

Supplementary Table 1. Reports of spontaneously arising tumors in degus (*Octodon degus*) other than chordoma.

Type of tumors		
Epithelial	Mesenchymal	Round cell
Hepatocellular adenoma ¹⁰	Splenic hemangioma ⁷	Lymphoma ^{7,10}
Hepatocellular carcinoma ^{6,7}	Renal cavernous hemangioma ¹⁰	Melanoma ⁴
Biliary cystadenoma ¹⁰	Lipomas ^{7,10}	Malignant histiocytoma ⁴
Pulmonary adenocarcinoma ^{1,9}	Fibrosarcoma ^{2,4,10}	Reticulum cell sarcoma ⁷
Renal transitional cell carcinoma ⁵	Subcuticular myxosarcoma ¹⁰	
Parathyroid adenocarcinoma ⁹	Vaginal leiomyoma ⁴	
Oral squamous papilloma ¹⁰	Vaginal leiomyosarcoma ^{4,8}	
Squamous cell carcinoma ²	Uterine cavernous angioleiomyoma ³	
	Uterine leiomyosarcoma ¹⁰	
	Bladder leiomyosarcoma ¹⁰	
	Rhabdomyosarcoma ⁶	
	Femoral osteoma ¹⁰	
	Femoral osteosarcoma ¹⁰	

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Supplementary Table 2. Reports of spontaneously arising chordomas in non-human mammals.

Species	Breed/subspecies/strain	Age	Location of chordoma	No. of cases	Metastasis	Histologic subtype	Ref.
American mink (<i>Neovison vison</i>)		2.25 y	Thoracolumbar: vertebral canal at T14 and L1 (spinal cord not infiltrated)	1	None	NA‡	11
		4.75 y	Lumbar: presumed osseous mass involving the body and arches of L3 (spinal cord not infiltrated)	1	None	NA‡	11
Cat (<i>Felis catus</i>)	Domestic Shorthair	8 y	Cranial: skull base at the level of the basioccipital bone	1	None	CL	2
	Maine Coon	9 y	Cervical: within C2 vertebral body	1	None	NA*	12
	Domestic Shorthair	4 y	Cervical: deep intramuscular between the platysma and trapezius muscles lateral to C3-C4 on the left side of the neck	1	Prescapular lymph node, retropharyngeal lymph nodes	NA†	5
	Domestic Shorthair	14 y	Caudal: tip of the tail (distal part of last coccygeal vertebra)	1	None	CH	4
Degu (<i>Octodon degus</i>)		6 y	Caudal: base of the tail	1	NA	NA*	17
		8 y	Caudal: tip of the tail (last coccygeal vertebra)	1	None	CL	This study
		NA	NA	1	NA	NA	32
Dog (<i>Canis familiaris</i>)	Standard Dachshund	10 y	Cervical: extradural at the level of C3-C4 on the right side of the spinal canal	1	None	CH	26
	Belgian Shepherd	7 y	Cervical: intrameningeal and intramedullary at the level of C3	1	NA	CH	10
	Shetland Sheepdog	12 y	Cervical: spine at the level of C6-C7	1	NA	CH	30
	Doberman Pinscher	6 y	Caudal: Co2 within deep dermis and hypodermis	1	None	NA†	19

Coccygeal chordoma in a degu

Species	Breed/subspecies/strain	Age	Location of chordoma	No. of cases	Metastasis	Histologic subtype	Ref.
Ferret (<i>Mustela putorius furo</i>)		4 y	Cranio cervical: left cranial articular fovea of the atlas to mid-cervical region C4	1	Lungs	CH	9
		6.5 y	Caudal: base of the tail at the level of Co1	1	Skin (distant metastases)	NA‡	20
		$\bar{x}$ = 3.4 y	Caudal: tip of the tail	20	NA	CH (19) and NA (1)	7
		6 y	Caudal: tip of the tail	1	NA	CH	3
		4 y	Caudal: tip of the tail (last coccygeal vertebra)	1	None	CH	1
		3 y	Caudal: distal portion of the tail	1	None	CH	1
		>3 y	Caudal: near the end of the last coccygeal vertebra	5	None	NA‡	13
		3 y	Caudal: tip of the tail	1	NA	NA‡	6
		4 y	Caudal: tip of the tail	1	NA	NA‡	24
		3–5 y	Caudal: tip of the tail	6	None	CL	31
		5 y	Cervical: C1–C2 articular space	1	None	NA‡	29
		4 y	Cervical: ventral aspect of C2–C3	1	Skin adjacent to C2–C3	NA‡	29
		4 y	Cervical: at the level of C1 to C2	1	NA	NA	15
		3 y	Cervical: retropharyngeal region	1	None	NA‡	8
		Adult	Thoracic: T9–T10	1	NA	NA‡	21
		5 y	Caudal: tip of the tail	1	NA	CH	14
Oldfield mouse or beach mouse (<i>Peromyscus polionotus polionotus</i>)	Perdido Key beach mouse (<i>Peromyscus polionotus trissyllepsis</i>)	424–2,170 d ($\bar{x}$ = 1,399 d)	Vertebral column§:	38	Lungs (13)	CL (for primary tumors and metastases). Rare cases: CH	28
			cervical	5			
			thoracic	16			
			lumbar	13			
			sacral	10			
Norway rat (<i>Rattus norvegicus</i>)	Sprague-Dawley	617 d	Thoracolumbar: subcutaneous upper right thoracolumbar region	1	None	NA*	33

Coccygeal chordoma in a degu

Species	Breed/subspecies/strain	Age	Location of chordoma	No. of cases	Metastasis	Histologic subtype	Ref.
	Fischer 344	112 wk	Lumbar: ventral part of L5	1	NA	NA*	23
	Fischer 344	74–138 wk ($\bar{x}$ = 109 wk)	Vertebral column	31	Lungs (14)	CL (for primary tumors and metastases) except for 1 case‡	25
			Cranial	1			
			Lumbosacral	30			
	Fischer 344	2 y	Sacrococcygeal	1	NA	NA	22
	Fischer 344	97 wk	Sacrococcygeal	1	NA	NA‡	27
Sheep (<i>Ovis aries</i>)	Iranian fat-tailed	6 d	Cranial: deep dermis of the skin in the occipital region	1	None	CL	16
Tiger (<i>Panthera tigris</i>)	Bengal tiger (<i>Panthera tigris tigris</i>)	19 y	Thoracic: from the T7-T8 vertebral body to the left rib	1	None	CL	18

C = cervical vertebra; CH = chondroid; CL = classic; Co = coccygeal vertebra; d = days; L = lumbar vertebra; mo = months; NA = data not available; T = thoracic vertebra; wk = weeks; $\bar{x}$ = mean; y = years. Numbers in parentheses in metastasis or subtype columns indicate number of cases.

* Photographs and histologic description suggest a classic subtype.

† Interpreted as a classic subtype by Carminato et al. 2008.

‡ Photographs and histologic description suggest a chondroid subtype.

§ Ten mice had multiple primary chordomas at different locations: cervical and/or thoracic and/or lumbar and/or sacral.

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