**Supplementary document S2.** Treatment regimens for ENKTL

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| Group | Regimen | Treatment schedule | Reference |
| A: CHOP and CHOP-like | CHOP | Cyclophosphamide 750 mg/m2 day 1 IV  Doxorubicin 50 mg/m2 day 1 IV  Vincristine 1.4 mg/m2 day 1 IV  Prednisone 100 mg days 1–5 PO  The treatment was repeated every 21 days × 4 cycles | [21] |
| EPOCH | Etoposide 50 mg/m2 days 1–4 continuous IV  Doxorubicin 10 mg/m2 days 1–4 continuous IV  Vincristine 0.4 mg/m2 days 1–4 continuous IV  Cyclophosphamide 750 mg/m2 day 5 IV  Prednisone 60 mg/m2 days 1–5 PO  The treatment was repeated every 21 days × 6 cycles | [24] |
| CHOP + bortesomib | Bortezomib 1.6 mg/m2 days 1 and 8 IV  Cyclophosphamide 750 mg/m2 day 1 IV  Doxorubicin 50 mg/m2 day 1 IV  Vincristine 1.4 mg/m2 day 1 IV  Prednisone 100 mg days 1–5  The treatment was repeated every 21 days × 6 cycles | [22] |
| B: Gemcitabine and L-asparaginase-based | GELOX | Gemcitabine 1000 mg/m2 days 1, 8 IV  Oxaliplatin 130 mg/m2 day 1 IV  L-asparaginase 6000 U/m2 days 1–7 IV  The treatment was repeated every 21 days × 6 cycles | [24] |
| PGEMOX | Gemcitabine 1000 mg/m2 days 1, 8 IV  Oxaliplatin 130 mg/m2 day 1 IV  Pegaspargase 2500 U/m2 day 1 IM  The treatment was repeated every 21 days × 6 cycles | [30] |
| GLIDE | Gemcitabine 1000 mg/m2 days 1, 8 IV  L-asparaginase 6000 U/m2 days 4, 6, 8, 10, 12 IV  Ifosfamide 1000 mg/m2 days 1–3 IV  Dexamethasone 20 mg days 1–4  Etoposide 100 mg/m2 days 1–3 IV  The treatment was repeated every 28 days × 6 cycles | [25] |
| DDGP | Gemcitabine 800 mg/m2 days 1 and 8 IV  Pegaspargase 2,500 U/m2 day 1 IM  Cisplatin, 20 mg/m2 days 1–4 IV  Dexamethasone 15 mg/m2 days 1–5 IV  The treatment was repeated every 21 days × 6 cycles | [27] |
| GDL | Gemcitabine 1000 mg/m2 days 1 and 8 IV Dexamethasone 10 mg/m2 days 1–5 IV  L-asparaginase 5000 U/m2 days 1–7 IV  The treatment was repeated every 21 days × 4 cycles | [21] |
| GOLD | Gemcitabine 1,000 mg/m2 day 1 IV  Oxaliplatin 100 mg/m2 day 1 IV  L-asparaginase 10,000 U/m2 days 1–5 IV  Dexamethasone 20 mg b.i.d. days 1–4  The treatment was repeated every 14 days × not less than 4 cycles | [28] |
| C: SMILE and SMILE-like | SMILE | Methotrexate 2 g/m2 day 1 IV 6 hrs  Ifosfamide 1500 mg/m2 days 2–4 IV  Mesna 300 mg/m2 days 2–4 IV  Etoposide 100 mg/m2 days 2–4 IV  Dexamethasone 40 mg/m2 days 2–4 IV  L-asparaginase 6,000 U/m2 days 3–9 IV  The treatment was repeated every 21 days × 6 cycles | [27] |
| Modified SMILE | Ifosfamide 1.2 g/m2 days 1–3 IV  Mesna 300 mg/m2 days 1–3 IV 8 hrs  Etoposide 60 mg/m2 days 1–5 IV  Dexamethasone 15 mg/m2 days 1–5 IV or PO  Pegaspargase 2,500 u/m2 day 8 IM  Methotrexate 1.5 g/m2 day 1 2nd course IV  Leucovorin 20 mg/m2 2nd course days 1–2 IM  The treatment was repeated every 21 days | [8] |
| IMEP + ASP | Ifosfamide 1.5 g/m2 days 1–3 IV  Methotrexate 30 mg/m2 day 4 IV  Etoposide 100 mg/m2 days 1–3 IV  Prednisolone 60 mg/m2 days 1–5 PO  L-asparaginase 6,000 U/m2 days 1, 3, 5, 7, 9, and 11 IV  The treatment was repeated every 21 days × 6 cycles | [31] |
| D: Concurrent and “sandwich” RT+CT | CCRT + MIDLE | CCRT consisted of RT 36–44 Gy per 18–22 fractions and weekly administration of cisplatin (30 mg/m2) and tri-weekly IV or IM L-asparaginase 4 000 U/m2 days 1, 3, and 5 in each week during RT  Methotrexate 3 g/m2 day 1 IV  Etoposide 100 mg/m2 days 2–4  Ifosfamide 1 000 mg/m2 days 2–4  Dexamethasone 40 mg days 2–4  L-asparaginase 4 000 U/m2 days 4, 6, 8, and 10 IV or IM  The treatment was repeated every 28 days × 2 cycles | [35] |
| CCRT + VIPD | CCRT (weekly cisplatin 30 mg/m2 IV + RT 1.8–2 Gy/5 daily fractions, ie radiation 40 to 52.8 Gy)  Etoposide 100 mg/m2 days 1–3 IV over 90 mins  Ifosfamide 1,200 mg/m2 days 1–3 IV over 1 hr  Mesna 240 mg/m2 days 1–3 IV over 15 mins  Cisplatin 33 mg/m2 days 1–3 IV over 1 hr  Dexamethasone 40 mg/d days 1–4 PO or IV  The treatment was repeated every 21 days × 3 cycles | [10] |
| RT + DeVIC2/3 | Simultaneous RT 50 Gy + CT  Dexamethasone 40 mg days 1–3 IV  Etoposide 67 mg/m2 days 1–3 IV over 2 hours  Ifosfamide 1.0 g/m2 days 1–3 IV over 3 hours  Carboplatin 200 mg/m2 day 1 IV over 30 mins  The treatment was repeated every 21 days × 3 cycles | [11] |
| CCRT + VIDL | CCRT (weekly cisplatin 30 mg/m2 IV + RT 18–22 fractions, ie radiation 36 to 44 Gy × 4 weeks)  Etoposide 100 mg/m2 days 1–3 IV  Ifosfamide 1.2 g/m2 days 1–3 IV  Dexamethasone 40 mg days 1–3 IV  L-asparaginase 4000 U/m2 every other day from days 8 to 20 (total of seven doses) IM  The treatment was repeated every 28 days × 2 cycles | [33] |
| LVP + sandwiched RT | L-asparaginase 6000 U/m2 days 1–5 IV  Vincristine 1.4 mg/m2 day 1 IV  Prednisone 100 mg days 1–5 PO  The treatment was repeated every 21 days × 2 cycles. After 2 cycles of chemotherapy, RT was started (56 Gy in 28 fractions, once a day, and 5 fractions every week), and then CT was given for 2 to 4 cycles at 1 week after the completion of RT | [34] |
| PGEMOX + sandwiched RT | Pegaspargase 2500 U/m2 day 1 IM  Gemcitabine 1000 mg/m2 days 1 and 8 IV  Oxaliplatin, 130 mg/m2 day 1 IV  The treatment was repeated every 21 days × 2 cycles. After two cycles of chemotherapy, RT was started (48–56 Gy, with 2 Gy a day and five fractions each week), and then CT was given for another two cycles at 1 week after the completion of RT, resulting in a maximum total of 4 cycles | [36] |
| E: Methotrexate and L-asparaginase based | AspaMetDex | L-asparaginase 6000 Г/m2 days 2, 4, 6, and 8 IV  Methotrexate 3 g/m2 day 1  Dexamethasone 40 mg days 1–4  The treatment was repeated every 21 days × 3 cycles | [37] |
| MESA | Methotrexate 2 g/m2 day 1 IV  Etoposide 100 mg/m2 days 2, 3, 4 continuous IV  Dexamethasone 20 mg/m2 days 2–5 continuous IV  Pegasparaginase 2500 U/m2 day 5 IM  The treatment was repeated every 21 days × 3 cycles. After at least 3 cycles of CT, patients were referred for RT with a dose of 45–50 Gy for 25 times. An additional 2 to 4 cycles of MESA CT were started within 1 week after the completion of RT | [38] |
| MEDA | Methotrexate 3 g/m2 day 1 IV over 24 hrs  Etoposide 100 mg/m2 days 2–4 continuous IV  Dexamethasone 40 mg days 2–4 continuous IV  Pegasparaginase 2500 U/m2 day 4 IM  The treatment was repeated every 21 days × 6 cycles | [39] |

Note: IV – intravenous, IM – intramuscular, PO – per os