

Neoplastic meningitis in patients with acute myeloid leukemia scheduled for allogeneic hematopoietic stem cell transplantation

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Online Supplementary TableS1. Patients' characteristics.

| Patients with AML transplanted (N. of patients) | 250 | |
|---|------------|---------|
| LP performed | 204 | 82% |
| median time between index LP and HSCT (days) | 16 | |
| Age, median | 48 | |
| Cytogenetics available | 178 | 87% |
| Poor risk* | 34 | 19% |
| Intermediate risk* | 123 | 69% |
| Favorable risk* | 21 | 12% |
| Remission status at transplantation | | |
| CR1 | 95 | 47% |
| >CR1, PR | 56 | 27% |
| RD | 53 | 26% |
| Donor | | |
| MR | | |
| D | 88 | 43% |
| MU | | |
| D | 111 | 54% |
| Haploidentical donor | 5 | 2% |
| Conditioning regimen | | |
| Standard intensity | 120 | 59% |
| Reduced intensity (RIC) | 84 | 41% |
| CNS disease at any time | 31 | 15% |
| Age, median | 43 | |
| Cytogenetics available | 29 | |
| Poor risk* | 3 | 10% |
| Intermediate risk* | 22 | 76% |
| Favorable risk* | 4 | 14% |
| Remission status at transplantation | | |
| CR1 | 7 | 23% |
| >CR1, PR | 9 | 29% |
| RD | 15 | 48% |
| Donor | | |
| MRD | 11 | 35% |
| MUD | 18 | 58% |
| Haploidentical donor | 2 | 6% |
| Conditioning regimen | | |
| Standard intensity (incidence of CNS disease) | 18 | 15% |
| Reduced intensity (incidence of CNS disease) | 13 | 16% |
| CNS disease diagnosed before HSCT | 26 | 13% |
| CNS disease successfully treated before HSCT | 9 | |
| Intrathecal methotrexate (average cumulative dose) | 5 | (65mg) |
| Intrathecal ARA-C (average cumulative dose) | 7 | (188mg) |
| Intrathecal liposomal ARA-C (average cumulative dose) | 0 | |
| CNS radiotherapy (dose) | 1 | (14 Gy) |
| HD-ARA-C | 9 | |
| CNS disease active at index LP | 17 | 8% |
| Age, median | 49 | |
| known from previous treatment courses | 9 | |

to be continued in the next page

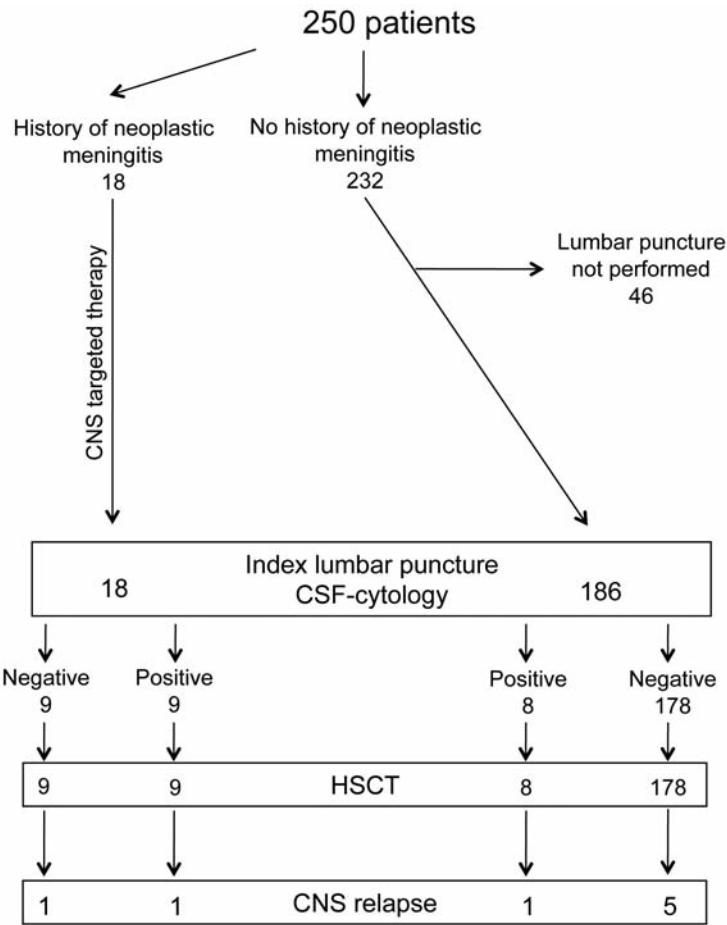
| | | |
|--|------------|-----------|
| newly diagnosed at time-point of HSCT | 8 | |
| Patients with refractory leukemia | 10 | |
| Patients with poor risk karyotype | 2 | |
| CNS targeted treatment pre-HSCT | 17 | |
| Intrathecal methotrexate (average cumulative dose) | 14 | (46,3 mg) |
| Intrathecal ARA-C (average cumulative dose) | 9 | (156mg) |
| Intrathecal liposomal ARA-C (average cumulative dose) | 5 | (120 mg) |
| CNS radiotherapy (average dose) | 3 | (25,2 Gy) |
| CNS targeted treatment after HSCT | 10 | |
| Intrathecal methotrexate (average cumulative dose) | 5 | (31,2mg) |
| Intrathecal ARA-C (average cumulative dose) | 2 | (60mg) |
| Intrathecal liposomal ARA-C (average cumulative dose) | 4 | (150mg) |
| CNS radiotherapy (average dose) | 2 | (21.6 Gy) |
| CNS disease after HSCT | 8 | 4% |
| Median time from HSCT to diagnosis of CNS relapse (days) | 203 | |
| CNS disease relapse after HSCT | 3 | |
| Pt. received post-HSCT maintenance therapy | 2 | |
| CNS disease newly diagnosed after HSCT | 5 | |
| Free of CNS disease at any time | 173 | 85% |
| Age, median | 48 | |
| Cytogenetics available | 149 | |
| Poor risk* | 31 | 18% |
| Intermediate risk* | 101 | 58% |
| Favorable risk* | 17 | 10% |
| Remission status at transplantation | | |
| CR1 | 88 | 51% |
| >CR1, PR | 47 | 27% |
| RD | 38 | 22% |
| Donor | | |
| MRD | 77 | 45% |
| MUD | 93 | 54% |
| Haploidentical donor | 3 | 2% |
| Conditioning regimen | | |
| Standard intensity | 102 | 59% |
| Reduced intensity (RIC) | 70 | 40% |
| Previous exposure to CNS active therapy before LP | 143 | 83% |
| HD-ARA-C | 142 | |
| HD-ARA-C/TBI | 1 | |

*Favorable risk: t(15;17)(q22;q21); t(8;21)(q22;q22); inv(16)(p13q22)/t(16;16)(p13;q22).

Intermediate risk: neither favorable nor poor risk aberration, normal karyotype.

Poor risk: abn(3q) [excluding t(3;5)(q21~25;q31~35)],; inv(3)(q21q26)/t(3;3)(q21;q26), add(5q), del(5q), -5, -7, add(7q)/del(7q), t(6;11)(q27;q23), t(10;11)(p11~13;q23), t(11q23) [excluding t(9;11)(p21~22;q23) & t(11;19)(q23;p13)], t(9;22)(q34;q11), -17/abn(17p), Complex (≥ 4 unrelated abnormalities)

Abbreviations: LP lumbar puncture, HSCT hematopoietic stem cell transplantation, CNS central nervous system, HD-ARA-C high-dose cytarabine, i.th. Intrathecal therapy, RT radiotherapy, MUD = matched unrelated donor, MRD = matched related donor, CR1=first complete remission, PR=partial remission, RD=refractory disease,



Online Supplementary Figure S1. Flow chart of patients included in the analysis.