**Appendix Table C24. Treatment characteristics: Rhabdomyosarcoma**

| **Study (Investigator, country, year)** | **Record Number** | **Group (N)** | **Stem Cell Source** | **Type of HSCT** | **Prior Treatment** | **Condition-ing Regimen** | **Immunosuppressive therapy for GVHD prophylaxis** | **Supportive Care** | **Comparative Treatment** | **Comparative Treatment Dose/Regimen** | **Comment** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Bisogno, Italy, 2009 | 75340 | HSCT (70) | PBSC | Auto | surgery + chemo including ifosfamide, vincristine, actinomycin, CY, carboplatin, vincristine, etoposide | thiotepa, melphalan, CY |  |  |  |  | those with at least a partial response moved onto HD with stem cell support. Patients received three rounds of HDC and stem cell infusion. |
| Breneman, USA, 2003 | 75360 | Comparator (127) |  |  |  |  |  |  | Chemo +/- RT | melphalan-vincristine + vincristine, dactinomycin and CY (VAC) or VAC + ifosfamide + etoposide |  |
| Carli, Italy, 1999 | 16010 | HSCT (52) Comparator (44) | PBSC or BM | Auto | epirubicin, carboplatin, vincristin, actinomycin, ifosfamide, etoposide | Melphalan |  |  |  | epirubicin, carboplatin, vincristin, actinomycin, ifosfamide, etoposide |  |
| Doelken, Germany, 2005 | 6570 | HSCT (2) | Pt1- PBSC from HLA-identical sibling Pt 2 PBSC from HLA-identical fraternal twin | Pt1- Allogeneic Pt 2- Auto then Allo | pt1-CWS-96 Arm B protocol including ifosfamide, vincristine, carboplatin, epirubicin and actinomycin D, etoposide and RT  Pt2- CWS-91 protocol chemo+ RT, relapsed +2 years, Auto transplant after HD w/ thiotepa and CY, resection and RT lung mets | Pt1- TBI, etoposide, CY Pt2- immunosuppression with treosulfane and fludarabine W/O HD chemo (for Allo) | Pt 1- cyclosporin A and MTX and prednisolone and CellCept after AGVHD developed |  |  |  |  |
| Donker, Netherlands, 2009 | 1420 | HSCT (1) | Bone Marrow | Allogeneic | SIOP MMT-98 protocol; including vincristine, dactinomycin, ifosfamide, carboplatin, epirubicin, etoposide and CY. | etoposide, CY and TBI | CsA was given |  |  |  |  |
| Grundy, UK, 2001 | 14200 | HSCT (1) |  |  | chemo including vincristine, actinomycin D, CY, doxorubicin, etoposide + amputation of the right leg | melphalan |  |  |  |  | transplant was followed by more chemo |
| Hara, Japan, 1998 | 17950 | HSCT (7) | PBSC or BM | Auto | Chemo containing cisplatin, CY, vincristine. Ifosfamide, dactinomycin, etoposide, carboplatin and pirarubicin were administered in some patients +/- surgery and LRT | Thiotepa, melphalan and busulfan |  | laminar air flow, total parenteral nutrition and antibiotics, G-CSF |  |  | 6 patients were transplanted in CR one was not in CR |
| Koscielniak, Germany, 1997 | 19800 | HSCT (36) | BM -26 patients PBSC- 5 patients Allogeneic - 5 patients | Auto-31 Allo-5 | CWS-81, CWS-86, CWS-91, (23 patients), MMT stage IV (12) CWS relapse (1), treatment included vincristine, dactinomycin, CY, doxorubicin, ifosfamide, VP16, carboplatin, epiadriamycin | melphalan, VP16, carboplatin +/- RT |  | 14 received G-CSF or GM-CSF support |  |  |  |
| Kuroiwa, Japan, 2009 | 390 | HSCT (1) |  | Auto | Chemo including vincristine, actinomycin D, CY | ifosfamide-cisplatin-etoposide |  |  |  |  |  |
| Kwan, Hong Kong, 1996 | 20800 | HSCT (1) | PBSC | Auto | adriamycin and CY + Surgery and post-operative radiation | Vincristine, ifosfamide, actinomycin D HDC with carboplatin, etoposide, melphalan |  |  |  |  | transplanted in CR |
| Lucidarme, France, 1998 | 17610 | HSCT (8) | PBSC or BM | Auto | chemo including CY or ifosfamide +/- surgery +/- RT | Thiotepa |  | laminar air-flow, right atrial catheters, parenteral nutrition, broad spectrum anti-biotics, blood products |  |  |  |
| Matsubara, Japan, 2003 | 10810 | HSCT (22) | PBSC and BM | Auto | treatment varied and included VAC (vincristine, dactinomycin and CY) VAC-THP (pirarubicin + VAC), VCA( vincristine, dactinomycin, CY, doxorubicin, VAI (vincristine, dactinomycin, ifosfamide) +/- cisplatin, etoposide or methotrexate and +/- surgery & RT | included Hi-MEC (etoposide, carboplatin, melphalan), Hi-MEC + pirarubicin, etoposide + melphalan + ifosfamide, etoposide + thiotepa, Melphalan alone |  | intravenous hyperalimentation or blood products as needed. G-CSF was used in 14 patients transplanted after 1993 |  |  |  |
| McDowell, UK, 2010 | 75350 | HSCT (101) Comparator (45) | Auto | PBSC | doxorubicin or carboplatin | sequential high dose therapy containing cyclophosphamide, etoposide, carboplatin |  |  | chemo and surgery +/- radiotherapy followed by maintenance therapy 9 courses of VAC | ifosfamide, vincristine, actinomycin D, carboplatin, etoposide, and epirubicin (induction) after local therapy patients received 9 courses of VAC (maintenance therapy) | sequential HD therapy was given at 14 day intervals regardless of blood count. Four does were given |
| Misawa, Japan, 2003 | 11040 | HSCT (1) | PBSC | Allogeneic from HLA-identical sibling | vincristine, CY, pirarubicin alternating with etoposide, ifosfamide, and cisplatin | pirarubicin, etoposide, carboplatin, melphalan | Cyclosporine and methylprednisolone |  |  |  |  |
| Moritake, Japan, 1998 | 18280 | HSCT (1) | BM | Allogeneic | VCR, actinomycin D, CY, pirarubicin and ifosfamide + RT | etoposide, carboplatin, pirarubicin, melphalan | methotrexate |  |  |  |  |
| Oue, Japan, 2003 | 10950 | HSCT (1) |  | Auto-Auto | chemo + RT | Ifosfamide and melphalan (first) Busulfan and thiotepa (second) |  | G-CSF, blood products |  |  | this is a tandem transplant |
| Pappo, USA, 1999 | 48020 | Comparator (605) |  |  |  |  |  |  | chemo +/- RT | vincristine-Actinomycin (14%), vincristine-Actinomycin-CY or similar (37%), vincristine, doxorubicin, actinomycin, CY +/- other agents (25%), window + other (24%) |  |
| Pappo, USA, 2001 | 47860 | Comparator (48) |  |  |  |  |  |  | Chemo +/- RT | Topotecan + VAC alternating with vincristine, topotecan, CY or topotecan + VAC |  |
| Raney, USA, 2008 | 2440 | comparator (91) |  |  |  |  |  |  | chemo +/- RT | vincristin, actinomycin D, CY +/-doxorubicin, cisplatin, dacarbazine, etoposide and/or ifosfamide |  |
| Sandler, USA, 2001 | 12810 | Comparator (152) |  |  |  |  |  |  | Chemo +/- RT | ifosfamide, doxorubicin and VAC |  |
| Sato, Japan, 1998 | 48070 | HSCT (5) | PBSC | Auto | Chemo +/- surgery and or RT | Hi-MEC +/- pyrarubicin |  | Hydroxyzine and hydrocortisone and G-CSF |  |  |  |
| Scully, USA, 2000 | 14580 | HSCT (1) | PBSC | Auto | prior chemo for initial disease, chemo for recurrence included ifosfamide carboplatin, etoposide | HDC with CY and carboplatin |  |  |  |  | tumor was excised after SC rescue and radiation was delivered |
| Shaw, Israel, 1996 | 20050 | HSCT (9) | PBSC and BM | Auto | Chemo +/- surgery and or radiation therapy chemo included vincristine, adriamycin, CY etoposide, ifosfamide | carboplatin, melphalan, |  | parenteral nutrition, antibiotics and anti-fungal therapy was provided based on the pt status. G-CSF or GM-CSF was used in some patients |  |  |  |
| Taguchi, Japan, 2005 | 7430 | HSCT (1) |  |  | carboplatin and etoposide |  |  |  |  |  |  |
| Van Winkle, USA, 2005 | 43550 | Comparator(27) |  |  |  |  |  |  | chemo | Ifosfamide and etoposide |  |
| Walterhouse, USA, 1999 | 17240 | HSCT (8) | PBSC | Auto | Chemo and radiation +/- surgical resection chemo regimens included vincristine, dactinomycin, CY, melphalan, etoposide, ifosfamide and doxorubicin | thiotepa, CY, carboplatin |  | G-CSF, fluconazole prophylaxis, broad spectrum abx for fever, parenteral nutrition and blood product support |  |  | patients achieving a complete response were offered HDC with stem cell rescue |
| Williams, Canada, 2004 | 9010 | HSCT (4) Comparator (13) |  | Auto | ifosfamide and etoposide alternating vincristine, CY, doxorubicin and/or actinomycin +/- radiation and surgical resection | etoposide, CY with or without melphalan |  |  | Chemo +/- radiation and surgical resection | ifosfamide and etoposide alternating vincristine, CY, doxorubicin and/or actinomycin | 13 patients received radiation with curative intent of these 4 received HDC with Stem cell support |