# Appendix 1: Medline Search Strategy

Searches downloaded by Nikki May – SA Health Library Service on 11/02/2021

| Database | # |
|----------|---|
| Ovid Embase | 1390 |
| Ovid Medline | 732 |
| Ovid Emcare | 171 |
| Ovid Cochrane (CDSR & CENTRAL) | 425 |
| EBSCO CINAHL | 133 |
| Scopus | 617 |
| Web of Science | 1968 |
| Clinicaltrials.gov | 76 |
| ISRCTN | 7 |
| **Total** | **5519** |
| **Duplicates removed** | **2428** |
| **Results to screen** | **3091** |

Database(s): Embase 1974 to 2021 February 09

Search Strategy:

| # | Searches | Results |
|---|----------|---------|
| 1 | imatinib/ | 42960 |
| 2 | imatinib.ti,ab,kw. | 24383 |
| 3 | gleevec.ti,ab,kw. | 1370 |
| 4 | dasatinib/ | 14060 |
| 5 | dasatinib.ti,ab,kw. | 7621 |
| 6 | sprycel.ti,ab,kw. | 126 |
| 7 | nilotinib/ | 9092 |
| 8 | nilotinib.ti,ab,kw. | 5301 |
| 9 | tasigna.ti,ab,kw. | 111 |
| 10 | bosutinib/ | 2595 |
| 11 | bosutinib.ti,ab,kw. | 1157 |
| 12 | ponatinib/ | 2906 |
| 13 | ponatinib.ti,ab,kw. | 1634 |
| 14 | ibrutinib/ | 7131 |
| 15 | ibrutinib.ti,ab,kw. | 5306 |
| 16 | lestaurtinib/ | 822 |
| 17 | lestaurtinib.ti,ab,kw. | 185 |
| 18 | quizartinib/ | 1002 |
| 19 | quizartinib.ti,ab,kw. | 437 |
| 20 | crenolanib/ | 497 |
| 21 | crenolanib.ti,ab,kw. | 210 |
| 22 | pinometostat/ | 151 |
| 23 | pinometostat.ti,ab,kw. | 20 |
| 24 | sorafenib/ | 30329 |
| 25 | sorafenib.ti,ab,kw. | 16819 |
| 26 | sunitinib/ | 23357 |
| 27 | sunitinib.ti,ab,kw. | 11498 |
| 28 | midostaurin/ | 2478 |
| 29 | midostaurin.ti,ab,kw. | 786 |
| 30 | lintuzumab/ | 157 |
| 31 | lintuzumab.ti,ab,kw. | 69 |
|    | Drug                          | Score  |
|----|-------------------------------|--------|
| 32 | gemtuzumab                    | 443    |
| 33 | gemtuzumab.ti,ab,kw.          | 1214   |
| 34 | blinatumomab                  | 1842   |
| 35 | blinatumomab.ti,ab,kw.        | 1083   |
| 36 | inotuzumab                    | 482    |
| 37 | inotuzumab.ti,ab,kw.          | 555    |
| 38 | gilteritinib                  | 461    |
| 39 | gilteritinib.ti,ab,kw.        | 249    |
| 40 | vincristine                   | 102392 |
| 41 | Vincristine.ti,ab,kw.         | 26657  |
| 42 | daunorubicin                  | 28555  |
| 43 | cytarabine plus daunorubicin  | 561    |
| 44 | daunorubicin.ti,ab,kw.        | 7503   |
| 45 | daunorubicin.ti,ab,kw.        | 1943   |
| 46 | Inotuzumab Ozogamicin         | 1066   |
| 47 | ozogamicin.ti,ab,kw.          | 1514   |
| 48 | cytarabine                    | 62070  |
| 49 | Cytarabine.ti,ab,kw.          | 13018  |
| 50 | cytosine arabinoside.ti,ab,kw.| 5608   |
| 51 | ara-C.ti,ab,kw.               | 6834   |
| 52 | doxorubicin                   | 194206 |
| 53 | cyclophosphamide plus doxorubicin plus prednisolone plus rituximab plus vincristine | 2930 |
| 54 | cyclophosphamide plus doxorubicin plus etoposide plus prednisolone plus vincristine | 171 |
| 55 | cyclophosphamide plus doxorubicin plus etoposide plus prednisolone plus rituximab plus vincristine | 393 |
| 56 | doxorubicin.ti,ab,kw.         | 63301  |
| 57 | Adriamycin.ti,ab,kw.          | 20295  |
| 58 | idarubicin                    | 10935  |
| 59 | idarubicin.ti,ab,kw.          | 3056   |
| 60 | asparaginase macrogol         | 1620   |
| 61 | L-asparaginase.ti,ab,kw.      | 3774   |
| 62 | PEG-L-asparaginase.ti,ab,kw.  | 46     |
| 63 | pegaspargase.ti,ab,kw.        | 301    |
| 64 | etoposide                     | 89596  |
| 65 | Etoposide.ti,ab,kw.           | 30349  |
| 66 | mercaptopurine                | 25573  |
| 67 | 6-mercaptopurine.ti,ab,kw.    | 4918   |
| 68 | "6-MP".ti,ab,kw.              | 1890   |
| 69 | tioguanine                    | 9331   |
| 70 | 6-thioguanine.ti,ab,kw.       | 3053   |
| 71 | "6-TG".ti,ab,kw.              | 815    |
| 72 | methotrexate                  | 181679 |
| 73 | Methotrexate.ti,ab,kw.        | 70315  |
| 74 | mitoxantrone                  | 23782  |
| 75 | Mitoxantrone.ti,ab,kw.        | 7422   |
| 76 | cyclophosphamide              | 220062 |
| 77 | Cyclophosphamide.ti,ab,kw.    | 77266  |
| 78 | prednisone                    | 174300 |
| 79 | prednisone.ti,ab,kw.          | 49947  |
| 80 | prednisolone                  | 127791 |
| 81 | prednisolone.ti,ab,kw.        | 40064  |
| 82 | dexamethasone                 | 154292 |
| 83 | dexamethasone.ti,ab,kw.       | 80371  |
| 84 | hydrocortisonide              | 127619 |
| 85 | hydrocortisonde.ti,ab,kw.     | 19658  |
| 86 | or/1-86                      | 1072884 |
| Number | Term                        | Count       |
|--------|-----------------------------|-------------|
| 87     | exp Leukemia/               | 310865      |
| 88     | cancer*.ti,ab,kw.           | 2676340     |
| 89     | neoplas*.ti,ab,kw.          | 448060      |
| 90     | leukemia*1.ti,ab,kw.        | 305209      |
| 91     | leukaemia*1.ti,ab,kw.       | 48326       |
| 92     | metastas*.ti,ab,kw.         | 771663      |
| 93     | malignan*.ti,ab,kw.         | 835996      |
| 94     | myeloma*.ti,ab,kw.          | 85853       |
| 95     | oncolog*.ti,ab,kw.          | 305985      |
| 96     | or/88-96                    | 3981811     |
| 97     | personalized medicine/      | 48484       |
| 98     | ((precision or personal*) adj2 dos*)ti,ab,kw. | 3514 |
| 99     | drug monitoring/            | 54577       |
| 100    | ((Therapeutic or drug*) adj2 monitor*)ti,ab,kw. | 32209 |
| 101    | TDM.ti,ab,kw.               | 5954        |
| 102    | TDMx.ti,ab,kw.              | 10          |
| 103    | InsightRx.ti,ab,kw.         | 7           |
| 104    | DoseMe.ti,ab,kw.            | 9           |
| 105    | (individual* adj2 dos*)ti,ab,kw. | 10967 |
| 106    | plasma concentration.ti,ab,kw. | 48265 |
| 107    | plasma level* .ti,ab,kw.    | 104247      |
| 108    | toxicity guided dos*.ti,ab,kw. | 12  |
| 109    | toxicity adjust* dos*.ti,ab,kw. | 16  |
| 110    | "TAD".ti,ab,kw.             | 2786        |
| 111    | optimal dos*.ti,ab,kw.      | 18842       |
| 112    | optimi?ed dos*.ti,ab,kw.    | 1036        |
| 113    | model informed dos*.ti,ab,kw. | 27   |
| 114    | MiPD.ti,ab,kw.              | 140         |
| 115    | trough concentration.ti,ab,kw. | 2572 |
| 116    | (pharmacokinetic* adj2 (physiological based or population)).ti,ab,kw. | 8990 |
| 117    | POP PK.ti,ab,kw.            | 138         |
| 118    | POPPK.ti,ab,kw.             | 656         |
| 119    | PBPK.ti,ab,kw.              | 3835        |
| 120    | or/98-120                   | 309700      |
| 121    | exp adolescence/            | 82014       |
| 122    | exp adolescent/             | 1569687     |
| 123    | exp child/                  | 2704713     |
| 124    | girl/                       | 40271       |
| 125    | boy/                        | 27501       |
| 126    | adolescen*.ti,ab,kw.        | 392586      |
| 127    | baby.ti,ab,kw.              | 55706       |
| 128    | babies.ti,ab,kw.            | 53432       |
| 129    | boy*1.ti,ab,kw.             | 199735      |
| 130    | boyhood.ti,ab,kw.           | 94          |
| 131    | child*1.ti,ab,kw.           | 1818404     |
| 132    | girl*1.ti,ab,kw.            | 203724      |
| 133    | juvenil*.ti,ab,kw.          | 102962      |
| 134    | kid*1.ti,ab,kw.             | 13324       |
| 135    | minor*1.ti,ab,kw.           | 299615      |
| 136    | neonat*.ti,ab,kw.           | 362755      |
| 137    | newborn*.ti,ab,kw.          | 201012      |
| 138    | new-born.ti,ab,kw.          | 5099        |
| 139    | paediatric*.ti,ab,kw.       | 122576      |
| 140    | pediatric*.ti,ab,kw.        | 489028      |
| 141    | peadiatric*.ti,ab,kw.       | 239         |
| 142    | perinat*.ti,ab,kw.          | 107100      |
| 143    | puber*.ti,ab,kw.            | 53967       |
### Database(s): Ovid MEDLINE(R) ALL
1946 to February 09, 2021

#### Search Strategy:

| # | Searches | Results |
|---|----------|---------|
| 1 | Imatinib Mesylate/ | 10409 |
| 2 | imatinib.ti,ab,kf. | 13898 |
| 3 | gleevec.ti,ab,kf,nm. | 987 |
| 4 | Dasatinib/ | 2147 |
| 5 | dasatinib.ti,ab,kf,nm. | 3806 |
| 6 | sprycel.ti,ab,kf,nm. | 52 |
| 7 | nilotinib.ti,ab,kf,nm. | 2147 |
| 8 | tasigna.ti,ab,kf,nm. | 49 |
| 9 | bosutinib.ti,ab,kf,nm. | 562 |
| 10 | ponatinib.ti,ab,kf,nm. | 751 |
| 11 | ibrutinib.ti,ab,kf,nm. | 2334 |
| 12 | lestaurtinib.ti,ab,kf,nm. | 155 |
| 13 | quizartinib.ti,ab,kf,nm. | 202 |
| 14 | crenolanib.ti,ab,kf,nm. | 90 |
| 15 | pinometostat.ti,ab,kf,nm. | 10 |
| 16 | sorafenib/ | 5001 |
| 17 | sorafenib.ti,ab,kf. | 8855 |
| 18 | sunitinib/ | 3645 |
| 19 | sunitinib.ti,ab,kf. | 5933 |
| 20 | midostaurin.ti,ab,kf,nm. | 602 |
| 21 | lintuzumab.ti,ab,kf,nm. | 36 |
| 22 | gemtuzumab/ | 525 |
| 23 | gemtuzumab.ti,ab,kf. | 672 |
|   | Chemical Name                  | Rank |
|---|-------------------------------|------|
| 24| blinatumomab.ti,ab,kf,nm.     | 531  |
| 25| inotuzumab.ti,ab,kf,nm.       | 287  |
| 26| gilteritinib.ti,ab,kf,nm.     | 143  |
| 27| Vincristine/                   |      |
| 28| vincristine.ti,ab,kf,nm.      | 31982|
| 29| Daunorubicin/                  |      |
| 30| daunorubicin.ti,ab,kf,nm.     | 10045|
| 31| daunomycin.ti,ab,kf,nm.       | 1886 |
| 32| Inotuzumab Ozogamicin/         | 124  |
| 33| ozogamicin.ti,ab,kf.          | 825  |
| 34| Cytarabine/                    | 14755|
| 35| cytarabine.ti,ab,kf,nm.       | 17771|
| 36| cytosine arabinoside.ti,ab,kf,nm. | 4893 |
| 37| ara-C.ti,ab,kf,nm.            | 4618 |
| 38| Doxorubicin/                   | 53812|
| 39| doxorubicin.ti,ab,kf,nm.      | 71531|
| 40| Adriamycin.ti,ab,kf,nm.       | 16010|
| 41| Idarubicin/                    | 1710 |
| 42| idarubicin.ti,ab,kf,nm.       | 2332 |
| 43| L-asparaginase.ti,ab,kf,nm.   | 3071 |
| 44| PEG-L-asparaginase.ti,ab,kf,nm. | 25   |
| 45| Asparaginase/                  | 4609 |
| 46| pegaspargase.ti,ab,kf,nm.     | 340  |
| 47| Etoposide/                     | 16851|
| 48| etoposide.ti,ab,kf,nm.        | 25992|
| 49| Mercaptopurine/                | 6288 |
| 50| 6-mercaptopurine.ti,ab,kf,nm. | 3788 |
| 51| "6-MP".ti,ab,kf,nm.           | 1109 |
| 52| Thioguanine/                   | 2584 |
| 53| 6-thioguanine.ti,ab,kf,nm.    | 2520 |
| 54| "6-TG".ti,ab,kf,nm.           | 519  |
| 55| Methotrexate/                  | 38412|
| 56| methotrexate.ti,ab,kf,nm.     | 55637|
| 57| Mitoxantrone/                  | 4284 |
| Term                        | PMID |
|-----------------------------|------|
| mitoxantrone.ti,ab,kf,nm.   | 6339 |
| Cyclophosphamide/           | 50418|
| cyclophosphamide.ti,ab,kf,nm.| 71736|
| Prednisone/                 | 39744|
| prednisone.ti,ab,kf,nm.     | 54271|
| Prednisolone/               | 33116|
| prednisolone.ti,ab,kf,nm.   | 46906|
| Dexamethasone/              | 51962|
| dexamethasone.ti,ab,kf,nm.  | 73580|
| Hydrocortisone/             | 72676|
| hydrocortisone.ti,ab,kf,nm. | 78206|
| exp Leukemia/               | 235182|
| cancer*.ti,ab,kf.           | 1896549|
| neoplas*.ti,ab,kf.          | 410784|
| leukemia*1.ti,ab,kf.        | 230003|
| leukaemia*1.ti,ab,kf.       | 37396|
| metastas*.ti,ab,kf.         | 535008|
| malignan*.ti,ab,kf.         | 598362|
| myeloma*.ti,ab,kf.          | 56254|
| oncolog*.ti,ab,kf.          | 167371|
| or/71-79                    | 2983530|
| Precision Medicine/         | 19372|
| ((precision or personal*) adj2 dos*).ti,ab,kf. | 2290 |
| Drug Monitoring/            | 21496|
| ((Therapeutic or drug*) adj2 monitor*).ti,ab,kf. | 20759|
| TDM.ti,ab,kf.               | 3352|
| TDMx.ti,ab,kf.              | 7|
| InsightRx.ti,ab,kf.         | 5|
| DoseMe.ti,ab,kf.            | 4|
| (individual* adj2 dos*).ti,ab,kf. | 7147 |
| plasma concentration.ti,ab,kf. | 37339 |
| plasma level*.ti,ab,kf.     | 77307|
| toxicity guided dos*.ti,ab,kf.| 8 |
| 92 | toxicity adjust* dos*.ti,ab,kf. | 7 |
| 93 | "TAD".ti,ab,kf. | 1987 |
| 94 | optimal dos*.ti,ab,kf. | 12698 |
| 95 | optimi* dos*.ti,ab,kf. | 1342 |
| 96 | model informed dos*.ti,ab,kf. | 18 |
| 97 | MIPD.ti,ab,kf. | 88 |
| 98 | trough concentration.ti,ab,kf. | 1595 |
| 99 | (pharmacokinetic* adj2 (physiological based or population)).ti,ab,kf. | 6195 |
| 100 | POP PK.ti,ab,kf. | 35 |
| 101 | POPPK.ti,ab,kf. | 261 |
| 102 | PBPK.ti,ab,kf. | 2649 |
| 103 | or/81-103 | 196503 |
| 104 | exp Adolescent/ | 2067391 |
| 105 | exp Child/ | 1944611 |
| 106 | adolescen*.ti,ab,kf. | 313307 |
| 107 | baby.ti,ab,kf. | 39694 |
| 108 | babies.ti,ab,kf. | 38034 |
| 109 | boy*.ti,ab,kf. | 149723 |
| 110 | boyhood.ti,ab,kf. | 86 |
| 111 | child*.ti,ab,kf. | 1480254 |
| 112 | girl*.ti,ab,kf. | 153116 |
| 113 | juvenil*.ti,ab,kf. | 85948 |
| 114 | kid*.ti,ab,kf. | 9124 |
| 115 | minor*.ti,ab,kf. | 234252 |
| 116 | neonat*.ti,ab,kf. | 278633 |
| 117 | newborn*.ti,ab,kf. | 180886 |
| 118 | new-born.ti,ab,kf. | 4087 |
| 119 | paediatric*.ti,ab,kf. | 71428 |
| 120 | pediatric*.ti,ab,kf. | 320168 |
| 121 | peadiatric*.ti,ab,kf. | 59 |
| 122 | perinat*.ti,ab,kf. | 79328 |
| 123 | puber*.ti,ab,kf. | 40356 |
| 124 | pubescen*.ti,ab,kf. | 2480 |
| 125 | preschool*.ti,ab,kf. | 30549 |
| #   | Searches                                      | Results |
|-----|-----------------------------------------------|---------|
| 1   | imatinib/                                     | 6325    |
| 2   | imatinib.ti,ab,kw.                           | 2562    |
| 3   | gleevec.ti,ab,kw.                            | 149     |
| 4   | dasatinib/                                    | 2016    |
| 5   | dasatinib.ti,ab,kw.                          | 674     |
| 6   | sprycel.ti,ab,kw.                            | 13      |
| 7   | nilotinib/                                    | 1326    |
| 8   | nilotinib.ti,ab,kw.                          | 501     |
| 9   | tasigna.ti,ab,kw.                            | 16      |
| 10  | bosutinib/                                    | 374     |
| 11  | bosutinib.ti,ab,kw.                          | 92      |
| 12  | ponatinib/                                    | 452     |
| 13  | ponatinib.ti,ab,kw.                          | 143     |
| 14  | ibrutinib/                                    | 978     |
| 15  | ibrutinib.ti,ab,kw.                          | 482     |
| 16  | lestaurtinib/                                 | 145     |
| 17  | lestaurtinib.ti,ab,kw.                       | 21      |
| 18  | quizartinib/                                  | 89      |
| 19  | quizartinib.ti,ab,kw.                        | 25      |
| 20  | crenolanib/                                   | 60      |
| 21  | crenolanib.ti,ab,kw.                         | 9       |
|   | Drug Name               | Score |
|---|------------------------|-------|
| 22| pinometostat/          | 18    |
| 23| pinometostat.ti,ab,kw. | 2     |
| 24| sorafenib/             | 5033  |
| 25| sorafenib.ti,ab,kw.   | 1930  |
| 26| sunitinib/             | 4153  |
| 27| sunitinib.ti,ab,kw.   | 1394  |
| 28| midostaurin/           | 287   |
| 29| midostaurin.ti,ab,kw.  | 88    |
| 30| lintuzumab/            | 17    |
| 31| lintuzumab.ti,ab,kw.  | 7     |
| 32| gemtuzumab/            | 61    |
| 33| gemtuzumab.ti,ab,kw.  | 131   |
| 34| blinatumomab/          | 296   |
| 35| blinatumomab.ti,ab,kw.| 114   |
| 36| inotuzumab/            | 163   |
| 37| inotuzumab.ti,ab,kw.  | 63    |
| 38| gilteritinib/          | 64    |
| 39| gilteritinib.ti,ab,kw.| 32    |
| 40| vincristine/           | 14240 |
| 41| Vincristine.ti,ab,kw.  | 2551  |
| 42| daunorubicin/          | 2696  |
| 43| cytarabine plus daunorubicin/ | 64 |
| 44| daunorubicin.ti,ab,kw. | 481   |
| 45| daunomycin.ti,ab,kw.  | 40    |
| 46| inotuzumab Ozogamicin/ | 163   |
| 47| ozogamicin.ti,ab,kw.  | 165   |
| 48| cytarabine/            | 6685  |
| 49| Cytarabine.ti,ab,kw.  | 1116  |
| 50| cytosine arabinoside.ti,ab,kw. | 148 |
| 51| ara-C.ti,ab,kw.       | 260   |
| 52| doxorubicin/           | 28644 |
| 53| cyclophosphamide plus doxorubicin plus prednisolone plus rituximab plus vincristine/ | 429   |
| 54| cyclophosphamide plus doxorubicin plus etoposide plus prednisolone plus vincristine/ | 26    |
|   | Drug Name                                      | Count |
|---|------------------------------------------------|-------|
| 55| cyclophosphamide plus doxorubicin plus etoposide plus prednisolone plus rituximab plus vincristine/ | 71    |
| 56| doxorubicin.ti,ab,kw.                          | 7488  |
| 57| Adriamycin.ti,ab,kw.                          | 1040  |
| 58| idarubicin/                                    | 1369  |
| 59| idarubicin.ti,ab,kw.                          | 188   |
| 60| asparaginase macrogol/                         | 252   |
| 61| L-asparaginase.ti,ab,kw.                      | 222   |
| 62| PEG-L-asparaginase.ti,ab,kw.                  | 3     |
| 63| pegaspargase.ti,ab,kw.                        | 49    |
| 64| etoposide/                                    | 13885 |
| 65| Etoposide.ti,ab,kw.                           | 2898  |
| 66| mercaptopurine/                                | 2932  |
| 67| 6-mercaptopurine.ti,ab,kw.                   | 296   |
| 68| "6-MP".ti,ab,kw.                              | 109   |
| 69| tioguanine/                                   | 679   |
| 70| 6-thioguanine.ti,ab,kw.                      | 123   |
| 71| "6-TG".ti,ab,kw.                              | 52    |
| 72| methotrexate/                                 | 29325 |
| 73| Methotrexate.ti,ab,kw.                       | 7672  |
| 74| mitoxantrone/                                 | 3555  |
| 75| Mitoxantrone.ti,ab,kw.                       | 648   |
| 76| cyclophosphamide/                             | 32776 |
| 77| Cyclophosphamide.ti,ab,kw.                   | 7020  |
| 78| prednisone/                                   | 29262 |
| 79| prednisone.ti,ab,kw.                         | 4568  |
| 80| prednisolone/                                 | 18002 |
| 81| prednisolone.ti,ab,kw.                       | 3322  |
| 82| dexamethasone/                                | 25863 |
| 83| dexamethasone.ti,ab,kw.                      | 8356  |
| 84| hydrocortisone/                               | 21530 |
| 85| hydrocortisone.ti,ab,kw.                     | 1676  |
| 86| or/1-86                                      | 154768|
| 87| exp Leukemia/                                 | 30411 |
| Term                      | Count |
|---------------------------|-------|
| cancer* .ti,ab,kw.       | 442888|
| neoplas*.ti,ab,kw.       | 54694 |
| leukemia*.ti,ab,kw.      | 22078 |
| leukaemia*.ti,ab,kw.     | 4060  |
| metastas*.ti,ab,kw.      | 103397|
| malignan*.ti,ab,kw.      | 112432|
| myeloma*.ti,ab,kw.       | 8080  |
| oncolog*.ti,ab,kw.       | 72000 |
| or/88-96                 | 601324|
| personalized medicine/   | 11564 |
| ((precision or personal*) adj2 dos*).ti,ab,kw. | 1056 |
| drug monitoring/         | 9543  |
| ((Therapeutic or drug*) adj2 monitor*).ti,ab,kw. | 4580 |
| TDM.ti,ab,kw.            | 572   |
| TDMx.ti,ab,kw.           | 1     |
| InsightRx.ti,ab,kw.      | 0     |
| DoseMe.ti,ab,kw.         | 0     |
| (individual* adj2 dos*).ti,ab,kw. | 1751 |
| plasma concentration.ti,ab,kw. | 5367 |
| plasma level*.ti,ab,kw.  | 12339 |
| toxicity guided dos*.ti,ab,kw. | 3    |
| toxicity adjust* dos*.ti,ab,kw. | 4    |
| *TAD*.ti,ab,kw.          | 427   |
| optimal dos*.ti,ab,kw.   | 3238  |
| optimi?ed dos*.ti,ab,kw. | 141   |
| model informed dos*.ti,ab,kw. | 1    |
| MIPD.ti,ab,kw.           | 18    |
| trough concentration.ti,ab,kw. | 280  |
| (pharmacokinetic* adj2 (physiological based or population)).ti,ab,kw. | 1282 |
| POP PK.ti,ab,kw.         | 7     |
| POPPK.ti,ab,kw.          | 38    |
| PBPK.ti,ab,kw.           | 205   |
| or/98-120                | 48374 |
| exp adolescence/         | 36613 |
|   | Term                        | Term Count |
|---|----------------------------|------------|
|122| exp adolescent/            | 360220     |
|123| exp child/                 | 679766     |
|124| girl/                      | 32705      |
|125| boy/                       | 27239      |
|126| adolescen*.ti,ab,kw.      | 164516     |
|127| baby.ti,ab,kw.            | 16255      |
|128| babies.ti,ab,kw.          | 13647      |
|129| boy*.ti,ab,kw.            | 55321      |
|130| boyhood.ti,ab,kw.         | 46         |
|131| child*.ti,ab,kw.          | 544584     |
|132| girl*.ti,ab,kw.           | 60286      |
|133| juvenil*.ti,ab,kw.        | 15617      |
|134| kid*.ti,ab,kw.            | 4151       |
|135| minor*.ti,ab,kw.          | 50830      |
|136| neonat*.ti,ab,kw.         | 81590      |
|137| newborn*.ti,ab,kw.        | 40342      |
|138| new-born.ti,ab,kw.        | 679        |
|139| paediatric*.ti,ab,kw.     | 34927      |
|140| pediatric*.ti,ab,kw.      | 133466     |
|141| pediatri*c*.ti,ab,kw.     | 28         |
|142| perinat*.ti,ab,kw.        | 27508      |
|143| puber*.ti,ab,kw.          | 8461       |
|144| pubescen*.ti,ab,kw.       | 452        |
|145| preschool*.ti,ab,kw.      | 18281      |
|146| kindergart*.ti,ab,kw.     | 4726       |
|147| school*.ti,ab,kw.         | 163652     |
|148| teen*.ti,ab,kw.           | 17054      |
|149| toddler*.ti,ab,kw.        | 7214       |
|150| underage*.ti,ab,kw.       | 1079       |
|151| under-age*.ti,ab,kw.      | 1736       |
|152| youth*.ti,ab,kw.          | 61358      |
|153| or/122-153                | 1176622    |
|154| and/87,97,121,154         | 171        |
Database(s): EBM Reviews - Cochrane Central Register of Controlled Trials January 2021, EBM Reviews - Cochrane Database of Systematic Reviews 2005 to February 10, 2021

Search Strategy:

| # | Searches            | Results |
|---|---------------------|---------|
| 1 | Imatinib Mesylate/  | 420     |
| 2 | imatinib.ti,ab,kw. | 1551    |
| 3 | gleevec.ti,ab,kw.  | 87      |
| 4 | Dasatinib/          | 109     |
| 5 | dasatinib.ti,ab,kw.| 490     |
| 6 | sprycel.ti,ab,kw.  | 46      |
| 7 | nilotinib.ti,ab,kw.| 433     |
| 8 | tasigna.ti,ab,kw.  | 34      |
| 9 | bosutinib.ti,ab,kw.| 136     |
|10 | ponatinib.ti,ab,kw.| 93      |
|11 | ibrutinib.ti,ab,kw.| 587     |
|12 | lestaurtinib.ti,ab,kw.| 15     |
|13 | quizartinib.ti,ab,kw.| 66     |
|14 | crenolanib.ti,ab,kw.| 27     |
|15 | pinometostat.ti,ab,kw.| 3  |
|16 | sorafenib/         | 482     |
|17 | sorafenib.ti,ab,kw.| 1954    |
|18 | sunitinib/         | 317     |
|19 | sunitinib.ti,ab,kw.| 1262    |
|20 | midostaurin.ti,ab,kw.| 97     |
|21 | lintuzumab.ti,ab,kw.| 11     |
|22 | gemtuzumab/        | 65      |
|23 | gemtuzumab.ti,ab,kw.| 202    |
|24 | blinatumomab.ti,ab,kw.| 87     |
|25 | inotuzumab.ti,ab,kw.| 109    |
|26 | giltertinib.ti,ab,kw.| 50     |
|27 | Vincristine/       | 2349    |
|28 | vincristine.ti,ab,kw.| 3367   |
|29 | Daunorubicin/      | 631     |
|   | Drug Name | Query Terms | Count |
|---|-----------|-------------|-------|
| 30 | daunorubicin.ti,ab,kw. | 964 |
| 31 | daunomycin.ti,ab,kw. | 66 |
| 32 | Inotuzumab Ozogamicin/ozogamicin.ti,ab,kw. | 18 |
| 34 | Cytarabine/cytarabine.ti,ab,kw. | 1342 |
| 35 | cytosine arabinoside.ti,ab,kw. | 454 |
| 37 | ara-C.ti,ab,kw. | 755 |
| 38 | Doxorubicin/doxorubicin.ti,ab,kw. | 6114 |
| 39 | Idarubicin/idarubicin.ti,ab,kw. | 599 |
| 41 | L-asparaginase.ti,ab,kw. | 280 |
| 43 | PEG-L-asparaginase.ti,ab,kw. | 10 |
| 45 | Asparaginase/pegaspargase.ti,ab,kw. | 333 |
| 46 | etoposide.ti,ab,kw. | 1786 |
| 48 | 6-mercaptopurine.ti,ab,kw. | 425 |
| 51 | "6-MP".ti,ab,kw. | 196 |
| 52 | Thioguanine/6-thioguanine.ti,ab,kw. | 148 |
| 54 | "6-TG".ti,ab,kw. | 23 |
| 55 | Methotrexate/methotrexate.ti,ab,kw. | 4144 |
| 56 | Mitoxantrone/mitoxantrone.ti,ab,kw. | 10815 |
| 57 | cyclophosphamide/ti,ab,kw. | 513 |
| 61 | Prednisone/prednisone.ti,ab,kw. | 8040 |
| 62 | Prednisolone/prednisolone/ | 3000 |
|   | query                                                                 | count |
|---|----------------------------------------------------------------------|-------|
|64 | prednisolone.ti,ab,kw.                                               | 5738  |
|65 | Dexamethasone/                                                        | 4538  |
|66 | dexamethasone.ti,ab,kw.                                             | 11189 |
|67 | Hydrocortisone/                                                      | 5956  |
|68 | hydrocortisone.ti,ab,kw.                                           | 4462  |
|69 | or/1-69                                                              | 66038 |
|70 | exp Leukemia/                                                        | 4767  |
|71 | cancer*.ti,ab,kw.                                                   | 176578|
|72 | neoplas*.ti,ab,kw.                                                  | 21957 |
|73 | leukemia*1.ti,ab,kw.                                                | 13248 |
|74 | leukaemia*1.ti,ab,kw.                                               | 2202  |
|75 | metastasis*.ti,ab,kw.                                               | 44556 |
|76 | malignan*.ti,ab,kw.                                                 | 29247 |
|77 | myeloma*.ti,ab,kw.                                                  | 5782  |
|78 | oncolog*.ti,ab,kw.                                                  | 29094 |
|79 | or/71-79                                                             | 216189|
|80 | Precision Medicine/                                                 | 474   |
|81 | ((precision or personal*) adj2 dos*).ti,ab,kw.                      | 237   |
|82 | Drug Monitoring/                                                     | 1823  |
|83 | ((Therapeutic or drug*) adj2 monitor*).ti,ab,kw.                    | 3034  |
|84 | TDM.ti,ab,kw.                                                       | 328   |
|85 | TDMx.ti,ab,kw.                                                      | 2     |
|86 | InsightRx.ti,ab,kw.                                                 | 1     |
|87 | DoseMe.ti,ab,kw.                                                    | 0     |
|88 | (individual* adj2 dos*).ti,ab,kw.                                   | 2567  |
|89 | plasma concentration.ti,ab,kw.                                     | 13567 |
|90 | plasma level*.ti,ab,kw.                                            | 11931 |
|91 | toxicity guided dos*.ti,ab,kw.                                      | 0     |
|92 | toxicity adjust* dos*.ti,ab,kw.                                    | 7     |
|93 | "TAD".ti,ab,kw.                                                     | 199   |
|94 | optimal dos*.ti,ab,kw.                                             | 4329  |
|95 | optimi* dos*.ti,ab,kw.                                             | 523   |
|96 | model informed dos*.ti,ab,kw.                                      | 1     |
|97 | MIPD.ti,ab,kw.                                                      | 11    |
|   |   |   |
|---|---|---|
| 98 | trough concentration.ti,ab,kw. | 638 |
| 99 | (pharmacokinetic* adj2 (physiological based or population)),ti,ab,kw. | 2262 |
| 100 | POP PK,ti,ab,kw. | 32 |
| 101 | POPPK,ti,ab,kw. | 111 |
| 102 | PBPK,ti,ab,kw. | 84 |
| 103 | or/81-103 | 38734 |
| 104 | exp Adolescent/ | 106011 |
| 105 | exp Child/ | 56354 |
| 106 | adolescen*.ti,ab,kw. | 53456 |
| 107 | baby.ti,ab,kw. | 4853 |
| 108 | babies.ti,ab,kw. | 4733 |
| 109 | boy*1.ti,ab,kw. | 7274 |
| 110 | boyhood.ti,ab,kw. | 0 |
| 111 | child*.ti,ab,kw. | 152223 |
| 112 | girl*1.ti,ab,kw. | 7939 |
| 113 | juvenil*.ti,ab,kw. | 3908 |
| 114 | kid*1.ti,ab,kw. | 1167 |
| 115 | minor*1.ti,ab,kw. | 17577 |
| 116 | neonat*.ti,ab,kw. | 23596 |
| 117 | newborn*.ti,ab,kw. | 16219 |
| 118 | new-born.ti,ab,kw. | 203 |
| 119 | paediatric*.ti,ab,kw. | 7839 |
| 120 | pediatric*.ti,ab,kw. | 30494 |
| 121 | paediatric*.ti,ab,kw. | 20 |
| 122 | perinat*.ti,ab,kw. | 6396 |
| 123 | puber*.ti,ab,kw. | 1843 |
| 124 | pubescen*.ti,ab,kw. | 63 |
| 125 | preschool*.ti,ab,kw. | 11869 |
| 126 | kindergart*.ti,ab,kw. | 770 |
| 127 | school*.ti,ab,kw. | 35093 |
| 128 | teen*.ti,ab,kw. | 2893 |
| 129 | toddler*.ti,ab,kw. | 1864 |
| 130 | underage*.ti,ab,kw. | 201 |
| 131 | under-age*.ti,ab,kw. | 469839 |
| #  | Query                                      | Limiters/Expanders                                        | Results |
|----|--------------------------------------------|----------------------------------------------------------|---------|
| S1 | (MH "Imatinib")                           | Expanders - Apply equivalent subjects                     | 861     |
| S2 | TI imatinib OR AB imatinib                 | Expanders - Apply equivalent subjects                     | 2,578   |
| S3 | TI gleevec OR AB gleevec                  | Expanders - Apply equivalent subjects                     | 113     |
| S4 | (MH "Dasatinib")                          | Expanders - Apply equivalent subjects                     | 117     |
| S5 | TI Dasatinib OR AB Dasatinib              | Expanders - Apply equivalent subjects                     | 765     |
| S6 | TI sprycel OR AB sprycel                  | Expanders - Apply equivalent subjects                     | 13      |
| S7 | (MH "Nilotinib")                          | Expanders - Apply equivalent subjects                     | 90      |
| S8 | TI nilotinib OR AB nilotinib              | Expanders - Apply equivalent subjects                     | 564     |
| S9 | TI tasigna OR AB tasigna                  | Expanders - Apply equivalent subjects                     | 22      |
| S10| (MH "Vincristine")                        | Expanders - Apply equivalent subjects                     | 2,345   |
| S11| TI Vincristine OR AB Vincristine          | Expanders - Apply equivalent subjects                     | 2,129   |
| S12| (MH "Imatinib")                           | Expanders - Apply equivalent subjects                     | 861     |
| S13| TI bosutinib OR AB bosutinib              | Expanders - Apply equivalent subjects                     | 117     |
| S14| TI ponatinib OR AB ponatinib              | Expanders - Apply equivalent subjects                     | 170     |
| S15| TI ibrutinib OR AB ibrutinib              | Expanders - Apply equivalent subjects                     | 670     |
| S16| TI lestaurtinib OR AB lestaurtinib        | Expanders - Apply equivalent subjects                     | 13      |
|   | Search term | Expander settings | Count |
|---|-------------|--------------------|-------|
| S17 | TI quizartinib OR AB quizartinib | Expander settings | 21 |
| S18 | TI pinometostat OR AB pinometostat | Expander settings | 2 |
| S19 | (MH "Sorafenib") | Expander settings | 895 |
| S20 | TI sorafenib OR AB sorafenib | Expander settings | 2,042 |
| S21 | (MH "Sunitinib") | Expander settings | 87 |
| S22 | TI sunitinib OR AB sunitinib | Expander settings | 1,786 |
| S23 | TI midostaurin OR AB midostaurin | Expander settings | 83 |
| S24 | TI lintuzumab OR AB lintuzumab | Expander settings | 9 |
| S25 | TI gemtuzumab OR AB gemtuzumab | Expander settings | 148 |
| S26 | TI blinatumomab OR AB blinatumomab | Expander settings | 148 |
| S27 | (MH "Inotuzumab Ozogamicin") | Expander settings | 2 |
| S28 | TI inotuzumab OR AB inotuzumab | Expander settings | 79 |
| S29 | TI ozogamicin OR AB ozogamicin | Expander settings | 205 |
| S30 | TI gilteritinib OR AB gilteritinib | Expander settings | 40 |
| S31 | S1 OR S2 OR S3 OR S4 OR S5 OR S6 OR S7 OR S8 OR S9 OR S10 OR S11 OR S12 OR S13 OR S14 OR S15 OR S16 OR S17 OR S18 OR S19 OR S20 OR S21 OR S22 OR S23 OR S24 OR S25 OR S26 OR S27 OR S28 OR S29 OR S30 OR S31 | Expander settings | 11,342 |
| S32 | (MH "Leukemia+") | Expander settings | 22,717 |
| S33 | TI cancer* OR AB cancer* | Expander settings | 409,890 |
| S34 | TI neoplas* OR AB neoplas* | Expander settings | 26,952 |
| S35 | TI leukemia OR AB leukemia | Expander settings | 23,402 |
| S36 | TI leukemias OR AB leukemias | Expanders - Apply equivalent subjects | Search modes - Boolean/Phrase | 17,781 |
|-----|-----------------------------|--------------------------------------|-------------------------------|--------|
| S37 | TI leukaemia OR AB leukaemia| Expanders - Apply equivalent subjects | Search modes - Boolean/Phrase | 18,740 |
| S38 | TI leukaemias OR AB leukaemias | Expanders - Apply equivalent subjects | Search modes - Boolean/Phrase | 17,700 |
| S39 | TI metasta* OR AB metasta* | Expanders - Apply equivalent subjects | Search modes - Boolean/Phrase | 75,501 |
| S40 | TI malignan* OR AB malignan* | Expanders - Apply equivalent subjects | Search modes - Boolean/Phrase | 73,542 |
| S41 | TI myeloma* OR AB myeloma* | Expanders - Apply equivalent subjects | Search modes - Boolean/Phrase | 8,409 |
| S42 | TI oncolog* OR AB oncolog* | Expanders - Apply equivalent subjects | Search modes - Boolean/Phrase | 57,923 |
| S43 | S33 OR S34 OR S35 OR S36 OR S37 OR S38 OR S39 OR S40 OR S41 OR S42 OR S43 | Expanders - Apply equivalent subjects | Search modes - Boolean/Phrase | 539,675 |
| S44 | (MH "Individualized Medicine") | Expanders - Apply equivalent subjects | Search modes - Boolean/Phrase | 5,414 |
| S45 | TI (individual* N2 dos*) OR AB (individual* N2 dos*) | Expanders - Apply equivalent subjects | Search modes - Boolean/Phrase | 1,587 |
| S46 | TI ((precision or personal*) N2 dos*) OR AB ((precision or personal*) N2 dos*) | Expanders - Apply equivalent subjects | Search modes - Boolean/Phrase | 353 |
| S47 | (MH "Drug Monitoring") | Expanders - Apply equivalent subjects | Search modes - Boolean/Phrase | 8,012 |
| S48 | TI ((Therapeutic or drug*) N2 monitor*) OR AB ((Therapeutic or drug*) N2 monitor*) | Expanders - Apply equivalent subjects | Search modes - Boolean/Phrase | 4,229 |
| S49 | TI TDM OR AB TDM | Expanders - Apply equivalent subjects | Search modes - Boolean/Phrase | 590 |
| S50 | TI InsightRx OR AB InsightRx | Expanders - Apply equivalent subjects | Search modes - Boolean/Phrase | 2 |
| S51 | TI DoseMe OR AB DoseMe | Expanders - Apply equivalent subjects | Search modes - Boolean/Phrase | 2 |
| S52 | TI "plasma concentration" OR AB "plasma concentration" | Expanders - Apply equivalent subjects | Search modes - Boolean/Phrase | 3,788 |
| S53 | TI "plasma level***" OR AB "plasma level***" | Expanders - Apply equivalent subjects | Search modes - Boolean/Phrase | 7,692 |
| S54 | TI TDMx OR AB TDMx | Expanders - Apply equivalent subjects | Search modes - Boolean/Phrase | 1 |
| S55 | TI "toxicity guided dos**" OR AB "toxicity guided dos**" | Expanders - Apply equivalent subjects | Search modes - Boolean/Phrase | 5 |
| S56 | TI "toxicity adjust* dos*" OR AB "toxicity adjust* dos*" | Expanders - Apply equivalent subjects | 5 |
|-----|--------------------------------------------------|-------------------------------------|---|
| S57 | TI "TAD" OR AB "TAD" | Expanders - Apply equivalent subjects | 216 |
| S58 | TI "optimal dos*" OR AB "optimal dos*" | Expanders - Apply equivalent subjects | 2,329 |
| S59 | TI "optimi* dos*" OR AB "optimi* dos*" | Expanders - Apply equivalent subjects | 261 |
| S60 | TI "model informed dos*" OR AB "model informed dos*" | Expanders - Apply equivalent subjects | 4 |
| S61 | TI MIPD OR AB MIPD | Expanders - Apply equivalent subjects | 19 |
| S62 | TI "trough concentration" OR AB "trough concentration" | Expanders - Apply equivalent subjects | 311 |
| S63 | TI (pharmacokinetic* N2 ("physiological based " OR population)) | OR AB (pharmacokinetic* N2 (physiological based or population)) | | Expanders - Apply equivalent subjects | 1,629 |
| S64 | TI "POP PK" OR AB "POP PK" | Expanders - Apply equivalent subjects | 7 |
| S65 | TI POPPK OR AB POPPK | Expanders - Apply equivalent subjects | 59 |
| S66 | TI PBPK OR AB PBPK | Expanders - Apply equivalent subjects | 171 |
| S67 | S45 OR S46 OR S47 OR S48 OR S49 OR S50 OR S51 OR S52 OR S53 OR S54 OR S55 OR S56 OR S57 OR S58 OR S59 OR S60 OR S61 OR S62 OR S63 OR S64 OR S65 OR S66 OR S67 | Expanders - Apply equivalent subjects | 33,466 |
| S68 | (MH "Adolescence++") | | | Expanders - Apply equivalent subjects | 544,027 |
| S69 | (MH "Child++") | | | Expanders - Apply equivalent subjects | 688,728 |
| S70 | TI adolescen* OR AB adolescen* | Expanders - Apply equivalent subjects | 139,418 |
| S71 | TI baby OR AB baby | Expanders - Apply equivalent subjects | 30,968 |
| S72 | TI babies OR AB babies | Expanders - Apply equivalent subjects | 27,884 |
| S73 | TI (boy OR boys) OR AB (boy OR boys) | Expanders - Apply equivalent subjects | 39,321 |
|   | Search Term                  | Expander Settings                          | Count   |
|---|-----------------------------|--------------------------------------------|---------|
| S74| boyhood OR AB boyhood       | Expanders - Apply equivalent subjects      | 33      |
|   | Search modes - Boolean/Phrase|                                            |         |
| S75| TI child* OR AB child*      | Expanders - Apply equivalent subjects      | 505,865 |
|   | Search modes - Boolean/Phrase|                                            |         |
| S76| TI ( girl OR girls ) OR AB ( girl OR girls ) | Expanders - Apply equivalent subjects  | 43,805  |
|   | Search modes - Boolean/Phrase|                                            |         |
| S77| TI juvenil* OR AB juvenil*  | Expanders - Apply equivalent subjects      | 10,512  |
|   | Search modes - Boolean/Phrase|                                            |         |
| S78| TI ( kid OR kids ) OR AB ( kid OR kids ) | Expanders - Apply equivalent subjects  | 10,338  |
|   | Search modes - Boolean/Phrase|                                            |         |
| S79| TI ( minor OR minors ) OR AB ( minor OR minors ) | Expanders - Apply equivalent subjects  | 31,600  |
|   | Search modes - Boolean/Phrase|                                            |         |
| S80| TI neonat* OR AB neonat*    | Expanders - Apply equivalent subjects      | 69,750  |
|   | Search modes - Boolean/Phrase|                                            |         |
| S81| TI newborn* OR AB newborn*  | Expanders - Apply equivalent subjects      | 31,963  |
|   | Search modes - Boolean/Phrase|                                            |         |
| S82| TI "new-born" OR AB "new-born" | Expanders - Apply equivalent subjects  | 387     |
|   | Search modes - Boolean/Phrase|                                            |         |
| S83| TI paediatric* OR AB paediatric* | Expanders - Apply equivalent subjects | 26,533  |
|   | Search modes - Boolean/Phrase|                                            |         |
| S84| TI pediatric* OR AB pediatric* | Expanders - Apply equivalent subjects  | 117,530 |
|   | Search modes - Boolean/Phrase|                                            |         |
| S85| TI perinat* OR AB perinat*  | Expanders - Apply equivalent subjects      | 24,959  |
|   | Search modes - Boolean/Phrase|                                            |         |
| S86| TI paediatric* OR AB paediatric* | Expanders - Apply equivalent subjects | 17      |
|   | Search modes - Boolean/Phrase|                                            |         |
| S87| TI puber* OR AB puber*      | Expanders - Apply equivalent subjects      | 6,146   |
|   | Search modes - Boolean/Phrase|                                            |         |
| S88| pubescen* OR AB pubescen*   | Expanders - Apply equivalent subjects      | 290     |
|   | Search modes - Boolean/Phrase|                                            |         |
| S89| TI preschool* OR AB preschool* | Expanders - Apply equivalent subjects     | 13,881  |
|   | Search modes - Boolean/Phrase|                                            |         |
| S90| TI kindergart* OR AB kindergart* | Expanders - Apply equivalent subjects | 3,059   |
|   | Search modes - Boolean/Phrase|                                            |         |
| S91| TI school* OR AB school*    | Expanders - Apply equivalent subjects      | 147,999 |
|   | Search modes - Boolean/Phrase|                                            |         |
| S92| TI teen* OR AB teen*        | Expanders - Apply equivalent subjects      | 19,451  |
|   | Search modes - Boolean/Phrase|                                            |         |
| S93| TI toddler* OR AB toddler*  | Expanders - Apply equivalent subjects      | 6,808   |
|   | Search modes - Boolean/Phrase|                                            |         |
| ID  | Search Terms                                 | Search Modes                          | Results |
|-----|---------------------------------------------|---------------------------------------|---------|
| S94 | TI underage* OR AB underage*               | Expanders - Apply equivalent subjects | 880     |
|     |                                             | Search modes - Boolean/Phrase         |         |
| S95 | TI "under-age** OR AB "under-age**"        | Expanders - Apply equivalent subjects | 1,408   |
|     |                                             | Search modes - Boolean/Phrase         |         |
| S96 | TI youth* OR AB youth*                     | Expanders - Apply equivalent subjects | 51,993  |
|     |                                             | Search modes - Boolean/Phrase         |         |
| S97 | S69 OR S70 OR S71 OR S72 OR S73 OR S74    | Expanders - Apply equivalent subjects | 1,350,400|
|     | OR S75 OR S76 OR S77 OR S78 OR S79 OR S80| Search modes - Boolean/Phrase         |         |
|     | OR S81 OR S82 OR S83 OR S84 OR S85 OR     |                                       |         |
|     | S86 OR S87 OR S88 OR S89 OR S90 OR S91   |                                       |         |
|     | OR S92 OR S93 OR S94 OR S95 OR S96 OR    |                                       |         |
|     | S97                                         |                                       |         |
| S98 | MH “Daunorubicin”)                         | Expanders - Apply equivalent subjects | 253     |
|     |                                             | Search modes - Boolean/Phrase         |         |
| S99 | TI Daunorubicin OR AB Daunorubicin          | Expanders - Apply equivalent subjects | 327     |
|     |                                             | Search modes - Boolean/Phrase         |         |
| S100| (MH "Cytarabine")                          | Expanders - Apply equivalent subjects | 1,136   |
|     |                                             | Search modes - Boolean/Phrase         |         |
| S101| TI Cytarabine OR AB Cytarabine             | Expanders - Apply equivalent subjects | 1,064   |
|     |                                             | Search modes - Boolean/Phrase         |         |
| S102| TI "cytosine arabinoside" OR AB "cytosine  | Expanders - Apply equivalent subjects | 109     |
|     | arabinoside"                               | Search modes - Boolean/Phrase         |         |
| S103| TI "ara-C" OR AB "ara-C"                    | Expanders - Apply equivalent subjects | 160     |
|     |                                             | Search modes - Boolean/Phrase         |         |
| S104| (MH "Doxorubicin")                         | Expanders - Apply equivalent subjects | 5,159   |
|     |                                             | Search modes - Boolean/Phrase         |         |
| S105| TI Doxorubicin OR AB Doxorubicin           | Expanders - Apply equivalent subjects | 4,783   |
|     |                                             | Search modes - Boolean/Phrase         |         |
| S106| TI Adriamycin OR AB Adriamycin             | Expanders - Apply equivalent subjects | 619     |
|     |                                             | Search modes - Boolean/Phrase         |         |
| S107| (MH "Idarubicin")                          | Expanders - Apply equivalent subjects | 132     |
|     |                                             | Search modes - Boolean/Phrase         |         |
| S108| TI Idarubicin OR TI Idarubicin             | Expanders - Apply equivalent subjects | 81      |
|     |                                             | Search modes - Boolean/Phrase         |         |
| S109| ( MH "Asparaginase")                       | Expanders - Apply equivalent subjects | 403     |
|     |                                             | Search modes - Boolean/Phrase         |         |
| S110| TI "L-asparaginase" OR AB "L-asparaginase"| Expanders - Apply equivalent subjects | 183     |
|     |                                             | Search modes - Boolean/Phrase         |         |
| S111| TI "PEG-L-asparaginase" OR AB "PEG-L-      | Expanders - Apply equivalent subjects | 2       |
|     | asparaginase"                               | Search modes - Boolean/Phrase         |         |
| S112| TI pegaspargase OR AB pegaspargase         | Expanders - Apply equivalent subjects | 67      |
|     |                                             | Search modes - Boolean/Phrase         |         |
| S113 | (MH "Etoposide") | Expanders - Apply equivalent subjects | Search modes - Boolean/Phrase | 1,734 |
| S114 | TI Etoposide OR AB Etoposide | Expanders - Apply equivalent subjects | Search modes - Boolean/Phrase | 2,078 |
| S115 | TI "6-mercaptopurine" OR AB "6-mercaptopurine" | Expanders - Apply equivalent subjects | Search modes - Boolean/Phrase | 223 |
| S116 | TI "6-MP" OR AB "6-MP" | Expanders - Apply equivalent subjects | Search modes - Boolean/Phrase | 71 |
| S117 | TI "6-thioguanine" OR AB "6-thioguanine" | Expanders - Apply equivalent subjects | Search modes - Boolean/Phrase | 90 |
| S118 | TI "6-TG" OR AB "6-TG" | Expanders - Apply equivalent subjects | Search modes - Boolean/Phrase | 10 |
| S119 | (MH "Methotrexate") | Expanders - Apply equivalent subjects | Search modes - Boolean/Phrase | 6,149 |
| S120 | TI Methotrexate OR AB Methotrexate | Expanders - Apply equivalent subjects | Search modes - Boolean/Phrase | 6,630 |
| S121 | (MH "Mitoxantrone") | Expanders - Apply equivalent subjects | Search modes - Boolean/Phrase | 446 |
| S122 | TI Mitoxantrone OR AB Mitoxantrone | Expanders - Apply equivalent subjects | Search modes - Boolean/Phrase | 461 |
| S123 | (MH "Cyclophosphamide") | Expanders - Apply equivalent subjects | Search modes - Boolean/Phrase | 5,287 |
| S124 | TI Cyclophosphamide OR AB Cyclophosphamide | Expanders - Apply equivalent subjects | Search modes - Boolean/Phrase | 5,816 |
| S125 | (MH "Prednisone") | Expanders - Apply equivalent subjects | Search modes - Boolean/Phrase | 5,026 |
| S126 | TI Prednisone OR AB Prednisone | Expanders - Apply equivalent subjects | Search modes - Boolean/Phrase | 4,003 |
| S127 | (MH "Prednisolone") | Expanders - Apply equivalent subjects | Search modes - Boolean/Phrase | 3,406 |
| S128 | TI Prednisolone OR AB Prednisolone | Expanders - Apply equivalent subjects | Search modes - Boolean/Phrase | 2,871 |
| S129 | (MH "Dexamethasone") | Expanders - Apply equivalent subjects | Search modes - Boolean/Phrase | 5,905 |
| S130 | TI Dexamethasone OR AB Dexamethasone | Expanders - Apply equivalent subjects | Search modes - Boolean/Phrase | 6,489 |
| S131 | (MH "Hydrocortisone") | Expanders - Apply equivalent subjects | Search modes - Boolean/Phrase | 8,754 |
| S132 | TI hydrocortisone OR AB Hydrocortisone | Expanders - Apply equivalent subjects | Search modes - Boolean/Phrase | 1,217 |
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| S133 | S32 OR S99 OR S100 OR S101 OR S102 OR S103 OR S104 OR S105 OR S106 OR S107 OR S108 OR S109 OR S110 OR S111 OR S112 OR S113 OR S114 OR S115 OR S116 OR S117 OR S118 OR S119 OR S120 OR S121 OR S122 OR S123 OR S124 OR S125 OR S126 OR S127 OR S128 OR S129 OR S130 OR S131 OR S132 OR S133 | Expanders - Apply equivalent subjects Search modes - Boolean/Phrase | 58,101 |
| S134 | S44 AND S68 AND S98 AND S134 | Expanders - Apply equivalent subjects Search modes - Boolean/Phrase | 133 |

(Imatinib OR gleevec OR Dasatinib OR sprycel OR nilotinib OR tasigna OR Vincristine OR bosutinib OR ponatinib OR ibritinib OR lestaurtinib OR quazitninib OR crenolanib OR pinimetostat OR sorafenib OR sunitinib OR midostaurin OR lintuzumab OR gilteritinib OR gemtuzumab ozogamicin OR blinatumomab OR inotuzumab OR Daunorubicin OR daunomycin OR Cytarabine OR "cytotoxic arabinoside" OR "ara-C" OR Doxorubicin OR Adriamycin OR Idarubicin OR "L-asparaginase" OR "PEG-L-asparaginase" OR pegaspargase OR Etosopside OR "6-mercaptopurine" OR "6-MP" OR "6-thioguanine" OR "6-TG" OR Methotrexate OR Mitoxantrone OR Cyclophosphamide OR Prednisone OR Prednisolone OR Dexamethasone OR hydrocortisone) AND (cancer* OR neoplas* OR leukemia OR leukemias OR leukaemia OR leukaemias OR metastas* OR malignan* OR myeloma* OR oncolog*) AND ((individual* NEAR/2 dos*) OR (precision OR personal* OR "near/2 dos") OR (Therapeutic OR drug*) NEAR/2 monitor*) OR TDM OR TDMx OR InsightRx OR DoseMe OR "plasma concentration" OR "plasma level" OR "toxicity guided dos" OR "TAD" OR "toxicity adjust dos" OR "optimal dos" OR "normal dos") OR (model informed* OR "MIP* OR "trough concentration" OR (pharmacokinetic NEAR/2 "physiological based" OR population) OR "POP PK" OR "POP PKP" OR PBPK) AND (adolescent* OR baby OR babies OR boy OR boys OR boyhood OR child* OR girl OR girls OR juvenil* OR kid OR kids OR minor OR minors OR neonat* OR newborn* OR "new-born")
paediatric* OR pediatric* OR perinat* OR puber* OR pubescent* OR preschool* OR kindergarten* OR school* OR teen* OR toddler* OR underage* OR "under-age*"* OR youth*)

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Scopus
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1,968 document results

TITLE-ABS-KEY(imatinib OR gleevec OR Dasatinib OR sprycel OR nilotinib OR tasigna OR vincristine OR bosutinib OR ponatinib OR ibritinib OR lestaurtinib OR quizaritinib OR crenolanib OR pinometostat OR sorafenib OR sunitinib OR midostaurin OR lintuzumab OR gilteritinib OR gemtuzumab OR ozogamicin OR blinatumomab OR inotuzumab OR Daunorubicin OR daunomycin OR Cytarabine OR "cytosine arabinoside" OR "ara-C" OR Doxorubicin OR Adriamycin OR Idarubicin OR "L-asparaginase" OR "PEG-L-asparaginase" OR pegasparagase OR etoposide OR "6-mercaptopurine" OR "6-MP" OR "6-thioguanine" OR "6-TG" OR Methotrexate OR Mitoxantrone OR Cyclophosphamide OR Prednisone OR Prednisolone OR Dexamethasone OR hydrocortisone) AND TITLE-ABS-KEY(cancer* OR neoplas* OR leukemia OR leukaemia OR leukaemias OR leukaemia OR leukaemias OR metastas* OR malignan* OR myeloma* OR oncolog*) AND TITLE-ABS-KEY(individual* W/2 dos*) OR ((precision OR personal*) W/2 dos*) OR ((Therapeutic or drug*) W/2 monitor*) OR TDM OR TDmX OR InsightRx OR DoseMe OR "plasma concentration" OR "plasma level"* OR "toxicity guided dos"* OR "TAD" OR "toxicity adjust* dos"* OR "optimal dos"* OR "optimi* dos"* OR "model informed dos"* OR MIPD OR "trough concentration" OR (pharmacokinetic* W/2 ("physiological based" OR population)) OR "POP PK" OR POPPK OR PBPK) AND TITLE-ABS-KEY(adolescent* OR baby OR babies OR baby OR boys OR boy OR boyhood OR child* OR girl OR girls OR juvenile* OR kid OR kids OR minor OR minors OR neonat* OR newborn* OR "new-born" OR paediatric* OR pediatric* OR perinat* OR puber* OR pubescent* OR preschool* OR kindergarten* OR school* OR teen* OR toddler* OR underage* OR "under-age*" OR youth*)

clinicaltrials.gov

25 Studies found for: personal* OR Precision* OR individual* OR dosing | leukemia OR leukaemia | imatinib OR gleevec OR Dasatinib OR sprycel OR nilotinib OR tasigna OR vincristine OR bosutinib OR ponatinib OR ibritinib OR lestaurtinib OR quizaritinib OR crenolanib OR pinometostat OR sorafenib OR sunitinib OR midostaurin OR lintuzumab | Child

van Dyk M, et al. BMJ Open 2022; 12:e053308. doi: 10.1136/bmjopen-2021-053308
ISRCTN registry (selected -

18 results (leukemia OR leukaemia) AND (precision OR individual* OR personal* OR dosing) within Participant age range: Child