**Appendix Table C4. Treatment characteristics: Ewing’s tumors**

| **Study (Investigator, country, year)** | **Record Number** | **Group (N)** | **Stem Cell Source** | **Type of HSCT** | **Prior Treatment** | **Conditioning Regimen** | **Immunosuppressive therapy for GVHD prophylaxis** | **Supportive Care** | **Comparative Treatment** | **Comparative Treatment Dose/Regimen** | **Comment** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Bernstein, USA/Canada 2006 | 6290 | 110 |   |   |   |   |   |   | CT +/- complete surgical resection +/- full-dose RT or lower dose RT to microscopic residual dz.Up to 3 metastatic sites excl BM with RT | CT: I, E, vincr, doxorub, CPM) |   |
| Bhatia,USA, 2007 | 43210 | 60 |   |   |   |   |   |   | high-intensity CT | doxorubicin, CPM and ifos |   |
| Burdach, Germany and Austria, 2000 | 14310 | 28 | for auto [n=21] BM n=2 PB n=17 BM+ PB n=2for allo [n=7] all BM | auto n=21allo n=7 |   | MEL, Eto, Carbo, TBI n=10MEL, E, TBI n=15MEL, E, carbo n=1MEL, TBI n=1E, TBI n=1 |   |   |   |   |   |
| Burdach, Germany, 2003 | 10030 | <+17 yrssingle HSCT n=18tandem n=14 |   | single auto or tandem auto auto | all pts recd local RT to met sites | single TBI,MEL,E +/-carboplatintandem MEL, E times 2 |   |   |   |   |   |
| Burke, USA 2007 | 4060 | 7 | pb | single auto n=1tandem auto n=6 | complete surgical resection n=6no surgery n=1RT n=2 (one to primary tumor and one to an orbital met) | 1st: Eto, Carboplatin, CPM2nd: MEL, CPM n=4; Thio, CPM n=1; MEL and TBI n=1 |   | rec'd for fever, nutrition and hematologic indications prn (n=7) |   |   | All pts achv'd CR after first HSCT; only 6 went on to 2nd HSCT b/c one pt progressed with local and metastatic dz 30 days after 1st HSCT |
| Costa, USA, 2008 | 1710 | 1 | NR | auto | vincristine, CY, doxorubicin, ifos, VP-16 |   |   |   |   |   |   |
| Drabko, Poland 2005 | 6680 | 21 | pb | auto |   | BUS, MEL n=12MEL, VP-16, TBI n=1MEL, VP16, CBCA n=6Treo, Mel n=2 |   |   |   |   |   |
| Fazekas, Austria, 2008 | 2720 | 1 |   | auto | hemipelvectomy | BUS, MEL |   |   |   |   |   |
| Hara , Japan 1998 | 17950 | 3 | bm or pb or both | auto | no preHSCT surgery or RT | double- conditioning regimen thio and MEL |   | TPN, Abx |   |   |   |
| Harimaya, Japan, 2003 | 9850 | 2 | pb | auto | surgery n=2 (one partially resected; one en bloc)RT n=1 (pt partially resected) | carboplat and E n=1carboplat, E, ifos n=1 |   |   | partial surgical resection, multiagent CT, RT | VAIA |   |
| Hawkins, USA 2000 | 15360 | 16 | pb n=15bm n=1 | auto n=14syngeneic n=1allo n=1 (HLA-matched sibling) |   | grp 1: BUS, MEL, Thio followed by HSCT then total marrow myeloablative RT followed by a second HSCTgrp 2: BUS, MEL, Thio |   | prophylactic Abx if low granulocyte count |   |   |   |
| Kasper, Germany, 2006 | 2570 | 5 | pb | auto |   | MEL and E n=2BUS and MEL n=3 |   |   |   |   |   |
| Kogawa, Japan, 2004 | 8410 | 1 | pb | auto | surgery and RT | NR |   |   |   |   |   |
| Koscielniak Germany 2005 | 7860 | 1 | mismatched related | allo | tandem auto-autolocal RT | BUS, Thio, Flu, CPM |   |   |   |   |   |
| Kushner, USA, 1995 | 21430 | 2 |   | auto | surgery GTR n=1 no surg n=1 | MEL, TBI |   |   | non met dz CT, surg, RT | CT CPM, doxo, VIN, ifos, Enonmets: GTR n=14 inoperable n=2 amputation n=1 RT n=7met dz: GTR n=3 no surg n=4 RT 71 % (n=5) |   |
| Kushner, USA, 2001 | 14240 | 5 | bm and pb n=3bm n=2 | auto | RT n=4 | TBI, MEL or thio, carboplatin |   |   | induction CT and in one pt RT |   |   |
| Laws, Germany, 2003 | 9450 | 2 |   | auto | resection of primary tumor with wide margins n=2RT to mets n=2 | TBI, MEL, E n=1NR n=1 |   |   |   |   |   |
| Lucas, USA 2008 | 2450 | 1 |   | allo, matched mother | chemotherapy leading to resolution of disease at primary tumor site, BM, and lungs and stable disease in the vertebrae and ribs for 6 months | BUS, MEL thymoglobulin | cyclosporin and methotrexate |   |   |   |   |
| Lucidarme, France, 1998 | 17610 | 3 | bm or pb | auto x 1 (n=1)auto x 2 (n=2) | surgery for primary tumor n=1 (pt with PD) and RT after HSCTafter | thioRT n=1 |   | TPN Abx |   |   |   |
| Meyers, USA, 2001 | 13670 | 23 | pb | auto | local RT of primary tumor and mets sites | TBI, MEL, Eto |   | filgrastim | repeated cycles of CT |   | 9 patients were not transplanted b/c did not achieve good response in primary tumor and all mets sites |
| Milano, Italy, 2006 | 43290 | 36 |   |   |   |   |   |   | CT n =16conservative surgery after CT n=14RT n=3 | ICE/CAV n=18ICE n=2CECAT n=16 |   |
| Navid, US and Canada, 2006 | 5930 | 9 |   | auto | surgery n=6 RT n=7 | CPM and E n=3 CPM, Topotecan n=2 |   |   | 4 patients did not undergo HSCT b/c did not achieve PR or CR with induction CT. |   |   |
| Numata, Japan, 2002 | 12130 | 1 | pb | auto | conventional CT and regional RT | carboplatin, e, ifo |   |   |   |   |   |
| Oberlin, France, 2008 | 46850 |   |   |   |   |   |   |   |   |   |   |
| Ozkaynak, USA 1998 | 18540 | 15 | bm n=7bm and pb n=8 | auto |   | MEL, Carbopl, E +/- CPM |   |   |   |   |   |
| Pession, Italy, 1999 | 16120 | 3 | bm | auto | one patient RT to primary tumor | BUS, E, thio |   |   |   |   |   |
| Prete, Italy 1998 | 17210 | 17 | pb | auto |   | BUS, E, Thio (n=16) L-PAM (n=1) |   |   |   |   |   |
| Sari, Turkey, 2010 | 42790 | 36 |   |   |   |   |   |   | CT only 8% CT and RT 55% CT and surgery 6% CT,RT and surg 22% | CT EVAIA vincr, ifos, mesna, E, adriamy, actino-D |   |
| Tanaka, Japan, 2002 | 11770 | 6 | PB | auto | surgery n=2 RT n=2 both surg and RT n=2 |   |   |   |   |   |   |
| van Winkle, USA, 2005 | 43550 | 22 |   |   |   |   |   |   | CT | ICE |   |
| Yaniv, Israel, 2004 | 9100 | 11 | pb and bm | auto |   | MEL, E , carbopl or BUS and MEL |   |   |   |   |   |
| Ladenstein, Austria, France, UK, Switzerland, Netherlands, Germany, Sweden, 2010 | 2270 | n=99 | autologous | myeloablative | resection of primary and metastatic tumor sites | induction VIDE x 6 cycles and one cycle of VAIhigh dose CT oral busulfan and melphalan |   |   |   |   |   |
| Ilari, Italy, 2010 | 2230 | 24 | auto | myeloablative | local therapy (surgery with or without RT)- surgery could have been at diagnosis (n=2) or after 4 courses CT (n=13) or after HSCT (n=5); in inoperable pts, RT was after HSCT | etoposide, thiotepa and CY |   |   |   |   |   |
| Diaz, Spain, 2010 | 2135 | 47 |   | auto | 64% local radiation | high-dose busulfan and melphalan |   |   |   |   |   |
| Kwon, Korea, 2010 | 2268 | 1 | auto | sequential high-dose (2 consequent courses of RIC followed by a high-dose with auto HSCT) | 4 cycles of chemotherapyNo surgical resection of primary tumor | RIC: etoposide, cyclophosphamide, carboplatinhigh-dose: carboplatin , etoposide, melphalan with or without TBI |   |   |   |   |   |
| Burdach, Germany and Austria, 2010 | 2077 | 21 | auto n = 8 (one pt received auto followed by allo b/c of progression after initial auto SCR) | myeloablative chemotherapy EVAIA and/or VAIA | TB-MRI assessmentsurgery and/or irradiation | VAIA and E/VAIAhigh-dose melphalan x 2 and etoposideallo: BU and CY or |   |   | induction chemo VAIA and E/VAIA |   |   |