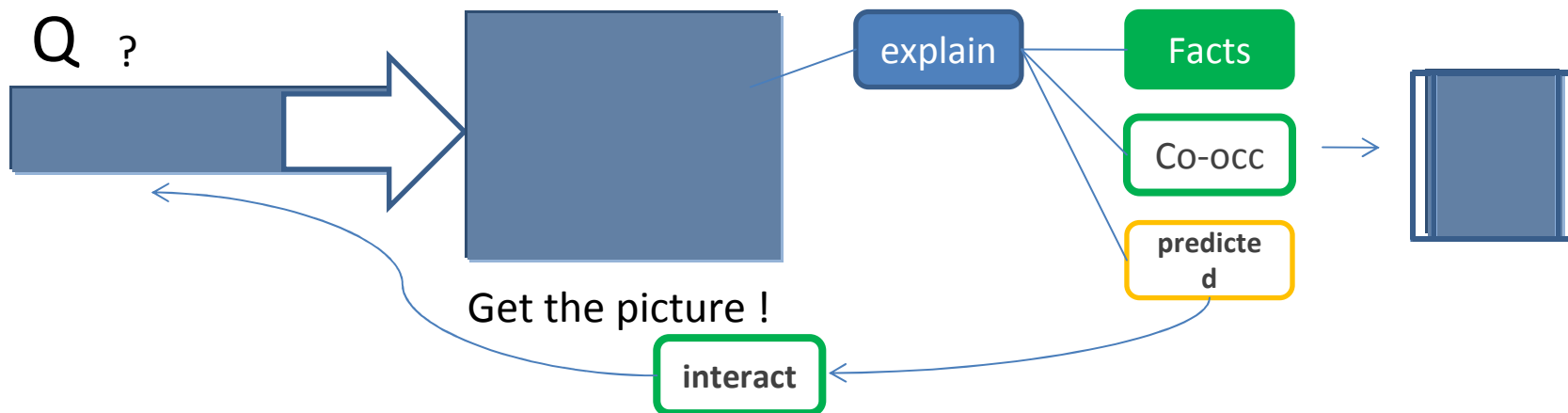
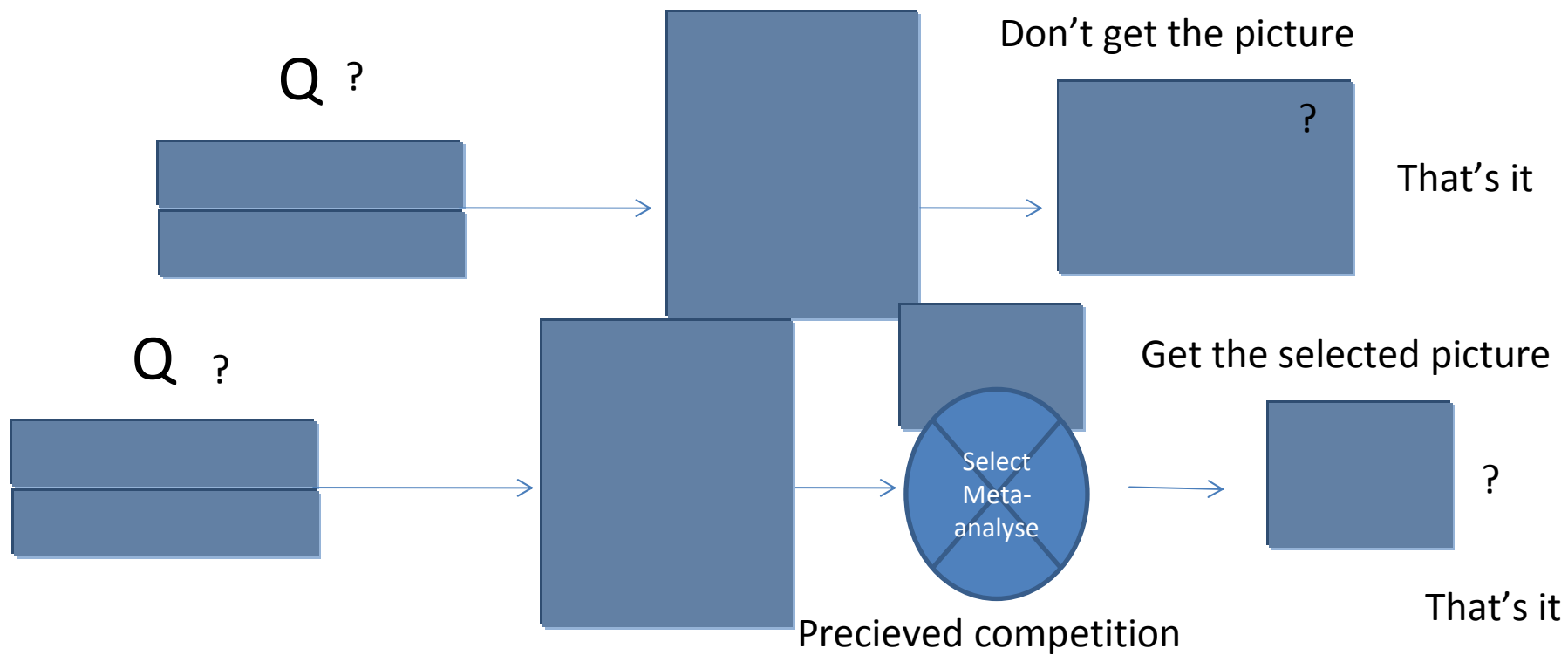
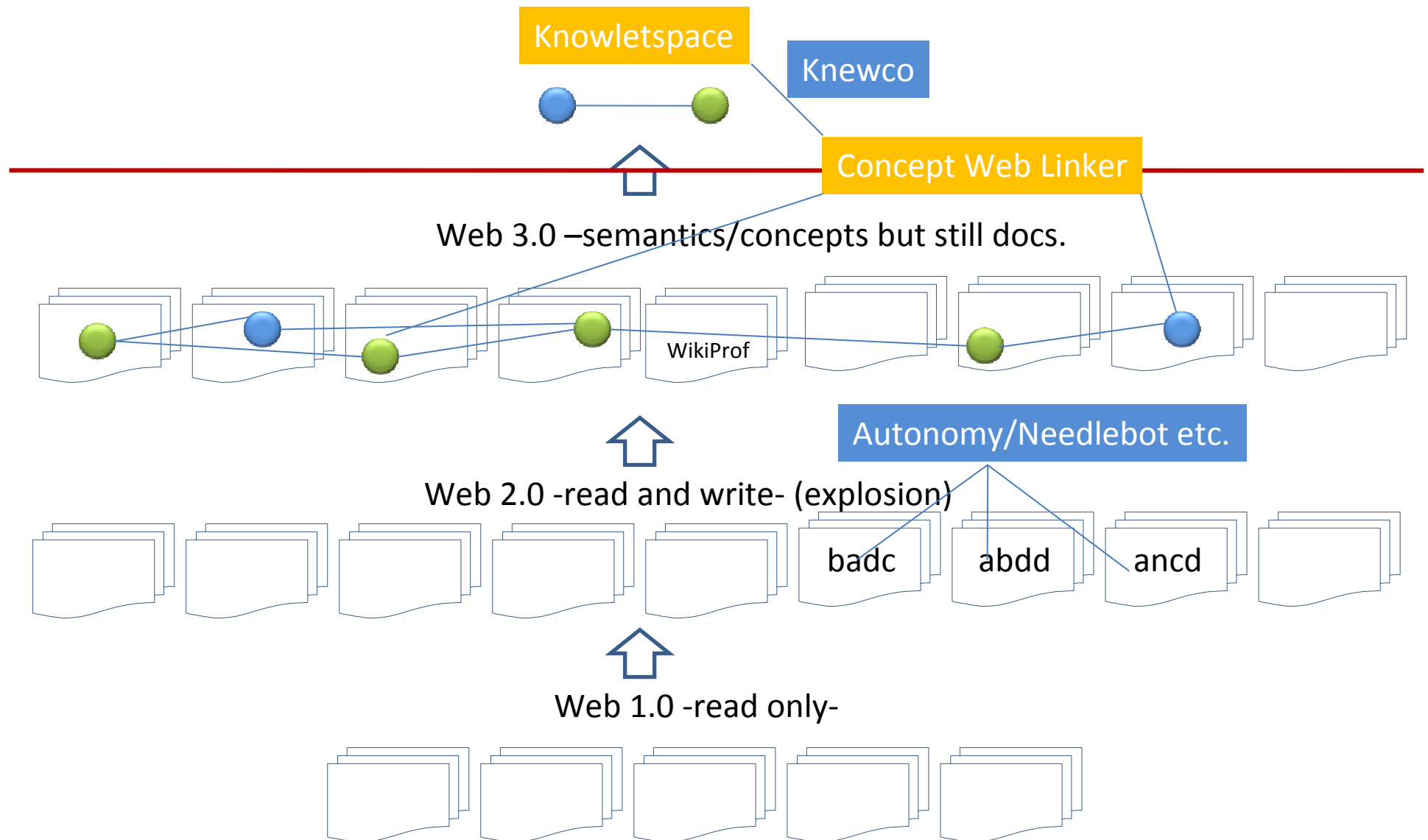


## **Problems with the 'Text Web'**

- Ambiguity
- Redundancy
- Fragmentation





How do we do it

## Knowlet Construction

<Source concept>

<Target Concept>

<Relations>:

<Type F1> Database facts (multiple attributes)

<Type F2> Community Annotations (WikiProf)

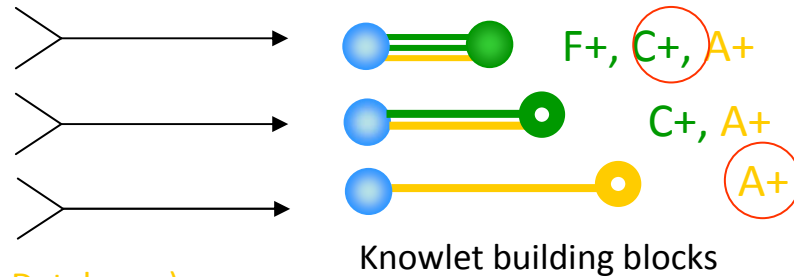
<Type C1> Co-occurrence sentence

<Type C2> Co-occurrence abstract

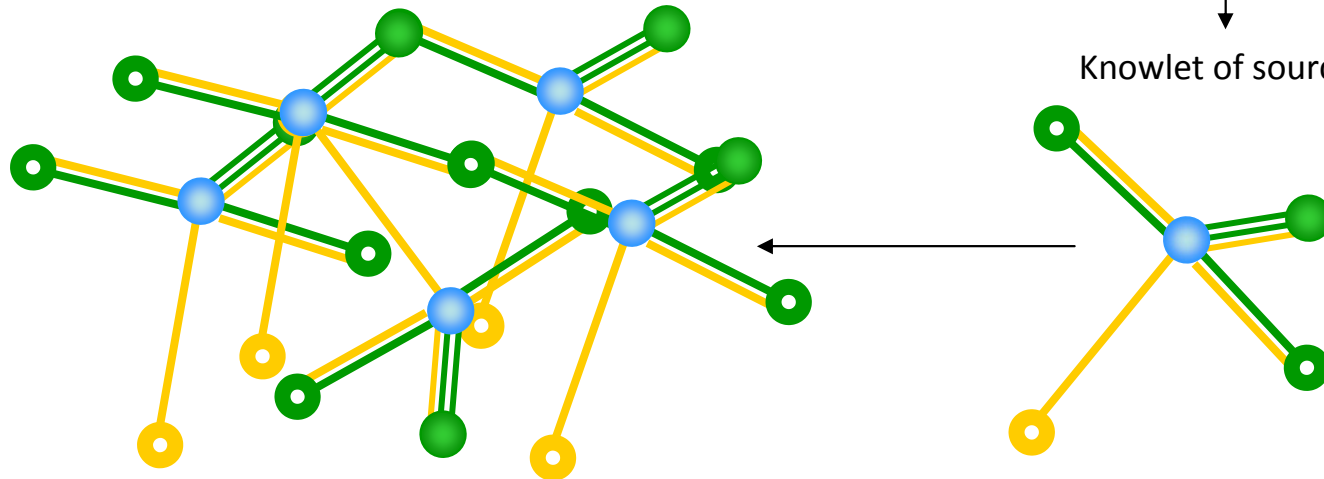
<Type A1> Concept Profile Match

<Type A2> Homology (homologene)

<Type A3> Co-expression with (genes from expression Databases)

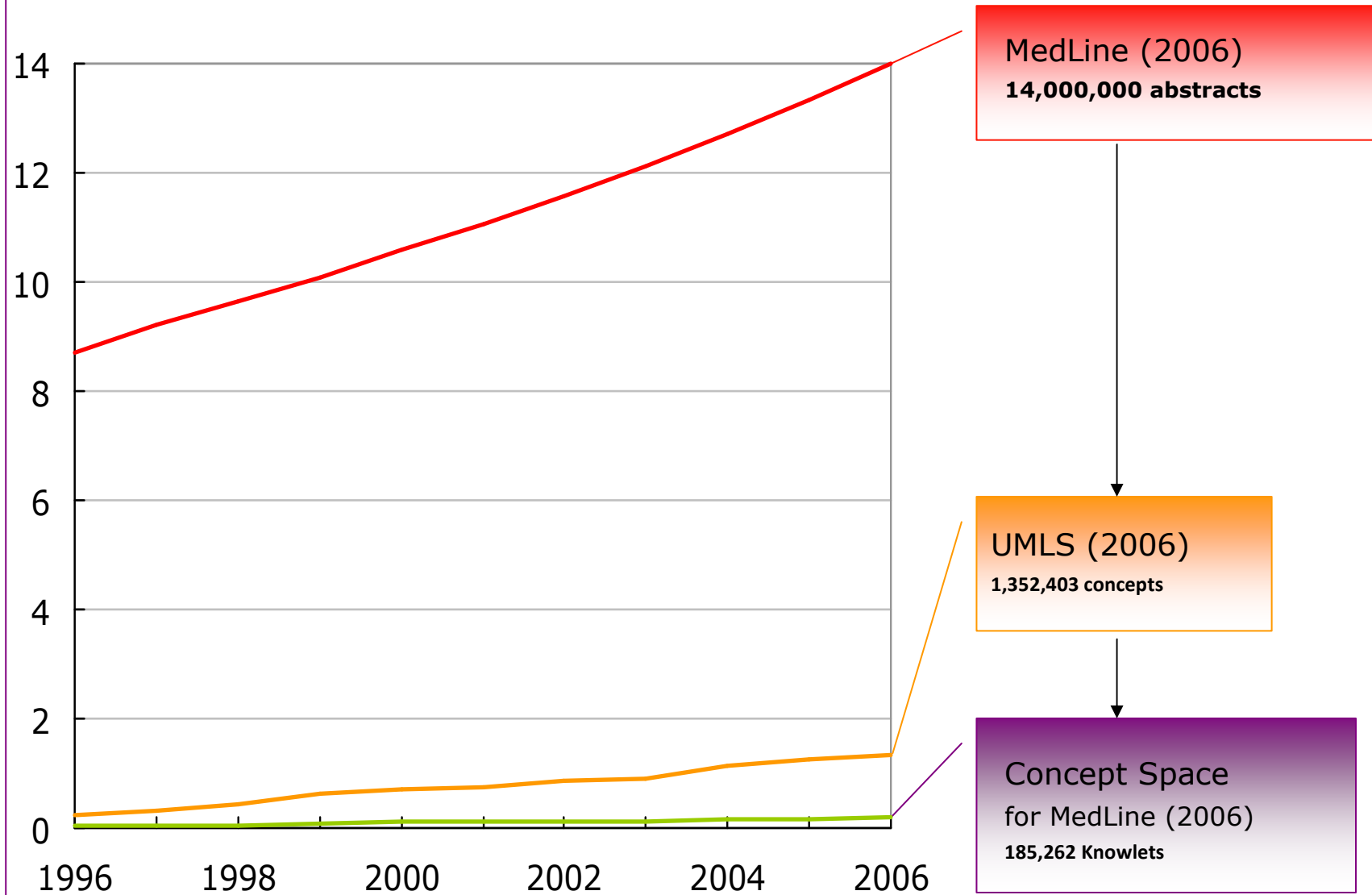


Knowlet of source concept



Knowlet Space

## The Concept Web 1: reducing redundancy.



# Solving Ambiguity 1: synonyms (1)



cancer and kaposi sarcoma

Search

1,280,000 for [cancer](#) and [kaposi sarcoma](#).

294,000 for [malignant neoplasms](#) and [kaposi sarcoma](#).

6,610 for [malignant neoplasms](#) and [HHV8](#).

Relation to source: ● factual (1) ● co-occurrence (10) ● associative (45) Wikiproteins Pubmed

Malignant Neoplasms has a broader relationship to Kaposi Sarcoma

Navigate the Concept Web:

cancer and kaposi sarcoma

Expand to > 43 synonyms

Found:  
1 fact, > 10 co-occurrences  
and 45 shared concepts with  
Kaposi Sarcoma

CI: 268

Malignant neoplasms

Basque	minbizi
Bokmål	kreft
Bulgarian	pak
Castilian	cáncer
Czech	rakovina
Danish	kræft
Dutch	kanker
English	cancer
Estonian	vähk(tõbi)
Finnish	syöpä
French	cancer
Georgian	ჯიბი
German	Krebskrankheit
Greek	καρκίος
Hungarian	rák
Italian	cancro
Japanese	癌
Polish	rak
Portuguese (Brazil)	câncer
Portuguese (Portugal)	cancro
Russian	рак
Slovak	rakovina

>1000 languages

CI: 268

Malignant neoplasms

Also known as  
Malignancy  
CANCER  
MALIGNANCY  
NEOPLASM MALIGNANT  
CANCER (NOS)  
MALIGNANCIES  
Cancer  
Malignant neoplasms  
Malignant neoplasm  
cancer  
malignant tumoral disease  
malignant neoplasm  
malignant tumor  
MALIGNANT TUMOR  
Cancers

43

More synonyms

CI: 65786

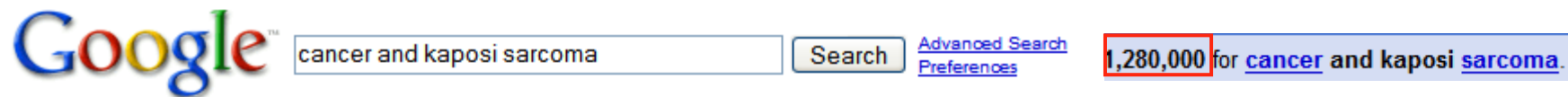
Kaposi sarcoma

Also known as  
ENDOTHELIOCARCINOMA  
KAPOSI CANCER, SARCOMA  
KAPOSI SARCOMA  
SARCOMA, MULTIPLE IDIOPATHIC  
HEMORRHAGIC  
Kaposi sarcoma  
Kaposi's Sarcoma  
KAPOSIS SARCOMA  
Sarcoma, Kaposi  
Kaposi's sarcoma  
HHV8  
HHV 8  
KS  
sarcoma, multiple hemorrhagic  
multiple hemorrhagic sarcoma  
sarcoma, Kaposi's

36

More synonyms

## Solving Ambiguity 1: synonyms (2)



### Web

#### Sarcoma

[www.mskfirst.org](http://www.mskfirst.org) Memorial Sloan-Kettering for better cancer treatment

#### ACS :: What Is Kaposi Sarcoma?

**Kaposi sarcoma** (KS) was named for Dr. Moritz Kaposi who first described it. For decades KS was considered a rare disease...

[www.cancer.org/docroot/cr/cr\\_2\\_4\\_1x\\_what\\_is\\_kaposi\\_sarcoma](http://www.cancer.org/docroot/cr/cr_2_4_1x_what_is_kaposi_sarcoma)

Cached - Similar pages

#### ACS :: How Is Kaposi Sarcoma Staged?

Staging is the process of using physical examinations, imaging tests, and, in some cases, biopsy results to determine the extent of cancer in the body...

[www.cancer.org/docroot/CRI/content/CRI\\_2\\_4\\_1x\\_kaposi\\_sarcoma\\_staged\\_21.asp?sitearea=](http://www.cancer.org/docroot/CRI/content/CRI_2_4_1x_kaposi_sarcoma_staged_21.asp?sitearea=)

More results from [www.cancer.org](http://www.cancer.org) »

#### Kaposi's Sarcoma - Cancer Overview

**Kaposi's sarcoma** is a disease in which cancerous cells grow on the skin or mucous membranes that line the mouth, nose and throat.

[www.umgcc.org/bone\\_st\\_program/kaposi.htm](http://www.umgcc.org/bone_st_program/kaposi.htm) - 18k - Cached - Similar pages

"Kaposi Sarcoma" OR "multiple hemorrhagic sarcoma" OR "Kaposi cancer, sarcoma" OR "Endotheliosarcoma" OR "Sarcoma, multiple idiopathic hemorrhagic" OR "HHV8" OR "Kaposi's sarcoma, unspecified" OR "Skin cancer, Kaposi's sarcoma" OR "Kaposi - Kaposi's Sarcoma" OR "Malignant Neoplasms" OR "Malignancy" OR "Malignant neoplasm without specification of site" OR "Malignant Tumor" OR "neoplasm/cancer" OR "malignant tumoral disease" OR "Cancer, unspecified site" OR "Malignancy, unspecified site" OR "Cancer"

Concepts in search query:

- ☒ Kaposi Sarcoma
- ☒ Malignant Neoplasms

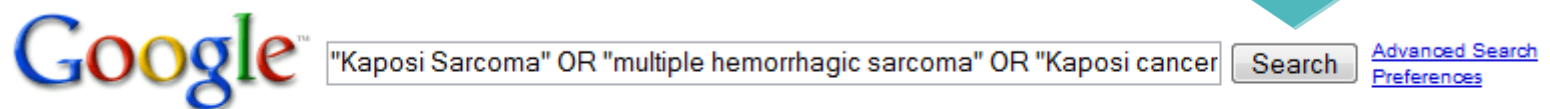
Concept Web

Expand  
To all  
synonyms

1,280,000

3,780,000

Full coverage



"site" (and any subsequent words) was ignored because we limit queries to 32 words.

Web Results 1 - 10 of about 3,780,000 for "Kaposi Sarcoma" OR "multiple hemorrhagic sarcoma" OR "Kaposi cancer, sarcoma"

3,7800 hits >>>>>>>>>> 1 knowlet

Kaposi Sarcoma | Malignant Neoplasms Knowlet - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://spaces.wikiprofessional.org/spaces/conceptNavigator?knowletId=umls%2FC0036220

Google Search Bookmarks PageRank Check AutoLink AutoFill Send to Settings

Wiki Professional life sciences BETA

Login to my concept web | Create account

Linker Navigator People Finder My Concept Web

### Source publications

View publications about: Kaposi Sarcoma

The **Kaposi Sarcoma** knowlet was created by extracting all associated concepts from these representative publications:

[Leder HA, Galor A, Peters GB, Kedhar SR, Dunn JP, Thorne JE.](#)  
Resolution of conjunctival Kaposi sarcoma after institution of highly active antiretroviral therapy alone.  
*Br J Ophthalmol.* 2007; 92(1):151

[Ho-Yen C, Chang F, van der Walt J, Lucas S.](#)  
Gastrointestinal malignancies in HIV-infected or immunosuppressed patients: pathologic features and review of the literature.  
*Adv Anat Pathol.* 2007; 14(6):431-43

[Omeis I, Siems AL, Harrington W, Johnson LS, Destian S, DeMattia JA.](#)  
Spinal Kaposi sarcoma presenting without cutaneous manifestations. Case report.  
*J Neurosurg Spine.* 2007; 7(5):558-61

1 - 2 - 3 - 4 - 5 Next >

### Source concepts

kaposi sarcoma + add to knowlet new knowlet

Insert term from the Life Sciences; e.g., Pulmonary embolism

- ☒ Kaposi Sarcoma
- ☒ Malignant Neoplasms

remove from source concepts

### Community Annotation

View WikiProteins article about: Kaposi Sarcoma

Join the million minds and add your ideas on the subject of **Kaposi Sarcoma**

### Kaposi Sarcoma

**Definition:** multicentric, malignant neoplastic vascular proliferation characterized by the development of bluish-red cutaneous nodules, usually on the lower extremities, most often on the toes or feet, and slowly increasing in size and number and spreading to more proximal areas; occurs spontaneously in Jewish and Italian males; aggressive variant in young children is endemic in some areas of Africa; a third form occurs in about 0.04% of kidney transplant patients; there is also a high incidence in AIDS patients; human herpesvirus 8 is the suspected cause.

[edit](#)

### Related concepts

hide | show histogram

☒ factual ☒ co-occurrence ☒ predictive

Neoplasms in Vascular Tissue

More related to query Less related to query

### Definition

**Also known as**

- KS
- Kaposi Sarcoma
- KAPOSI SARCOMA
- Kaposi sarcoma
- Kaposi's Sarcoma
- Sarcoma, Kaposi's

Windows taskbar: Inbox - Thunderbird, Genome Biology | ..., ConceptWeb Linker ..., Kaposi Sarcoma | M..., 6 Microsoft Office..., 11:52 AM

## Solving Ambiguity 2: Homonyms (1)



dmd and sntl

Search

6,330,000 for dmd

428 for dmd sntl.

27,600 for dystrophin homo sapiens

1<sup>st</sup> hit:

Multiple meanings: SNTL - WikiProteins

Interacts with the dystrophin protein **DMD** and related pr  
from "http://www.wikiproteins.org/Expression: SNTL" ...

Doctor of Dental Medicine

Duchenne Muscular Dystrophy (DMD)

Drug Metabolism and Disposition

OMIM - DYSTROPHIN; DMD

DMD Compiler

Enter biomedical concept:  
dmd

These concepts are found in the dictionary

- [4,8-dimethyldecanal](#)
- [desmethylselegiline](#)
- [Dystrophin \(Sus scrofa\)](#)
- [Becker Muscular Dystrophy](#)
- [Dystrophin \(Homo sapiens\)](#)
- [Dystrophin \(Mus musculus\)](#)
- [DMD GENE MUTATION ANALYSIS](#)
- [Dystrophin \(Gallus gallus\)](#)
- [Muscular Dystrophy, Duchenne](#)
- [DMD GENE MUTATIONS TESTED FOR](#)
- [Dystrophin \(Canis familiaris\)](#)
- [Dystrophin \(Rattus norvegicus\)](#)
- [4-demethoxy-1,4-dimethyl-daunomycinone](#)
- [3,6-diamino-10-methyl-9,10-dihydroacridine](#)
- [6,8-dimethoxy-3-methyl-3,4-dihydroisocoumarin](#)
- [21-demethoxy-19-O-methyl-24-demethylbafilomycin C1](#)

Found: 18 homonyms

Relation to source: ☒ factual (1) ☒ co-occurrence (1) ☐ associative (0) Wikiproteins Pubmed

Dystrophin (Homo sapiens) interacts with Beta-2-syntrophin (Homo sapiens)

CI: 11399659

DMD

☐ Also known as  
Dystrophin  
DMD protein, human  
Dp116 protein, human  
dystrophin (muscular dystrophy, Duchenne and Becker types) protein, human  
Dystrophin (Homo sapiens)  
DMD\_HUMAN [\[edit\]](#)

CI: 12373225

SNT3

☐ Also known as  
SNT3  
SNTL  
SNTB2 protein, human  
syntrophin, beta 2 (dystrophin-associated protein A1, 59kDa, basic component 2), human  
syntrophin, beta 2 protein, human  
59 kDa dystrophin-associated protein triplet, human  
59 kDa dystrophin-associated protein, human  
59-DAP protein, human  
Beta-2-syntrophin  
Beta-2-syntrophin (Homo sapiens)  
SNTB2\_HUMAN  
59 kDa dystrophin-associated protein A1  
basic component 2  
Syntrophin-3

## Removing Redundancy



malaria mosquito mosquitoes plasmodium

Search

[Advanced Search](#)  
[Preferences](#)

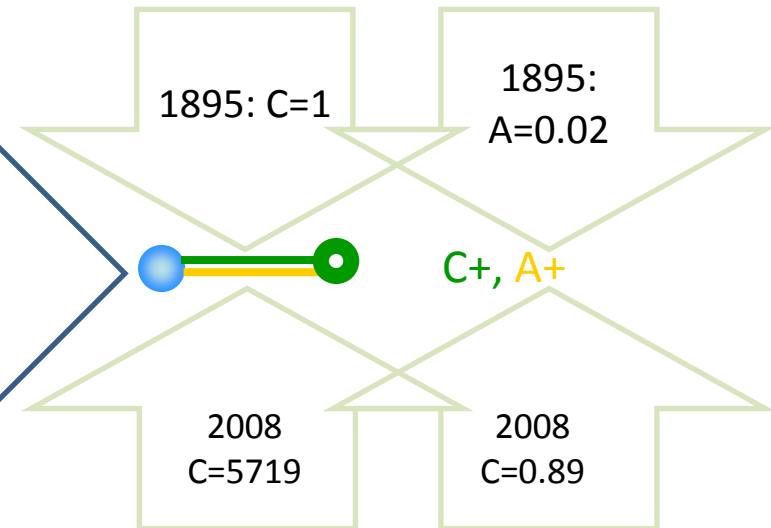
787,000 for [malaria mosquito mosquitoes plasmodium](#).



malaria and mosquitoes

Items 1 - 20 of 5719

Malaria is transmitted by mosquitoes  
Malaria is transmitted by mosquitoes  
Plasmodium is transmitted by mosquitoes  
Malaria is transmitted by mosquitoes  
Malaria is transmitted by *Anopheles*  
*P. falciparum* is transmitted by Culicidae  
*P. vivax* is transmitted by Culicidae  
*Plasmodium falciparum* is transmitted by *Anopheles gambiae*  
Malaria is transmitted by mosquitoes  
Malaria is transmitted by mosquitoes  
Malaria is transmitted by mosquitoes  
Malaria is transmitted by mosquitoes  
Malaria is transmitted by mosquitoes  
Malaria is transmitted by mosquitoes  
Malaria is transmitted by mosquitoes  
Malaria is transmitted by mosquitoes  
Malaria is transmitted by mosquitoes  
Malaria is transmitted by mosquitoes



http://proteins.wikiprofessional.org/index.php/Concept:11267575

CDC28 create Highlighting: hide Behavior Anatomy Chemicals Diseases Genes Physiology Living Being Other

156.83.1.251 talk for this ip log in / create account

concept discussion edit history

## G2/mitotic-specific cyclin-2 (Saccharomyces cerevisiae)

Concept identifier: 11267575

Show authoritative viewpoint of Community: ☒ **Authorities co-viewed**  
 Show authoritative viewpoint of Swiss-Prot: ☒  
 Show authoritative viewpoint of National Library of Medicine (NLM): ☒ Show

**Create new concept in Wiki**

**Also known as**

**Functional information**

Connection	Element	Reference information	Community	Swiss-Prot
gene product has molecular function	N-methyl-D-aspartate receptor-associated protein activity		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
has function	Essential for the control of the cell cycle at the G2/M (mitosis) kinase to form MPF. G2/M cyclins accumulate steadily during		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
interacts with	with CDC28 (accepted by Swiss-Prot);		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
interacts with	with NET1 (accepted by Swiss-Prot);		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

**Localization and spatial information**

Connection	Element	Community
gene product is found in cellular component	bud neck	<input checked="" type="checkbox"/>
gene product is found in cellular component	spindle pole body	<input checked="" type="checkbox"/>
gene product is found in cellular component	cell cycle	<input checked="" type="checkbox"/>
occurs in	Sa	<input checked="" type="checkbox"/>

**Structural and physical information**

Connection	Element	Community
gene product encoded by gene	CLB2 (Saccharomyces cerevisiae)	<input checked="" type="checkbox"/>

**Temporal information**

**Conceptual and other information**

**Terminological information**

**Mapped to Concept Web and search**

**Mapped to UMLS**

**DefinedMeaning:CLB2 protein, S cerevisiae (3787220)**

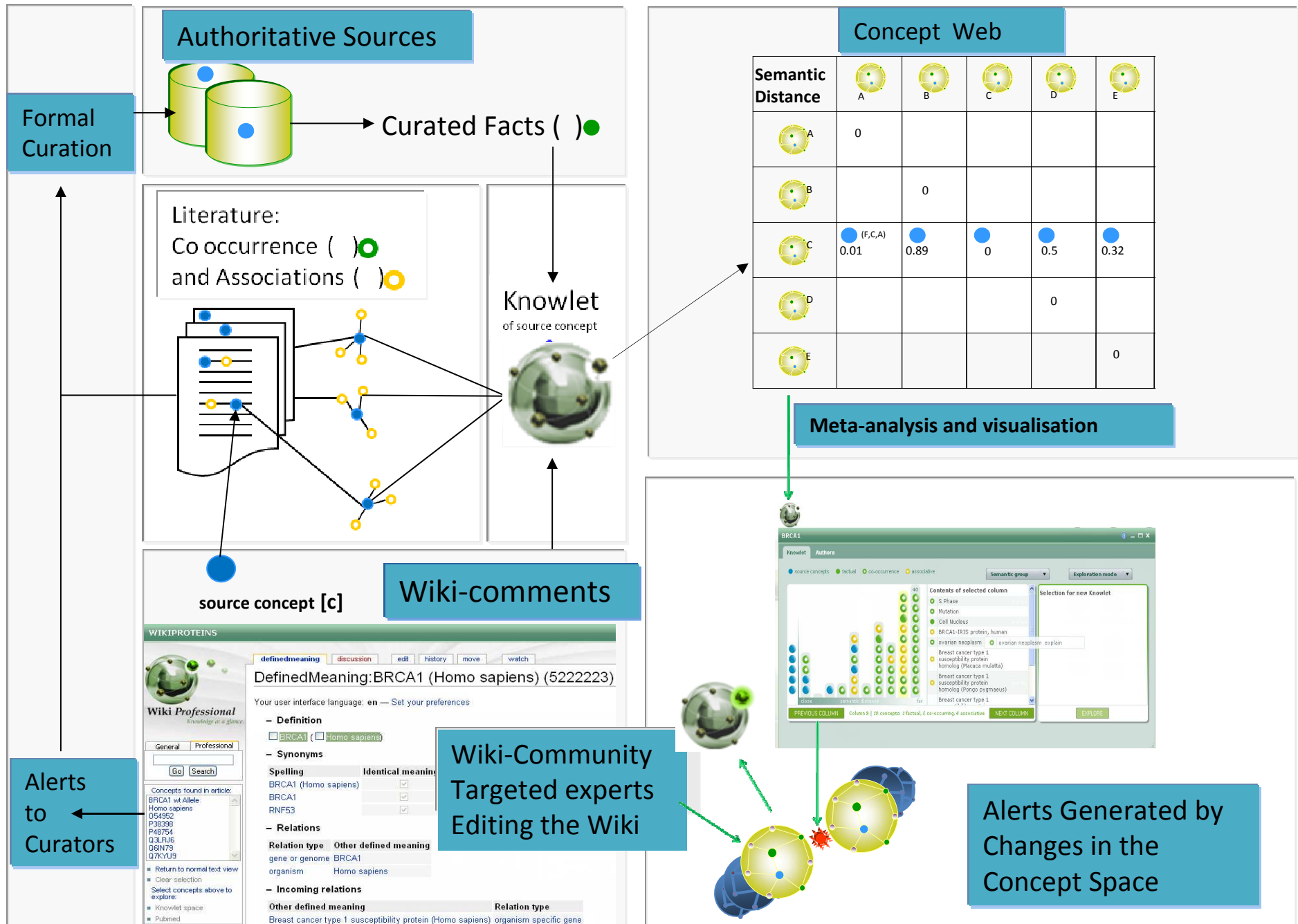
Your user interface language: en — Set your preferences

**Synonyms**

Spelling	Identical meaning?
CLB2 protein, S cerevisiae	<input checked="" type="checkbox"/>
G2-mitotic-specific cyclin 2 protein, S cerevisiae	<input checked="" type="checkbox"/>

**Collection membership**

Collection	Source identifier
UMLS	C1437948
Medical Subject Headings, 2005-2005-01-17	C093749
umls	b6f2d230-7ce8-102a-88fe-00137238d68e



- ▶ **E**  
2
- ▶ **A**  
e
- ▶ **A**  
c
- ▶ **C**  
a
- ▶ **G**

- ▶ **E**  
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- ▶ **C**  
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- ▶ **G**

- ▶ **E**  
2
- ▶ **A**  
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- ▶ **G**

- ▶ **E**  
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- ▶ **A**  
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- ▶ **C**  
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- ▶ **G**

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2
- ▶ **A**  
e
- ▶ **A**  
c
- ▶ **C**  
a
- ▶ **G**

[Lolekha R](#), [Anuwatnonthakate A](#), [Nateniyom S](#), [Sumnapun S](#), [Yamada N](#), [Wattanaamornkiat W](#), [Sattayawuthipong W](#), [Charusuntornsri P](#), [Sanguanwongse N](#), [Wells CD](#), [Varma JK](#).

ABSTRACT: BACKGROUND: Of the 9.2 million new TB cases occurring each year, about 10% are in [children](#). Because childhood TB is usually non-infectious and non-fatal, national programs do not prioritize childhood TB diagnosis and treatment. We reviewed data from a demonstration project to [learn](#) more about the epidemiology of childhood TB in Thailand. METHODS: In four Thai provinces and one national hospital, we contacted healthcare facilities monthly to record data about persons diagnosed with TB, assist with patient care, provide HIV counseling and testing, and obtain [sputum](#) for culture and susceptibility testing. We analyzed clinical and treatment outcome data for [patients](#) age < 15 years old registered in 2005 and 2006. RESULTS: Only 279 (2%) of 14,487 total cases occurred in [children](#). The median age of [children](#) was 8 years (range: 4 months, 14 years). Of 197 [children](#) with [pulmonary TB](#), 63 (32%) were bacteriologically-confirmed: 56 (28%) were smear-positive and 7 (4%) were smear-negative, but culture-positive. One was diagnosed with multi-[drug](#) resistant TB. [HIV infection](#) was documented in 75 (27%). Thirteen (17%) of 75 [HIV](#)-infected [children](#) died during TB treatment compared with 4 (2%) of 204 not known to be [HIV](#)-infected ( $p < 0.01$ ). CONCLUSIONS: Childhood TB is infrequently diagnosed in Thailand. [Understanding](#) whether this is due to absence of [disease](#) or diagnostic effort requires further research. [HIV](#) contributes substantially to the childhood TB burden in Thailand and is associated with high mortality.

PMID: 18637205 [PubMed - as supplied by publisher]

Display [AbstractPlus](#) Show [20](#) Sort By

HIV

VIH

+

Add to search query

Retrovirus que causa el Síndrome de inmunodeficiencia adquirida (SIDA), una condición en los humanos en la cual el sistema inmunitario empieza a fallar, dejando paso a infecciones oportunistas que pueden ser mortales.

Open in Concept Web

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[n Act](#) | [Disclaimer](#)

