CANCER GENOMICS CONSORTIUM

Educating for Best Practices in Clinical Cancer Genomics

Mitelman Database of Chromosome Aberrations and Gene Fusions in Cancer

Mitelman Database of Chromosome Aberrations and Gene Fusions in Cancer (2017). Mitelman F, Johansson B and Mertens F (Eds.), http://cgap.nci.nih.gov/Chromosomes/Mitelman

National Cancer Institute U.S. National Institutes of Health | www.cancer.gov

Cancer Genome Anatomy Project

CGAP How To | Genes | Chromosomes | Tissues | SAGE Genie | RNAi | Pathways | Tools

Chromosomes

Tools
- FISH-mapped BACs
- Genetic and Physical SNP Maps
- Mitelman Searchers
- SNP500Cancer

CGAP Data
- Download

Purchase CGAP Reagents
- CCAP BAC Clones

Related Links
- Atlas of Genetics & Cytogenetics in Oncology & Haematology
- Progenetix
- SKY/M-FISH & CGH Database

Quick Links:
- ICG
- NCI Home
- NCICB Home
- NCBI Home
- OCG

Mitelman Database of Chromosome Aberrations and Gene Fusions in Cancer

Searching the Database

The information in the Mitelman Database of Chromosome Aberrations and Gene Fusions in Cancer relates chromosomal aberrations to tumor characteristics, based either on individual cases or a
by Felix Mitelman, Bertil Johansson, and Fredrik Mertens.
CGAP has developed six web search tools to help you analyze the information within the Mitelman Database:

- The Cases Quick Searcher allows you to query the individual patient cases using the four major fields: aberration, breakpoint, morphology, and topography.
- The Cases Full Searcher permits a more detailed search of the same individual patient cases as above, by including more cytogenetic field choices and adding search fields for patient characteristics and references.
- The Molecular Biology Associations Searcher does not search any of the individual patient cases. It searches studies pertaining to gene rearrangements as a consequence of cytogenetic aberrations.
- The Clinical Associations Searcher does not search any of the individual patient cases. It searches studies pertaining to clinical associations of cytogenetic aberrations and/or gene rearrangements.
- The Recurrent Chromosome Aberrations Searcher provides a way to search for structural and numerical abnormalities that are recurrent, i.e., present in two or more cases with the same morphology and topography.
- The Reference Searcher queries only the references themselves, i.e., the references from the individual cases and the molecular biology and clinical associations.

5 main tools

Database last updated on Feburary 20, 2017
Total number of cases = **66,919**
Total number of gene fusions = **10,676**

Curation Activity

Need help! To learn about the Mitelman Database and how to search it, please visit:
- All about the Mitelman Database, which provides background information about the Mitelman Database of Chromosome Aberrations and Gene Fusions in Cancer.
- Mitelman Database Search Help, which contains information on how to use the search tools.
- ISCN Abbreviated Terms and Symbols, which provides a list of terms and symbols used to describe chromosome abnormalities.

Online education materials

Citation of the Database

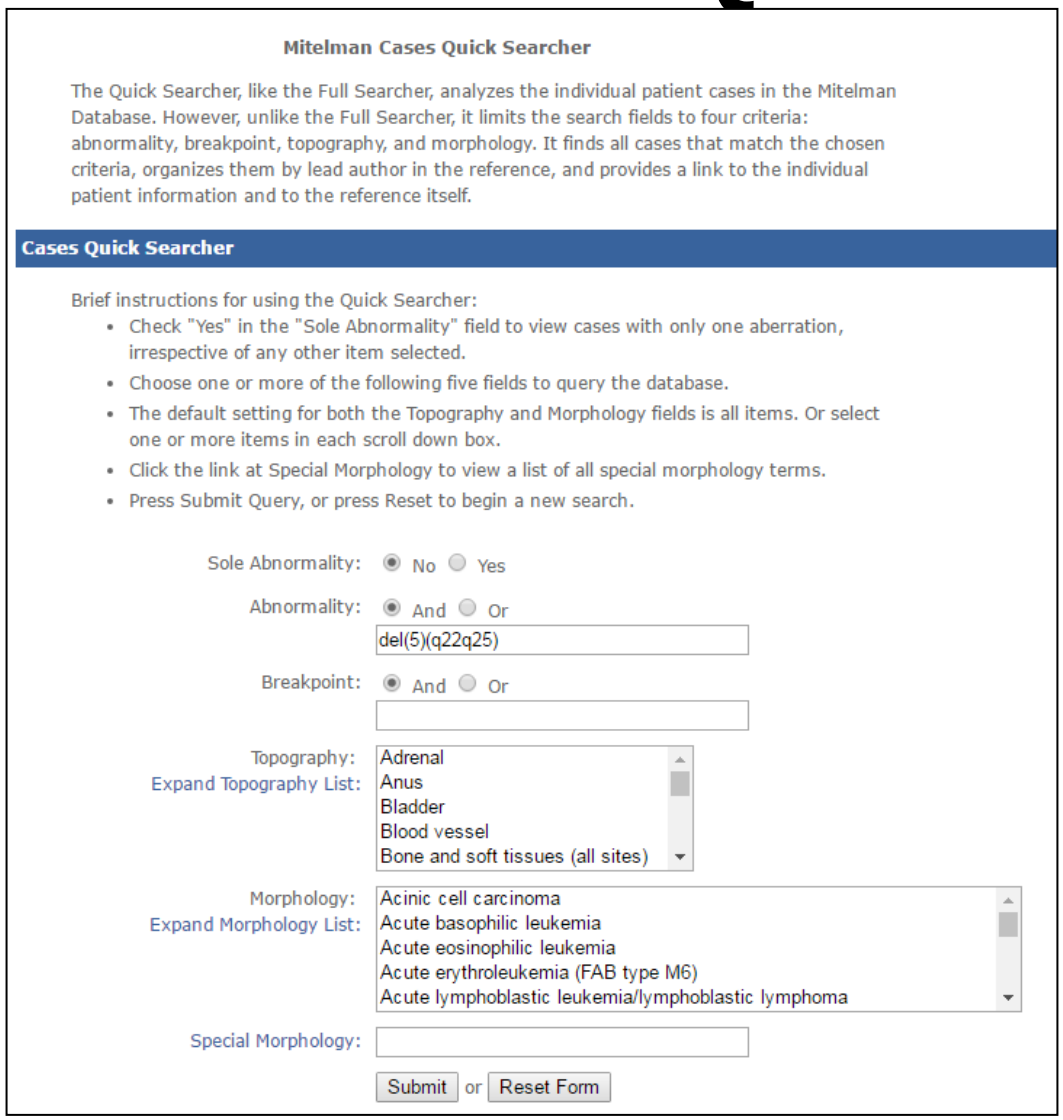
To cite the use of the Mitelman Database from this CGAP Website in a publication, please quote the following: **"Mitelman Database of Chromosome Aberrations and Gene Fusions in Canc
http://cgap.nci.nih.gov/Chromosomes/Mitelman"**

The Mitelman Database is supported by the Swedish Cancer Society and the Swedish Childhood Cancer Foundation. The database is updated quarterly in February, May, August, and November.

Filling Database Search Fields

- https://cgap.nci.nih.gov/Chromosomes/Help
- Review this page before attempting to enter information into search fields.
- Make sure ISCN nomenclature is correct when searching for a specific abnormality.
  - https://cgap.nci.nih.gov/Chromosomes/ISCNSymbols
  - https://www.amazon.com/ISCN-2016-International-Cytogenomic-Nomenclature/dp/3318058572

Cases Quick Searcher



Mitelman Cases Quick Searcher

The Quick Searcher, like the Full Searcher, analyzes the individual patient cases in the Mitelman Database. However, unlike the Full Searcher, it limits the search fields to four criteria: abnormality, breakpoint, topography, and morphology. It finds all cases that match the chosen criteria, organizes them by lead author in the reference, and provides a link to the individual patient information and to the reference itself.

Cases Quick Searcher

Brief instructions for using the Quick Searcher:

- Check "Yes" in the "Sole Abnormality" field to view cases with only one aberration, irrespective of any other item selected.
- Choose one or more of the following five fields to query the database.
- The default setting for both the Topography and Morphology fields is all items. Or select one or more items in each scroll down box.
- Click the link at Special Morphology to view a list of all special morphology terms.
- Press Submit Query, or press Reset to begin a new search.

Sole Abnormality: (•) No ( ) Yes

Abnormality: (•) And ( ) Or

del(5)(q22q25)

Breakpoint: (•) And ( ) Or

Topography:
Expand Topography List:
Adrenal
Anus
Bladder
Blood vessel
Bone and soft tissues (all sites)

Morphology:
Expand Morphology List:
Acinic cell carcinoma
Acute basophilic leukemia
Acute eosinophilic leukemia
Acute erythroleukemia (FAB type M6)
Acute lymphoblastic leukemia/lymphoblastic lymphoma

Special Morphology:

Submit or Reset Form

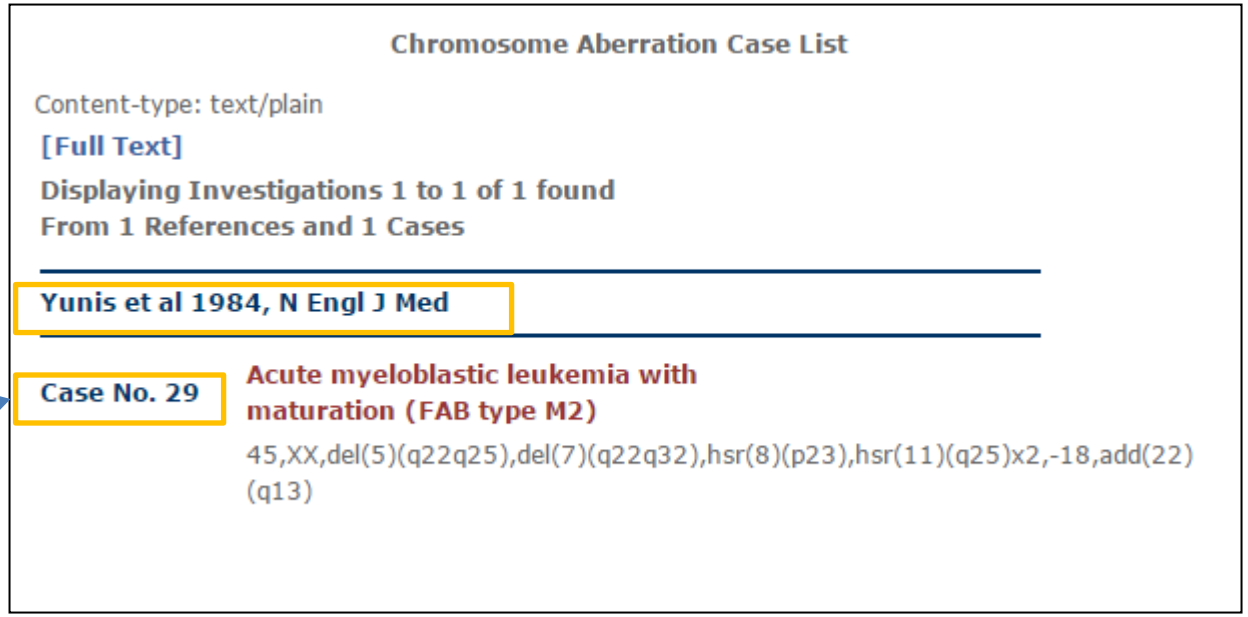
- Abnormality : enter appropriate Cytogenetic ISCN
- Breakpoint: enter appropriate chromosome band (ex: 5q25)
- Wildcard "*" symbol can be used if complete breakpoints are not defined. For example:
  - del(5)(q22)*
  - del(5)(q2*
  - Or designate Breakpoint as 5q2*
- Cannot use sub-bands
  - Ex/will not recognize "5q31.1", must be typed as "5q31"

Cases Quick Searcher Results

- Query for del(5)(q22q25)

Link to information on publication

Link to information on patient/case



Information on Patient/Case

Chromosome Aberration Case Info

Yunis et al 1984, N Engl J Med

Case Number 29

Karyotype

45,XX,del(5)(q22q25),del(7)(q22q32),hsr(8)(p23),hsr(11)(q25)x2,-18,add(22)(q13)

Patient Characteristics

Sex	Female
Age	70
Race	
Country	United States
Series	Unselected
Hereditary Disorder	

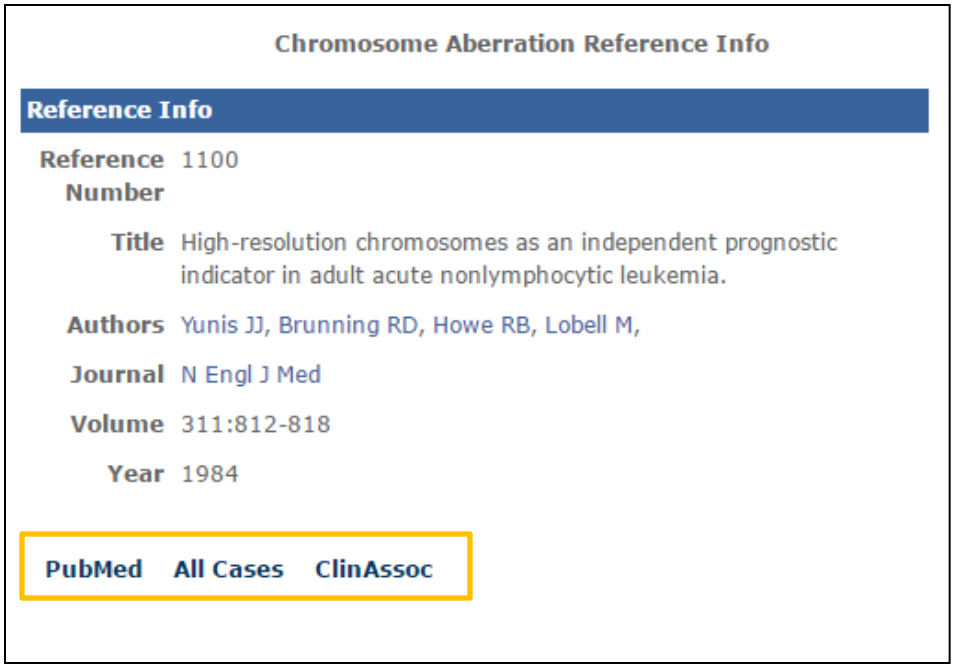
Present Tumor

Topography	
Immunophenotype	
Morphology	Acute myeloblastic leukemia with maturation (FAB type M2)
Tissue	Bone marrow

Previous Tumor

Topography	
Morphology	
Treatment	

Publication Information



- PubMed: Links to PubMed entry for this reference
- All Cases: List of all cases from this publication
- ClinAssoc : Clinical associations based on parameters of abnormality

Publication Information – All Cases and ClinAssoc

Chromosome Aberration Case List

Content-type: text/plain

[Full Text]

Displaying Investigations 1 to 33 of 33 found
From 1 References and 33 Cases

Yunis et al 1984, N Engl J Med

Case No. 1	Acute monoblastic leukemia with differentiation (FAB type M5b)	46,XY,inv(16)(p13q22)
Case No. 10	Acute myeloblastic leukemia with maturation (FAB type M2)	47,XY,+8
Case No. 11	Acute monoblastic leukemia without differentiation (FAB type M5a)	46,XX,t(9;11)(p22;q23)
Case No. 12	Acute myeloblastic leukemia with maturation (FAB type M2)	46,XX,t(6;9)(p22;q34)
Case No. 13	Acute myeloblastic leukemia without maturation (FAB type M1)	46,XY,t(8;9;22)(p21;q34;q11)/47,idem,+21
Case No. 14	Acute myeloblastic leukemia without maturation (FAB type M1)	46,XX,t(9;22)(q34;q11)
Case No. 15	Acute monoblastic leukemia with differentiation (FAB type M5b)	46,XX,del(9)(q13q22)
Case No. 16	Acute myeloblastic leukemia with maturation (FAB type M2)	46,XX,del(21)(q22)
Case No. 17	Acute myeloblastic leukemia without maturation (FAB type M1)	45,X,-X/45,idem,t(17;18)(p11;p11)

- All Cases: Lists cases associated with the publication with karyotypes and disease classification.

- ClinAssoc: Clinical Associations affirmed by publication

Association List

[Full Text]

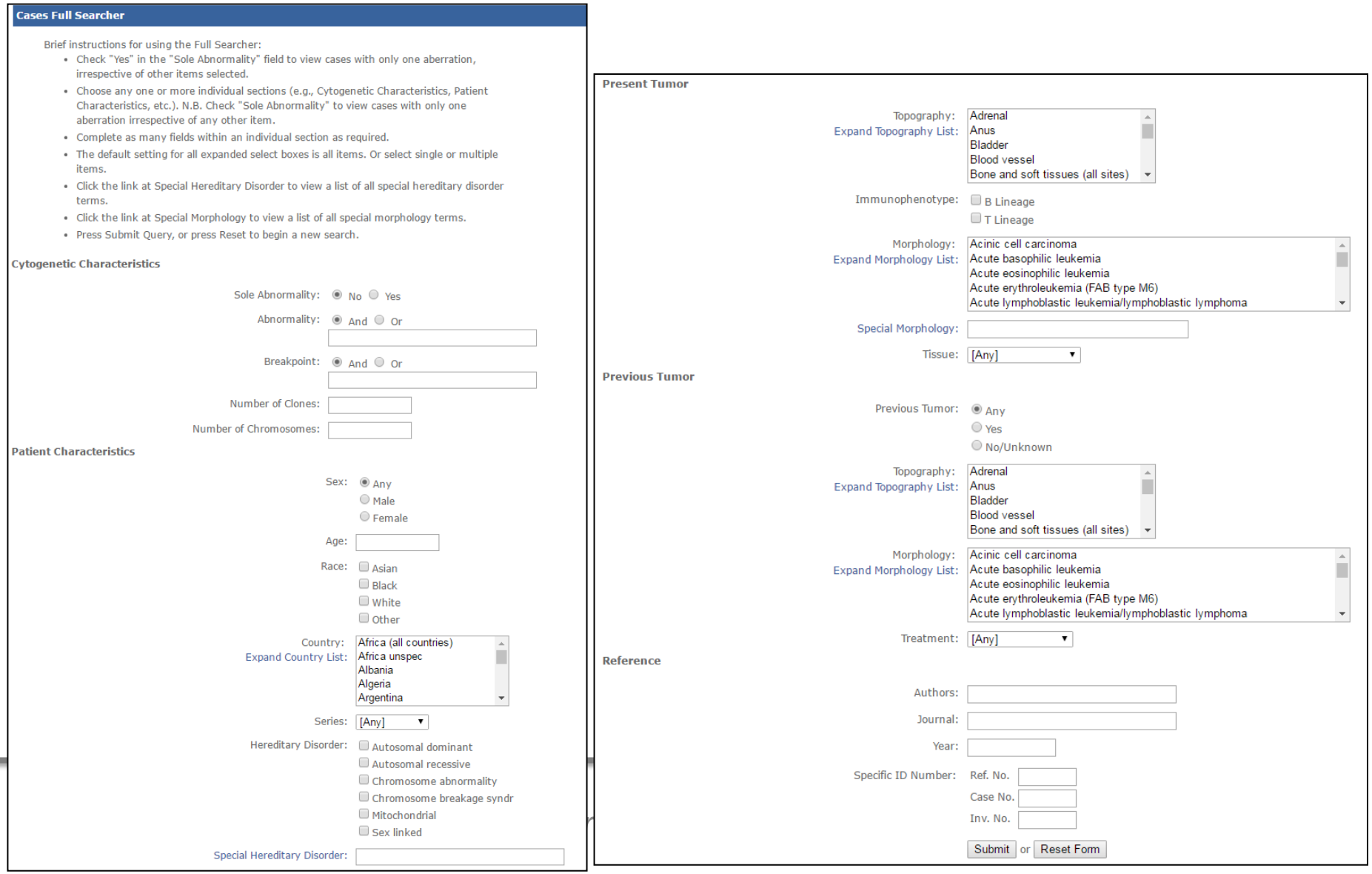
Displaying Investigations 1 to 1 of 1 found
From 1 References

Kasyan et al 2010, Mod Pathol

Acute erythroleukemia (FAB type M6)

Cases Full Searcher

More "advanced" version of quick searcher retrieves same information as Quick Searcher



Cases Full Searcher

Brief instructions for using the Full Searcher:

- Check "Yes" in the "Sole Abnormality" field to view cases with only one aberration, irrespective of other items selected.
- Choose any one or more individual sections (e.g., Cytogenetic Characteristics, Patient Characteristics, etc.). N.B. Check "Sole Abnormality" to view cases with only one aberration irrespective of any other item.
- Complete as many fields within an individual section as required.
- The default setting for all expanded select boxes is all items. Or select single or multiple items.
- Click the link at Special Hereditary Disorder to view a list of all special hereditary disorder terms.
- Click the link at Special Morphology to view a list of all special morphology terms.
- Press Submit Query, or press Reset to begin a new search.

Cytogenetic Characteristics

Sole Abnormality: No Yes

Abnormality: And Or

Breakpoint: And Or

Number of Clones:

Number of Chromosomes:

Patient Characteristics

Sex: Any Male Female

Age:

Race: Asian Black White Other

Country: Expand Country List: Africa (all countries), Africa unspec, Albania, Algeria, Argentina

Series: [Any]

Hereditary Disorder: Autosomal dominant, Autosomal recessive, Chromosome abnormality, Chromosome breakage syndr, Mitochondrial, Sex linked

Special Hereditary Disorder:

Present Tumor

Topography: Expand Topography List: Adrenal, Anus, Bladder, Blood vessel, Bone and soft tissues (all sites)

Immunophenotype: B Lineage, T Lineage

Morphology: Expand Morphology List: Acinic cell carcinoma, Acute basophilic leukemia, Acute eosinophilic leukemia, Acute erythroleukemia (FAB type M6), Acute lymphoblastic leukemia/lymphoblastic lymphoma

Special Morphology:

Tissue: [Any]

Previous Tumor

Previous Tumor: Any Yes No/Unknown

Topography: Expand Topography List: Adrenal, Anus, Bladder, Blood vessel, Bone and soft tissues (all sites)

Morphology: Expand Morphology List: Acinic cell carcinoma, Acute basophilic leukemia, Acute eosinophilic leukemia, Acute erythroleukemia (FAB type M6), Acute lymphoblastic leukemia/lymphoblastic lymphoma

Treatment: [Any]

Reference

Authors:

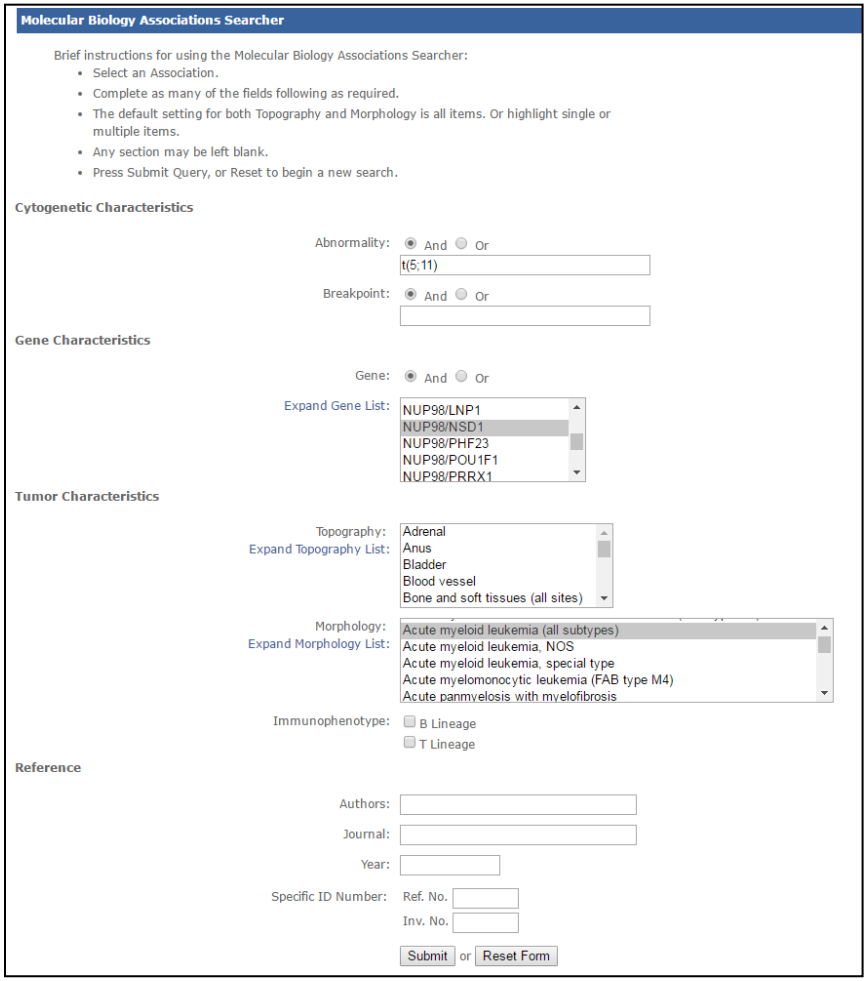
Journal:

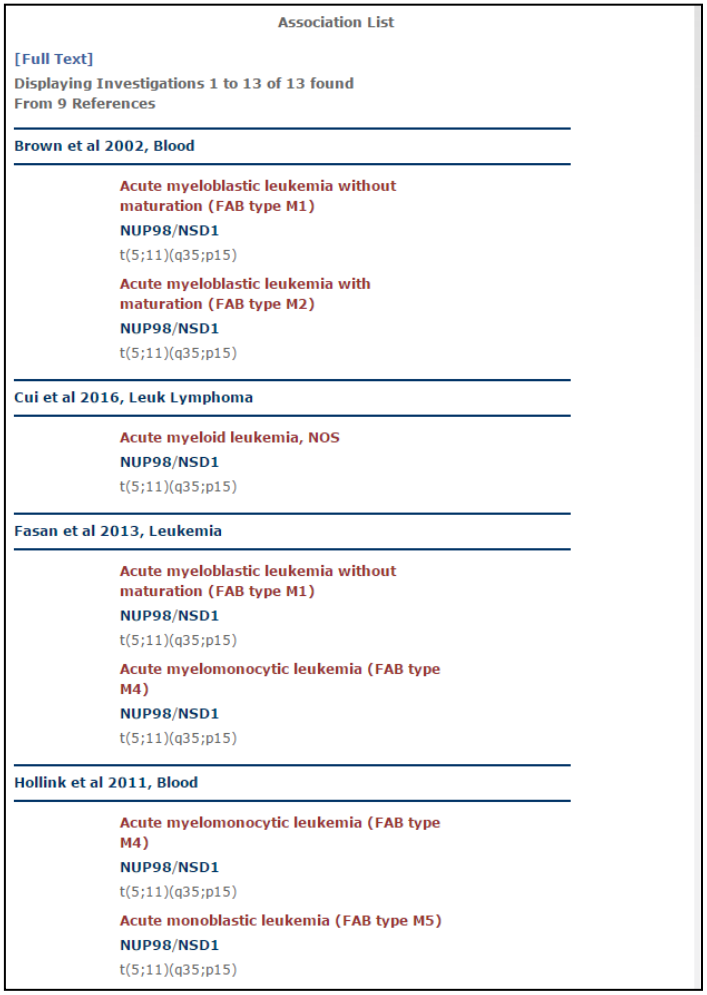
Year:

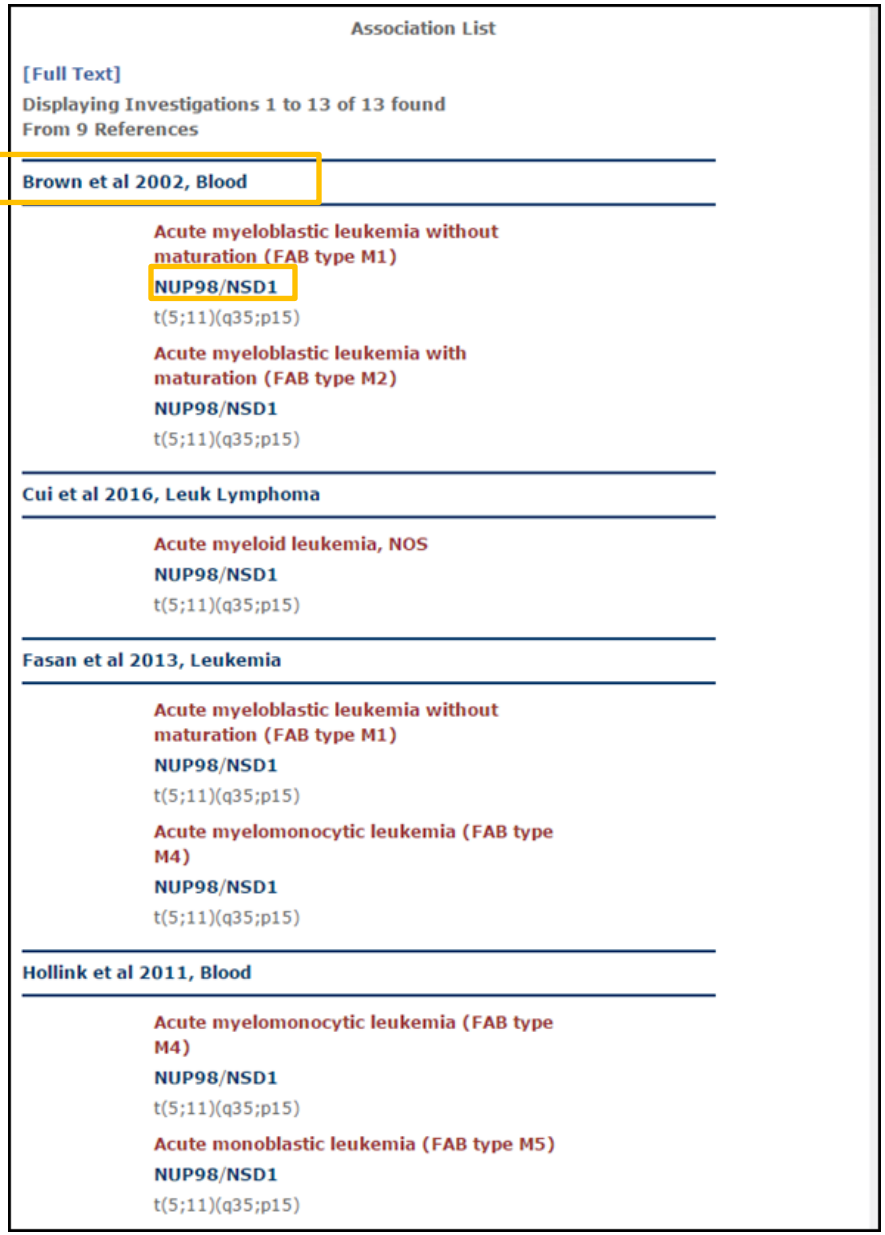
Specific ID Number: Ref. No. Case No. Inv. No.

Submit or Reset Form

Molecular Biology Associations Searcher







Association List

[Full Text]

Displaying Investigations 1 to 13 of 13 found
From 9 References

Brown et al 2002, Blood

Acute myeloblastic leukemia without maturation (FAB type M1)
NUP98/NSD1
t(5;11)(q35;p15)

Acute myeloblastic leukemia with maturation (FAB type M2)
NUP98/NSD1
t(5;11)(q35;p15)

Cui et al 2016, Leuk Lymphoma

Acute myeloid leukemia, NOS
NUP98/NSD1
t(5;11)(q35;p15)

Fasan et al 2013, Leukemia

Acute myeloblastic leukemia without maturation (FAB type M1)
NUP98/NSD1
t(5;11)(q35;p15)

Acute myelomonocytic leukemia (FAB type M4)
NUP98/NSD1
t(5;11)(q35;p15)

Hollink et al 2011, Blood

Acute myelomonocytic leukemia (FAB type M4)
NUP98/NSD1
t(5;11)(q35;p15)

Acute monoblastic leukemia (FAB type M5)
NUP98/NSD1
t(5;11)(q35;p15)

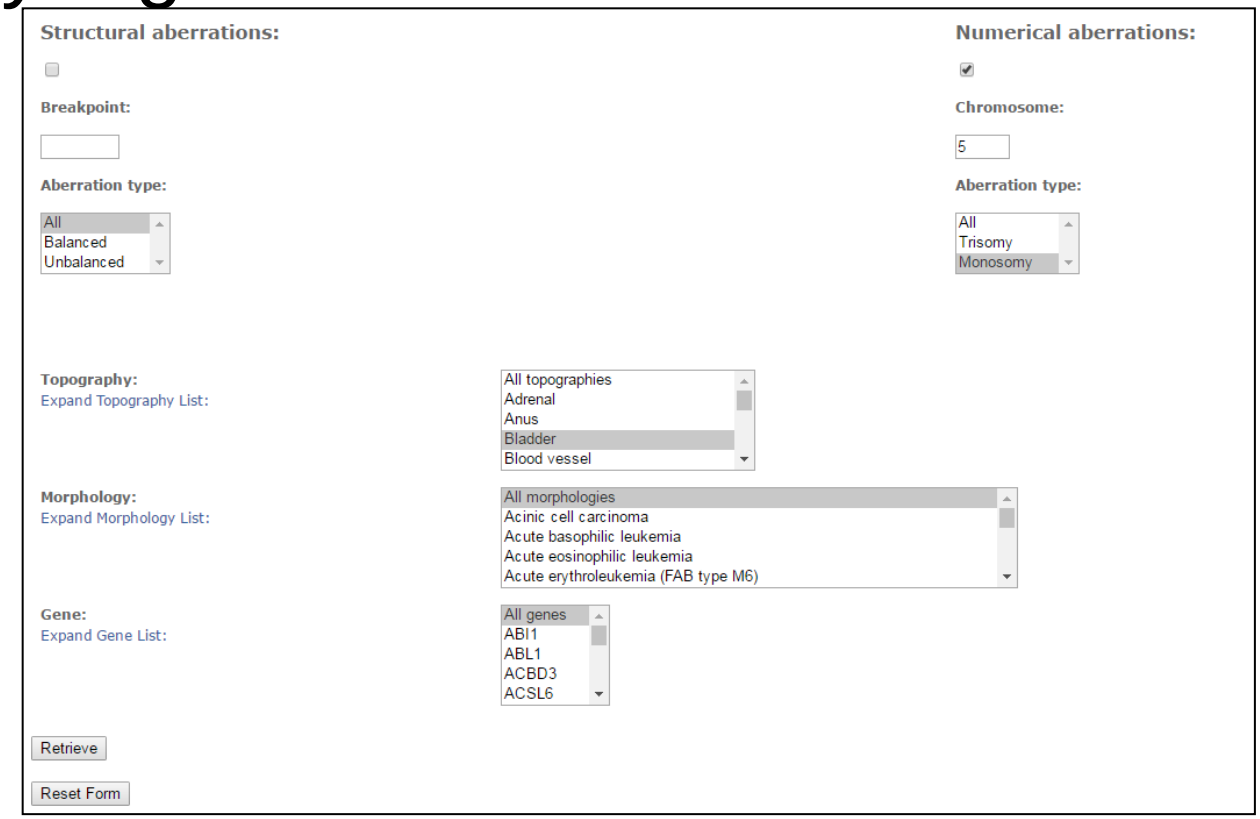
- For each Association on the resulting list there are links to
  - Publication Information (See slide 7)
  - Gene Information

Gene Information Page

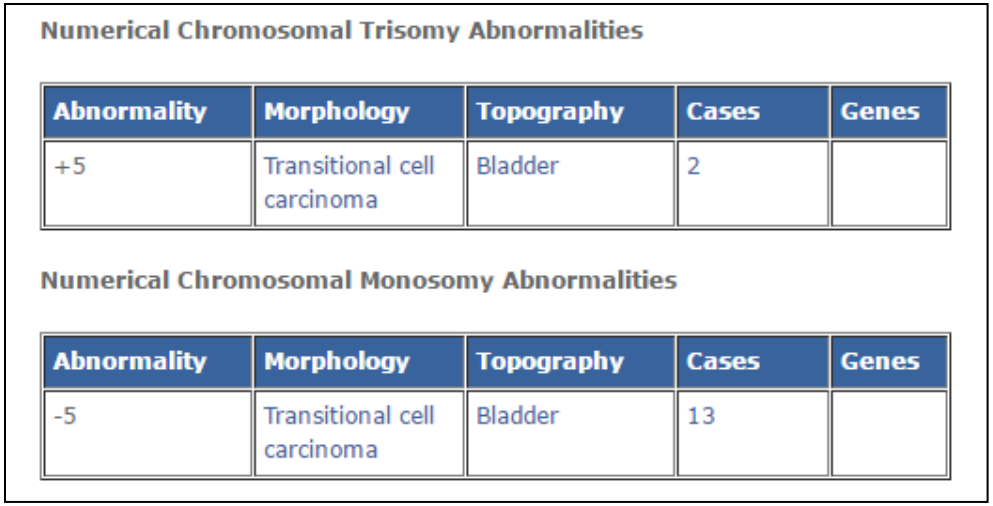
- Click on gene name to retrieve gene information
  - Database Links, sequence IDs, Cytogenetic Location, UCSC gene/exon info
  - Links to expression visualization
    - SAGE Anatomic Viewer, Digital Northern, and 2D array displays
  - MGC Clones (NIH, NCBI)
  - Protein information
  - Homology
  - Gene Ontology

Recurrent Chromosome Aberrations Searcher

- Search for structural or numerical cytogenetic aberrations



Aberrations Searcher Results



Numerical Chromosomal Trisomy Abnormalities

Abnormality	Morphology	Topography	Cases	Genes
+5	Transitional cell carcinoma	Bladder	2	

Numerical Chromosomal Monosomy Abnormalities

Abnormality	Morphology	Topography	Cases	Genes
-5	Transitional cell carcinoma	Bladder	13	

- Links to Morphology listed in table, Topography listed in table, and Cases

Morphology/Topography

Balanced Chromosomal Abnormalities

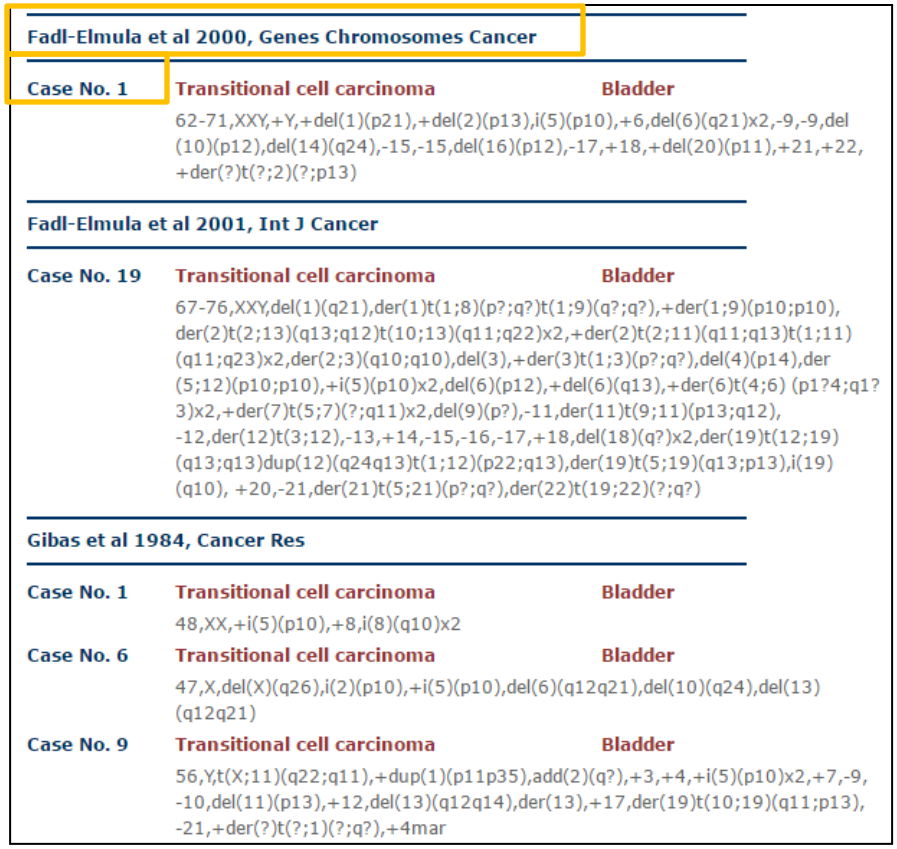
Band	Abnormality	Morphology	Topography	Cases	Genes
3p14	t(3;5)(p14;p14)	Transitional cell carcinoma	Bladder	2	
5p14	t(3;5)(p14;p14)	Transitional cell carcinoma	Bladder	2	

Unbalanced Chromosomal Abnormalities

Band	Abnormality	Morphology	Topography	Cases	Genes
1p11	del(1)(p11)	Transitional cell carcinoma	Bladder	2	
1p22	del(1)(p22)	Transitional cell carcinoma	Bladder	4	
1q10	i(1)(q10)	Transitional cell carcinoma	Bladder	3	
1q12	del(1)(q12)	Transitional cell carcinoma	Bladder	2	
1q21	del(1)(q21)	Transitional cell carcinoma	Bladder	3	
3q21	add(3)(q21)	Transitional cell carcinoma	Bladder	2	
3q21	del(3)(q21)	Transitional cell carcinoma	Bladder	2	
3q25	del(3)(q25)	Transitional cell carcinoma	Bladder	2	
5p10	i(5)(p10)	Transitional cell carcinoma	Bladder	11	
5q11	del(5)(q11q13)	Transitional cell carcinoma	Bladder	2	

- If you select the morphology or topography fields from the Aberrations Searcher, you are brought to a page with 4 tables of all cytogenetic abnormalities documented under that morphology or topography.
  - Balanced Chromosomal Abnormalities
  - Unbalanced Chromosomal Abnormalities
  - Trisomy Abnormalities
  - Monosomy Abnormalities

Cases from Aberrations Searcher Results



Fadl-Elmula et al 2000, Genes Chromosomes Cancer

Case No. 1	Transitional cell carcinoma	Bladder

62-71,XXY,+Y,+del(1)(p21),+del(2)(p13),i(5)(p10),+6,del(6)(q21)x2,-9,-9,del(10)(p12),del(14)(q24),-15,-15,del(16)(p12),-17,+18,+del(20)(p11),+21,+22,+der(?)t(?;2)(?;p13)

Fadl-Elmula et al 2001, Int J Cancer

Case No. 19	Transitional cell carcinoma	Bladder

67-76,XXY,del(1)(q21),der(1)t(1;8)(p?;q?)t(1;9)(q?;q?),+der(1;9)(p10;p10),der(2)t(2;13)(q13;q12)t(10;13)(q11;q22)x2,+der(2)t(2;11)(q11;q13)t(1;11)(q11;q23)x2,der(2;3)(q10;q10),del(3),+der(3)t(1;3)(p?;q?),del(4)(p14),der(5;12)(p10;p10),+i(5)(p10)x2,del(6)(p12),+del(6)(q13),+der(6)t(4;6) (p1?4;q1?3)x2,+der(7)t(5;7)(?;q11)x2,del(9)(p?),-11,der(11)t(9;11)(p13;q12),-12,der(12)t(3;12),-13,+14,-15,-16,-17,+18,del(18)(q?)x2,der(19)t(12;19)(q13;q13)dup(12)(q24q13)t(1;12)(p22;q13),der(19)t(5;19)(q13;p13),i(19)(q10), +20,-21,der(21)t(5;21)(p?;q?),der(22)t(19;22)(?;q?)

Gibas et al 1984, Cancer Res

Case No. 1	Transitional cell carcinoma	Bladder

48,XX,+i(5)(p10),+8,i(8)(q10)x2

Case No. 6	Transitional cell carcinoma	Bladder

47,X,del(X)(q26),i(2)(p10),+i(5)(p10),del(6)(q12q21),del(10)(q24),del(13)(q12q21)

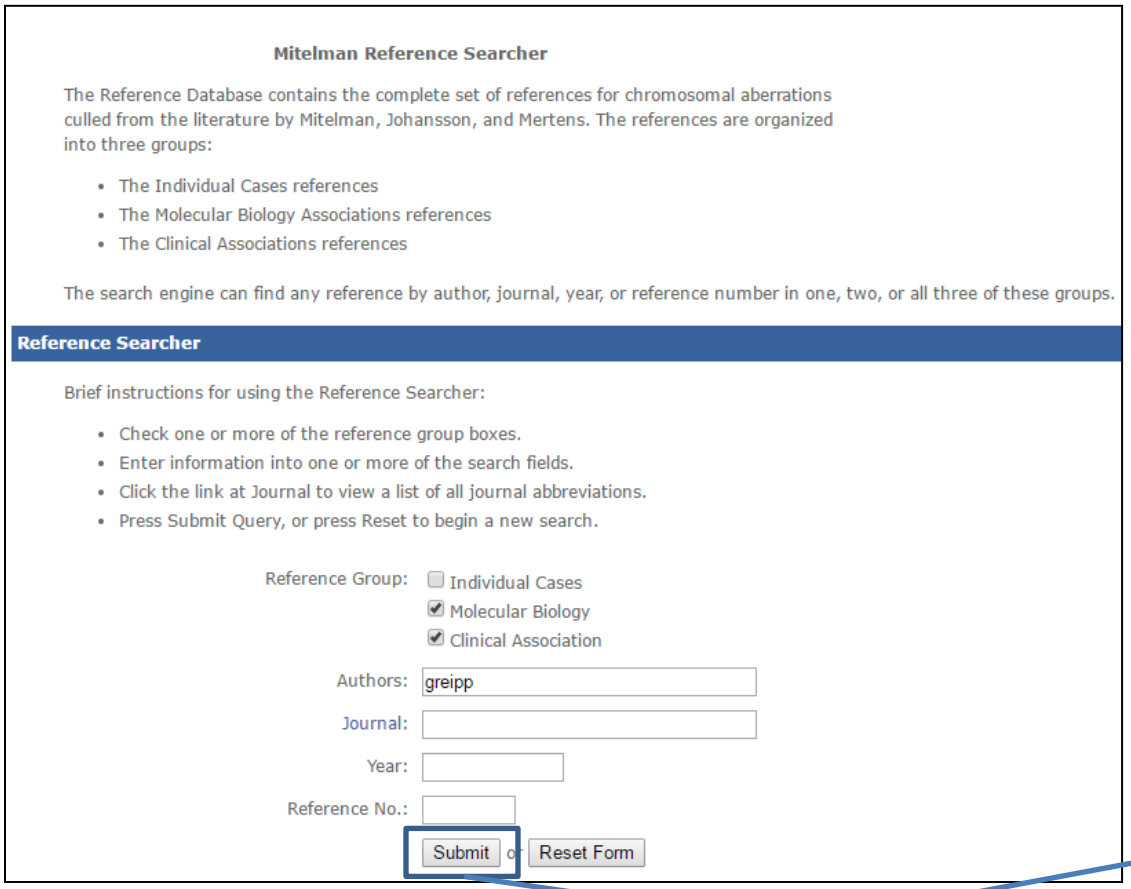
Case No. 9	Transitional cell carcinoma	Bladder

56,Y,t(X;11)(q22;q11),+dup(1)(p11p35),add(2)(q?),+3,+4,+i(5)(p10)x2,+7,-9,-10,del(11)(p13),+12,del(13)(q12q14),der(13),+17,der(19)t(10;19)(q11;p13),-21,+der(?)t(?;1)(?;q?),+4mar

- Select the number in the 'Cases' column from the results of the aberrations searcher
- Resulting page will have particular cases from publications highlighted
- Links (in orange boxes)
  - Publication information (see Slide 7-8)
  - Patient/Case information (see Slide 6)

Reference Searcher

- Search one or more reference groups for specific search criteria to retrieve relevant publications. (See slide 7)



Mitelman Reference Searcher

The Reference Database contains the complete set of references for chromosomal aberrations culled from the literature by Mitelman, Johansson, and Mertens. The references are organized into three groups:

- The Individual Cases references
- The Molecular Biology Associations references
- The Clinical Associations references

The search engine can find any reference by author, journal, year, or reference number in one, two, or all three of these groups.

Reference Searcher

Brief instructions for using the Reference Searcher:

- Check one or more of the reference group boxes.
- Enter information into one or more of the search fields.
- Click the link at Journal to view a list of all journal abbreviations.
- Press Submit Query, or press Reset to begin a new search.

Reference Group: ☐ Individual Cases ☑ Molecular Biology ☑ Clinical Association

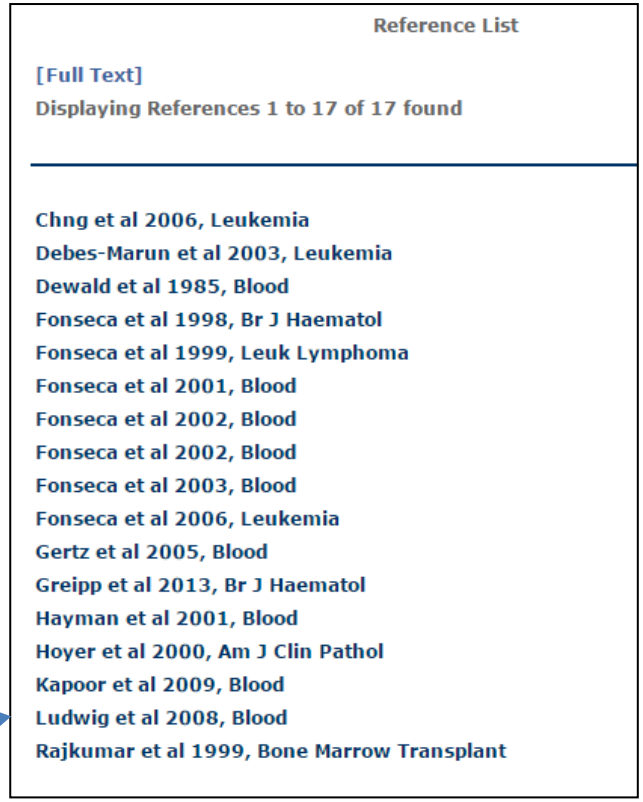
Authors: greipp

Journal:

Year:

Reference No.:

Submit or Reset Form



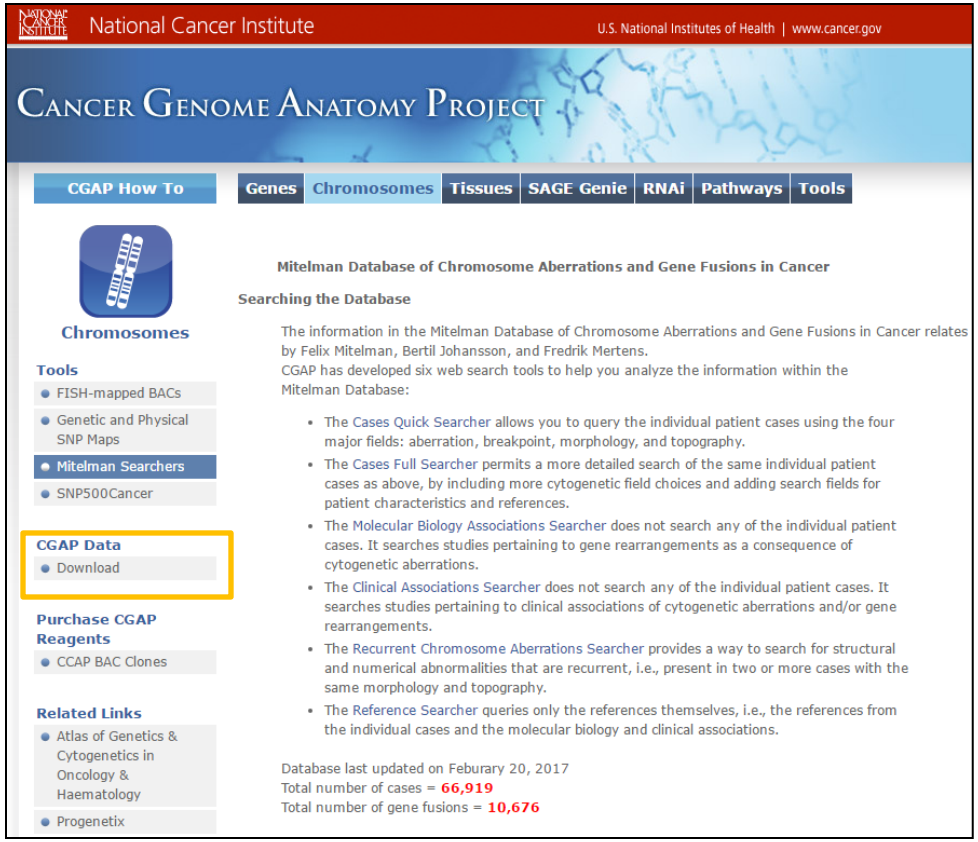
Reference List

[Full Text]

Displaying References 1 to 17 of 17 found

Chng et al 2006, Leukemia
Debes-Marun et al 2003, Leukemia
Dewald et al 1985, Blood
Fonseca et al 1998, Br J Haematol
Fonseca et al 1999, Leuk Lymphoma
Fonseca et al 2001, Blood
Fonseca et al 2002, Blood
Fonseca et al 2002, Blood
Fonseca et al 2003, Blood
Fonseca et al 2006, Leukemia
Gertz et al 2005, Blood
Greipp et al 2013, Br J Haematol
Hayman et al 2001, Blood
Hoyer et al 2000, Am J Clin Pathol
Kapoor et al 2009, Blood
Ludwig et al 2008, Blood
Rajkumar et al 1999, Bone Marrow Transplant

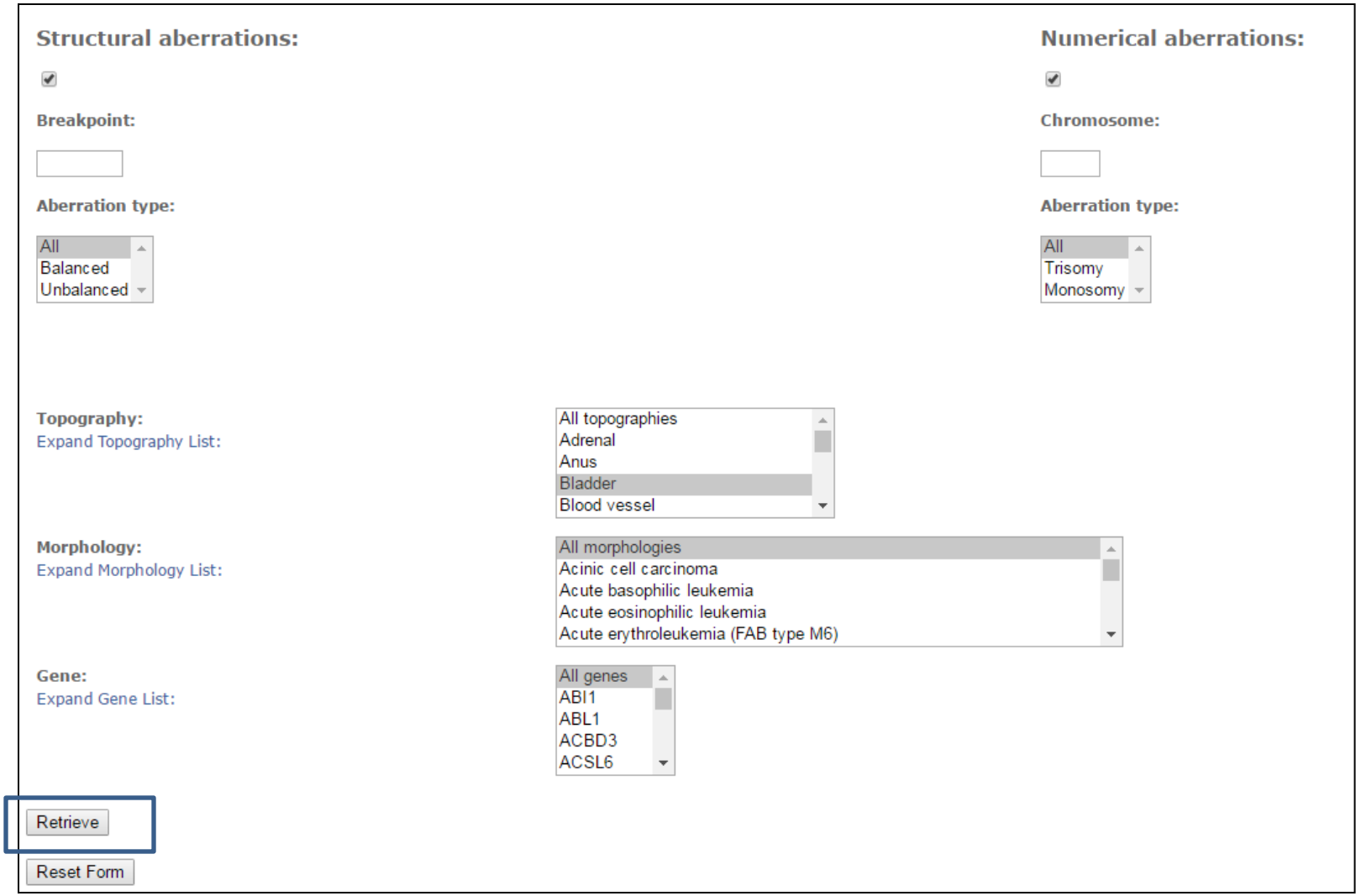
Raw Data Download



- Mitelman Database raw data is available for download.
- Click on ‘Download’ under CGAP Data.
- Resulting window will have a table of information used to populate the Cancer Genome Anatomy Project site.
- Click on “mitelman.tar.gz” to download folder of raw Mitelman Database data.
- Unzip .gz file with file archiving program (i.e. 7-Zip)
- Extract all files into a folder in your desired location.
- Data can be viewed as Excel file.

Scenario #1

- You are creating a data analysis guide for a bladder cancer study your lab is conducting. You have lots of gene information, but not much on larger recurrent cytogenetic abnormalities. How can this database help?
  - Recurrent Chromosome Aberrations Searcher


Structural aberrations:
Breakpoint:
Aberration type:
All
Balanced
Unbalanced
Numerical aberrations:
Chromosome:
Aberration type:
All
Trisomy
Monosomy
Topography:
Expand Topography List:
All topographies
Adrenal
Anus
Bladder
Blood vessel
Morphology:
Expand Morphology List:
All morphologies
Acinic cell carcinoma
Acute basophilic leukemia
Acute eosinophilic leukemia
Acute erythroleukemia (FAB type M6)
Gene:
Expand Gene List:
All genes
ABI1
ABL1
ACBD3
ACSL6
Retrieve
Reset Form

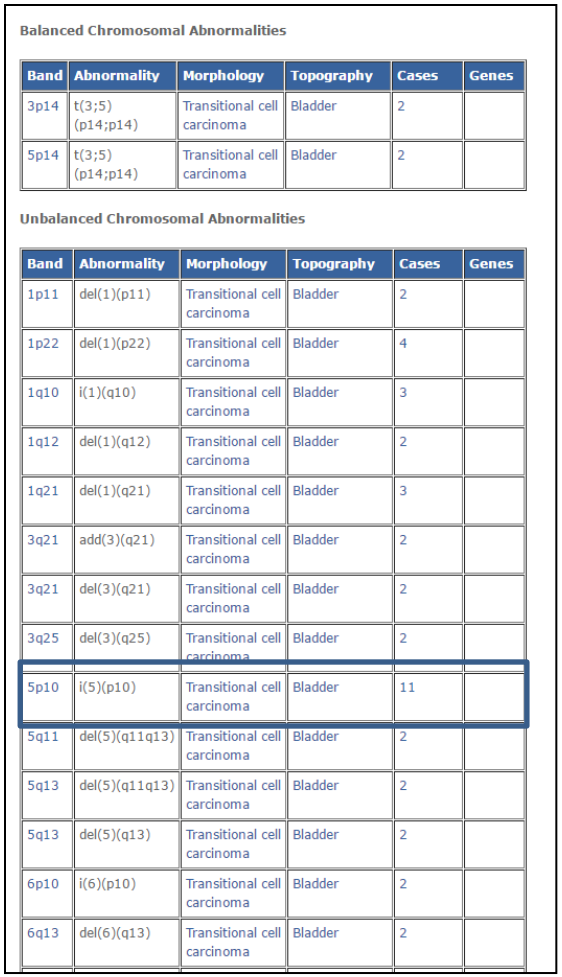
Cytogenetics Abnormalities in Bladder Cancer

- Tip: You may want to set a case threshold based on your results, so you're only pulling the most prevalent abnormalities for your guide.

- For example – set case threshold to 5 for rearrangements and 15 for numerical abnormalities and only pay attention to transitional cell carcinoma morphology.

Cytogenetics Abnormalities in Bladder Cancer

* Click on Number in Cases column to see evidence by publication (See slides 5-8)



Balanced Chromosomal Abnormalities

Band	Abnormality	Morphology	Topography	Cases	Genes
3p14	t(3;5)(p14;p14)	Transitional cell carcinoma	Bladder	2	
5p14	t(3;5)(p14;p14)	Transitional cell carcinoma	Bladder	2	

Unbalanced Chromosomal Abnormalities

Band	Abnormality	Morphology	Topography	Cases	Genes
1p11	del(1)(p11)	Transitional cell carcinoma	Bladder	2	
1p22	del(1)(p22)	Transitional cell carcinoma	Bladder	4	
1q10	i(1)(q10)	Transitional cell carcinoma	Bladder	3	
1q12	del(1)(q12)	Transitional cell carcinoma	Bladder	2	
1q21	del(1)(q21)	Transitional cell carcinoma	Bladder	3	
3q21	add(3)(q21)	Transitional cell carcinoma	Bladder	2	
3q21	del(3)(q21)	Transitional cell carcinoma	Bladder	2	
3q25	del(3)(q25)	Transitional cell carcinoma	Bladder	2	
5p10	i(5)(p10)	Transitional cell carcinoma	Bladder	11	
5q11	del(5)(q11q13)	Transitional cell carcinoma	Bladder	2	
5q13	del(5)(q11q13)	Transitional cell carcinoma	Bladder	2	
5q13	del(5)(q13)	Transitional cell carcinoma	Bladder	2	
6p10	i(6)(p10)	Transitional cell carcinoma	Bladder	2	
6q13	del(6)(q13)	Transitional cell carcinoma	Bladder	2	

Cyto Band	Abnormality	# Cases
5p10	iso(5)(p10)	11
8q10	iso(8)(q10)	8
11q10	iso(11)(q10)	5
Chr7	+7	21
Chr8	-8	17
Chr9	-9	56
Chr10	-10	16
Chr11	-11	15
Chr15	-15	17
Chr16	-16	17
Chr18	-18	17
ChrY	-Y	33

Scenario #2

- By Mate Pair sequencing, your lab has identified a t(5;11)(p15.3;q23) involving NUP98 and KMT2A(MLL) in a B-cell ALL patient. Has this rearrangement been described in the literature previously?
  - Cases Quick Searcher
    - Abnormality = t(5;11)(p15;q23)
      - *Remember: No Sub-bands!*
    - Morphology = Acute lymphoblastic leukemia/lymphoblastic lymphoma

Quick Case Searcher Results

Chromosome Aberration Case List

Content-type: text/plain

[Full Text]

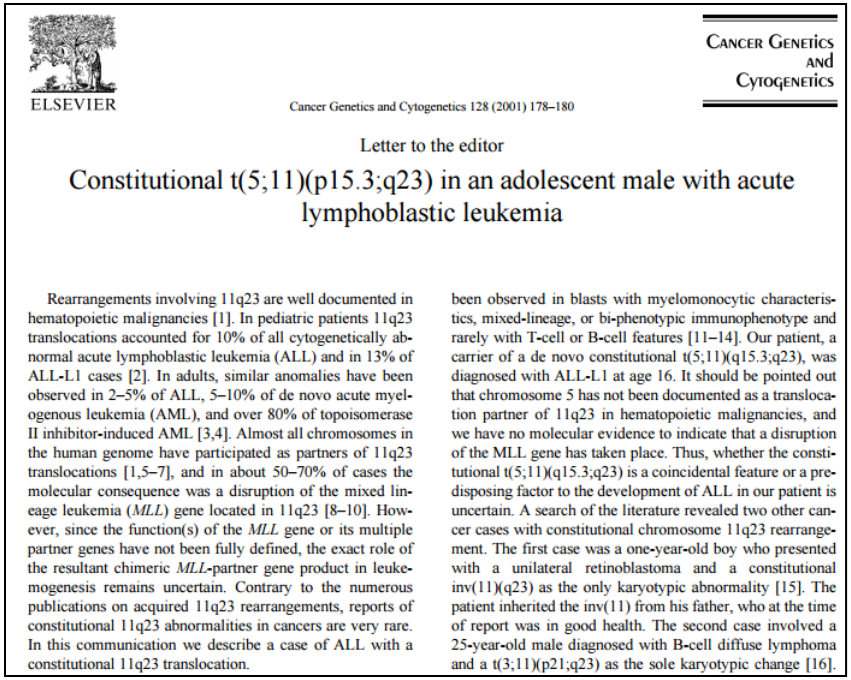
Displaying Investigations 1 to 1 of 1 found
From 1 References and 1 Cases

Swan et al 2001, Cancer Genet Cytogenet

Case No. 1 **Acute lymphoblastic leukemia/lymphoblastic lymphoma**

46,XY,t(5;11)(p15;q23)c,inv(9)(p24q32)/46,idem,add(17)(p13)

- There is one publication for this query, and it appears to be a constitutional rearrangement.



ELSEVIER

Cancer Genetics and Cytogenetics 128 (2001) 178–180

CANCER GENETICS AND CYTOGENETICS

Letter to the editor

Constitutional t(5;11)(p15.3;q23) in an adolescent male with acute lymphoblastic leukemia

Rearrangements involving 11q23 are well documented in hematopoietic malignancies [1]. In pediatric patients 11q23 translocations accounted for 10% of all cytogenetically abnormal acute lymphoblastic leukemia (ALL) and in 13% of ALL-L1 cases [2]. In adults, similar anomalies have been observed in 2–5% of ALL, 5–10% of de novo acute myelogenous leukemia (AML), and over 80% of topoisomerase II inhibitor-induced AML [3,4]. Almost all chromosomes in the human genome have participated as partners of 11q23 translocations [1,5–7], and in about 50–70% of cases the molecular consequence was a disruption of the mixed lineage leukemia (*MLL*) gene located in 11q23 [8–10]. However, since the function(s) of the *MLL* gene or its multiple partner genes have not been fully defined, the exact role of the resultant chimeric *MLL*-partner gene product in leukemogenesis remains uncertain. Contrary to the numerous publications on acquired 11q23 rearrangements, reports of constitutional 11q23 abnormalities in cancers are very rare. In this communication we describe a case of ALL with a constitutional 11q23 translocation.

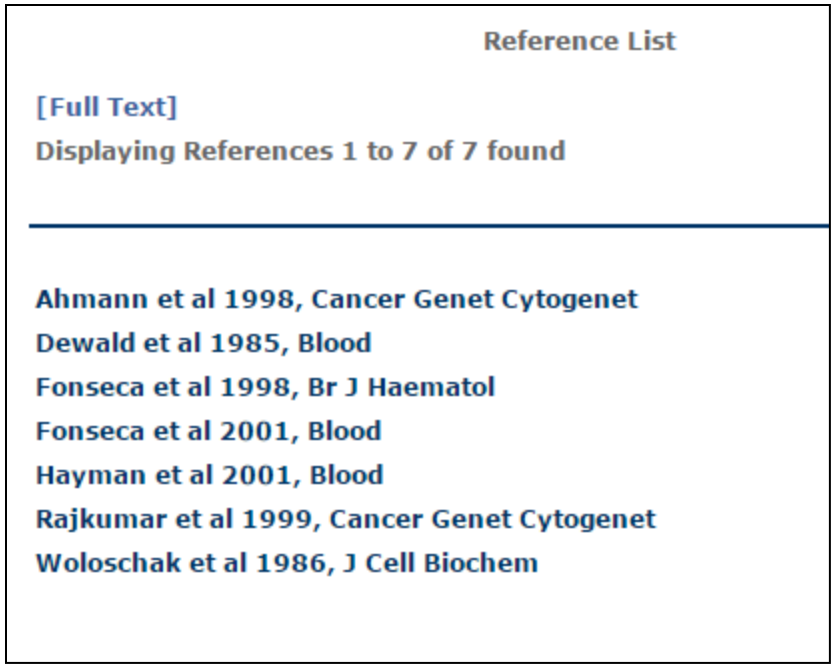
been observed in blasts with myelomonocytic characteristics, mixed-lineage, or bi-phenotypic immunophenotype and rarely with T-cell or B-cell features [11–14]. Our patient, a carrier of a de novo constitutional t(5;11)(q15.3;q23), was diagnosed with ALL-L1 at age 16. It should be pointed out that chromosome 5 has not been documented as a translocation partner of 11q23 in hematopoietic malignancies, and we have no molecular evidence to indicate that a disruption of the MLL gene has taken place. Thus, whether the constitutional t(5;11)(q15.3;q23) is a coincidental feature or a predisposing factor to the development of ALL in our patient is uncertain. A search of the literature revealed two other cancer cases with constitutional chromosome 11q23 rearrangement. The first case was a one-year-old boy who presented with a unilateral retinoblastoma and a constitutional inv(11)(q23) as the only karyotypic abnormality [15]. The patient inherited the inv(11) from his father, who at the time of report was in good health. The second case involved a 25-year-old male diagnosed with B-cell diffuse lymphoma and a t(3;11)(p21;q23) as the sole karyotypic change [16].

Swan et al. 2001, PMID 11478302

Scenario #3

- How can you be sure your publications are incorporated into this database?
  - Reference Searcher
    - Search for Author: LastName FM (or F* if you don't know the middle name)

Authorship Search


Reference List

[Full Text]

Displaying References 1 to 7 of 7 found

Ahmann et al 1998, Cancer Genet Cytogenet
Dewald et al 1985, Blood
Fonseca et al 1998, Br J Haematol
Fonseca et al 2001, Blood
Hayman et al 2001, Blood
Rajkumar et al 1999, Cancer Genet Cytogenet
Woloschak et al 1986, J Cell Biochem

- Searched for “Jenkins RB”
- 7 hits in database.
- Can also search using “*” wildcard
  - Ex/ Jenkins R*

Contacts

Contact Dr. Felix Mitelman directly with any questions about this resource:
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