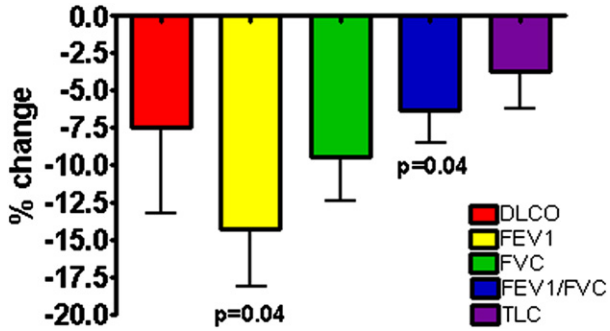
performed in the same laboratory. Survival rate at the time of analysis was 90%.

We initially compared single parameters of PFTs including corrected diffusion limiting capacity of oxygen (DLCO), forced expiratory volume in one second (FEV1), forced vital capacity (FVC), FEV1/FVC ratio, and total lung capacity (TLC) obtained before and after transplant. Post transplant, all PFT parameters showed some degree of reduction compared to pre-transplant values. FEV1 and FEV1/FVC were significantly decreased (108 vs 92, $P = .04$ and 86 vs 80%, $P = .04$, respectively), with no difference between Caucasian and non-Caucasians. Overall, median values of corrected DLCO and TLC prior to and after transplant were only slightly reduced. However, in non-Caucasian patients a significant reduction of DLCO was observed (93%±31 vs 73%±11, $P = .05$).

We analyzed intra-patient changes in DLCO and FEV1 values and no correlation was found between these parameters and the development of chronic GVHD.

This study shows an overall decrease in pulmonary function in patients without apparent lung disease following a myeloablative busulfan-based HSCT. However, a higher risk of a reduced DLCO was noted only among non-Caucasian patients. At this time it is not known if this observation is due to genetic, biologic or environmental causes.



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Inonilomab for Children with Steroid-Refractory Acute Graft-Versus-Host Disease : A Nationale Multicenter Phase II Retrospective Analysis

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One hundred twenty-three children from 6 French centers were evaluated retrospectively for the treatment of steroid-refractory acute graft-versus-host disease (aGVHD) with Inolimomab, a murine anti-IL2R.

Hematopoietic stem cell transplantations (HSCT) were performed between 1995 and 2012. Diseases were non malignant inherited diseases (63%) and hematological malignancies (37%). Median age was 4, 3 years. Donors were MRD (27.5%), MUD (32%), mismatch-MUD (13%), Haploidentical (20.5%) and Cord Blood (CB) (7%). The graft source was BM (80%), PBSC (12%) and CB (8%). 37% patients had a myeloablative conditioning. The median time to aGVHD was 13 days after HSCT. The baseline grade of aGVHD was I in 19%, II 45.5%, III 25% and IV 10.5%. The median delay between aGVHD and Inolimomab was 16 days. The median dose was 0.4mg/kg and the median treatment duration of 27 days.

We observe 55% complete responses and 14% partial responses for a total response rate of 69% and with no side effect. Among the responders, 26% relapse. Incidence of infection during treatment was 19.5%.

A logistic model on complete response provide evidence of the high predictive negative effect of the baseline grade [Odds Ratio (OR): 5.24]. No particular target organ was a significant predictive factor for treatment response or survival. However, multi-organ involvement predicted worse survival with 34%, 45% and 52% of death for patients with one, two, and three or more organs involved, respectively ($P = .234$).

The observed overall survival probability was 59%, with a median survival time of 463 days. The Overall unadjusted survivals were 87%, 77 %, and 61% at day 100, 200, and one year. Survival was also significantly improved for responders (Relative Risk: 0.413; $P = .002$).

As shown by multivariate Cox model, the survival was significantly lower for patients with non malignant inherited diseases [Hazard Ratio (HR) =2.88, $P < .001$] compared with hematological malignancies, and female patients were associated with higher mortality (HR=1.72 , $P= .049$). For both response and survival, the success rates were significantly increasing with year of transplantation, and non-significant differences were found among centers.

Chronic GVHD (cGVHD) occurred in 56% patients, extensive in 42%. cGVHD incidence was 78%, 72% , 42% for Non Responders, Partial Responders and Complete Responders (Anova, $P= .017$, difference only significant between Complete Responders and the others). Patients with hematological malignancies were observed with significantly less cGHVD (OR=.29, $P= .012$).

Fifty-one patients died, 17(33%) before day 100 and 34(67%) after day 100, mostly of infections (55%) and GVHD (51%).

In conclusion, Inolimomab is well tolerated and effective for steroid-refractory aGVHD in pediatrics. Further randomized studies are requires to define the optimum regimen.

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Pulmonary Symptoms Measured by the NIH Lung Score Predict Overall Survival and Non-Relapse Mortality in Chronic GVHD

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