Supplementary Table 1. Other characteristics of the included studies

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| --- | --- | --- | --- |
| No | Article / Method | Outcomes reported in the article but not used in this review: | Remarks  |
| 1 | Biernaux C 1995[4] | 1. Prevalence of M-BCR using 10 µg RNA
 | **Funding:** “Oeuvre Belge du Cancer” training grant**Declaration of interest:** M.L. received financial help from 7.4512.91 TELEVIE.**Trial registry number:** NR**Informed consent:** taken  |
| 2 | Bose S 1998[11] | 1. Human HCL: prevalence of M-BCR
2. Human HCL: Prevalence of m-BCR
 | **Funding:** in part by grants from the Leukaemia Research Fund (UK) & the Dr Mildred Scheel-Stiftung fur Krebsforshung (Germany)**Declaration of interest:** NR**Trial registry number:** NR**Informed consent:** taken  |
| 3 | Uckun FM 1998[12] | 1. Study group: prevalence of t(4;11)(q21;q23) (cytogenetics) vs *MLL-AF4* (standard or nested PCR)
2. Control group & ALL remission BM: prevalence of *MLL-AF4* (standard PCR vs nested PCR)
3. Molecular characterization of *MLL-AF4* in leukemic & normal cells
4. Study group (infant): age, TWC, IP, karyotype, *MLL-AF4* (standard vs nested), *E2A-PBX1* & *BCR-ABL1*
5. Study group (children with *MLL-AF4*+: age, TWC, karyotype, *MLL-AF4* (standard vs nested), *E2A-PBX1* (standard)& *BCR-ABL1* (standard & nested)
 | **Funding:** Department of Health & Human Services grants, including CCG Chairman’s Grant Nos. CA-13539 & CA-60437 from the National Cancer Institute. F.M.U. is a Stohlman Scholar of the Leukemia Society of America & Parker Hughes Chair in Oncology**Declaration of interest:** NR**Trial registry number:** NR**Informed consent:** NR |
| 4 | Ravetto PF 2003[13] | 1. Study group: prevalence of *TEL-AML1*
2. Study group: prevalence of *MLL-AF4*
3. Control group: prevalence of *TEL-AML1*
4. Control group: prevalence of *MLL-AF4*
5. Study group: no. of X-ray & absorbed doses
 | **Funding:** NR**Declaration of interest:** NR**Trial registry number:** NR**Informed consent:** informed maternal consent; ethical approval from the Central Manchester & Manchester Children’s University Hospitals NHS Trust local research ethics committee. |
| 5 | Hsu H 2004[14] | 1. Study group: pprevalence of *BCR-ABL1*
 | **Funding:** NSC 90-2314-B-075-074 from the National Science Council of the Republic of China & a grant from Taipei Veterans General Hospital.**Declaration of interest:** NR**Trial registry number:** NR**Informed consent:** taken  |
| 6 | le Coutre P 2010[15] | 1. Post-transplant CML: summary of 17 articles plus 4 case reports
2. Study / Control / Post-transplant CML group: age, gender, time between transplant & PCR analysis & immunosuppressive drugs (in all & *BCR-ABL*+ for Study group)
3. Interval between transplantation & 1st *BCR-ABL1*+ test, when compared to the remaining patient group
4. Clinical parameters such as gender, HLA-type or age between *BCR-ABL1*+ & *BCR-ABL1*- transplanted or not transplanted individuals
 | **Funding:** NR**Declaration of interest:** no conflict of interest with regard to any of the authors.**Trial registry number:** NR**Informed consent:** taken  |
| 7 | Song J 2011[16] | 1. Prevalence of *MLL* PTD according to age group & in CB
2. Prevalence of *MLL-AF4* according to age group
3. Prevalence of *AML1-ETO* according to age group
4. Prevalence of *PML-RARA* according to age group
5. Prevalence of *CBFB-MYH11* according to age group
 | **Funding:** Supported in part by the Board of Regents of the State of Louisiana [grant LEQSF (2007-10)-RD-A-32 to M.L.] & developmental funds from the Tulane Cancer Center (M.L. & J.S.).**Declaration of interest:** NR**Trial registry number:** NR**Informed consent:** taken for volunteer subjects only. NR for discarded samples. |
| 8 | Zuna J 2011[17] | 1. Prevalence of *TEL-AML1*
2. Prevalence of *MLL-AF4*
 | **Funding:** NR**Declaration of interest:** NR**Trial registry number:** NR**Informed consent:** NR  |
| 9 | Boquett JA 2013[18] | nil | **Funding:** NR**Declaration of interest:** NR**Trial registry number:** NR**Informed consent:** taken. Ethical approval by the Human Ethics Committee of the Assis Gurgacz Faculty. |
| 10 | Ismail SI 2014[19] | 1. Logistic regression analysis for incidence of translocation according to gender & age group.
 | **Funding:** a student grant from the Deanship of Scientific Research, University of Jordan.**Declaration of interest:** NR**Trial registry number:** NR**Informed consent:** taken. The study protocol was approved by the Institutional Review Board (IRB) of the University of Jordan. |
| 11 | Kosik P 2017[22] | 1. Prevalence of *ETV6-RUNX1*
2. Prevalence of *MLL-AF4*
3. Prevalence of *ETV6-RUNX1* after applying validation rates
4. Prevalence of *MLL-AF4* after applying validation rates
5. Correlation of preleukemic gene fusion with impaired (DDR) & apoptosis.
 | **Funding:** Slovak Research & Development Agency (APVV 0669-10, APVV-15- 0250); the National Scholarship Program of the Slovak Republic (SAIA); & the VEGA Grant Agency (2/0106/15, 2/0109/15) of the Slovak Republic.**Declaration of interest:** The funders have no role in study design, data collection & analysis, decision to publish, or in the preparation of the manuscript.**Trial registry number:** NR**Informed consent:** taken from parents for human CB samples. This study has been approved by the Ethics Committee of Children’s Hospital in Bratislava. Experiments were carried out in accordancewith the approved procedure. |

ALL, acute lymphoblastic leukaemia; BM, bone marrow; CB, umbilical cord blood; DDR, deoxyribonucleic acid (DNA) damage response; HCL, haematopoietic cell lines: NR, not reported; PCR, polymerase chain reaction; UK, United Kingdom; vs, versus