Supplemental

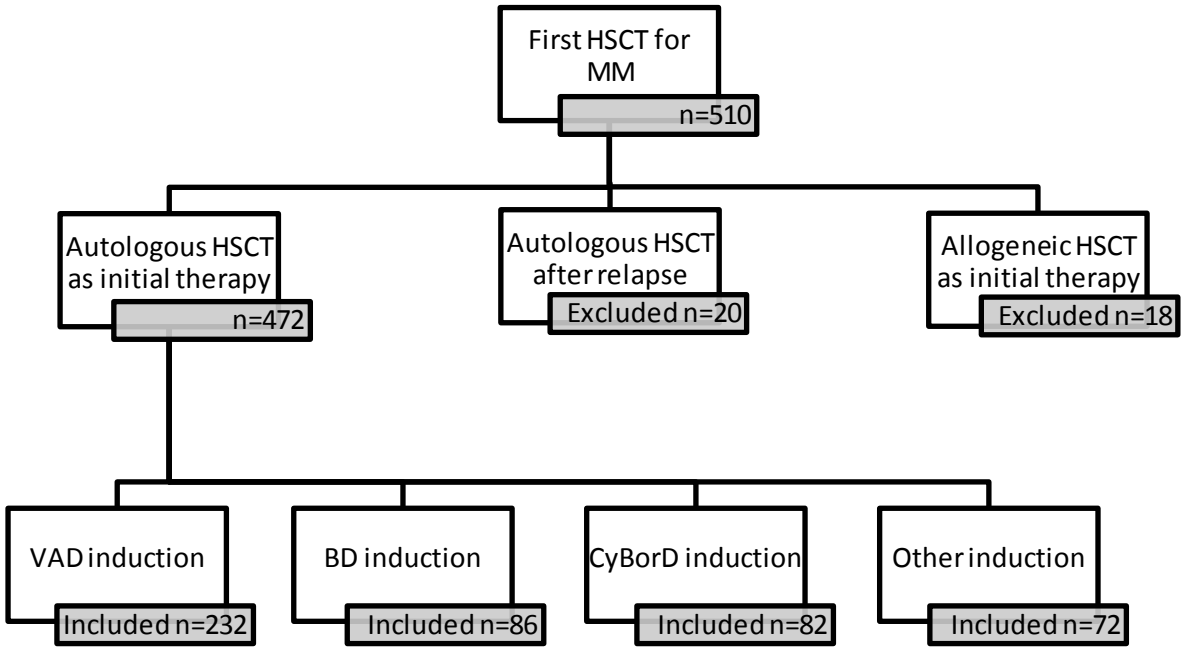


Figure S1. Course of patient selection.

HSCT, hematopoietic stem-cell transplant; MM, multiple myeloma; HSPC, hematopoietic stem and progenitor cells. Consecutive MM patients were selected from the BMT database, but they were excluded if HSPC collection was not part of a first-line therapy or if they had failed HSPC.

Figure S2. a)

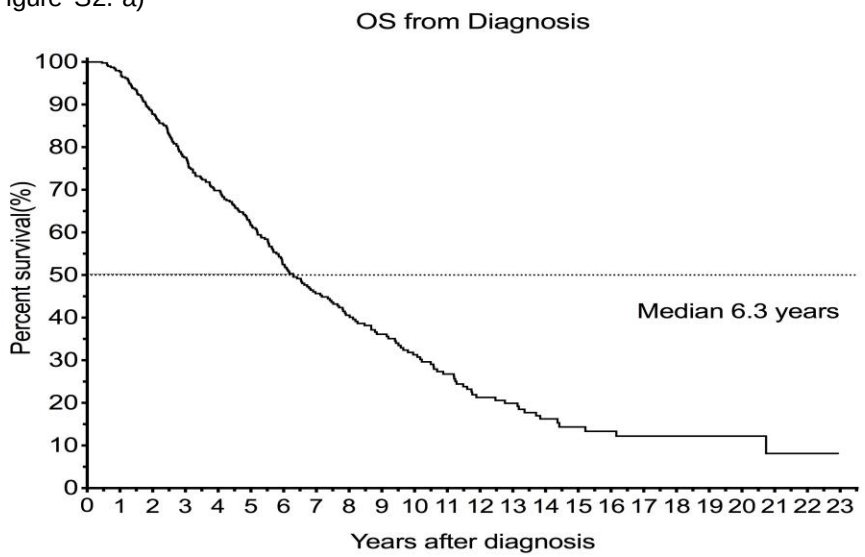


Figure S2. b)

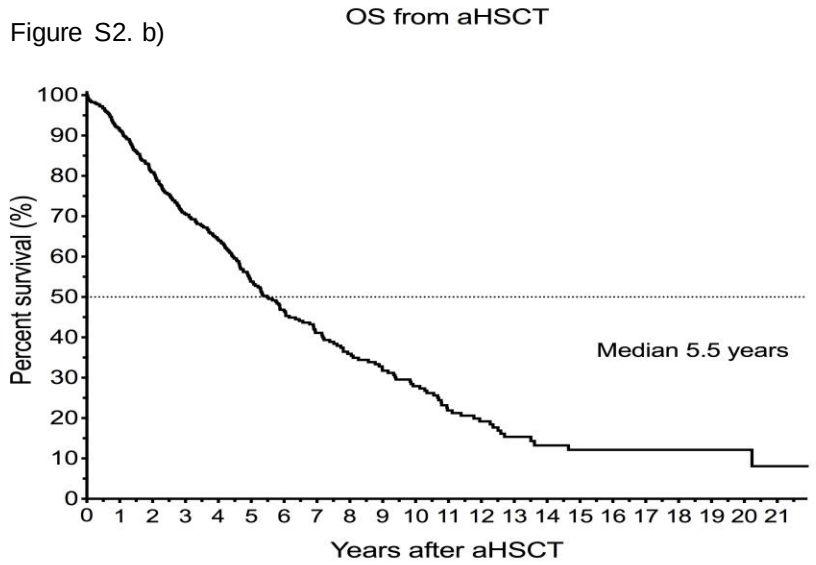


Figure S2. Overall survival of patients who had an aHSCT at our centre (n=406) from diagnosis to last follow-up or death (S2a) and from aHSCT to last follow-up or death (S2b).

Supplemental

Table S1

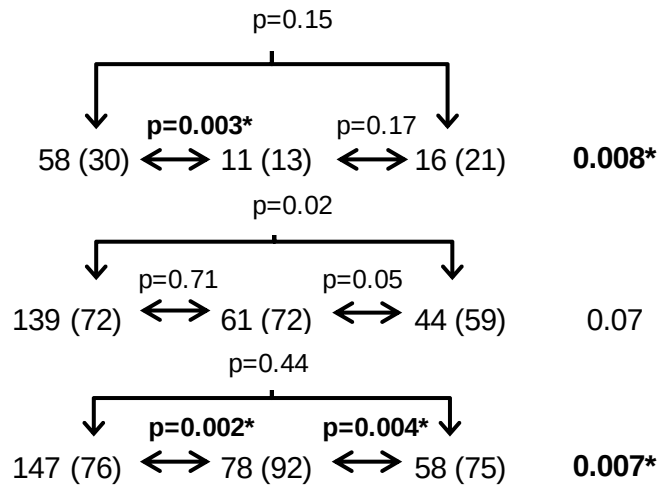
Regimens used as remission induction therapy and aHSCT conditioning

Regimen	Drugs and dose
Induction	
VAD	• vincristine 0.5mg d1-4 • adriamycin 10mg/m^2 d1-4 • dexamethasone 40mg d1-4, d9-12 and d17-20
BD	• bortezomib 1.3mg/m^2 d1, d4, d8 and d11 • dexamethasone 20-40mg d1-2, d4-5, d8-9, d11-12
CyBorD	• bortezomib 1.3-1.5mg/m^2 d1, d8, d15 and d22 • CTX 300-500mg d1, d8, d15 and d22 • dexamethasone 40mg d1, d8, d15 and d22
Conditioning	
MelVPTBI	• melphalan 140mg/m^2 • etoposide 60mg/kg • total body irradiation 5Gy
BuCyTBI	• busulfan 16mg/kg • CTX 120mg/kg • TBI 12Gy
Mel140-200	• melphalan 140mg/m^2 - 200mg/m^2
BuMel	• busulfan 3.2mg/kg • melphalan 140mg/m^2

Description of the regimens given as remission induction and aHSCT conditioning between January-1991 and September-2015 according to contemporary guidelines.

Table S2 Mobilization and collection outcomes stratified by remission induction received

	Induction Regimen	Total	VAD	BD	CyBorD	*P* value
A	Evaluable patients, n (% total)	355 (100)	193 (54)	85 (24)	77 (22)	
B	Mobilization toxicity, n (%)					
	Patients admitted	85 (24)	58 (30)	11 (13)	16 (21)	**0.008***
	Number of apheresis, n (%) One apheresis	244 (69)	139 (72)	61 (72)	44 (59)	0.07
	Patients who collected ≥5x10^6 CD34$^+$ cells/kg, (%)	283 (78)	147 (76)	78 (92)	58 (75)	**0.007***



Mobilization toxicity and HSPC collection effectiveness analyzed in patients mobilized with CTX2.5g/m^2 according to remission induction received. In (A) percent of patients refers to all the studied patients (n=355). In (B) percent was calculated from the number of patients given each induction regimen. The collection of at least 5x10^{6}CD34$^+$cells/kg was considered sufficient for two aHSCT. The p values over the arrows describe the p value of a pairwise comparison while the overall p value is given at the end of the row. Proportion of patients admitted was statistically different between VAD and BD only. The proportion of patients who collected enough CD34$^+$cells for a second transplant was significantly higher in the BD cohort when compared to the VAD and CyBorD patients, and not different between VAD and CyBorD. Table S2 shows that toxicity is lower and graft collections were better in those that received BD induction.