# Early relapse after autologous transplant for myeloma is associated with poor survival regardless of cytogenetic risk

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**Supplemental Table 1: Univariable analysis of overall survival (landmark analysis at 18 months)**

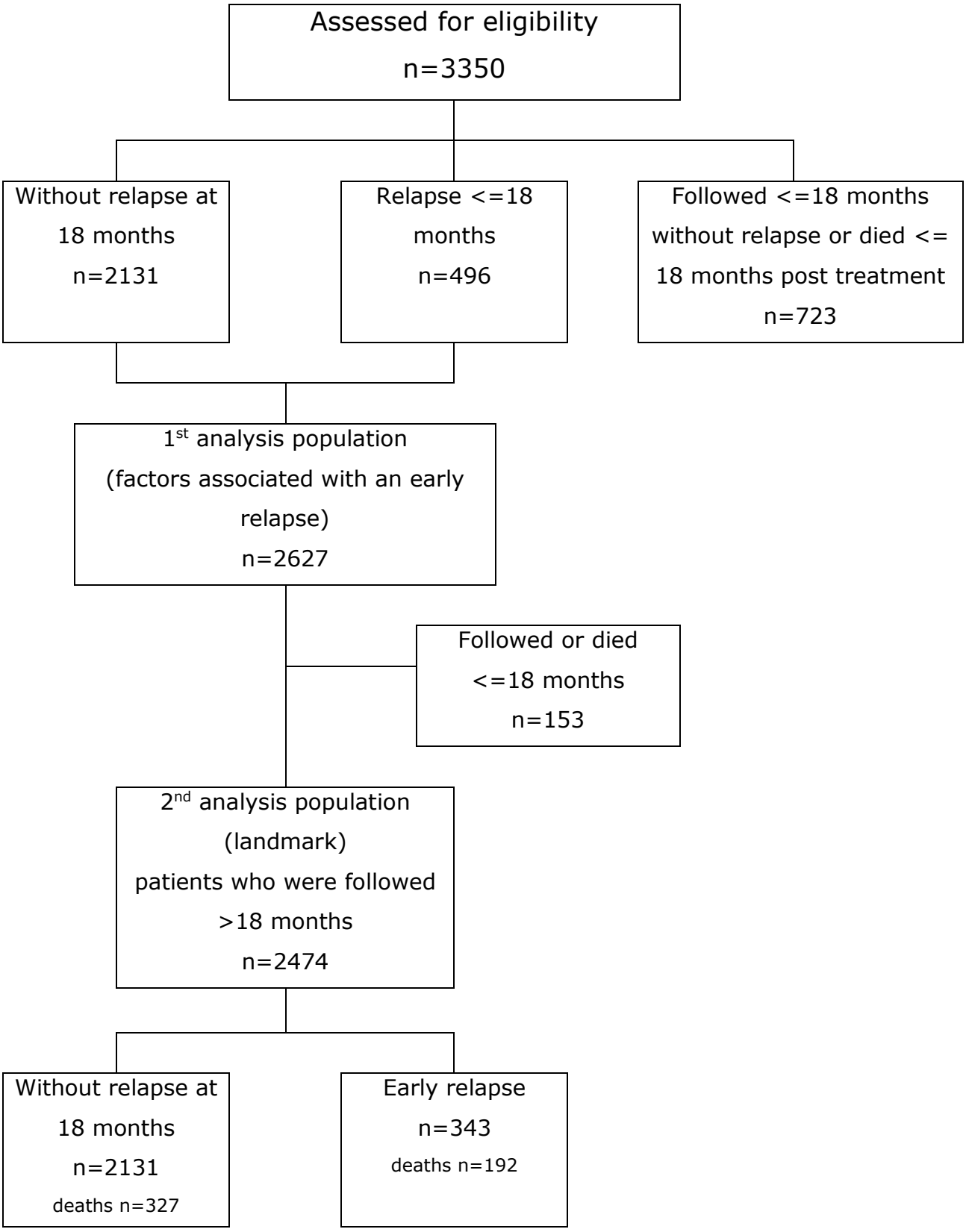
| | Death / N | Hazard Ratio [IC95%] | |
|---|---|---|---|
| Sex : | | | p = 0.0976 |
| Male | 309 / 1396 | 1.00 | |
| Female | 207 / 1025 | 0.86 [ 0.72; 1.03] | |
| Age : | | | **p = 0.0055** |
| <60y | 284 / 1405 | 1.00 | |
| >=60y | 235 / 1069 | 1.28 [ 1.07; 1.52] | |
| ISS : | | | **p < 0.0001** |
| 1 | 91 / 690 | 1.00 | |
| 2 | 194 / 882 | 1.76 [ 1.37; 2.26] | |
| 3 | 153 / 481 | 2.39 [ 1.84; 3.09] | |
| Del 17p and/or t4;14) : | | | **p < 0.0001** |
| No | 319 / 1782 | 1.00 | |
| Yes | 141 / 359 | 2.63 [ 2.16; 3.21] | |
| Early relapse (<18 months) : | | | **p < 0.0001** |
| No | 327 / 2131 | 1.00 | |
| Yes | 192 / 343 | 5.96 [ 4.98; 7.14] | |
| Maintenance : | | | p = 0.2298 |
| No | 467 / 2179 | 1.00 | |
| Yes | 52 / 295 | 0.84 [ 0.63; 1.12] | |
| Best response: | | | **p = 0.0036** |
| VGPR/CR | 222 / 1224 | 1.00 | |
| SD/RP | 94 / 299 | 1.43 [ 1.12; 1.82] | |
| Treatment : | | | **p = 0.0002** |
| Triplet | 198 / 1552 | 1.00 | |
| Doublet | 321 / 922 | 1.41 [ 1.17; 1.69] | |

**Supplemental Table 2: Multivariable analysis of overall survival (landmark analysis at 18 months)**

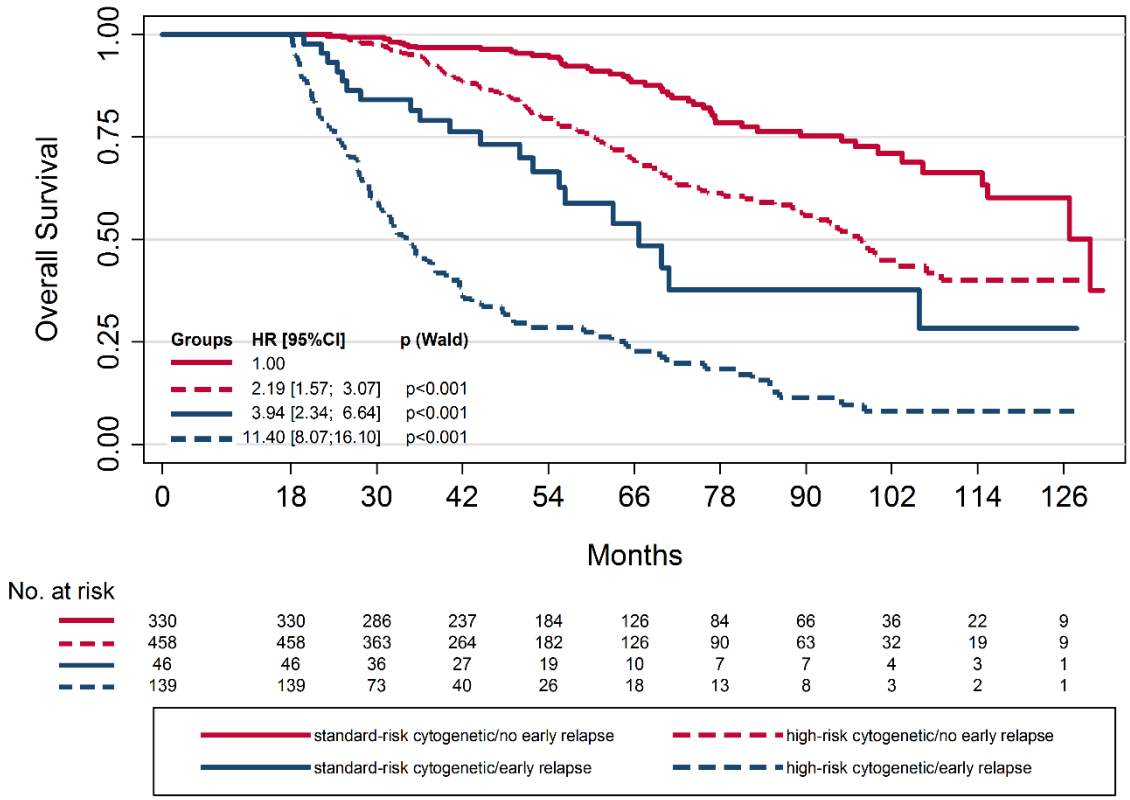
| (n=1178, 255 events) | | Hazard Ratio | IC95% | p value |
|---|---|---|---|---|
| ISS | | | | |
| | 1 | 1.00 | | |
| | 2 | 1.72 | [1.24; 2.38] | **0.0012** |
| | 3 | 1.89 | [1.33; 2.68] | **0.0003** |
| Early relapse (<18 months) | | | | |
| | No | 1.00 | | |
| | Yes | 4.40 | [3.34; 5.81] | **<0.0001** |
| del17p &/ or t(4;14) | | | | |
| | No | 1.00 | | |
| | Yes | 2.05 | [1.54; 2.72] | **<0.0001** |
| Best response | | | | |
| | VGPR/CR | 1.00 | | |
| | SD/RP | 1.15 | [0.86; 1.54] | 0.3470 |
| Treatment | | | | |
| | Triplet | 1.00 | | |
| | Doublet | 1.54 | [ 1.18; 2.00] | **0.0015** |

**Supplemental Table 3: Description of patients' cytogenetic factors and their association to early relapse**

| | No relapse within 18m N = 2131 | Early relapse (≤18m) N = 496 | p value |
|---|---|---|---|
| Del(17p) and/or t(4;14) (n = 2273) | | | **p < 0.0001** |
| No | 1560 (85.3%) | 300 (67.4%) | |
| Yes | 268 (14.7%) | 145 (32.6%) | |
| Missing | 303 | 51 | |
| Trisomy 5 (n = 830) | | | **p = 0.0024** |
| No | 363 (57.8%) | 141 (69.8%) | |
| Yes | 265 (42.2%) | 61 (30.2%) | |
| Missing | 1503 | 294 | |
| Gain 1q (n = 840) | | | **p < 0.0001** |
| No | 420 (66.2%) | 99 (48.1%) | |
| Yes | 214 (33.8%) | 107 (51.9%) | |
| Missing | 1497 | 290 | |
| Del(1p32) (n = 820) | | | **p = 0.0007** |
| No | 558 (90.6%) | 167 (81.9%) | |
| Yes | 58 (9.4%) | 37 (18.1%) | |
| Missing | 1515 | 292 | |
| Del(17p) or t(4;14) or gain 1q or del(1p32) (n = 1061) | | | **p < 0.0001** |
| No | 330 (41.9%) | 57 (20.9%) | |
| Yes | 458 (58.1%) | 216 (79.1%) | |
| Missing | 1343 | 223 | |




**Supplemental Figure 1: Data flowchart.** The flowchart illustrates the selection process of patient data for statistical and model analyses.




**Supplemental Figure 2: Kaplan-Meier overall survival curves for patients according to early or no early relapse.** Landmark analysis at 18 months. Patients with no early relapse and standard-risk cytogenetic (N=330, red line) vs patients with no early relapse and high-risk cytogenetic (N=458, red dashed line) vs patients with early relapse and standard-risk cytogenetic (N=46, blue line) vs patients with early relapse and high-risk cytogenetic (N=139, blue dashed line). High-risk cytogenetic was defined here by the presence of t(4;14) and/or del(17p) in more than 55% of plasma cells and/or del(1p32) and/or gain 1q.