Background. Hodgkin’s lymphoma is one of the malignant diseases with the highest rate of cure particularly if diagnosed in early stage. Nevertheless a small proportion of patients with localized stage do not respond to therapy and become chemorefractory. We explored the predictive value on therapy outcome of an early evaluation of treatment response by 18F-fluorodeoxyglucose positron emission tomography (FDG-PET) scan performed after two courses of ABVD in patients with localized Hodgkin’s disease. Patients. From 2002, 163 new localized stage Hodgkin’s lymphoma patients were consecutively admitted to nine Italian hematological centers. Patients with stage I-IIIA according to Ann Arbor stage were considered for the study. FDG-PET was mandatory at baseline, after two cycles and at the end of therapy. We evaluated the progression free survival of patients starting from the time of diagnosis to relapse or progression of disease or last follow-up. Patients were candidate to receive 3 or 4 course of ABVD followed by ASCT ± peri-transplant IFRT. In 29 patients a negative PET-2 was allowed. Results. The median age was 38 years (16-75), 85 patients were female and 78 male, 15 patients presented stage I and 148 stage II, bulky was reported in 45 patients. One-hundred and forty-seven patients were treated with combined modality (CT+RT) and 15 patients were treated with chemotherapy alone (all with 6 cycles). One hundred and forty-seven patients attained CR while 16 were chemoresistant: 9 showed disease progression during CT and 7 showed an early relapse. The FDG-PET performed after two cycles (PET2) was positive in 23 patients (14%); 12 (52%) progressed or relapsed and 11 remained in CR. By contrast 130/140 (93%) patients with a negative PET2 remained in CR. Thus the positive predictive value of a PET2 was 52% and the negative predictive value was 93%. The sensitivity and specificity of PET2 were 55% and 92%, respectively. Seventeen patients showed disease progression during therapy or within 12 months after having reached CR, 11/17 (65%) were PET2 positive. The FDG-PET performed at the end of therapy was positive in 80% of patients repeating chemotherapy and was positive in 11/17 (65%) patients due to the disease, four were free from progression. The 2-yr 5FS probability for PET2 negative and for PET2 positive patients were 94% and 58% respectively. Conclusions. This prospective and multicentric study confirms that FDG-PET scan performed after two courses of conventional standard dose chemotherapy was able to predict treatment outcome in early stage Hodgkin disease. Due to the large number of false negative PET2 in localized lymphoma we suggest new evaluation methods in this subset of patients.

0087

EARLY FDG-PET SCAN CONFIRMS ITS PROGNOSTIC IMPACT ALSO IN LOCALIZED STAGE, ABVD TREATED HODGKIN LYMPHOMA PATIENTS

L. Rugacci, 1 B. Puccini, 1 A. Gallamini, 1 F. Merli, 1 C. Stelitano, 1 M. Balzarotti, 1 P. Pregno, 1 C. Fraulinii, 1 F. Salvi, 1 R. Emilì, 1 S. Tavera, 2 I. Capodanno, 3 F. Morabito, 1 A. Santoro, 1 U. Vitolo, 1 T. Chisesi, 1 A. Levis, 1 A.M. Liberati, 1 A. Bosi

‘Azienda Ospedaliera Careggi, FLORENCE; ‘ASO S. Corce e Carle, CUNEO; ’Ospedale S. Maria Nuova, REGGIO CALABRIA; ‘Ematologia Ospedali Riuniti, REGGIO CALABRIA; ‘Ematologia Humanitas, MILANO; ‘Ematologia Ospedale S. Giovanni Battista, TORINO; ‘Ematologia Ospedali Riuniti Ss. Giovanni e Paolo, VENEZIA; ‘Ematologia Ospedale S.S. Antonio e Bianco, ALESSANDRI; ‘Ematologia Ospedale, TERNI, Italy

Background. FDG-PET is able to detect the underlying lymphoma burden with high sensitivity and specificity independently of the treatment given. Several studies have confirmed the high prognostic value of PET scan in the context of primary stage Hodgkin lymphoma (HL). However, in the context of relapsed/refractory HL, the role of FDG-PET remains controversial. Aim. To confirm the high prognostic value of PET scan also in the context of relapsed/refractory HL treated with an autologous stem cell transplant (ASCT) ± peri-transplant IFRT.

Methods. From 2003 to 2008, 52 consecutive HL patients with relapsed/refractory disease (RD) who were treated with an ASCT at three centers were included in the study: 14 patients were treated at the Azienda Ospedaliera Careggi (Florence, Italy), 20 patients at the Hospital Ampang, Ampang, Selangor, Malaysia and 18 patients at the Singapore General Hospital. Following the ABVD regimen ± peri-transplant IFRT, autologous stem cell transplantation was performed in patients achieving a complete remission (CR) following salvage chemotherapy. The complete remission status by FDG-PET post salvage, treatment details, including salvage type and peri-transplant IFRT, and clinical characteristics were recorded and EFS and overall survival (OS) post ASCT were evaluated. Survival analyses were performed using Kaplan-Meier estimates and cohorts were compared using the Log-rank (Mantel-Cox) and the Gehan-Breslow-Wilcoxon Test. The contingency of data between different groups was compared using Fisher’s exact test. Microvessel density at the time of diagnosis and the end of therapy was evaluated by immunohistochemistry of tissue sections stained for factor VIII-related antigen. The median number of transplanted CD34+ cells was 4.1 x 10⁶/kg.

Results. A follow-up of 2-3 years was available for all the patients. At the time of analysis, 9 patients (17%) had died of disease progression and 33 patients (63%) were alive with a median follow-up of 5 years. In the entire series, the 2-year actuarial EFS and OS were 49% and 75%, respectively. Female gender was the only factor predictive for obtaining a complete FDG-PET remission post salvage therapy (p=0.011). Female gender and duration of first remission of ≥12 months also independently predicted for superior EFS (p=0.017 and 0.039, respectively). Other characteristics including the presence of B-symptoms, extra-nodal disease prior to salvage, age ≥38 years, type of salvage or conditioning regimen used, or transplant centre did not influence EFS or OS. Conclusions. Our data show that FDG-PET-status after salvage chemotherapy for relapsed or refractory HL is a powerful predictor of EFS after ASCT demonstrating an excellent outcome for FDG-PET-negative pts. In pts with limited FDG-PET-avid disease following salvage chemotherapy, the addition of peri-transplant IFRT was able to reduce the poor prognostic impact of residual FDG-PET positivity in a subset of patients.

0088

PHASE II STUDY OF ORAL PANOBINOSTAT IN PATIENTS WITH RELAPSED/REFRACTORY HODGKIN LYMPHOMA AFTER HIGH-DOSE CHEMOTHERAPY WITH AUTOLOGOUS STEM CELL TRANSPLANT

A. Younes, 1 A. Sureda, 2 D. Ben-Yehuda, 3 T.C. Ong, 4 D. Tan, 5 A. Engert, 6 C. Le Corre, 7 J. Gallagher, 8 S. Hirawat, 9 M. Prince

‘M. D. Anderson Cancer Center, HOUSTON, USA; ‘Hospital de la Santa Creu, BARCELON, Spain; ‘Haddassah Medical Organization, JERUSALEM, Israel; ‘Hospital Ampang, AMPANG, SELANGOR, Malaysia; ‘Singapore General Hospital, SINGAPORE, Singapore; ‘Klinikum der Universität zu Köln, KOLN, Germany; ‘Novartis Pharmaceuticals Corporation, FLOHRAM PARK, NJ, USA; ‘Calbini Institute, MALVERN, Australia

Background. Panobinostat (LBH589) is a pan-deacetylase inhibitor