

**Table S1: Minimal residual disease definition**

| Time                      | Pre-TED   | CRF, disease specific   |
|---------------------------|---|---|
| Before November 2013      | 1) Was recipient in cytogenetic remission prior to conditioning?<br>2) Was recipient in molecular remission prior to conditioning?  | 1) Was recipient in cytogenetic remission prior to conditioning?<br>2) Was recipient in molecular remission prior to conditioning?  |
| November 2013 – July 2017 | 1) Was recipient in cytogenetic remission prior to conditioning?<br>2) Was recipient in molecular remission prior to conditioning?<br>3) Was recipient in flow cytometry-based remission prior to conditioning? | 1) Was flow cytometry performed for blood/marrow prior to HCT?<br>2) Was disease detected in blood by flow?<br>3) Was disease detected in marrow by flow?<br>4) Molecular markers detected prior to HCT |

**Table S2: Variables selected *a priori* for multivariable analysis of outcomes**

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| <p>Main effect: Haplo vs. MSD</p> <p>Other variables:</p> <ul style="list-style-type: none"> <li>Patient age at HCT: 18-54 vs. 55+</li> <li>Patient gender: male vs. female</li> <li>Karnofsky performance score: <math>\geq 90</math> vs. <math>&lt; 90</math></li> <li>HCT-CI: 0 vs. 1-2 vs. <math>\geq 3</math></li> <li>Race: White vs. African American vs. others</li> <li>Ethnicity: Hispanic vs. others</li> <li>Cytogenetic risk: Favorable vs. intermediate (including normal) vs. poor: MK vs. other poor</li> <li>MRD at time of HCT: positive vs. negative</li> <li>AML type: De novo vs. secondary/therapy-related</li> <li>Conditioning intensity: MA with TBI vs. MA without TBI vs. RI</li> <li>Year of HCT: Continuous</li> <li>Donor/Recipient gender: F/F vs. M/M vs. F/M vs. M/F</li> <li>Donor/Recipient CMV serostatus: +/+ vs. +/- vs. -/+ vs. -/-</li> <li>Center effect</li> </ul> |
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AML: Acute myeloid leukemia; CMV: Cytomegalovirus; F: Female; Haplo: Haploidentical; HCT-CI: Hematopoietic cell transplantation-specific comorbidity index; M: Male; MA: Myeloablative; MK: Monosomal karyotype; MRD: Minimal residual disease; MSD: Matched sibling donor; RI: Reduced-intensity; TBI: Total body irradiation