

CD8⁺ T-cell immunity against cancer-testis antigens develops following allogeneic stem cell transplantation and reveals a potential mechanism for the graft-versus-leukemia effect

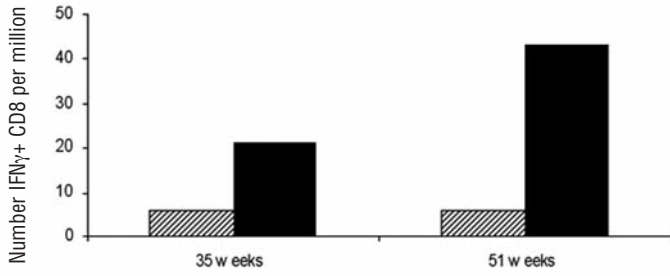
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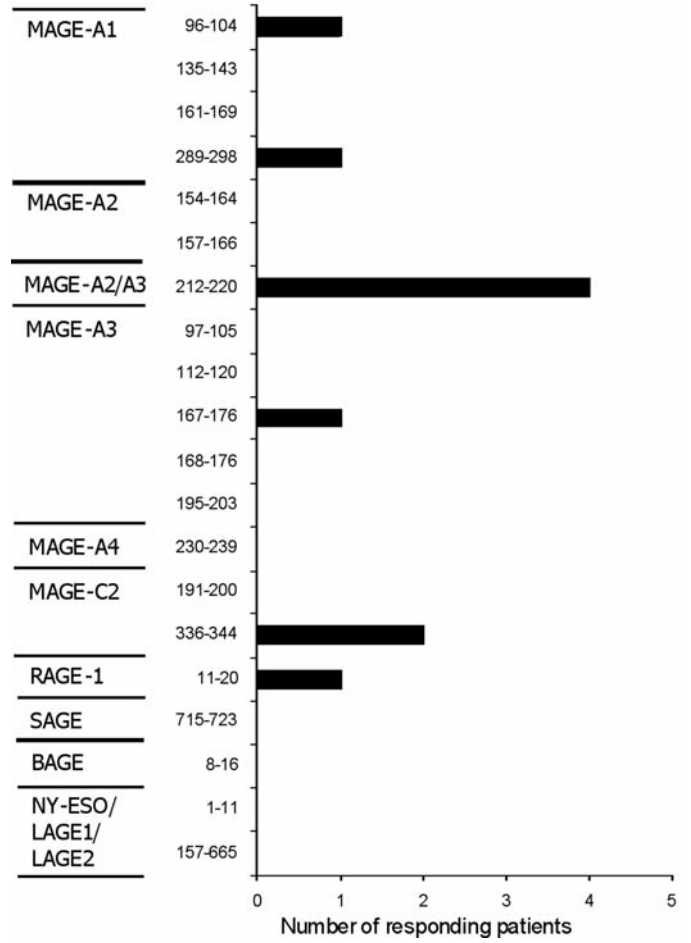
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Online Supplementary Table S1. Antigenic peptides encoded by CTag genes used to screen patients.

| Gene | Position | Peptide | HLA-Restriction | Frequency in population (%) |
|----------------------------|-----------|-------------|-----------------|-----------------------------|
| <i>BAGE</i> | | | | |
| | 8-10 | AARAVFLAL | Cw16 | 7 |
| <i>MAGE-A1</i> | | | | |
| | 161-169 | EADPTGHSY | A1 | 26 |
| | 96-104 | SLFRAVITK | A3 | 22 |
| | 135-143 | NYKHCFPEI | A24 | 19 |
| | 289-298 | RVRFFFPSL | B7 | 17 |
| <i>MAGE-A2</i> | | | | |
| | 157-166 | YLQLVFGIEV | A2 | 44 |
| | 156-164 | EYLQLVFGI | A24 | 20 |
| | 212-220 | EGDCAPEEK | Cw7 | 41 |
| <i>MAGE-A3</i> | | | | |
| | 168-176 | EVDPIGHLY | A1 | 26 |
| | 112-120 | KVAELVHFL | A2 | 44 |
| | 97-105 | TFPDLESEF | A24 | 19 |
| | 195 - 203 | IMPKAGLLI | A24 | 19 |
| | 167-176 | MEVDPIGHLY | B18 | 6 |
| | | | B44 | 21 |
| <i>MAGE-A4</i> | | | | |
| | 230-239 | GVYDGREHTV | A2 | 44 |
| <i>MAGE-C2</i> | | | | |
| | 191-200 | LLFGLALIEV | A2 | 44 |
| | 336-344 | ALKDVEERV | A2 | 44 |
| <i>NY-ESO/LAGE-1&2</i> | | | | |
| | 1-11 | MLMAQEALAFI | A2 | 44 |
| | 157-165 | SLLMWITQC | A2 | 44 |
| <i>RAGE-1</i> | | | | |
| | 352-360 | LKLSGWVRL | A2 | 44 |
| | 32-40 | PLPPARNGGL | A2 | 44 |
| | 11-20 | SPSSNRIRNT | B7 | 17 |
| <i>SAGE</i> | | | | |
| | 715-723 | LYATVIHDI | A24 | 20 |



Online Supplementary Figure S1. Following IFN- γ cytokine secretion assay, the frequencies of CTA γ -specific CD8 $^+$ T cells in peripheral blood (hatched bars) and bone marrow (solid bars) are shown. Comparison of frequencies of CTA γ -specific CD8 $^+$ T cells in peripheral blood and bone marrow. Peripheral blood mononuclear cells were isolated from paired peripheral blood samples and bone marrow aspirates taken at two time points from patient 189A.



Online Supplementary Figure S2. Responses were detected to peptides from different CTA γ . The number of patients responding to each peptide screened is shown. The peptides and the antigens they are derived from are shown on the y-axis. The number of patients with a T-cell response is shown on the x-axis.