

Therapy-related myeloid neoplasms following treatment with radioiodine

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Online Supplementary Table S1. tMDS and tAML following radiolodine and other treatments. Comparison between 39 patients with tMDS/tAML following radioiodine treatment and 165 patients with tMDS following other treatment modalities. A complete set of information about the indicated biological variables was only available for 157 of the 165 patients. The frequencies are, therefore, calculated for these 157 patients.

| | Radioiodine | Radiatio | Chemotherapy | Radiochemotherapy | p-value |
|---|-------------|------------|--------------|-------------------|-------------------|
| No | 39 | 29 | 85 | 43 | |
| Sex [%] | | | | | |
| Male | 49 | 42 | 49 | 50 | n.s. |
| Female | 51 | 58 | 51 | 50 | |
| Median age, years | 63 | 71 | 62 | 56 | < 0.001 |
| Range | 19-80 | 39-99 | 21-84 | 24-90 | |
| MedianTime to tMDS/tAML, months | 79 | 109 | 70 | 61 | § |
| Range | 6-440 | 1-408 | 1-341 | 4-237 | |
| WHO, patients (%)* | | | | | |
| RA | 1 (2.5) | 1 (3) | 9 (11) | 1 (3) | |
| RARS | 1 (2.5) | 1 (3) | 3 (3,5) | 0(0) | |
| RCMD | 6 (16) | 10(35) | 31 (36,5) | 22 (50) | |
| MDS 5q- | 3 (8) | 0 (0) | 1 (1) | 0(0) | n.s. |
| RAEB I | 2 (5) | 4 (15) | 14 (16) | 6 (13) | |
| RAEB II | 6 (15) | 6 (21) | 12 (14) | 7 (17) | |
| MDS/MPN | 2 (5) | 3 (10) | 6 (7) | 2 (5) | |
| AML | 18 (46) | 4 (13) | 9(11) | 5 (12) | |
| AML transformation, patients (%)** | | | | | |
| yes | 7 (33) | 6 (22) | 22 (29) | 8(21) | n.s. |
| no | 14 (67) | 19 (78) | 54 (71) | 30(79) | |
| IPSS, patients (%)*** | | | | | |
| low | 4 (23) | 5 (17) | 7 (8) | 1 (3) | n.s. |
| intermediate-1 | 5 (29) | 11 (38) | 26 (31) | 18 (41) | |
| intermediate-2 | 6 (35) | 8 (28) | 28 (33) | 17 (40) | |
| high | 2 (13) | 5 (17) | 24 (28) | 7 (16) | |
| Cytogenetic Risk, patients (%)*** | | | | | |
| low | 9 (52) | 15 (52) | 29 (34) | 17 (41) | n.s. |
| intermediate | 4 (24) | 8 (28) | 14 (17) | 7 (16) | |
| high | 4 (24) | 6 (20) | 42 (49) | 19 (43) | |

*Data about patients with tAML following chemotherapy, radiation or radiochemotherapy in the Duesseldorf MDS Register refer only to patients formerly defined as having refractory anemia with excess blasts in transformation. This must be taken into account when looking at the frequency of tAML in these subgroups. **Within the subgroup of patients with therapy-related myeloid neoplasms following radioiodine only patients with tMDS (n=21) were considered for the frequency of AML transformation. ***In the subgroup of patients with tMDS/tAML following radioiodine treatment only patients with tMDS were evaluated for the distribution of IPSS score and cytogenetic risk. No karyotype was available for four patients. §P=0.026 for the comparison between radioiodine (79 months) and chemotherapy (70 months) and P=0.006 for the comparison between radioiodine and radiochemotherapy (61 months).