

**Supplementary Data 4: Previous therapies for “Treated patients”**

PID	Diagnosis (year)	Previous Therapies
28	2014	up-front metronomic therapy
32	2014	2 x MVDT PACE
43	2003	DT-PACE Melphalan with ASCT BEAM with ASCT DT-PACE consolidation Thal/Dex 1. <i>Relapse</i> VTD 2. <i>Relapse</i> Pom 3. <i>Relapse</i> CFZ/Dex 4. <i>Relapse</i> metronomic, Arsenic trioxide
44	2012	Radiation therapy MVTD PACE Melphalan with ASCT VRD
45	2009	VTD VTDSPACE 1. <i>Relapse</i> CFZ/Dex CRD Progression CFZ/Arsenic/Pom/Atra/Dex
46	2003	DT-PACE 2 x Melphalan with ASCT VTD consolidation
47	2011	MVTD PACE 2 x Melphalan with ASCT VRD consolidation
48	2012	VRD Radiation therapy CFZ/Dex
49	2009	MVTD PACE Melphalan with ASCT VRD consolidation 1. <i>Relapse</i> Metronomic therapy 2. <i>Relapse</i> Trametinib 3. <i>Relapse</i> : Trametinib/Pom/Dex
50	2006	DT-PACE Melphalan/VTD + ASCT Thal VDSPACE consolidation

PID	Diagnosis (year)	Previous Therapies
		Thal 1. Relapse VDT Len/Dex
51	2004	VDT-PACE 2 x Melphalan with ASCT VTD Thal 50mg + Dex 20mg Len

Abbreviations: Dex: Dexamethasone; (V)DTPAC(E): (Bortezomib) Dexamethasone, Thalidomide, Cisplatin, Doxorubicin, Cyclophosphamide, (Etoposide); ASCT: autologous stem cell transplantation; Pom: Pomalidomide; CFZ: Carfilzomib; Metronomic therapy: Doxorubicin&Cisplatin as continuous 24-h intravenous infusion for 16 days plus Bortezomib, Thalidomide: Dexamethasone; Len: Lenalidomide; MVDT: Melphalan/VTD; CRD: Carfilzomib, Lenalidomide, Dexamethasone