

# WIKIPEDIA & OSTEOSARCOMA

## AN EDUCATIONAL OPPORTUNITY AND PROFESSIONAL RESPONSIBILITY FOR EMSOS



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## Eyjafallajökull

From Wikipedia, the free encyclopedia

← → It has been suggested that this article be split into articles entitled *Eyjafallajökull (glacier)* and *Eyjafallavirkni*, accessible from a disambiguation page. Discuss

**Eyjafallajökull** (pronounced [ˈɛjˌafˌalˌaˌjɔˌkʏˌl], listen (help·info)) is an Icelandic "island mountain glacier"  (see also the smaller glacier Eyjafjallajökull), situated to the north of Skogar and to the west of Myrdalajökull. The icecap of the glacier covers a volcano with a summit elevation of 1,666 metres (5,480 ft). The volcano has erupted relatively frequently since the last glacial period, most recently 485, which = 1,000 again in 2010 [2010].

The glacier covers an area of about 190 square kilometres (70 sq mi). The south end of the mountain was once part of the island's Atlantic coastline, but over thousands of years the sea retreated some 5 kilometres (3.1 mi), with the former coastline now consisting of sheer cliffs with many waterfalls, of which the best known is Djúgafoss. In strong winds, the water of the smaller falls can even be blown up the mountain.

The volcano, which has a crater 3–4 kilometres (1.9–2.5 mi) in diameter, erupted in 900, 1612 and again from 1821 to 1823 when it caused a glacial lake outburst flood or jökulhlaup [6] It has erupted twice in 2010—on 20 March and 14 April. The March event forced a brief evacuation of around 500 local people [7] but the April eruption was ten to twenty times more powerful and caused substantial disruption to air traffic across Europe.

**Contents** (view)

- 1 Etymology
- 2 Geology
- 3 1821 to 1823 eruption
- 4 2010 eruptions
- 5 Eyjafallajökull and HVO
- 6 See also
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### Etymology

The name *Eyjafallajökull* is made up of the words *eyja* (genitive plural of *ey*, meaning *islet* or *island*), *falla* (genitive plural of *fall*, whose nominative plural is *fall*, meaning *falls* or *mountains*) and *jökull* (meaning *glacier*; cognate with the *-ic* in *iceberg*). A literal translation would thus be the "island-falls glacier" or the "island-mountain glacier". The name *Eyjafall* describes the southern side of the volcano, massed together with the small mountains which form the foot of the volcano. The village and museum of Skogar are also part of the region under *Eyjaföllum* (meaning "under the Eyjafalls").

**Geology**

**Location** Iceland

**Coordinates** 63°36N 19°36W

**Area** 180 km<sup>2</sup> (40 sq mi)

**Thickness** 260 m



Eyjafallajökull

Glacial, Eyjafallajökull's largest outlet glacier



a Eyjafallajökull

Location in Iceland




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# BACKGROUND



15.000.000 articles (3.200.000 in English)  
240 languages



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## Osteosarcoma

From Wikipedia, the free encyclopedia

**Osteosarcoma** is an aggressive cancerous neoplasm arising from primitive transformed cells of mesenchymal origin that exhibit osteoblastic differentiation and produce malignant osteoid. It is the most common histological form of primary bone cancer.<sup>[1]</sup>

**Contents** (hide)

- 1 Incidence
- 2 Prevalence
- 3 Treatment
- 4 Mortality and Survival
- 5 Pathology
- 6 Causes
- 7 Symptoms
- 8 Diagnosis
- 9 Treatment
- 10 Prognosis
- 11 Canine osteosarcoma
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### Incidence

Osteosarcoma is the eighth most common form of childhood cancer, comprising 2.4% of all malignancies in pediatric patients, and approximately 20% of all bone cancers.<sup>[1]</sup>

Incidence rates for osteosarcoma in U.S. patients under 20 years of age are estimated at 5.0 per million per year in the general population, with a slight variation between individuals of Black, Hispanic, and white ethnicities (6.8, 6.5, and 4.6 per million per year, respectively). It is slightly more common in males (5.4 per million per year) than in females (4.0 per million per year).<sup>[1]</sup>

There is a preference for origination in the metaphyseal region of tubular long bones, with 42% occurring in the femur, 19% in the tibia, and 10% in the humerus. About 8% of all cases occur in the skull and jaw, and another 8% in the pelvis.<sup>[1]</sup>

### Prevalence

Osteogenic sarcoma is the sixth leading cancer in children under age 15. Osteogenic sarcoma affects 400 children under age 20 and 500 adults (most between the ages of 15-30) every year in the USA. Approximately 1/3 of the 900 will die each year, or about 300 a year. A second peak in incidence occurs in the elderly, usually associated with an underlying bone pathology such as Paget's disease, medullary infarct, or prior radiation.

### Treatment

**Osteosarcoma**

Classification and external resources



Micrograph of an osteosarcoma with pleomorphic, hyperchromatic, atypical cells. IHC: IHC.

<b>ICD-10</b>	C40.0-C41.0 <span></span>
<b>ICD-9</b>	170 <span></span>
<b>ICD-O3</b>	M9180-9 <span></span>
<b>OMIM</b>	259900 <span></span>
<b>DiseasesDB</b>	4392 <span></span>
<b>MedlinePlus</b>	001690 <span></span>
<b>eMedicine</b>	ped1664 <span></span> orthoped531 <span></span> radio204 <span></span> radio505 <span></span>
<b>MeSH</b>	D012516 <span></span>



# BACKGROUND



„English Wikipedia is a prominent source of online health information ... “

Laurent MR and Vickers TJ, JAMIA 2009;16:471-9

... especially for young physicians

Hughes B et al. Int J Med Inform 2009;78:645-55

„... its accuracy, at least on science topics, is surprisingly high.“

Giles J. Nature 2006;443:493

# BACKGROUND



„... less complete, and has more errors of omission ... “  
Clauson KA et al. Ann Pharmacother. 2008;42:1814-21

- information found
- promote patients‘ compliance
  - influence on denial of therapy
  - rate of participation in clinical trials

# AIM



completeness & accuracy?

# AIM



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

NCI Home | Cancer Topics | Clinical Trials | Cancer Statistics | Research & Fund

## Osteosarcoma and Malignant Fibrous Histiocytoma of Bone (PDQ®)

Patient Version | Health Professional Version | En español

**General Information About Osteosarcoma and Malignant Fibrous Histiocytoma of Bone**

**Stages of Osteosarcoma and Malignant Fibrous Histiocytoma of Bone**

**Recurrent Osteosarcoma and Malignant Fibrous Histiocytoma of Bone**

**Treatment Option Overviews**

**Treatment Options for Osteosarcoma and Malignant Fibrous Histiocytoma of Bone**

**To Learn More About Osteosarcoma and Malignant Fibrous Histiocytoma of Bone**

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**Questions about cancer?**  
1-800-4-CANCER

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## Osteosarcoma

From Wikipedia, the free encyclopedia

**Osteosarcoma** is an aggressive cancerous neoplasm arising from primitive transformed cells of mesenchymal origin that exhibit osteoblastic differentiation and produce malignant osteoid. It is the most common histological form of primary bone cancer.<sup>[1]</sup>

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

NCI Home | Cancer Topics | Clinical Trials | Cancer Statistics | Research & Fund

## Osteosarcoma and Malignant Fibrous Histiocytoma of Bone (PDQ®)

Patient Version | Health Professional Version | En español

**Purpose of This PDQ Summary**

This PDQ cancer information summary for health professionals provides evidence-based information about the treatment of osteosarcoma and bone. This summary is reviewed regularly and updated as necessary by [Editorial Board](#).

Information about the following is included in this summary:

- Incidence
- Prognostic factors
- Cellular classification
- Staging information
- Treatment options

This summary is intended as a resource to inform and assist clinicians who care for pediatric cancer patients. It does not provide formal guidelines for making health care decisions.

Some of the reference citations in this summary are accompanied by a [designator](#). These designations are intended to help readers assess the strength of specific interventions or approaches. The PDQ Pediatric and Adult [Formal Evidence Review System](#) in developing their level of evidence, strength of the available evidence, treatment options are described as a "evaluation." These classifications should not be used as a basis for re-evaluation.

This summary is also available in a [patient version](#), which is written in [Spanish](#).

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**Contact**

# METHODS



test approach similar to Clauson et al.  
Ann Pharmacother 2008;42:1814-21

20 questions  
3 independent observers  
scores on a 0-3 scale  
Mann-Whitney U test

No	Question	Wikipedia	NCI patient	NCI professional
1	What is the incidence of osteosarcoma per 100.000 inhabitants?			
2	Should a biopsy be performed?			
3	What is a biopsy?			
4	Name three helpful chemotherapeutic agents			
5	Should radiotherapy normally be applied?			
6	What kind of surgery should be performed? (margins)			
7	Are amputations necessary in a large number of cases?			
8	What does staging imply?			
9	Is a follow-up necessary? If yes, name 2 diagnostic procedures.			
10	What is the 5 or 10-year prognosis?			
11	Prognosis depends on several factors, name 5.			
12	Which age group is most affected?			
13	Might metastases occur? If yes, what are metastases?			
14	Name three histological subtypes.			
15	What symptoms might indicate the presence of a bone tumor (name 2)			
16	What is the main localiation of osteosarcoma?			
17	What late effects are possible after successful treatment? (name 3)			
18	Do you find web-links to study centers (EURAMOS)?			
19	What are clinical trials?			
20	How can you find clinical trials in your area?			
	total			

# RESULTS



test approach similar to Clauson et al.  
Ann Pharmacother 2008;42:1814-21

20 questions  
3 independent observers  
scores on a 0-3 scale

No	Question	Wikipedia	NCI patient	NCI professional
1	What is the incidence of osteosarcoma per 100.000 inhabitants?	1	0	1
2	Should a biopsy be performed?	3	3	3
3	What is a biopsy?	3	3	3
4	Name three helpful chemotherapeutic agents	3	0	3
5	Should radiotherapy normally be applied?	0	0	3
6	What kind of surgery should be performed? (margins)	0	3	3
7	Are amputations necessary in a large number of cases?	3	3	3
8	What does staging imply?	0	2	3
9	Is a follow-up necessary? If yes, name 2 diagnostic procedures.	0	0	1
10	What is the 5 or 10-year prognosis?	3	0	2
11	Prognosis depends on several factors, name 5.	3	3	3
12	Which age group is most affected?	2	3	3
13	Might metastases occur? If yes, what are metastases?	3	3	3
14	Name three histological subtypes.	0	0	3
15	What symptoms might indicate the presence of a bone tumor (name 2)	3	3	1
16	What is the main localisation of osteosarcoma?	3	3	3
17	What late effects are possible after successful treatment? (name 3)	2	3	1
18	Do you find web-links to study centers (EURAMOS)?	0	2	2
19	What are clinical trials?	0	3	3
20	How can you find clinical trials in your area?	1	3	3
	total	33	40	50

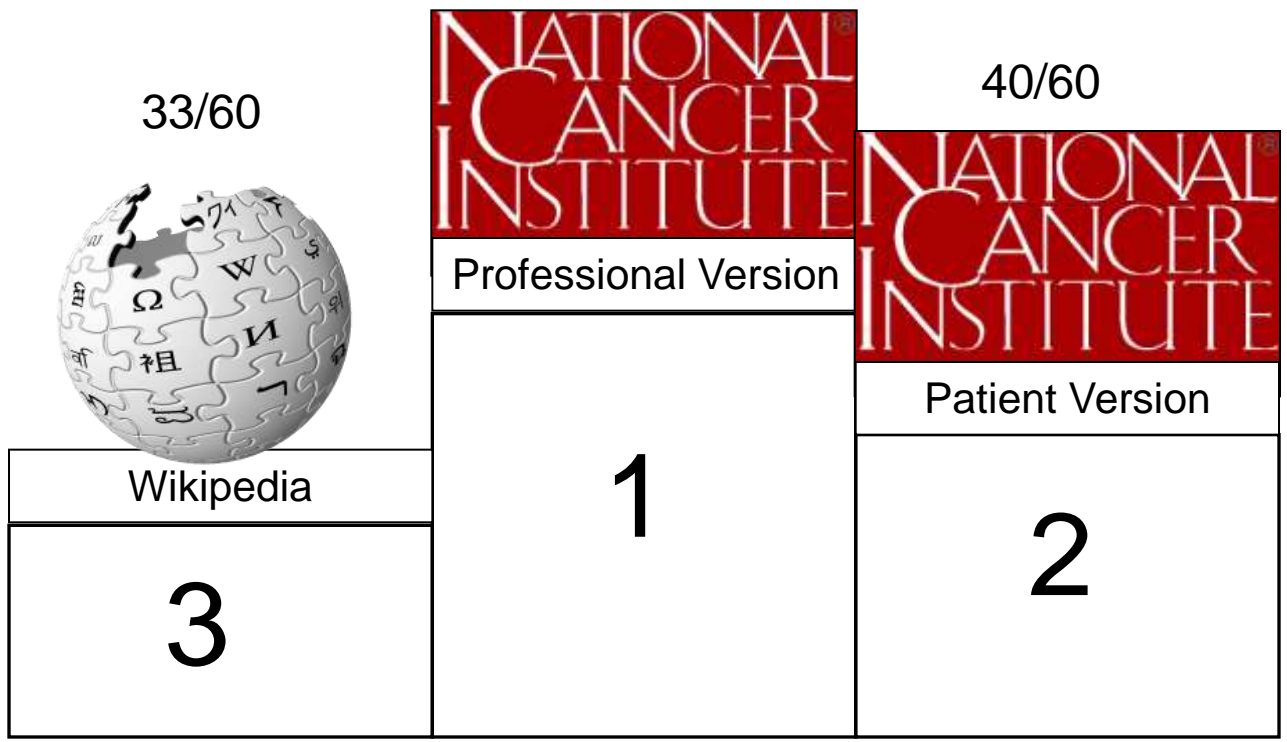
# RESULTS



50/60

33/60

40/60



Professional Version



Patient Version

Wikipedia

1

2

3

# RESULTS



asked for

„ease of use“

„page’s oversight“

all 3 reviewers preferred Wikipedia

# DISCUSSION




Kristine L. Callis et al. „Improving Wikipedia: educational opportunity and professional responsibility“  
Trends Ecol Evol 2009;24:177-9

# CONCLUSION



1. Osteosarcoma-related information found in English Wikipedia is good but inferior to the NCI sites
2. „Public“ sites like Wikipedia should provide links to „professional“ websites
3. Organisations like NCI or EMSOS should check those sites on a regular basis

severe cerebral and cerebellar compression in a dog. *Journal of Veterinary Science* 2009; 10:81-83.

16. <sup>^</sup> Tomlin, J. L., Sturgeon, C. et al. (2000). "Use of the bisphosphonate drug alendronate for palliative management of osteosarcoma in two dogs". *Vet Rec* 147(5):129-32.
17. <sup>^</sup> [1] 

## Further reading

[edit]

- James, H. (1979). *Promises in the Dark*. New York: Bantam Books. ISBN 0-553-13453-1. Story of a young girl's osteosarcoma fight and its effect on her relationship with her boyfriend
- Trottier, Maxine (2005). *Terry Fox: A Story of Hope*. Markham, Ont: Scholastic Canada. ISBN 0-439-94888-6. About Terry Fox and his quest to raise \$25 million for cancer research by running across Canada on his prosthetic leg. Also *The Terry Fox Story*, a 1983 movie.
- Belshaw, Sheila M. (2001). *Fly With a Miracle*. Denor Press. ISBN 0 9526056 7 8. The story of a family's journey through teenage osteosarcoma and its aftermath.

## External links

[edit]

- [Osteosarcoma](#)  at the Open Directory Project
- [Template:Cancer.org](#)
- [University of Minnesota - Genetics of Osteosarcoma research study](#) 

v · d · e	<b>Connective tissue neoplasm: Osseous and Chondromatous tumors (ICD-O 9180-9269) (C40-C41/D16, 170/213)</b>			[hide]
Diaphysis	<b>Myeloid</b>	Multiple myeloma		
	<b>Epithelial</b>	Adamantinoma		
	<b>PNET/Ewing family</b>	Ewing's sarcoma		
Metaphysis	<b>Osteoblast</b>	Osteoid osteoma · Osteoblastoma		
		Osteoma/ <b>osteosarcoma</b>		
	<b>Chondroblast</b>	Chondroma/ecchondroma/enchondroma (Enchondromatosis) · Chondrosarcoma (Mesenchymal chondrosarcoma, Myxoid chondrosarcoma)		
		Osteochondroma (Osteochondromatosis)		
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Epiphysis	<b>Fibrous</b>	Ossifying fibroma · Fibrosarcoma		
	<b>Chondroblast</b>	Chondroblastoma		
Other/ungrouped	<b>Myeloid</b>	Giant cell tumor of bone		
	<b>Notochord</b>	Chordoma		
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- EURAMOS - The European and American Osteosarcoma Study Group [↗](#)
- National Cancer Institute - patient information on osteosarcoma [↗](#)

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Metaphysis	<b>Osteoblast</b>	Osteoid osteoma · Osteoblastoma Osteoma/ <b>osteosarcoma</b>	
	<b>Chondroblast</b>	Chondroma/ecchondroma/enchondroma (Enchondromatosis) · Chondrosarcoma (Mesenchymal chondrosarcoma, Myxoid chondrosarcoma)	
		Osteochondroma (Osteochondromatosis)	
		Chondromyxoid fibroma	
<b>Fibrous</b>	Ossifying fibroma · Fibrosarcoma		
Epiphysis	<b>Chondroblast</b>	Chondroblastoma	
	<b>Myeloid</b>	Giant cell tumor of bone	
Other/ungrouped	<b>Notochord</b>	Chordoma	
M: BON/CAR	anat,(t,c,f,k,f,u,p,l)/phys /devp	noco/cong/tumr, sysi/ epon, injr	proc, drug(M5)

Categories: Cat diseases | Dog diseases | Skeletal disorders | Types of cancer | Sarcoma

more soon in ....

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