Supplementary Materials

Table S1. Risk factors associated with treatment outcome of solitary plasmacytoma treated with RT (univariate analysis)

|                          | n  | 5-year LC (%) | p-value | 5-year MMFS (%) | p-value | 5-year FFS (%) | p-value | 5-year OS (%) | p-value |
|--------------------------|----|---------------|---------|-----------------|---------|----------------|---------|---------------|---------|
| **Age (yr)**             |    |               |         |                 |         |                |         |               |         |
| <60                      | 22 | 77.2          | 0.230   | 36.4            | 0.820   | 37.7           | 0.840   | 88.8          | 0.320   |
| ≥60                      | 25 | 95.5          | 0.110   | 38.8            | 0.620   | 36.5           | 0.440   | 87.2          | 0.190   |
| **Sex**                  |    |               |         |                 |         |                |         |               |         |
| Male                     | 30 | 78.6          | 0.110   | 36.5            | 0.620   | 36.5           | 0.440   | 87.2          | 0.430   |
| Female                   | 17 | 100.0         | 0.220   | 41.0            | 0.001   | 41.0           | <0.001  | 90.9          | 0.430   |
| **Tumor location**       |    |               |         |                 |         |                |         |               |         |
| Extramedullary           | 11 | 100.0         | 0.220   | 100.0           | 0.001   | 100.0          | <0.001  | 90.9          | 0.430   |
| Bone                     | 36 | 82.0          | 0.004   | 64.6            | 0.007   | 87.8           | 0.470   | 78.8          | 0.470   |
| **Tumor size (cm)**      |    |               |         |                 |         |                |         |               |         |
| <5                       | 20 | 95.0          | 0.490   | 68.4            | 0.004   | 64.6           | 0.007   | 87.8          | 0.470   |
| ≥5                       | 21 | 88.0          | 16.9    | 17.2            | 72.7    |                |         |               |         |
| **Serum M protein present** | |               |         |                 |         |                |         |               |         |
| No                       | 16 | 87.5          | 0.230   | 49.1            | 0.210   | 49.1           | 0.088   | 85.1          | 0.960   |
| Yes                      | 20 | 82.0          | 0.110   | 40.1            | 0.120   | 40.1           | 0.210   | 85.9          | 0.960   |
| Unknown                  | 11 | 100.0         | 0.220   | 45.5            | 0.210   | 45.5           | 0.150   | 72.7          | 0.960   |
| **Bence Jones proteinuria** | |               |         |                 |         |                |         |               |         |
| Absent                   | 28 | 85.9          | 0.650   | 34.1            | 0.200   | 35.1           | 0.320   | 87.2          | 0.960   |
| Present<sup>a</sup>      | 5  | 100.0         | 0.004   | 40.0            | 0.004   | 40.0           | 0.004   | 100.0         | 0.960   |
| Unknown                  | 14 | 84.6          | 47.6    | 43.7            | 0.004   | 43.7           | 0.004   | 69.2          | 0.960   |
| **Serum free light chain ratio** | |               |         |                 |         |                |         |               |         |
| Normal                   | 9  | 100.0         | 0.078   | 59.3            | 0.017   | 59.3           | 0.004   | 83.3          | 0.950   |
| Abnormal<sup>b</sup>     | 9  | 73.9          | 29.6    | 22.2            | 83.3    |                |         |               |         |
| Unknown                  | 29 | 87.0          | 39.5    | 40.2            | 81.1    |                |         |               |         |
| **RT dose**              |    |               |         |                 |         |                |         |               |         |
| <45 GyEQD2               | 31 | 85.9          | 0.920   | 35.6            | 0.800   | 34.7           | 0.620   | 84.8          | 0.590   |
| ≥45 GyEQD2               | 15 | 92.9          | 51.4    | 51.4            | 51.4    |                |         |               |         |
| **Surgical intervention**|    |               |         |                 |         |                |         |               |         |
| Yes                      | 14 | 100.0         | 0.150   | 50.6            | 0.280   | 50.6           | 0.210   | 84.2          | 0.310   |
| No                       | 33 | 80.2          | 29.7    | 29.8            | 29.8    |                |         |               |         |
| **Chemotherapy**         |    |               |         |                 |         |                |         |               |         |
| Yes                      | 2  | 100.0         | 0.640   | 50.0            | 0.730   | 50.0           | 0.690   | 100.0         | 0.280   |
| No                       | 43 | 86.4          | 37.0    | 36.7            | 36.7    |                |         |               |         |

RT, radiation therapy; LC, local control; MMFS, multiple myeloma-free survival; FFS, failure-free survival; OS, overall survival; EQD2, equivalent dose in 2-Gy fractions at α/β of 10.

<sup>a</sup>Two-year survival, <sup>b</sup>3-year survival.