outcome in pts with PTCL.