

Supplement file

Title: Antithymocyte globulin improves the survival of patients with myelodysplastic syndrome undergoing HLA-matched unrelated donor and haplo-identical donor transplants

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1) Patient clinical characteristics

Variables	No.
Sex (n=85)	
Male/Female	53/32
Age (n=85)	
Median (range)	39 (12-59)
WHO classification (n=85)	
RCUD	8
RCMD	28
MDS-U	2
RAEB-1	22
RAEB-2	25
IPSS (n=84)	
Low	1
Int-1	46
Int2	27
High	10
Karyotype (n=84)	
Good	47

Int	28
Poor	9
Conditioning (n=85)	
MAC	78
RIC	7
Stem cell source (n=85)	
Marrow	17
PBSCs	43
Marrow+PBSCs	24
Cord	1
Therapies pre-HSCT(n=85)	
DAC±chemotherapy	43
BSC	42
CR Pre-HSCT(n=85)	
Yes	13
No	72
Secondary MDS (n=85)	
Yes	12
No	73
ATG (n=85)	
Yes	39
No	46
Progression pre-HSCT	
(n=85)	
Yes	16
No	69
Donor type (n=85)	
MSDs	38
MUDs	29

MAC: myeloablative conditioning; RIC: reduced intensive conditioning; DAC: decitabine; BSC: basic supportive care, including erythropoiesis-stimulating agent and blood transfusion; Secondary MDS: MDS that transformed from chronic aplastic anemia; ATG: Rabbitantithymocyte globulin; Progression pre-HSCT: MDS that progressed to advanced stage or AML; MSDs: matched sibling donors; MUDs: matched unrelated donors ; HIDs: haplo-identical donors.

2) Conditioning regimens in allo-HSCT

For MSDT, pre-transplant MAC regimens comprised semustine ($250\text{mg}/\text{m}^2$, day -10), cytarabine ($2\text{g}/\text{m}^2/\text{d}$ days -9 to -8), busulfan ($3.2\text{ mg}/\text{kg}/\text{d}$ days -7 to -5), cyclophosphamide ($1.8\text{ g}/\text{m}^2/\text{d}$ days -4 to -3). For non-MSDT (MUDT and HIDs), patients received a regimen identical to that for MSDT apart from receiving higher doses of cytarabine ($4\text{ g}/\text{m}^2/\text{d}$ days -9 to -8). In addition, patients receiving MUDT also received hydroxycarbamide ($80\text{mg}/\text{kg}$, day -10). Rabbit ATG (Thymoglobulin; Imtix Sangstat, Lyon, France) was administered to patients receiving MUDT ($10\text{ mg}/\text{kg}$ total dose, days -5 to -2) and HIDs ($10\text{ mg}/\text{kg}$ total dose, days -6 to -3).

The RIC comprised semustine ($250\text{ mg}/\text{m}^2$, day -10), fludarabine ($30\text{ mg}/\text{m}^2/\text{day}$, days -10 to -6), cytarabine ($1.5\text{ g}/\text{m}^2/\text{d}$ days -10 to -6), and busulfan ($3.2\text{ mg}/\text{kg}/\text{d}$ days -5 to -3). Additionally, ATG was used in patients receiving MUDT ($6\text{ mg}/\text{kg}$ total dose, days -4 to -1).