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Dear Reader,

We are excited to share with you the latest findings presented at the EBMT Congress held from March 30th to April 2nd 2025 in Florence. This year's congress showcased numerous studies on Treosulfan, highlighting its efficacy and safety in both pediatric and adult patients. Just to mention a few examples, for pediatric patients, studies such as OS2-05 and OS2-08 demonstrated high engraftment rates and low toxicity, while Paed4-02 and A328 confirmed Treosulfan's effectiveness in treating severe combined immunodeficiency and transfusion-dependent thalassemia. In adult patients, abstracts OS18-04 and B118 revealed Treosulfan's potential in reducing non-relapse mortality and improving overall survival, with B121 and OS9-04 further supporting its use in conditioning regimens for hematological malignancies.

Beyond these presentations, many other fascinating abstracts were presented, offering valuable insights into the use of Treosulfan. We hope you find this brochure both informative and enjoyable.

Best regards from Wedel,

Yours

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Abbreviations

ACS Acute Chest Syndrome and Autologous Hemstopoietic Stem Cell Transplantation - Comorbidity Index Transplantation - Transplantation - Comorbidity Index Transplantation - Transplantation - Comorbidity Index Transplantation - Transplantation - HHV Human Herpesvirus - HID Haploidentical Donor - HALL Acute Lymphoblastic Leukemia HL Hodgkin Lymphoma - LID - Company - March - Mar	a/cGvHD	Acute/Chronic Graft-versus-Host Disease	НВ	Hepatoblastoma
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	GRFS	Graft-versus-Host Disease-Free, Relapse-Free		
GvHD Graft-versus-Host Disease SCD Sickle Cell Disease				
	GvHD	Graft-versus-Host Disease	SCD	Sickle Cell Disease



Abbreviations

SCID Severe Combined Immunodeficiency
SOS Sinusoidal Obstruction Syndrome

TA-TMA Transplant-Associated Thrombotic Microangiopathy

TBI Total Body Irradiation
TCD T-Cell Depletion
TCL T-Cell Lymphoma

 $TCR\alpha\beta/CD19$ T-Cell Receptor Alpha/Beta and CD19 Depletion

TDM Therapeutic Drug Monitoring
TDT Transfusion-Dependent Thalassemia

TFS Thalassemia-Free Survival
TM Thalassemia Major

Treo Treosulfan

TRM Transplant-Related Mortality

TT Thiotepa

VOC Vaso-Occlusive Crisis
VOD Veno-Occlusive Disease

VP Etoposide

WAS Wiskott-Aldrich Syndrome

WT Wilms Tumor

y Year

: medac



Pediatric Patients



Fludarabine/Treosulfan/Thiotepa/ATG Conditioning for Sibling Haemopoietic Stem Transplantation in Sickle Cell Disease Leads to Early and Sustained Engraftment With Low Toxicity & GVHD

OS2-05 Oral presentation

Adam Gassas', Farah O'Boyle', Kirstin Lund', Toni Petterson', Sandra Loaiza', Kelly Hennessy', Sandrine Bremathas', Leena Karnik', Josu de la Fuente'.

Affiliations: ¹Imperial College Healthcare NHS Trust, London, United Kingdom of Great Britain and Northern Ireland (the), ²Imperial College London, London, United Kingdom of Great Britain and Northern Ireland (the) ¹Fred Hutch Cancer Center, Seattle, United States

Study design	Retrospective analysis	Aim	FTTA conditioning for sibling HSCT in SCD
Outcome parameters	Engraftment, toxicity, GvHD, s	urvival	
Patients	80	Median age (range)*	11 y (3-18)
Indication	SCD with either stroke, severe of to hydroxycarbamide	cerebrovascular disease, or recurre	ent VOC/ACS not responding
Conditioning regimen	Flu 160 mg/m², Treo 42 g/m², T	Г 10 mg/kg	
	and ATG (Thymoglobin) 7.5 mg/	kg, ATLG (Grafalon) 30 mg/kg or	Alemtuzumab 0.3 mg/kg
Results* Engraftment Secondary graft failure aGvHD cGvHD VOD Median time to stop IST 2 y OS 2 y EFS	100% on day +28 (neutrophiles median 13 d, range 8-24; platelets median 30 d, range 15-62) 1.3% (n=1) 13.8% (n=11, grade II-III, no grade IV) 20% (n=16, limited), 11.3% (n=9, extensive) 13.8% (n=11) 210 d (91-538) 98.6% (one death on d+185)		
Conclusions	 FTTA conditioning with pre-transplant suppression of hemopoiesis leads to correction of SCD with very low toxicity. High engraftment rates and low incidence of GvHD. FTTA conditioning is justified as the standard of care in the pediatric population for SCD. 		

^{*}Numbers differing from abstract were based on talk presented at conference.





Treosulfan, Thiotepa, and Fludarabine-Based Reduced Toxicity Conditioning Regimen in Children With Thalassemia Major: A Report From a Tertiary Care Center in India

OS2-08 Oral presentation

Ravi Joshi¹, Sunil Bhat¹, Pooja Mallya¹, Shobha Badiger¹, Rhea Daruvala¹

Affiliation: ¹Mazumdar Shaw Medical Center Narayana Health, Bengaluru, India

Study design	Retrospective analysis	Aim	Evaluate FTT conditioning regimen in children with TM
Outcome parameters	Engraftment, VOD, GvHD, OS	S, TFS	
Patients	81	Median age (range)	144 mo (22-276)
Indication	TM		
Conditioning regimen*	Treo 14 g/m²/d for 3 d, TT 8 mg/ ATG	kg/d in two divided doses, Flu 40	mg/m²/d for 4 d, +/- Rabbit
Results* Neutrophil engraftment Platelet engraftment VOD aGvHD cGvHD Primary graft failure Mixed chimerism OS TRM TFS	92.5%, Median 12 d Median 14 d 11% (n=7 mild & moderate, n=2 severe) 43.2% (n=23 grade I/II, n=12 grade III/IV) 17.6% 7.4% 6.2% 86.4% 3.7% 81.4%		
Conclusions	 Reduced-toxicity conditioning with FTT is effective for HSCT in children with TM. Lesser toxicity, significantly reduced incidence of VOD. Achieves excellent OS and TFS. 		

^{*}Numbers differing from abstract were based on talk presented at conference.





Hematopoietic Stem Cell Transplantation in Osteopetrosis: An IEWP Study of 715 Children

Paed4-01 Oral presentation

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Study design	Retrospective registry study	Aim	Outcomes after HSCT for OP
Outcome parameters	OS, EFS		
Patients*	555	Median age (range)	0.7 y (0-15)
Indication	OP		
Conditioning regimens*	FB (46%), Bu/Cy (32%), FTT (1	7%), other (5%)	
Results*			
3 y OS	72%; 59% (1990-2000), 69% (2001-2011), 78% (2012-2022)		
	80% (FTT), 77% (FB), 70% (Bu/Cy); p=0.157		
3 y EFS	60%; 52% (1990-2000); 56% (•	
	72% (FTT), 63% (FB), 63°	% (Bu/Cy); p=0.185	
GF	20%		
180 d aGvHD	25% (grade II-IV), 10% (grade III-IV)		
2 y cGvHD	11% (all), 5% (extensive)		
VOD	24% (of which 35% mild, 19% moderate, 46% severe/very severe); associated with Bu-exposure		
	and younger age in MVA		
PAH	13%		
Hypercalcemia	20%		



Conclusions*	Largest study to date on HSCT outcomes in children with OP.
	Significant improvement in survival over the last decade.
	Challenges remain with GF, VOD, and TRM, especially without HLA matched donor.
	• FB vs FTT: no difference in OS/EFS, but FB associated with VOD.

^{*}Numbers differing from abstract were based on talk presented at conference.





Busulfan-Fludarabine Versus Treosulfan-Fludarabine Conditioning for Infants With Severe Combined Immunodeficiency: A Retrospective Multicenter Study

Paed4-02 Oral presentation

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Study design	Retrospective multicenter study	Aim	Outcomes of FB vs FT conditioning in infants with SCID
Outcome parameters	OS, EFS, GRFS, ECD, toxicitie	es, chimerism	
Patients	164	Median age (range)	6.4 mo (1.4-22.2)
Indication*	SCID (FB n=62, FT n=102)		
Conditioning regimens*	FT 30 g/m² n=31 36 g/m² n=57 42 g/m² n=11	FB AUC≥70mgh/L n=29 AUC<70mgh/L, n=29 NA, n=4	Р
Results*			
5 y OS EFS	82% 81% 12.7%/4.1%	79% 70% 21.1%/4.0%	0.54 0.09 0.18/0.61
d+100 aGvHD (gr. II-IV/III-IV) 1 y cGvHD d+100 ECD VOD	2.1% 8% 7.8%	2% 53% 43.6%	0.60 <0.001 <0.001
Pulmonary hypertension Respiratory support Dialysis	0% 15.2% 3.9%	11.3% 32.3% 11.3%	<0.001 0.01 0.07
Conclusions	 No difference in OS, EFS, GRFS between FB and FT. FT associated with significantly lower ECD compared to FB. FB achieved better myeloid chimerism vs. Treo 30 g/m², but not compared to higher doses of Treo. Treo could be preferred conditioning in infants with SCID. PK studies could further optimize long-term myeloid function. 		

^{*}Numbers differing from abstract were based on talk presented at conference.



https://ebmt2025.abstractserver.com/program/#/details/presentations/1122



Treosulfan, Thiotepa and Fludarabin Represents a Safe and Efficient Alternative Conditioning in T Cell Depleted Haploidentical and MSD HSCT for Patients With TDT

A328 Poster presentation

Anja Troeger', Katharina Kleinschmidt', Gina Penkivech', Juergen Foell', Tarek Hanafee-Alali', Stephanie Leszczak', Marcus Jakob', Sonja Kramer', Silke Kietz', Petra Hoffmann', Claudia Behrendt-Boehm', Carina Kaess', Andreas Brosig', Robert Offner', Daniel Wolff', Selim Corbacioglu'

Affiliation: ¹University Hospital Regensburg, Regensburg, Germany

Study design	Retrospective case series	Aim	Outcome of T-haplo HSCT vs MSD HSCT in TDT pts
Outcome parameters	OS, DFS, engraftment, chimer	ism, transfusion independenc	e, IST duration
Patients	24	Median age (range)	11 y (2-23) T-haplo HSCT, 11.4 y (4-35) MSD
Indication	TDT		
Conditioning regimen	Treo, TT, Flu, ATG-Grafalon®		
Results	MSD T-haplo HSCT		
n	10		14
OS / DFS	100% / 100%		100% / 93%
Leukocyte engraftment (d)	28.5 (20-28)		14 (11-36)
Chimerism (range)	96% (27.7-100%))	100% (34.6-100%)
Transfusion independence	100%		All but one
IST duration (d)	178 (108-296)	2	20 (88-527), 1 pt still on IST
Immune reconstitution (d)	53.5 (20-153) 110 (33-168)		•
Conclusions	T-haplo HSCT is a viable alternative to MSD HSCT in TDT pts.		
	Treo is an effective alternative to Bu with lower VOD incidence.		
	No severe transplant-related toxicity observed.		





Fludarabine/Treosulfan/Thiotepa/ATG Conditioning for Sibling Transplantation Transfusion Dependent Thalassaemia Leads to Early and Sustained Engraftment With Low Incidence of VOD and GVHD

A340 Poster presentation

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Study design	Retrospective analysis	Aim	Evaluate FTTA conditioning for sibling transplantation in TDT
Outcome parameters	Engraftment, GvHD, VOD, sur	vival rates	
Patients	67	Median age (range)	8 y (2-18)
Indication	TDT		
Conditioning regimen	Flu 160 mg/m², Treo 42 g/m², T	T 10 mg/kg, ATG 7.5 mg/kg	
Results Engraftment Med. neutrophil engraftment Deaths aGvHD cGvHD VOD Cessation of IST 1 y stable mixed chimerism 2 y OS 2 y DFS	100% with donor hematopoiesis d+28; 3% (n=2) secondary GF 12 d (range 9-21) 3% (n=2) 16.4% (n=11) grade 2-4 11.9% (n=8) mild, 6% (n=4) moderate/severe 9% (n=6) 175 d (105-523) 38.1% myeloid, 47.9% T cells 97%		
Conclusions	 FTTA conditioning leads to early and sustained long-term engraftment. Low rates of graft failure and toxicity and minimal GvHD. Optimal approach for HSCT in TDT 		





Prospective Evaluation of Treosulfan Exposure Impact on the Outcomes of Pediatric Allogeneic Hematopoietic Cell Transplantation

B174 Poster presentation

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Study design	Multicenter, prospective study	Aim	Develop TDM-guided Treo dose individualization in infants and children undergoing HSCT
Outcome parameters	Toxicity, efficacy, OS, EFS, don	or chimerism	
Patients	65 (reporting on first 23 pts)	Median age (range)	8.7 y
Indications	Malignant (n=9), NMD (n=14)		
Conditioning regimen	Treo administered for 3 consecutive d at age-directed dose (first dose, further doses could be modified), combined with other chemotherapy agents		
Results OS EFS Donor chimerism Median AUC after first dose Treo posology modification	95% 89% (Events observed: one leukemia relapse and one late graft loss at 14 mo in thalassemia patient) 100% in malignant (n=8), 98-100% in NMD (n=11/14) 1572.5 mgh/L (range, 970-2804 mgh/L); n=13 within, n=4 below, n=6 above therapeutic range Reduced by 10-20% in 5 pts, increased by 10-20% in 9 pts		
Conclusions	 Treo dose adjustment based on first dose AUC might limit toxicity and optimize HSCT outcome. Wide variability in Treo exposure. Tendency to AUC reduction in older pts. 		





Autologous Hematopoietic Stem Cell Transplantation for Malignant Neoplasms in Children: Single Center Experience for 560 Pediatric Patients

B213 Poster presentation

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Study design	Retrospective analysis	Aim	Type/CI of complications and outcome after aHSCT
Outcome parameters	OS, EFS, transplant-related tox	icities	
Patients	560	Median age (range)	8.7 y (0.9-17.7)
Indications	NB (n=364), ES (n=83), HL/NHL (n=35), WT (n=33), GCT (n=24), RB (n=9), CNS tumors (n=9), PPB (n=1), SB (n=1), HB (n=1)		
Conditioning regimens	Treo(Bu)/Mel, CEAM/BEAM or Mel/Ribo, VP/Carbo and TT, Mel, Eto/Carbo, TT-based (depending on underlying indication)		
Results Engraftment Transplant-related toxicities 3 y OS 3 y EFS NRM	All pts engrafted 78.3% (grade I-II), 9.2% (grade III-IV) 83.4% 74.3% 0.9%		
Conclusions	 aHSCT for pediatric malignant neoplasms is safe and effective. Transplant-related toxicity is acceptable. NRM is comparably low. Importance of long-term follow-up for large patient groups. 		





Low-Dose Treosulfan-Based Conditioning With PTCY GVHD Prophylaxis in Haploidentical Hematopoietic Stem Cell Transplantation for Children With Severe Aplastic Anemia

B292 Poster presentation

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Study design	Cohort study	Aim	Safety and efficacy of Treo- based conditioning with PT-Cy GvHD prophylaxis in haploHSCT for children with SAA	
Outcome parameters	Engraftment, donor chimerism,	GvHD, TA-TMA		
Patients	12	Median age (range)	9 y (3-16)	
Indication	SAA			
Conditioning regimen*	Treo 21 g/m², Flu 150 mg/m², rATG 5 mg/kg, Cy 50 mg/kg, Rtx 375 mg/m²			
Results Neutrophil engraftment Platelet engraftment Donor chimerism GvHD incidence TA-TMA incidence	All patients are alive and transfusion independent. Median 20 d (range, 19-24) Median 19 d (range, 18-24) Complete in n=10 (83.3%), mixed chimerism in n=2 (16.6%); no primary or secondary GF Grade I aGvHD 25%, grade II-IV aGvHD 8%, cGvHD 8% 1 patient (8.3%) No toxicity above grade 2 of conditioning was observed.			
Conclusions	 Treo-based conditioning with PT-Cy GvHD prophylaxis is safe and effective in haploHSCT for children with SAA. No toxicity above grade 2 observed, low risk of GvHD. 			

^{*}Information differing from abstract was based on poster presented at conference.





Treosulfan-Based Conditioning Regimen With Plerixafor and G-CSF Before $TCR\alpha\beta^+/CD19^+$ Graft Depleted HSCT in Wiskott-Aldrich Syndrome Patients: An Update of 8 Years' Experience

B323 Poster presentation

Evelina Lyudovskikh¹, Alexandra Laberko¹², Svetlana Kozlovskaya¹, Julia Skvortsova¹, Alexandra Shutova¹, Larisa Shelikhova¹, Alexey Maschan¹, Michael Maschan¹, Dmitry Balashov¹

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Study design	Retrospective study	Aim	Efficacy of plerixafor and G-CSF in Treo-based conditioning regimen before $TCR\alpha\beta^+/CD19^+$ cell-depleted HSCT in WAS pts	
Outcome parameters	OS, EFS, GvHD, MMC			
Patients	40	Median age (range)	not specified	
Indication	WAS			
Conditioning regimen	Treo 30-42 g/m², Flu 150 mg/m², Mel 140 mg/m² or TT 10 mg/kg, rATG 5 mg/kg In addition: G-CSF 10 μg/kg daily for 5 d starting on day -8, Plerixafor 240 μg/kg/d for 3 d starting on day -6			
Results OS EFS MMC	MMRD HSCT MUD HSCT MRD HSCT p 78.3% 100% 100% 0.13 69.6% 92.9% 100% 0.16 13% (3/23) 36% (5/14) 0.16 0.16 aGvHD: 47.5% (grade I/II), 0% (grade III/IV) 0.16 0.16 0.16			0.13
Conclusions	 TCRαβ+/CD19+ graft depletion approach demonstrated safety. Low incidence of severe GvHD. Addition of plerixafor and G-CSF to Treo-based conditioning regimen led to low-rate graft failure and achieved high OS/EFS. 			





Treosulfan-Based Conditioning for Pediatric and Young Adult ALL: Ukrainian Single Center Experience

P222 Poster presentation

Olha Veremiichyk', Oleksandr Istomin', Andrii Budzyn', Nataliia Bindiuzhenko', Olha Martych', Hanna Brudna', Alla Mykhalchuk', Anisiia Luchkiv', Olena Silina', Oleksandr Lysytsia'

Affiliation: 'National Specialized Children's Hospital "Ohmatdyt", Kyiv, Ukraine

Study design	Single-center retrospective study	Aim	Efficacy of Treo-based conditioning in pediatric and young adult ALL pts, comparison with FORUM study results
Outcome parameters	OS, EFS, TRM, aGvHD, relaps	е	
Patients	33	Median age (range)	6 y (1-21)
Indications	B-cell precursor ALL (n=27), T-cell precursor ALL (n=6)		
Conditioning regimen	Flu (30 mg/m²/d for 5 d), Treo (12–14 g/m²/d for 3 d), TT (10 mg/kg for 1 day)		
Results 2 y OS 2 y EFS TRM aGvHD CIR	83.2% (compare: 91% in TBI arr 69.7% (compare: 86% in TBI, 58 6% n=22 total, n=5 grade III-IV 24% (8 pts)		
Conclusions	• 2-year OS exceeding 80% and	as a viable option in LMIC setting I TRM rate of 6% indicate Treo-ba ive strategies to optimize outcome	sed regimen is relatively safe.





Treosulfan Based Conditioning for Paediatric Haematopoietic Stem Cell Transplantation: A 10-Year Experience in a Single Centre

P247 Poster presentation

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Study design	Retrospective cohort study	Aim	10-year experience with Treo in pediatric alloHSCT
Outcome parameters	EFS, OS, TRM, CIR, aGvHD		
Patients	72	Median age (range)	5.1 y (1.8–11.3)
Indication*	IEI (n=33), AML (n=21), DBA (n=6), ALL (n=3), metabolic disord	ers (n=4), other (n=5)
Conditioning regimen	FTT (n=32), FT (n=14), Treo/Mel/Cy or Flu (n=21), Other (n=5)		
Results 3 y OS 3 y EFS TRM 3 y CIR aGvHD	75.6% (72.6% in malignant, 77.2% in NMD) 75.9% (73.9% in malignant, 77.2% in NMD) 9.9% (100 d), 11.4% (1 y), 18.3 (3 y) 11.6% (only malignant diseases) 48.3 (grade I-IV), 23.3 (grade III-IV)		
Conclusions	Particularly effective in pts wit Acceptable TRM rates.	ens show favorable 3 y OS and 3 y h IEI, AML, and DBA. n alternative to regimens with high	

^{*}Information differing from abstract was based on poster presented at conference.





: medac

Adult Patients



Safety and Efficacy of Fludarabine Plus Myeloablative Dose of Treosulfan (FT14) Conditioning Regimen for AML – Interim Analysis From the FT14 Study Group

OS9-04 Oral presentation

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Study design	Multicenter prospective phase	Aim	Evaluate efficacy and safety of FT14 regimen	
Outcome parameters	LFS, OS, GvHD			
Patients	62	Median age (range)*	57 y (53-61)	
Indication	AML			
Conditioning regimen	Flu (30 mg/m²/d for 5 d), Treo (14 g/m²/d for 3 d)		
Results* LFS OS Relapse Median time to relapse aGvHD cGvHD Infectious complications Mortality	93% (180 d), 88% (360 d) 96% (180 d), 82% (360 d) 11% 6.3 (2.7-12.8) mo 37% (grade I-II: 31%, grade III-IV: 6%) 10% (mild: 7%, moderate: 3%, severe: 0%) 37% (CMV 6%, EBV 11%, SARS-CoV-2 4%, HHV6 2%) 13% (3% non-disease related, 10% disease related)			
*Numbers differing from abstract	 FT14 is a safe and effective myeloablative conditioning regimen for AML in pts aged 40-65 y. Demonstrates excellent disease control with minimal toxicity. Reduced TRM and GvHD rates compared to FB4. Longer follow-up and direct comparative studies with FB4 are warranted. Supports Treo as a reduced-toxicity alternative in MAC. 			

^{*}Numbers differing from abstract were based on talk presented at conference.





Impact of Busulfan- Versus Treosulfan-Based Conditioning on the Incidence of Sinusoidal Obstruction Syndrome After Allogeneic Hematopoietic Cell Transplantation

OS18-04 Oral presentation

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Study design	Retrospective analysis	Aim	Impact of Bu- vs Treo- based conditioning on SOS incidence	
Outcome parameters	SOS, OS, NRM, PFS, CIR, a/c	GvHD		
Patients	927	927 Median age 57 y (15-72) Treo-based 55 y (16-75) Bu-based g		
Indications	Hematologic Malignancies: AL	(n=582), Lymphoma/MM (n=146)), MDS/MPN (n=199)	
Conditioning regimens	FT (n=213), FT + Other (n=237), FB (n=51), FBT (n=417)			
Results* SOS OS NRM aGvHD cGvHD PFS CIR	Higher with Bu (6.9%) vs. Treo (1.3%), p<0.0001; HR 4.47 Worse in pts with SOS (61.3%) vs. without (70.7%), p=0.03, no significant differences according to conditioning regimen. Higher in pts with SOS (30.4%) vs. without (14.1%), p<0.001, no significant differences according to conditioning regimen. No significant differences according to conditioning regimen. Higher with Bu (45.8%) compared to Treo (34.7%), p<0.0001 No significant differences according to conditioning regimen. No significant differences according to conditioning regimen.			
Conclusions	 SOS is a challenging but relatively uncommon complication of alloHSCT. Bu is independently associated with increased risk of SOS. Treo may provide a protective effect against SOS in high-risk pts. Treo is preferable for conditioning in pts undergoing second alloHSCT. 			

^{*}Numbers differing from abstract were based on talk presented at conference.





Impact of Increasing Doses of Treosulfan in Double-Alkylating Conditioning Regimen on Long Term Outcome in $TCR\alpha\beta/CD19$ Depleted Haploidentical HSCT in Adults With Hematological Malignancies

A026 Poster presentation

Lucia Prezioso¹, Sabrina Bonomini¹, Roberta Segreto¹, Benedetta Cambō¹, Amelia Rinaldi¹, Maria Teresa Giaimo¹², Maurizio Soli³, Silvia Giuliodori⁴, Claudia Labate⁴, Pamela Berni⁴, Gabriella Sammarelli¹, Giannalisa Todaro¹, Luisa Craviotto¹, Giovanni Roti¹², Franco Aversa⁵

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Study design	Retrospective analysis	Aim	Impact of increasing Treo doses in double-alkylating regimen on long-term outcomes in αβTCR/ CD19 TCD HSCT
Outcome parameters	OS, PFS, TRM, CIR, GvHD, e	engraftment	
Patients	81	Median age (range)	55 y (18-74)
Indications	ML/LL (n=43/n=8), MDS (n=3	i), MM (n=6), NHL/HL (n=7/n=9),	MPD (n=5)
Conditioning regimen	Treo 30 or 36 g/m² (n=32 or 49, respectively), TT 10 mg/kg, Flu 150 mg/m², Thymoglobulin 6 mg/kg		
Results OS CIR TRM GvHD Engraftment VOD Viral reactivation	50% overall 40% overall, lower for Treo36, p<0.01 28% overall, lower for Treo36, p=0.2 4% (aGvHD grade III-IV), no cGvHD, no significant difference for Treo36, p > 0.05 Full engraftment in n=79/81 pts, recovery of neutrophils at median of 13 d, platelets at median of 11 d No venoocclusive disease occurred. No CMV reactivations in letermovir era.		
Conclusions	 Promising OS, PFS, and TRA Low toxicity profile even in he Increased Treo dose significant TRM. 	ollow-up of αβTCR/CD19-based d Λ, especially in pts with HSCT in C eavily pretreated population. atly improved outcomes, reducing a y used in older pts in a myeloablati	R1.





Peripheral Blood Stem Cell Graft but Not Conditioning Improves Sibling or Unrelated Donor Transplantation Outcomes in Patients with AML ≥65 Years: A Study of EBMT ALWP

B109 Poster presentation

Alexandros Kanellopoulos¹, Myriam Labopin², Alexandros Spyridonidis³, Uwe Platzbecker⁴, Henrik Sengeloev⁵, Didier Blaise⁶, Thomas Schroederⁿ, Eleni Tholouli³, Goda Choiゥ, Victoria Potter¹ゥ, Peter Dreger¹¹, Matthias Stelljes¹², Jenny Byrne¹³, Bipin Savani¹⁴, Eolia Brissot¹⁵, Arnon Nagler¹⁶, Fabio Ciceri¹⊓, Mohamad Mohty¹⁵

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Study design	Retrospective analysis	Aim	Optimal conditioning intensity, donor selection, and SC source in alloHSCT for elderly AML pts	
Outcome parameters	Graft failure, OS, LFS, NRM, 0	GvHD, GRFS, MRD		
Patients	2900	Median age (range)*	68.6 y (NMA) 68 y (RIC)	
Indication	AML≥65 y			
Conditioning regimen	RIC FB2, Flu/Mel, Flu/Treo	NMA Flu/TBI2Gy		
Results			Р	
GF	1.5%	1.9%	0.44	
2 y OS	56.5%	53.4%	0.19	
2 y LFS	50.7%	51%	0.78	
2 y NRM	20.7%	23.8%	0.83	
Grade II-IV GvHD Chronic extensive GvHD	26.3% 12.9%	25.5% 25.3%	0.01 0.02	
GRFSs	Equivalent	Equivalent	0.46	
	• Lower risk of relapse in Flu/Mel compared with FB2 (HR 0.55, p=0.0002) and Flu/Treo (HR 0.63, p=0.025)			
	• Lower risk of cGvHD in Flu/Mel compared to FB (HR 0.7, p=0.044) and in Flu/Treo compared to Flu/Mel (HR 0.59, p=0.032)			
	No differences between the three RIC regimens with respect to OS, NRM, GRFS, and LFS			



Conclusions*

- Less intensive conditioning regimens can be used without compromising patient outcomes, potentially reducing treatment toxicities and improving patient quality of life.
- PBSC grafts are associated with better OS in elderly AML alloHSCT.
- Lack of significant interaction between conditioning intensity and MRD suggests that more research is required on the role of MRD in guiding conditioning selection.



^{*}Numbers differing/additional to abstract were based on poster presented at conference.



Treosulfan vs Busulfan as Part of Clofarabine-Based Reduced-Intensity Conditioning Regimen Before Allotransplant for Myeloid Malignancies

B111 Poster presentation

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Affiliation: ¹University of Nantes, Nantes, France

Study design	Monocentric retrospective study	Aim	Compare Clo/Bu vs Clo/Treo RIC regimen	
Outcome parameters	Neutrophils (>0.5 G/L), platel	ets (>50 G/L), OS, DFS, NRM, C	CIR, a/cGvHD	
Patients	142	Median age (range) 65 y CloB2 62 y CloT3		
Indication	AML (n=95), other myeloid ma	alignancies		
Conditioning regimens	CloT3 Clo 30 mg/m²/d x 5 d Treo 10 g/m²/d x 3 d ATG 2.5 mg/kg/d x 2 d	CloB2 p Clo 30 mg/m²/d x 5 Bu 3.2 mg/kg/d x 2 ATG 2.5 mg/kg/d x 1-2 d		
Results*				
n Neutrophil / Platelet recovery 1.5 y OS 1.5 y DFS 1.5 y NRM 1.5 y CIR aGvHD (grade 3-4) cGvHD (all / extensive)	34 10 d / 13 d 79% 70% 15% 15% 21% 56% / 18%	108 16 d / 11 d 69% 63% 15% 22% 13% 41% / 16%	p<0.001 / 0.2 0.3 0.4 >0.9 0.3 0.2 0.055 / 0.8	
Conclusions	 CloT3 RIC regimen provides similar outcomes compared to CloB2 RIC regimen in adults with myeloid malignancies receiving PBSC matched transplant. Faster neutrophil recovery with CloT3. Significant lower CIR with CloT3 in AML pts. Higher incidence of GvHD-related deaths in AML pts with CloT3. 			

^{*}Numbers differing/additional to abstract were based on poster presented at conference.





Treosulfan/Fludarabine Versus Thiotepa/Busulfan/Fludarabine for Allogeneic Hematopoietic Cell Transplantation in Patients With Lymphomas in the Post-Transplant Cyclophosphamide Era: A Study on Behalf of GETH-TC

B118 Poster presentation

Lorenzo Lazzari¹, Marta Peña², Diego Fernando Martinez Moreno², Fabio Ciceri¹, Aitana Balaguer³, Jaime Sanz³, Maria Jesus Pascual⁴, Ana Benzaquén⁵, Jose Luis Piñana⁵, Maria Queralt Salas⁶, Agustin Nieto-Vazquez⁷, Ignacio Español⁸, Maria Huguet-Mas⁹, Leyre Bento¹⁰, Adolfo Sáez¹¹, Pere Barba¹², Silvia Filaferro¹³, Pascual Balsalobre¹⁴, Raffaella Greco¹, Alberto Mussetti²

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Study design	Retrospective analysis	Aim	Outcomes of FT vs. FBT in lymphoma pts		
Outcome parameters	NRM, OS, PFS, GFRS, CIR/P	POD, a/cGvHD, hematological rec	covery		
Patients	178	78 Median age (range) 50 (21.2-68.5) FT 52.7 (25.3-70.1) FBT			
Indications	Aggr. BCL (n=56), Indol. BCL ((n=58), HL (n=38), TCL (n=26)			
Conditioning regimens	FT	FBT	Р		
Results* n 3 y NRM 3 y PFS 3 y OS 3 y GFRS 3 y CIR/POD aGvHD (gr. II-IV / III-IV) 3 y cGvHD (moderate-severe) Engraftment d+30 (neutrophil/platelets) GFs	65 14% 66% 70.8% 43.8% 22% 26% / 14% 26% 92% / 56%	113 33% 45.2% 54.5% 39.8% 22% 23% / 9.8% 9.9% 94% / 52%	0.017 0.023 0.056 0.47 0.08 0.7 / 0.5 0.007 0.06 / 0.3		
Conclusions	 FT conditioning regimen demonstrated superior outcomes in terms of NRM among lymphoma pts undergoing reduced toxicity alloHSCT. FT should be considered a viable reduced-toxicity conditioning for lymphoma pts receiving alloHSCT with PTCy-based GvHD prophylaxis, particularly for older or frail pts. 				





Fludarabine and Treosulfan Conditioning Is Feasible and Leads to High OS and Low NRM

B121 Poster presentation

Chiara Bernardi^{1,2}, Stéphane Morisset³, Amandine Pradier^{1,2}, Anne-Claire Mamez¹, Federica Giannotti¹, Sarah Morin¹, Stavroula Masouridi Levrat¹, Gabrielle Roth-Guepin⁴, Maud D'Aveni^{4,5}, Céline Kicki^{4,5}, Arnaud Campidelli^{4,5}, Federico Simonetta^{1,2}, Simona Pagliuca^{4,5}, Yves Chalandon¹, Marie-Thérèse Rubio^{4,5}

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Study design	Bi-institutional cohort study	Aim	Clinical and immune reconstitution data after FT10 conditioning	
Outcome parameters	OS, PFS, relapse, NRM, a/cGv	HD, EBV/CMV reactivation		
Patients	89	Median age (range)	63 y (29-74)	
Indications*	AML (n=47), MDS (n=21), MPI	N (n=8), lymphoma (n=5), other (n=8)	
Conditioning regimen	Flu 30 mg/m² (5 d), Treo 10 g/m	n² (3 d), ATLG 10 mg/kg (1-3 d)		
Results*				
2 y OS	71.66%			
2 y PFS	56.16%			
2 y CIR	39.00%			
2 y NRM	4.84%			
Grade II-IV aGvHD	22.47%			
Moderate/severe cGvHD	23.07%			
2 y GRFS	44.48%			
Conclusions	FT10 conditioning regimen is safe and effective.			
	High survival probability and low NRM observed.			
	Adequate immune recovery post-transplant.			
	Comparable outcomes to previous phase III trial.			

^{*}Numbers differing from abstract were based on poster presented at conference.





Thiotepa Addition to Treosulfan-Fludarabine Regimen Exhibited Effectiveness and Tolerability in Elderly and Unfit Patients Undergoing HSCT With Active Myeloid Diseases: A Real-World Study

B134 Poster presentation

Luca Tosoni^{1,2}, Gabriele Facchin¹, Rosa Plos^{1,2}, Chiara Callegari^{1,2}, Matteo Fanin^{1,2}, Marta Lisa Battista¹, Antonella Geromin¹, Renato Fanin^{1,2}, Francesca Patriarca^{1,2}

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Study design	Retrospective analysis		Aim	FT vs FTT in elderly/ unfit AML/MDS pts undergoing HSCT
Outcome parameters	aGvHD, infections, VO	D, NRM, GRFS, PFS,	OS	
Patients	66		Median age (range)	66 y (46-76)
Indications	AML (n=58), MDS (n=	8)		'
Conditioning regimen	Overall	FT Treo 30 g/m², Flu	FTT Treo 30 g/m², Flu, TT 5 mg/kg	р
Results* n CR status at HSCT MRD+ status at HSCT aGvHD (grade II-IV) Infection (grade III-IV) VOD Relapse NRM Death 3 y OS 3 y PFS	66 79% 50% 33% 30% 6% 36% 17% 39% 52% 44%	48 88% 40% 35% 33% 6% 38% 17% 42% 50%	18 57% 90% 28% 22% 6% 33% 17% 33% 58%	0.005 0.005 0.558 0.382 0.916 0.754 1.000
Conclusions	between FT and FTT.	n AML/MDS cohort. tion of non-CR pts in F ensifying conditioning r	asible. TT group, no differences i	





Real World Experience of Treosulfan in Allogeneic Stem Cell Transplantation in Adult Patients With Hematological Diseases. The Spanish Group of SCT and Cell Therapy (GETH-TC)

B135 Poster presentation

Juan Manuel Cerezo Martín¹, Lucrecia Yañez San Segundo¹², María de las Mercedes Colorado¹, Queralt Salas³, Estefanía Pérez-López⁴, Guillermo Martin Sánchez¹, Noemi Fernández Escalada¹, Lucia España¹, Pascual Pasalobre⁵, Lucía López Corral⁴, Montserrat Rovira³, María Aránzazu Bermúdez¹²

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Study design	Retrospective study	Aim	Real-world experience of Treo as SCT conditioning regimen
Primary outcome	OS, RFS, TRM, factors influencing survival		
Patients	76	Median age (range)	60 y (21-73)
Indications*	AML (n=49), MDS (n=18), CMPN (n=3), CMML (n=1), Other (n=5)		
Conditioning regimens	FT14 (n=29), FT10 (n=39), FT-Other (n=8)		
Primary GF 2 y OS 2 y RFS TRM 2 y CIR Hematologic recovery aGvHD 2 y cGvHD	n=2 61.5% 51.9% 17.2% (1 y), 18.8% (2 y) 30.6% Median 17 d (neutrophils), 20 d 20.4% (grade II-IV), 11.9% (grad 39.4% (moderate-severe)	•	
Conclusions*	 Treo conditioning regimen is safe and effective in preventing disease relapse, even in high-risk pts with elevated HCT-CI and DRI scores or undergoing second alloHSCT. These findings support its use as a viable option for patients with significant comorbidities or advanced disease. 		

^{*}Numbers differing from abstract were based on poster presented at conference.





Outcomes and Early Complications of Allogeneic Stem Cell Transplant for Hematologic Malignancies in Patients Over 65 Years

Poster presentation

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Study design	Retrospective, observational, monocentric	Aim	Early post-HSCT complications, NRM, and long-term outcomes
Outcome parameters	Early complications (by day 100), NRM, long-term outcomes		
Patients	62	Median age (range)	68 y (65–75)
Indication	AML (73%), MDS (8%), CMPN (5%), Other (14%)		
Conditioning regimens	FT (29%), FBT (50%), FB (13%) as RIC (73%), MAC (24%), or NMA (3%)		
Results* 2 y OS Early complications Infections aGvHD cGvHD 2 y DFS 2 y NRM 2 y CIR	49%; by donor type: MSD 75%, MMUD 60%, HID 36%, p=0.03; by conditioning (AML pts only): 70% Treo-, 39% Bu-based, p=0.06 98% 79% (Bacterial: 57%, Viral: 39%, Fungal: 13%), 63% grade III, 24% grade ≥4 58%; 72% grades I-II, 28% grades III-IV 27%: 30% severe 71% 27% 19%		
Conclusions	HSCT feasible for elderly pts but associated with substantial toxicity. Significant complications within first 100 d post-transplant. Treo-based conditioning offers better outcomes than Bu-based in AML pts.		

^{*}Numbers differing from abstract were based on poster presented at conference.





Treosulfan Versus Busulfan Conditioning Regimen in Allogeneic Stem Cell Transplantation: A Single Centre Experience

P211 Poster presentation

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Study design	Retrospective analysis	Aim	FTT vs FBT RIC regimens in alloHSCT	
Outcome parameters	Engraftment, a/cGvHD, relapse, PFS, OS, GRFS			
Patients	51	Median age (range)	60 y (55-63) FTT 54 y (51-58) FBT	
Indications	AML (n=22), ALL (n=6), MPN (n=6), LPN (n=14), MDS (n=3)			
Conditioning regimens	FTT TT 5 mg/kg, Treo 3 x 10 g/m², Flu 5 x 30 mg/m²	FBT TT 5 mg/kg, Bu 2 × 3.2 mg/kg Flu 5 × 50 mg/m²		
Results*				
n	27		24	
Engraftment neutrophils	20 d (14-30)	17 d (12-37)		
Engraftment platelets	20 d (11-153)	17 d (11-37)		
aGvHD (Grade II-IV)	15%		23%	
cGvHD (Moderate)	19%		20%	
2 y CIR	15%		17%	
Death in remission	22%		29%	
1 y PFS	73.2% ± 9	51.8% ± 10		
1 y OS	80.8% ± 7		56.6% ± 10	
1 y GRFS	65.6% ± 9		47.8% ± 10	
Conclusions	• RTC Treo-based regimen is safe and effective for disease control.			
	• FTT regimen shows tendency for better outcomes compared to FBT RIC regimen.			

^{*}Numbers differing from abstract were based on poster presented at conference..





A Single-Center Comparison of Thiotepa-Treosulfan Versus Thiotepa-Busulfan Based Conditioning Regimens in Adults With Haematological Malignancies Undergoing Allogeneic Haematopoietic Stem Cell Transplant

P220 Poster presentation

Kye Ling Wong', Tze Wei Chan', Tertius Tuy', Chieh Hwee Ang', Melinda Si Yun Tan', Lawrence Cheng Kiat Ng', Shin Yeu Ong', Hein Than', Yunxin Chen', Francesca Lorraine Wei Inng Lim', Chandramouli Nagarajan', William Ying Khee Hwang', Yeow Tee Goh', Yeh Ching Linn', Aloysius Yew Leng Ho', Jeffrey Kim Siang Quek'

Affiliation: ¹Singapore General Hospital, Singapore, Singapore

Study design	Retrospective single center study	Aim	Effectiveness/safety in pts with FTT/TEC-FT vs FBT/TEC-BF conditioning regimens
Outcome parameters	OS, PFS, GRFS, AEs (infection, mucositis, liver injury, and bleeding complications)		
Patients	52	Median age (range)	55 (47-61) Bu 57 (51-65) Treo
Indications	Leukemia (n=25), MPN (n=13), MDS (n=9), MM (n=3), Lymphoma (n=2)		
Conditioning regimens	FTT/TEC-FT (n=12)	FBT/TEC-BF (n=40)	Р
Results*			
1 y OS	65.0%	58.3%	0.69
1 y CIR	32.5%	33.3%	0.65
1 y GRFS	42.9%	42.2%	0.63
GvHD	42%	48%	0.7
Mortality	42%	40%	>0.9
Neutrophil engraftment	15.5 d	17.5 d	0.4
Platelet engraftment	17 d	19 d	0.14
AEs	Similar	Similar	NS
Conclusions	 No difference in OS, PFS, GRFS between FTT and FBT. Similar rates of AEs between groups. Decision to switch from Bu to Treo was on based on physician's discretion, predisposing to selection bias. 		

^{*}Information differing from abstract was based on poster presented at conference.



: medac

: medac

Trecondi* 1 g / 5 g powder for solution for infusion
Qualitative and quantitative composition: One vial Trecondi 1 g (5 g) powder for solution for infusion contains 1 g (5 g) of treosulfan. When reconstituted,
1 mL of the solution for infusion contains 50 mg treosulfan. Therapeutic indications: Treosulfan in combination with fludarabine is indicated as part of conditioning treatment prior to allogeneic haematopoietic stem cell transplantation (alloHSCT) in adult patients and in paediatric patients older than one month with malignant and non-malignant diseases. Posology and method of administration: Administration should be supervised by a physician experienced in conditioning treatment followed by alloHSCT. Adults with malignant diseases: Treosulfan is given in combination with fludarabine. Treosulfan 10 g/m² body surface area (BSA) per day as a two-hour intravenous infusion, given on three consecutive days (day -4, -3, -2) before stem cell infusion (day 0). The total treosulfan dose is 30 g/m²; Treosulfan is given in combination with fludarabine with or without thiotepa. Treosulfan 14 g/m² body surface area (BSA) per day as a two-hour intravenous infusion, given on three consecutive days (day -6, -5, -4) before stem cell infusion (day 0). The total treosulfan dose is 42 g/m²; Treosulfan should be administered before fludarabine. Paediatric administration of interest in combination with fludarabine, with or without thiotepa. Contraindications: Hypersensitivity to the active substance; active non-controlled infectious disease; severe concomitant cardiac, lung, liver, and renal impairment; Fanconi anaemia and other DNA breakage repair disorders; pregnancy; administration of live vaccine. Undesirable effects: Infections, infestations: Very commonly myelosuppression, pancytopenia, febrile neutropenia. Immune system: Commonly hypersensitivity. Metabolism and nutrition: Commonly decreased appetite. Uncommonly glucose tolerance impaired including hyperplaycaemia and hypoglycaemia. Acidosis, alkalosis, electrolyte imba sion, dry mouth. Gastric haemorrhage, neutropenic colitis, oesophagitis, proctitis, gingival pain. Hepatobiliary: Very commonly hepatotoxicity. Uncommonly veno-occlusive liver disease. Hepatomegaly. Skin, subcutaneous tissue: Very commonly pruritus, alopecia. Commonly (maculo-papular) rash, purpura, erythema, urticaria, palmar plantar erythrodysaesthesia syndrome, dermatitis exfoliative, pain of skin, skin hyperpigmentation. Uncommonly erythema multiforme, dermatitis acneiform, dry skin. Skin necrosis or ulcer, dermatitis, dermatitis bullous, dermatitis diaper.

dermatitis acneiform, dry skin. Skin necrosis or ulcer, dermatitis, dermatitis bullous, dermatitis diaper.
Musculoskeletal and connective tissue: Commonly pain in extremity, back pain, bone pain, arthralgia.
Uncommonly myalgia. Renal, urinary: Commonly acute kidney injury, haematuria. Uncommonly urinary tract pain. Renal failure, haemorrhagic or noninfective cystitis, dysuria. Reproductive system: Scrotal erythema, penile pain. General, administration site: Very commonly asthenic conditions (fatigue, asthenia, lethargy), pyrexia. Commonly oedema, chills. Uncommonly non cardiac chest pain, pain, face oedema.
Investigations: Very commonly blood bilirubin increased, ALT increased. Commonly AST increased, rGT increased, C-reactive protein increased, weight decreased, weight increased. Uncommonly blood alkaline phosphatase increased. Blood lactate dehydrogenase (LDH) increased. Legal classification: POM (prescription only medicine). Marketing authorisation holder: medac GmbH Theaterstraße 6; 22880 Wedel, Germany. Date of revision of text: 11/2023
Trecondi has been authorised in all countries of the EU as well as in Australia (Link medical Products), Belarus, Canada (Medexus Pharmaceuticals Inc.), Iceland, Kazakhstan, Norway, Liechtenstein, Russia, Switzerland (Ideogen AG), United Kingdom, Ukraine

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