Expert Committee recommendation

The Expert Committee noted that the incidence of paediatric tumours has been steadily increasing over the past decades with the largest increases reported in youngest children. The Expert Committee recommended the extension of the current listings on the complementary list of the EMLc of the medicines outlined in the following table for the indications specified. Noting that these paediatric cancers also affect older children and adolescents, the Committee also recommended extending the listings for these medicines on the EML. Medicine: (Indication(s)) Carboplatin: (Nephroblastoma, ovarian and testicular germ cell tumours) Cyclophosphamide: (Nephroblastoma) Dactinomycin: (Ewing sarcoma) Dexamethasone: (Burkitt lymphoma) Etoposide: (Acute myeloid leukaemia, nephroblastoma, osteosarcoma) Hydrocortisone: (Burkitt lymphoma) Ifosfamide: (Burkitt lymphoma, nephroblastoma) Imatinib: (Acute lymphoblastic leukaemia) Irinotecan: (Nephroblastoma, rhabdomyosarcoma) Methotrexate: (Burkitt lymphoma) Methylprednisolone: (Burkitt lymphoma) The Committee noted that administration of intravenous cyclophosphamide or ifosfamide required the use of the accompanying medicine mesna to prevent haemorrhagic cystitis commonly associated with these treatments. The Committee therefore also recommended the extension of the current listing for mesna on the EML and EMLc to include the indications of nephroblastoma and Burkitt lymphoma.

The proposed medicines are all included on the EMLc for other cancer indications.

Background

The proposed medicines are all included on the EMLc for other cancer indications.

Public health relevance

Cancer is a leading cause of death in children globally; the most common cancer types in children are leukaemias, lymphomas and
Cancer in children and adolescents is almost exclusively treated according to national and international treatment protocols. This is the case for first treatment and relapsed and refractory disease. Treatment regimens are devised by clinical experts from relevant tumour groups and are further developments of previous regimens. Often these treatment protocols consist of the standard arm that has proven to be effective based on previous experimental trials. All medicines proposed in this application are part of international treatment regimens and are considered the standard of care. Acute myeloid leukaemia – etoposide Etoposide is included in multiple trial regimens as standard therapy for children with acute myeloid leukaemia, including the AML-BFM 2012 (3), NOPHO-DBH AML 2012 (4) and ML DS 2006 (5) trials. Nephroblastoma – carboplatin, cyclophosphamide, etoposide, ifosfamide, irinotecan Carboplatin, cyclophosphamide, etoposide, ifosfamide and irinotecan are included as chemotherapy interventions along with dactinomycin, doxorubicin, melphalan and vincristine in the SIOP 2001/GPOH (6) and Umbrella SIOP-RTSG 2016 (7) trial regimens for nephroblastoma (Wilms tumour). Acute lymphoblastic leukaemia – imatinib Imatinib is included in the ALLTogether trial regimen for children and young adults with acute lymphoblastic leukaemia (8) and the EsPhALL trial regimen for children with Philadelphia chromosome-positive (Ph+) acute lymphoblastic leukaemia (9). Ewing sarcoma – dactinomycin Dactinomycin is included in many trial regimens for Ewing sarcoma, including EICESS-92 (10), Euro-Ewing 2012 (11,12) and Euro-Ewing 99 (13,14) trials. Ovarian and testicular germ cell tumours – carboplatin Carboplatin is included in the MAKEI-V regimen for malignant extracranial germ cell tumours (15), and is recommended in chemotherapy regimens for extracranial germ cell tumours in children and adolescents in guidelines issued by the Children’s Cancer and Leukaemia Group in the United Kingdom of Great Britain and Northern Ireland (16). Burkitt lymphoma – dexamethasone, hydrocortisone, ifosfamide, methylprednisolone, methotrexate Dexamethasone, ifosfamide and methotrexate are included in the LBL 2018 regimen for Burkitt lymphoma (17). Hydrocortisone, methylprednisolone and methotrexate are included in the Inter-B-NHL Ritux 2010 regimen (18,19). Osteosarcoma – etoposide Etoposide is included in the French OS2006 regimen for osteosarcoma (20,21). Rhabdomyosarcoma – irinotecan Irinotecan is included in the EpSSG FaR-RMS (22) and the VIT-0910 regimens for frontline or relapsed or refractory rhabdomyosarcoma (23,24).