

ST1 Mammal Leader Boards Top 20 Neoplasia

Species	common_name	Records With Denominators	Neoplasia With Denominators	Neoplasia Prevalence
Mustela putorius	Ferret	105	66	0.628571
Didelphis virginiana	Virginia opossum	27	15	0.555556
Panthera onca	Jaguar	22	10	0.454545
Atelerix albiventris	Four-toed hedgehog	147	66	0.44898
Elephas maximus	Asian elephant	22	9	0.409091
Petaurus breviceps	Pygmy sugar glider	30	12	0.4
Mus musculus	Common mouse	41	16	0.390244
Pan troglodytes	Chimpanzee	26	10	0.384615
Panthera uncia	Snow leopard	33	12	0.363636
Lycaon pictus	Cape hunting dog	58	20	0.344828
Species	common_name	Records With Denominators	Neoplasia With Denominators	Neoplasia Prevalence
Rattus norvegicus	Typical rat	354	122	0.344633
Canis lupus	Gray wolf	36	12	0.333333
Varecia variegata	Red/black ruffed lemur	48	16	0.333333
Vulpes zerda	Fennec fox	22	7	0.318182
Capra hircus	Domestic goat	117	37	0.316239

Ursus maritimus	Polar bear	26	8	0.307692
Puma concolor	Mountain lion	23	7	0.304348
Panthera pardus	Leopard	20	6	0.3
Lama glama	Llama	34	10	0.294118
Lemur catta	Ring-tailed lemur	95	27	0.284211

ST1 Bottom 20 Mammal Neoplasia

Species	common_name	RecordsWithDenominators	NeoplasiaWithDenominators	NeoplasiaPrevalence	StdErrorNeoplasia
Lemniscomys barbarus	Striped grass mouse	78	0	0	0.113228
Phocoena phocoena	Common porpoise	76	0	0	0.114708
Microtus agrestis	Common field vole	62	0	0	0.127
Pteropus rodricensis	Rodrigues fruit bat	61	0	0	0.128037
Heterocephalus glaber	Naked mole rat	145	2	0.013793	0.083045
Acrobates pygmaeus	Feathertail glider	43	0	0	0.152499
Saimiri boliviensis	Black-capped squirrel monkey	34	0	0	0.171499
Delphinus delphis	Common dolphin	31	0	0	0.179605
Pithecia pithecia	White-faced saki monkey	27	0	0	0.19245
Chrotopterus auritus	Vampire bat	48	1	0.020833	0.144338
Species	common_name	RecordsWithDenominators	NeoplasiaWithDenominators	NeoplasiaPrevalence	StdErrorNeoplasia
Phyllostomus discolor	Pale spear-nosed bat	23	0	0	0.208514
Macrotus californicus	California leaf-nosed bat	23	0	0	0.208514
Sciurus carolinensis	Grey squirrel	21	0	0	0.218218

Mico Argentatus	Silvery marmoset	20	0	0	0.223607
Macropus eugenii	Tammar wallaby	41	1	0.02439	0.156174
Capra nubiana	Nubian ibex	35	1	0.028571	0.169031
Saguinus imperator	Emperor tamarins	35	1	0.028571	0.169031
Cebuella pygmaea	Pygmy marmoset	64	2	0.03125	0.125
Eidolon helvum	Straw- colored fruit bat	31	1	0.032258	0.179605
Muscardin us avellanari us	Common dormouse	52	2	0.038462	0.138675

ST1 Top 20 Mammal Malignancy

Species	common_name	Records With Denominators	Malignancy Known	Malignant	Malignancy Prevalence
Didelphis virginiana	Virginia opossum	27	20	14	0.518519
Mustela putorius	Ferret	105	79	43	0.409524
Panthera onca	Jaguar	22	12	9	0.409091
Atelerix albiventris	Four-toed hedgehog	147	69	52	0.353742
Panthera uncia	Snow leopard	33	12	10	0.30303
Petaurus breviceps	Pygmy sugar glider	30	13	9	0.3
Vulpes zerda	Fennec fox	22	10	6	0.272727
Mus musculus	Common mouse	41	36	11	0.268293
Puma concolor	Mountain lion	23	7	6	0.26087
Canis lupus	Gray wolf	36	27	9	0.25
Species	common_name	Records With Denominators	Malignancy Known	Malignant	Malignancy Prevalence
Phascolarctos cinereus	Koala	84	22	21	0.25
Lemur catta	Ring-tailed lemur	95	32	22	0.231579
Varecia variegata	Red/black ruffed lemur	48	16	11	0.229167
Lycaon pictus	Cape hunting dog	58	18	13	0.224138
Ursus maritimus	Polar bear	26	8	5	0.192308

Didelphis marsupialis	Opposum	69	19	13	0.188406
Ovis aries	Sheep	87	24	16	0.183908
Panthera tigris	White bengal tiger	71	19	12	0.169014
Cynomys ludovicianus	Gunnison prairie dog	137	39	23	0.167883
Octodon degus	Degu	25	31	4	0.16

ST1 Bottom 20 Mammal Malignancy

Species	common_name	Records With Denominators	Malignancy Known	Malignant	Malignancy Prevalence	StdErrorMal
Heterocephalus glaber	Naked mole rat	145	7	1	0.006897	0.083045
Lemniscomys barbarus	Striped grass mouse	78	0	0	0	0.113228
Phocoena phocoena	Common porpoise	76	0	0	0	0.114708
Cebuella pygmaea	Pygmy marmoset	64	0	0	0	0.125
Microtus agrestis	Common field vole	62	0	0	0	0.127
Pteropus rodricensis	Rodrigues fruit bat	61	0	0	0	0.128037
Muscardinus avellanarius	Common dormouse	52	0	0	0	0.138675
Chrotopterus auritus	Vampire bat	48	0	0	0	0.144338
Tragelaphus strepsiceros	Kudu	48	0	0	0	0.144338
Acrobates pygmaeus	Feathertail glider	43	0	0	0	0.152499
Species	common_name	Records With Denominators	Malignancy Known	Malignant	Malignancy Prevalence	StdErrorMal
Heterocephalus glaber	Naked mole rat	145	7	1	0.006897	0.083045
Lemniscomys barbarus	Striped grass mouse	78	0	0	0	0.113228
Phocoena phocoena	Common porpoise	76	0	0	0	0.114708

Cebuella pygmaea	Pygmy marmoset	64	0	0	0	0.125
Microtus agrestis	Common field vole	62	0	0	0	0.127
Pteropus rodricensis	Rodrigues fruit bat	61	0	0	0	0.128037
Muscardin us avellanari us	Common dormouse	52	0	0	0	0.138675
Chrotopter us auritus	Vampire bat	48	0	0	0	0.144338
Tragelaph us strepsicero s	Kudu	48	0	0	0	0.144338
Acrobates pygmaeus	Feathertail glider	43	0	0	0	0.152499

ST2 All Species Top 20 Neoplasia

Species	Common Name	Records with Denominators	Neoplasia with Denominators	Neoplasia Prevalence
Mustela_putorius	Ferret	105	66	62.86%
Leptodactylus_fallax	Dominican mountain chicken frog	24	11	45.83%
Panthera_onca	Jaguar	22	10	45.45%
Atelerix_albiventris	Four-toed hedgehog	147	66	44.90%
Elephas_maximus	Asian elephant	22	9	40.91%
Petaurus_breviceps	Pygmy sugar glider	30	12	40.00%
Lampropeltis_triangulum	Milk snake	46	18	39.13%
Mus_musculus	Common mouse	41	16	39.02%
Pan_troglodytes	Chimpanzee	26	10	38.46%
Panthera_uncia	Snow leopard	33	12	36.36%
Species	Common Name	Records with Denominators	Neoplasia with Denominators	Neoplasia Prevalence
Pituophis_catenifer	Albino bull snake	25	9	36.00%
Didelphis_marsupialis	Opossum	96	34	35.42%
Lycaon_pictus	Cape hunting dog	58	20	34.48%
Rattus_norvegicus	Brown rat	354	122	34.46%

Pantherop his_guttatu s	Corn snake	67	23	34.33%
Canis_lup us	Gray wolf	36	12	33.33%
Lampropel tis_getula	Lampropel tis getula	33	11	33.33%
Varecia_v ariegata	Red/black ruffed lemur	48	16	33.33%
Python_bi vittatus	Indian rock python	24	8	33.33%
Vulpes_ze rda	Fennec fox	22	7	31.82%

ST2 All Species 86 Zero Neoplasia

Species	common_name	Records with Denominators	Neoplasia with Denominators	Neoplasia Prevalence	Std Error of Neoplasia Prevalence
Alytes muletensis	Mallorcan midwife toad	216	0	0	6.80%
Spheniscus demersus	Black-footed penguin	210	0	0	6.90%
Lophura edwardsi	Superb fruit dove	110	0	0	9.53%
Chelodina mccordi	Mccords snake-necked turtle	96	0	0	10.21%
Pitta sordida	Hooded pitta	89	0	0	10.60%
Rollulus rouloul	Roul roul	80	0	0	11.18%
Trichoglossus moluccanus	Rainbow lorikeets	80	0	0	11.18%
Ctenosaura bakeri	Bakers spiny tail iguana	80	0	0	11.18%
Lemniscomys barbarus	Striped grass mouse	78	0	0	11.32%
Phocoena phocoena	Common porpoise	76	0	0	11.47%
Rana temporaria	Common frog	73	0	0	11.70%
Theristicus melanopis	Black faced ibis	72	0	0	11.79%
Phyllomedusa bicolor	Giant waxy tree frog	70	0	0	11.95%

Xenopus longipes	Lake oku clawed frog	67	0	0	12.22%
Threskiornis aethiopicus	Sacred ibis	66	0	0	12.31%
Microtus agrestis	Common field vole	62	0	0	12.70%
Geokichla citrina	Orange headed ground thrush	61	0	0	12.80%
Pteropus rodricensis	Rodrigues fruit bat	61	0	0	12.80%
Copsychus malabaricus	Common shama	59	0	0	13.02%
Erpeton tentaculatum	Tentacled snake	56	0	0	13.36%
Phrynosoma asio	Giant horned lizard	51	0	0	14.00%
Phyllobates bicolor	Bi-colour poison dart frog	50	0	0	14.14%
Ptilinopus superbus	Mount apo lorikeet	48	0	0	14.43%
Chalcophaps indica	Emerald dove	48	0	0	14.43%
Crex crex	Corncrake	47	0	0	14.59%
Fringilla coelebs	Chaffinch	45	0	0	14.91%
Anas formosa	Baikal teal	43	0	0	15.25%
Acrobates pygmaeus	Feathertail glider	43	0	0	15.25%
Anomaloglossus beebei	Beebe's rocket frog	42	0	0	15.43%
Tylototriton shanjing	Emperor newt	42	0	0	15.43%
Tadorna radjah	Radjah shelduck	41	0	0	15.62%
Ciconia ciconia	Abdims stork	41	0	0	15.62%

Gonocephalus chamaeleontinus	Chameleon forest dragon	40	0	0	15.81%
Typhlonectes natans	Rio couca caecilian	40	0	0	15.81%
Ascaphus truei	Coastal tailed frog	39	0	0	16.01%
Lithobates sevosus	Mississippi gopher frog	39	0	0	16.01%
Bufo bufo	Common toad	38	0	0	16.22%
Phyllobates terribilis	Golden poison arrow frog	37	0	0	16.44%
Milvus milvus	Red kite	36	0	0	16.67%
Euphonia violacea	Euphonia violacea	35	0	0	16.90%
Chalcomitra senegalensis	Scarlet breasted sunbird	34	0	0	17.15%
Testudo kleinmanni	Egyptian tortoise	34	0	0	17.15%
Saimiri boliviensis	Black-capped squirrel monkey	34	0	0	17.15%
Calumma parsonii	Parsons chameleon	33	0	0	17.41%
Crotalus polystictus	Crotalus polystictus	33	0	0	17.41%
Chlamydosaurus kingii	Frilled dragon	32	0	0	17.68%
Ploceus cucullatus	Village weaver	32	0	0	17.68%
Lophodytes cucullatus	Hooded merganser	31	0	0	17.96%
Delphinus delphis	Common dolphin	31	0	0	17.96%
Bubulcus ibis	Cattle egret	30	0	0	18.26%
Notophthalmus perstriatus	Striped newt	30	0	0	18.26%
Cygnus cygnus	Whooper swan	29	0	0	18.57%
Naja annulifera	Egyptian snouted cobra	29	0	0	18.57%
Uraeginthus bengalus	Red cheeked cordon bleu	28	0	0	18.90%

Goura victoria	Victoria crowned pigeon	28	0	0	18.90%
Egretta garzetta	Little egret	28	0	0	18.90%
Uraeginthus cyanocephalus	Blue_capped cordonbleu	27	0	0	19.25%
Ptilinopus melanospilus	Black naped fruit dove	27	0	0	19.25%
Pithecia pithecia	White-faced saki monkey	27	0	0	19.25%
Gopherus agassizii	Agassiz's desert tortoise	27	0	0	19.25%
Branta ruficollis	Red-breasted goose	23	0	0	20.85%
Macrotus californicus	California leaf-nosed bat	23	0	0	20.85%
Rhynchopsitta pachyrhyncha	Thick-billed parrot	23	0	0	20.85%
Anurolimnas fasciatus	Black_banded crake	23	0	0	20.85%
Megophrys nasuta	Asian horned frog	23	0	0	20.85%
Tribolonotus pseudoponcelleti	False poncellet's helmet skink	23	0	0	20.85%
Cossypha polioptera	Grey_winged robin_chat	22	0	0	21.32%
Musophaga violacea	Violet plaitain eater	22	0	0	21.32%
Eudromia elegans	Elegant crested tinamou	22	0	0	21.32%
Anthraceroceros malayanus	Black hornbill	22	0	0	21.32%
Phelsuma standingi	Standings day gecko	22	0	0	21.32%
Basiliscus plumifrons	Plumed basilisk	22	0	0	21.32%
Lorius lory	Black_capped lory	22	0	0	21.32%
Paleosuchus palpebrosus	Dwarf caiman	22	0	0	21.32%
Aratinga solstitialis	Sun parakeet	21	0	0	21.82%
Guiraca guiraca	Guiraca cuckoo	21	0	0	21.82%
Eurypyga helias	Sun bittern	21	0	0	21.82%
Sciurus carolinensis	Grey squirrel	21	0	0	21.82%
Sicalis flaveola	Saffron finch	20	0	0	22.36%
Ptilinopus jambu	Jambu fruit_dove	20	0	0	22.36%
Gallicolumba luzonica	Bleeding heart dove	20	0	0	22.36%
Agama agama	Red headed rock agama	20	0	0	22.36%
Lorius garrulus	Chattering lory	20	0	0	22.36%

Incilius coniferus	Green climbing toad	20	0	0	22.36%
Mico Argentatus	Silvery marmoset	20	0	0	22.36%
Uromastix geyri	Dabb lizard	20	0	0	22.36%

ST2 All Species Top 20 Malignancy

Species	common_name	Records with Denominators	Malignant	Malignancy Prevalence
Didelphis virginiana	Virginia opossum	27	14	52%
Mustela putorius	Ferret	105	43	41%
Panthera onca	Jaguar	22	9	41%
Atelerix albiventris	Four-toed hedgehog	147	52	35%
Lampropeltis triangulum	Milk snake	46	16	35%
Lampropeltis getula	King snake	33	11	33%
Leptodactylus fallax	Dominican mountain chicken frog	24	8	33%
Pituophis catenifer	Albino bull snake	25	8	32%
Panthera uncia	Snow leopard	33	10	30%
Petaurus breviceps	Pygmy sugar glider	30	9	30%
Vulpes zerda	Fennec fox	22	6	27%
Mus musculus	Common mouse	41	11	27%
Puma concolor	Mountain lion	23	6	26%
Phascolarctos cinereus	Koala	84	21	25%
Canis lupus	Gray wolf	36	9	25%
Pantherophis guttatus	Corn snake	67	16	24%

Lemur catta	Ring-tailed lemur	95	22	23%
Varecia variegata	Red/black ruffed lemur	48	11	23%
Gallus gallus	Domestic chicken	272	62	23%
Lycaon pictus	Cape hunting dog	58	13	22%

ST2 All Species 133 Zero Malignancy

Species	common_name	Records With Denominators	Malignancy Known	Malignant	Malignancy Prevalence	Std Error Mal
Mantella aurantiaca	Golden mantella	304	2	0	0	5.74%
Alytes muletensis	Mallorcan midwife toad	216	0	0	0	6.80%
Spheniscus demersus	Black-footed penguin	210	0	0	0	6.90%
Lophura edwardsi	Superb fruit dove	110	0	0	0	9.53%
Agapornis nigrigenis	Black-cheeked lovebird	108	2	0	0	9.62%
Eudocimus ruber	Scarlet ibis	105	3	0	0	9.76%
Chelodina mccordi	Mccords snake-necked turtle	96	0	0	0	10.21%
Pitta sordida	Hooded pitta	89	0	0	0	10.60%
Chamaeleo calyptratus	Veiled chameleon	87	7	0	0	10.72%
Rollulus rouloul	Roul roul	80	0	0	0	11.18%
Trichoglossus moluccanus	Rainbow lorikeet	80	0	0	0	11.18%
Ctenosaura bakeri	Bakers spiny tail iguana	80	0	0	0	11.18%
Lemniscomys barbarus	Striped grass mouse	78	0	0	0	11.32%
Phocoena phocoena	Common porpoise	76	0	0	0	11.47%
Rana sierrae	Sierra nevada yellow-legged frog	76	1	0	0	11.47%
Rana temporaria	Common frog	73	0	0	0	11.70%
Theristicus melanopis	Black faced ibis	72	0	0	0	11.79%
Phyllomedusa bicolor	Giant waxy tree frog	70	0	0	0	11.95%
Xenopus longipes	Lake oku clawed frog	67	0	0	0	12.22%
Threskiornis aethiopicus	Sacred ibis	66	0	0	0	12.31%

Cebuella pygmaea	Pygmy marmoset	64	2	0	0	12.50%
Microtus agrestis	Common field vole	62	0	0	0	12.70%
Geokichla citrina	Orange headed ground thrush	61	0	0	0	12.80%
Pteropus rodricensis	Rodrigues fruit bat	61	0	0	0	12.80%
Eos bornea	Red lory	60	0	0	0	12.91%
Copsychus malabaricus	Common shama	59	0	0	0	13.02%
Erpeton tentaculatum	Tentacled snake	56	0	0	0	13.36%
Columba livia	Domestic pigeon	55	1	0	0	13.48%
Muscardinus avellanarius	Common dormouse	52	2	0	0	13.87%
Phrynosoma asio	Giant horned lizard	51	0	0	0	14.00%
Phyllobates bicolor	Bi-colour poison dart frog	50	0	0	0	14.14%
Chrotopterus auritus	Vampire bat	48	1	0	0	14.43%
Ptilinopus superbis	Mount apo lorikeet	48	0	0	0	14.43%
Chalcophaps indica	Emerald dove	48	0	0	0	14.43%
Tragelaphus strepsiceros	Kudu	48	2	0	0	14.43%
Crex crex	Corncrake	47	0	0	0	14.59%
Fringilla coelebs	Chaffinch	45	0	0	0	14.91%
Anas formosa	Baikal teal	43	0	0	0	15.25%
Acrobates pygmaeus	Feathertail glider	43	0	0	0	15.25%
Dacnis lineata	Dacnis lineata	42	2	0	0	15.43%
Leiothrix lutea	Pekin robin	42	1	0	0	15.43%
Anomalobates beebei	Beebe's rocket frog	42	0	0	0	15.43%
Tylototriton shanjing	Emperor newt	42	0	0	0	15.43%
Tadorna radjah	Radjah shelduck	41	0	0	0	15.62%

Ciconia ciconia	Abdims stork	41	0	0	0	15.62%
Gonocephalus chamaeleontinus	Chameleon forest dragon	40	9	0	0	15.81%
Typhlonectes natans	Rio couca caecilian	40	0	0	0	15.81%
Ascaphus truei	Coastal tailed frog	39	0	0	0	16.01%
Lithobates sevosus	Mississippi gopher frog	39	0	0	0	16.01%
Bufo bufo	Common toad	38	0	0	0	16.22%
Colius striatus	Speckled mousebird	37	3	0	0	16.44%
Lithobates catesbeianus	American bullfrog	37	6	0	0	16.44%
Phyllobates terribilis	Golden poison arrow frog	37	0	0	0	16.44%
Milvus milvus	Red kite	36	0	0	0	16.67%
Euphonia violacea	Euphonia violacea	35	0	0	0	16.90%
Capra nubiana	Nubian ibex	35	1	0	0	16.90%
Chalcomitra senegalensis	Scarlet breasted sunbird	34	0	0	0	17.15%
Paroaria coronata	Red-crested cardinal	34	1	0	0	17.15%
Testudo kleinmanni	Egyptian tortoise	34	0	0	0	17.15%
Saimiri boliviensis	Black-capped squirrel monkey	34	0	0	0	17.15%
Calumma parsonii	Parsons chameleon	33	0	0	0	17.41%
Crotalus polystictus	Crotalus polystictus	33	5	0	0	17.41%
Taeniopygia bichenovii	Double_barr ed finch	32	1	0	0	17.68%
Chlamydosaurus kingii	Friiled dragon	32	0	0	0	17.68%
Ploceus cucullatus	Village weaver	32	0	0	0	17.68%
Iguana iguana	Green iguana	32	1	0	0	17.68%

Euplectes nigroventris	Zanzibar bishop	31	0	0	0	17.96%
Lophodytes cucullatus	Hooded merganser	31	0	0	0	17.96%
Platalea ajaja	Ajaia ajaja	31	9	0	0	17.96%
Pavo cristatus	Blue peafowl	31	1	0	0	17.96%
Delphinus delphis	Common dolphin	31	0	0	0	17.96%
Bubulcus ibis	Cattle egret	30	0	0	0	18.26%
Ovis canadensis	Big horn sheep	30	1	0	0	18.26%
Notophthalmus perstriatus	Striped newt	30	0	0	0	18.26%
Coracias cyanogaster	Blue-bellied roller	29	1	0	0	18.57%
Taeniopygia guttata	Timor zebra finch	29	1	0	0	18.57%
Cygnus cygnus	Whooper swan	29	0	0	0	18.57%
Naja annulifera	Egyptian snouted cobra	29	0	0	0	18.57%
Uraeginthus bengalus	Red cheeked cordon bleu	28	0	0	0	18.90%
Goura victoria	Victoria crowned pigeon	28	0	0	0	18.90%
Egretta garzetta	Little egret	28	0	0	0	18.90%
Leptodactylus pentadactylus	Smoky jungle frog	28	1	0	0	18.90%
Uraeginthus cyanocephalus	Blue_capped cordonbleu	27	0	0	0	19.25%
Ptilinopus melanospilus	Black naped fruit dove	27	0	0	0	19.25%
Pithecia pithecia	White-faced saki monkey	27	0	0	0	19.25%
Gopherus agassizii	Agassiz's desert tortoise	27	0	0	0	19.25%
Ceratophrys omata	Bell'shorned frog	27	5	0	0	19.25%

Vini australis	Blue crowned lory	27	0	0	0	19.25%
Thraupis episcopus	Blue_gray tanager	26	1	0	0	19.61%
Alytes cisternasii	Iberian midwife toad	26	0	0	0	19.61%
Callipepla gambelii	Gambel's quail	25	1	0	0	20.00%
Macaca nigra	Sulawesi crested macaque	25	1	0	0	20.00%
Tauraco erythrolophus	Red crested turaco	24	0	0	0	20.41%
Chelus fimbriatus	Mata mata	24	1	0	0	20.41%
Cnemidophorus uniparens	Cnemidophorus uniparens	24	0	0	0	20.41%
Langaha madagascariensis	Langaha madagascariensis	24	0	0	0	20.41%
Ramphocelus carbo	Silver_beaked tanager	23	0	0	0	20.85%
Phyllostomus discolor	Pale spear-nosed bat	23	0	0	0	20.85%
Lamprotornis splendidus	Splendid glossy_starling	23	0	0	0	20.85%
Branta ruficollis	Red-breasted goose	23	0	0	0	20.85%
Macrotus californicus	California leaf-nosed bat	23	0	0	0	20.85%
Rhynchopsitta pachyrhynchos	Thick-billed parrot	23	0	0	0	20.85%
Varanus salvadorii	Varanus salvadorii	23	0	0	0	20.85%
Anurolimnas fasciatus	Black_banded crake	23	0	0	0	20.85%
Geotrypetes seraphini	Gaboon caecilian	23	1	0	0	20.85%
Megophrys nasuta	Asian horned frog	23	0	0	0	20.85%
Tribolonotus pseudoponceleti	False poncelet's helmet skink	23	0	0	0	20.85%
Cossypho polioptera	Grey_winged robin_chat	22	0	0	0	21.32%

Musophaga violacea	Violet plaitain eater	22	0	0	0	21.32%
Eudromia elegans	Elegant crested tinamou	22	10	0	0	21.32%
Anthracos malayanus	Black hornbill	22	0	0	0	21.32%
Phelsuma standingi	Standings day gecko	22	0	0	0	21.32%
Basiliscus plumifrons	Plumed basilik	22	0	0	0	21.32%
Lorius lory	Black_cappe d lory	22	0	0	0	21.32%
Paleosuchus palpebrosus	Dwarf caimen	22	0	0	0	21.32%
Columba hodgsonii	Speckled wood_pigeon	22	0	0	0	21.32%
Dendropsopus ebraccatus	Hourglass treefrog	22	1	0	0	21.32%
Aratinga solstitialis	Sun parakeet	21	0	0	0	21.82%
Guira guira	Guira cuckoo	21	0	0	0	21.82%
Eurypyga helias	Sun bittern	21	0	0	0	21.82%
Sciurus carolinensis	Grey squirrel	21	11	0	0	21.82%
Sicalis flaveola	Saffron finch	20	0	0	0	22.36%
Ptilinopus jambu	Jambu fruit_dove	20	0	0	0	22.36%
Gallicolumba luzonica	Bleeding heart dove	20	0	0	0	22.36%
Scopus umbretta	Hammerkop	20	1	0	0	22.36%
Agama agama	Red headed rock agama	20	0	0	0	22.36%

Tympanuchus cupido	Greater prairie-chicken	20	1	0	0	22.36%
Lorius garrulus	Chattering lory	20	0	0	0	22.36%
Haliaeetus leucocephalus	Bald eagle	20	4	0	0	22.36%
Cacatua moluccensis	Salmon-crested cockatoo	20	2	0	0	22.36%
Incilius coniferus	Green climbing toad	20	0	0	0	22.36%
Mico Argentatus	Silvery marmoset	20	0	0	0	22.36%
Uromastyx geyri	Dabb lizard	20	0	0	0	22.36%

ST3 Types Malignant

Common Name	Species	Top Location	Type	Location Proportion	Type Proportion
opossum	Didelphis marsupialis	Respiratory	adenocarcinoma	46%	38%
ferret	Mustela putorius	Systemic	Lymphoma	45%	45%
jaguar	Panthera onca	Gastrointestinal	adenocarcinoma	36%	45%
hedgehog	Atelerix albiventris	Gastrointestinal	Carcinoma	27%	42%
milk snake	Lampropeltis triangulum	Reproductive	adenocarcinoma	38%	69%
king snake	Lampropeltis getula	reproductive	adenocarcinoma	41%	41%
Albino bull snake	Pituophis catenifer	Gastrointestinal	sarcoma	42%	42%
Snow leopard	Panthera uncia	Endocrine	carcinoma	45%	36%
Pygmy Sugar Glider	Petaurus breviceps	Gastrointestinal	carcinoma	57%	57%

ST3 Types Benign. NA's are where pathologist did not provide any further designation as to type or location.

Common Name	Species	Top Location	Type	Location Proportion	Type Proportion
opossum	Didelphis marsupialis	Respiratory	adenoma	17%	17%
ferret	Mustela putorius	endocrine	insulinoma	18%	34%
jaguar	Panthera onca	Mesenchymal	neoplasia	22%	55%
hedgehog	Atelerix albiventris	gastrointestinal	NA	8%	NA
Elephas maximus	Elephas maximus	NA	NA	NA	NA
Pygmy Sugar Glider	Petaurus breviceps	gastrointestinal	adenoma	20%	20%
Milk snake	Lampropeltis triangulum	gastrointestinal	NA	9%	NA
Common mouse	Mus musculus	NA	hyperplasia	14%	35%
Chimpanzee	Pan troglodytes	gastrointestinal	hyperplasia	23%	23%

ST4 EvoModelSelection Neoplasia

Clade	Model	SigmaSquared (Evolutionary Rate)	AIC
Mammals	Orstein-Uhlenbeck	0.033	-22.66
Mammals	Brownian Motion	0.002	32.69
Mammals	Early Burst	0.002	34.69
Sauropsids	Orstein-Uhlenbeck	0.0004	-344.36
Sauropsids	Brownian Motion	0.0002	-286.92
Sauropsids	Early Burst	0.0002	-284.91
Amphibians	Orstein-Uhlenbeck	0.0009	-87.87
Amphibians	Brownian Motion	0.0002	-48.09
Amphibians	Early Burst	0.0002	-46.08

ST4 EvoModelSelection Malignancy

Clade	Model	SigmaSquared (Evolutionary Rate)	AIC
Mammals	Orstein-Uhlenbeck	0.0494	-176.47
Mammals	Brownian Motion	0.0009	-60.84
Mammals	Early Burst	0.009	-58.84
Sauropsids	Orstein-Uhlenbeck	0.0002	-435.21
Sauropsids	Brownian Motion	0.00009	-385.98
Sauropsids	Early Burst	0.00009	-383.98
Amphibians	Orstein-Uhlenbeck	0.0007	-114.23
Amphibians	Brownian Motion	0.0001	-69.3
Amphibians	Early Burst	0.0001	-67.3

ST5 Diagnosis Data Dictionary

Classification	Location	LocationExpr	Benign	BenignExpr	Malignant
Mesenchyma	fibrous		fibroma		fibrosarcoma
			hamartoma		
			sarcoids		
		myxomatous tissue	myxoma		myxosarcoma
		fat	fat adipose.* lipoma		liposarcoma
		notochord	chordoma		chordoma
		smooth muscle	leiomyoma		leiomyosarcoma
		striated muscle	muscle .*striated rhabdomyoma		rhabdomyosarcoma
		peripheral nerve	Peripheral nerve schwannoma		schwannoma
			neurilemmoma		
Bone	blood	Blood(vessel	hemangioma		hemangiosarcoma
	cartilage		chondroma		chondrosarcoma
	synovium		synovial myxoma		synovial cell sarcoma
			periarticular fibroma		
Round Cell	bone	sacrum bone	osteoma		osteosarcoma
	bone marrow	bone marrow			leukemia
	lymph nodes	Lymph.*(ves	thymoma		lymphoma
					lymphosarcoma
					plasmacytoma
					multiple myeloma
			lymphangioma		lymphangiosarcoma
	spleen				
	mast cell				sarcoma
					mastocytosis
Epithelial	dendritic cell		histiocytoma		mastocytoma
			chromatophoroma		histiocytic sarcoma
	pigment cell		melanocytoma		melanoma
			melanoma		melanosarcoma
			melanophoroma		
			iridophoroma		iridophoroma
			erythrophoroma		erythrophoroma
			xanthophoroma		xanthophoroma
			chromatophoroma		chromatophoroma
	skin	skin eyelid (	papilloma		carcinoma
Mammary	hair follicle	Hair(follicles	trichoepithelioma		trichoepithelioma
			trichoblastoma		
	gland		adenoma		adenocarcinoma
Nervous	mammary	mammary(gl	adenoma		adenocarcinoma
	glial cell		glioma		glioma

	meninges		meningioma	meningioma
	nerve cell	nerv(e ous)	ganglioneuroma	glioblastoma neuroblastoma medulloblastoma neurofibrosarcoma astrocytoma
	pnet	pnet neuroe	neurofibroma	
	neuroepithelial		astrocytoma	
	spinal cord	spinal spine		
	brain			
Endocrine	pituitary gland		adenoma	carcinoma
	parathyroid gland		adenoma	carcinoma
	thyroid		adenoma	carcinoma
	adrenal medulla	adrenal corti	pheochromocytoma	pheochromocytoma
			adenoma	carcinoma
	adrenal cortex		adenoma	carcinoma
	pancreas	pancreas.* is	adenoma	carcinoma
			insulinoma	
			glucogonoma	glucogonoma
	stomach		carcinoid	carcinoid
	carotid body	Carotid(body	chemodectoma	
			paraganglioma	
	neuroendocrine	neuroendocrine	Carcinoid	paraganglioma Carcinoid
Reproductive	testis	test(i e).*(S	seminoma	seminoma
			teratoma	teratoma
	prostate	prostat(ic e)	adenoma	carcinoma
	ovary	ovar.* (gran	dysgerminoma	dysgerminoma teratocarcinoma choriocarcinoma
	vulva	vulva vagina		
	uterus	uter.*	papilloma	carcinoma
			adenoma	adenocarcinoma
	kidney	kidney.* ren	adenoma	carcinoma
			nephroblastoma	nephroblastoma hypernephroma
Urinary	oviduct	oviduct	adenoma	carcinoma
	bladder	bladder uret	adenoma	carcinoma
			papilloma	
			fibroma	
			fibroma	
			papilloma	

Gastrointestinal	liver	hepa.* liver.ʹ	adenoma	carcinoma
			hepatoma	hepatoma
	bile duct	bile.* biliary	adenoma	cholangiocarcinoma
			cystadenoma	carcinoma
				cystadenocarcinoma
	gall bladder	gall bladder	adenoma	carcinoma
			papilloma	
	stomach		adenoma	adenocarcinoma
			papilloma	carcinoma
	small intestine (small)?	intes	adenoma	adenocarcinoma
			papilloma	carcinoma
	colon	Large intestine	adenoma	adenocarcinoma
			papilloma	carcinoma
	esophagus	esophag(us i	adenoma	adenocarcinoma
			papilloma	carcinoma
Eye	oral	oral tongue	papilloma	carcinoma
			melanoma	melanoma
			fibromatous epulis	ameloblastoma
			ameloblastoma	odontogenic
			odontoma	
	duodenum	duodenum		
	iris		melanoma	melanoma
				carcinoma
				adenocarcinoma
	pupil	pupil papillar	adenoma	carcinoma
Respiratory	larynx		adenoma	adenocarcinoma
			papilloma	carcinoma
	trachea		adenoma	adenocarcinoma
			papilloma	
	lung	lung.* pulm.ʹ	adenoma	adenocarcinoma
				carcinoma
	nose	nose sinus n	papilloma	adenocarcinoma
				carcinoma
Mesothelium	transitional e	Transitional e	papilloma	carcinoma
	mesothelium		mesothelioma	mesothelioma
Cardiac	heart	heart cardiac atrial		
Other	widespread	widespread metastatic body as a whole multiple disseminated		
	abdomen	abdom(e i).* omentum diaphragm chest sternal		carinomatosis
				fibroadenocarcinoma
			fibropapilloma	

fibropapillomatosis

chromatophroma

cyst

epithelioma

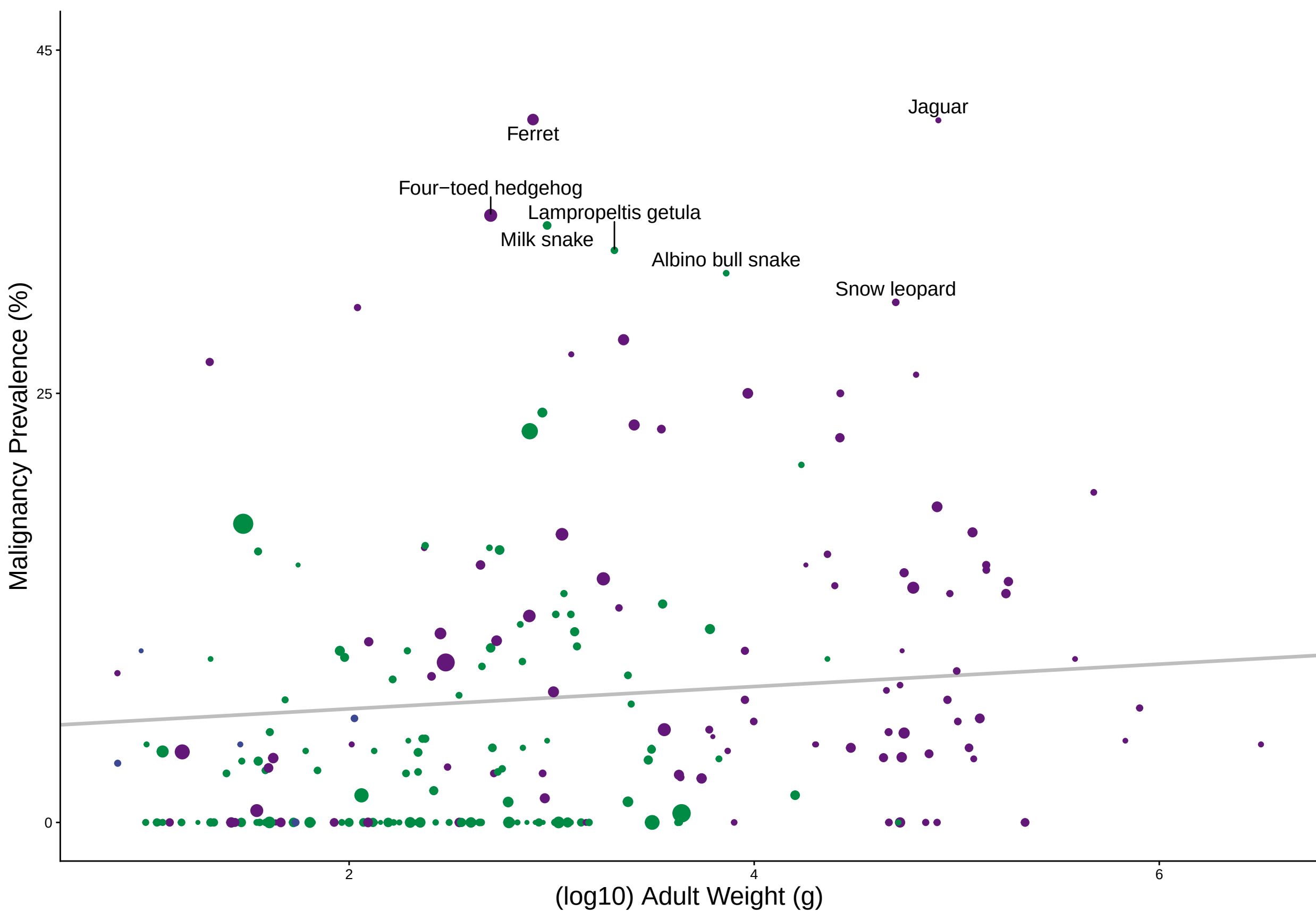
hyperplasia (meta|dys|hyper)plas(ia|tic)

neoplasia neoplas(ia|m)|cancer|tumor

polyp

S1 Malignancy Prevalence vs. Adult Weight

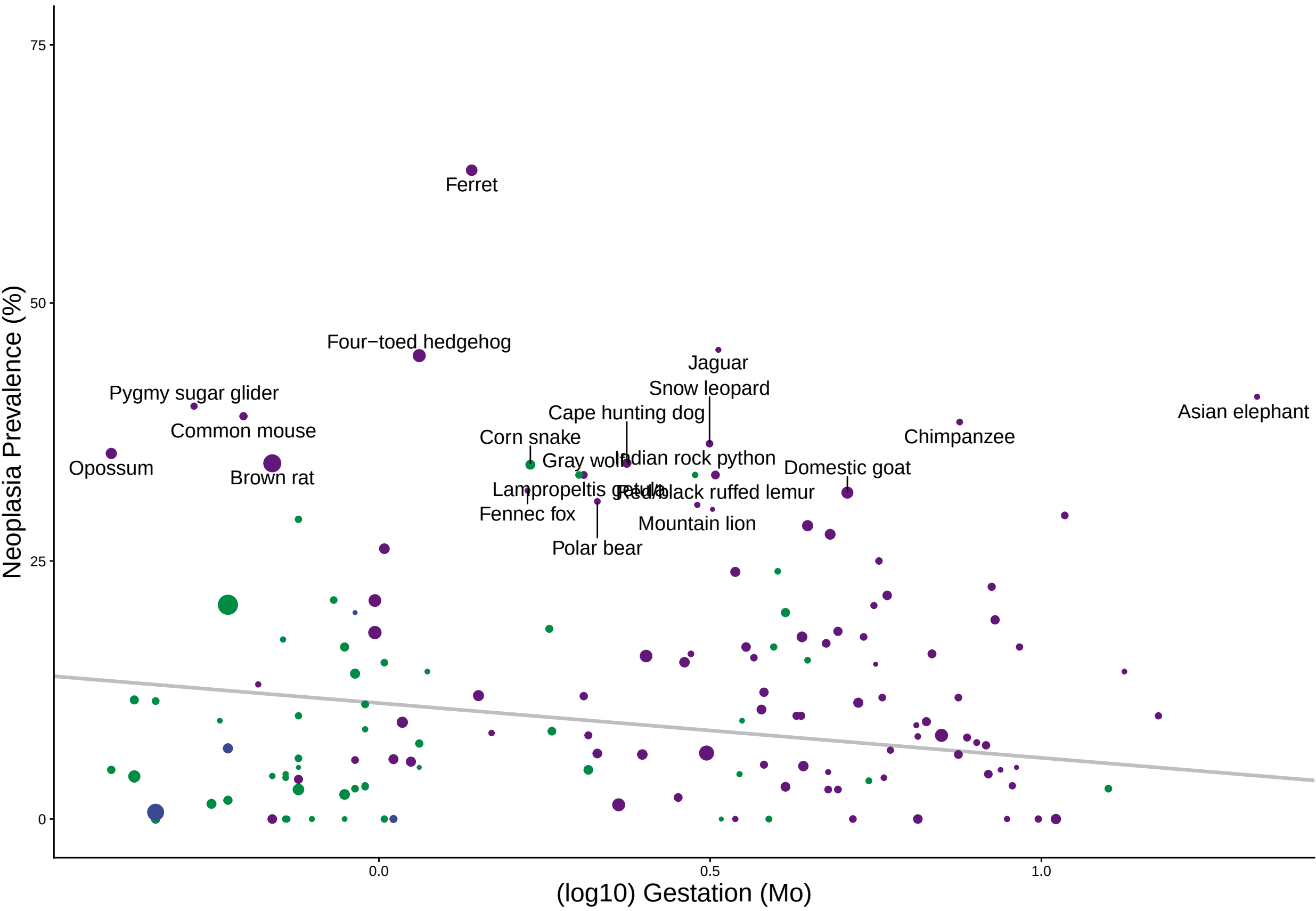
p-value : 0.287 R^2 : 0.13 Δ : 0.61



Clade ● Mammalia ● Sauropsida ● Amphibia Total Necropsies ● 20 ● 100 ● 200 ● 300 ● 477

S2 Neoplasia Prevalence vs. Gestation

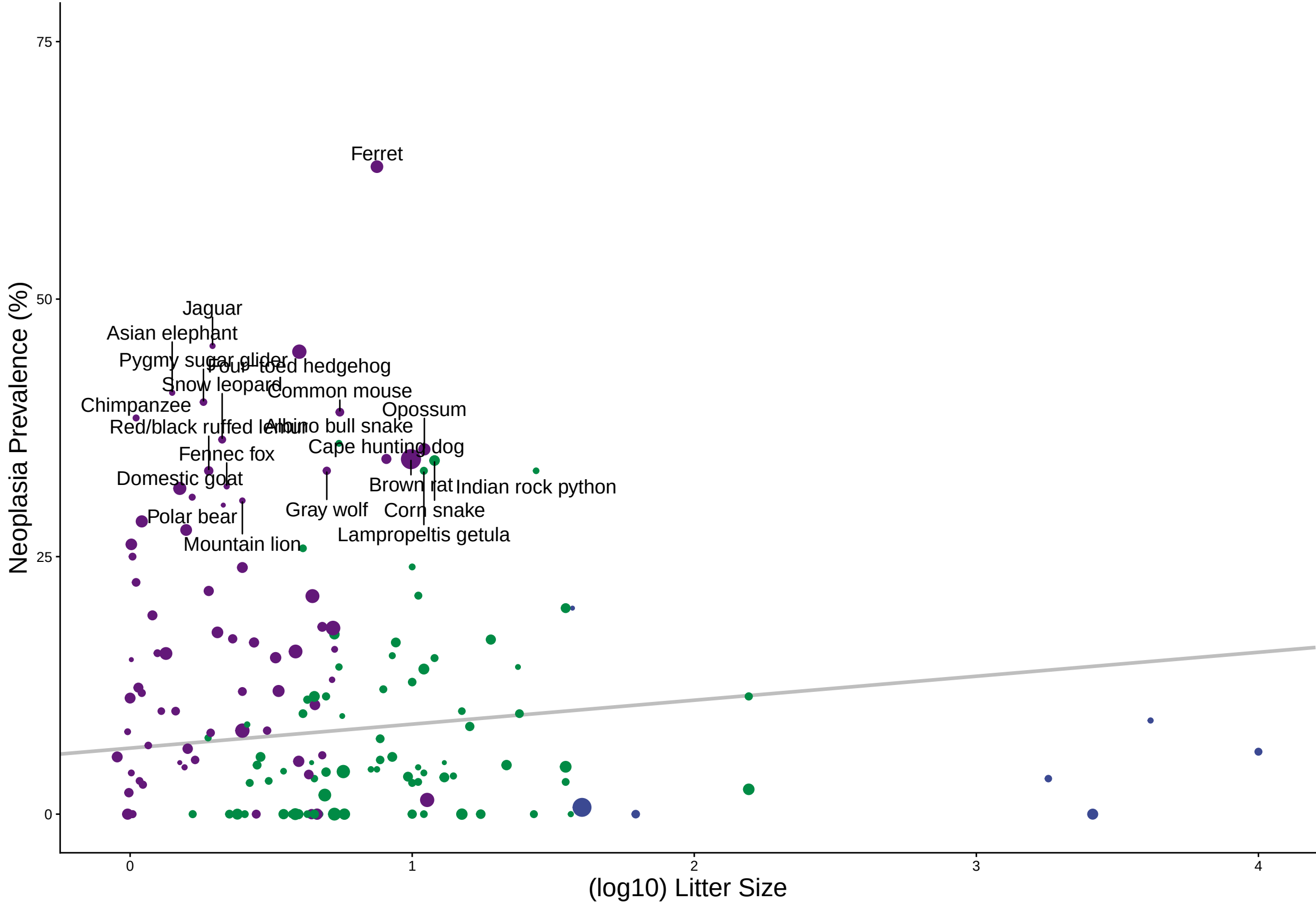
p-value : 0.101 R² : 0.016 Δ : 0.34



Clade ● Mammalia ● Sauropsida ● Amphibia Total Necropsies • 20 ● 100 ● 200 ● 300 ● 477

S3 Neoplasia Prevalence vs. Litter Size

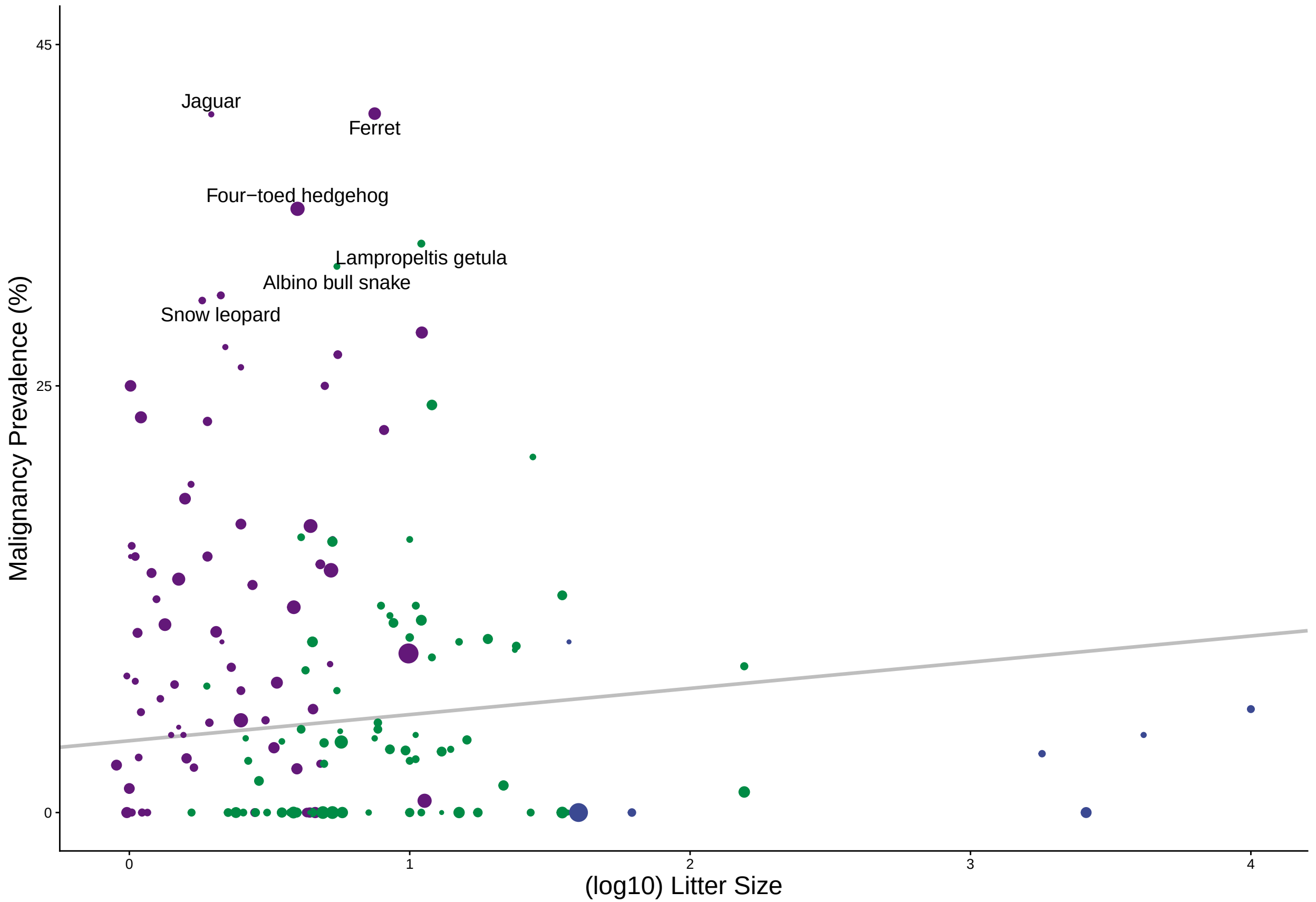
p-value : 0.292 R² : 0.35 Δ : 0.4



Clade Mammalia Sauropsida Amphibia Total Necropsies 100 200 300

S4 Malignancy Prevalence vs. Litter Size

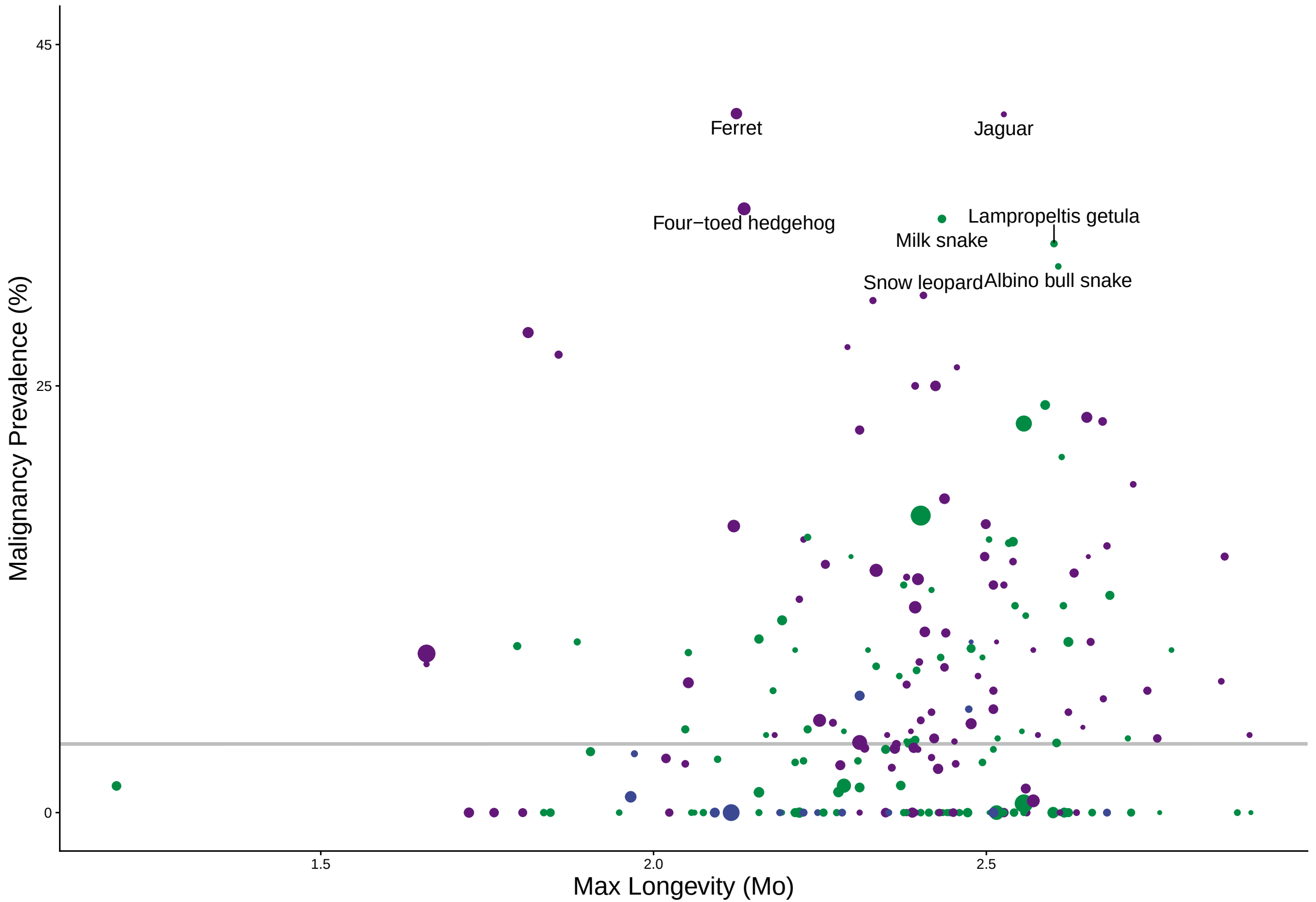
p-value : 0.363 R² : 0.33 Δ : 0.45



Clade Mammalia Sauropsida Amphibia Total Necropsies 100 200 300

S5 Malignancy Prevalence vs. Max Longevity

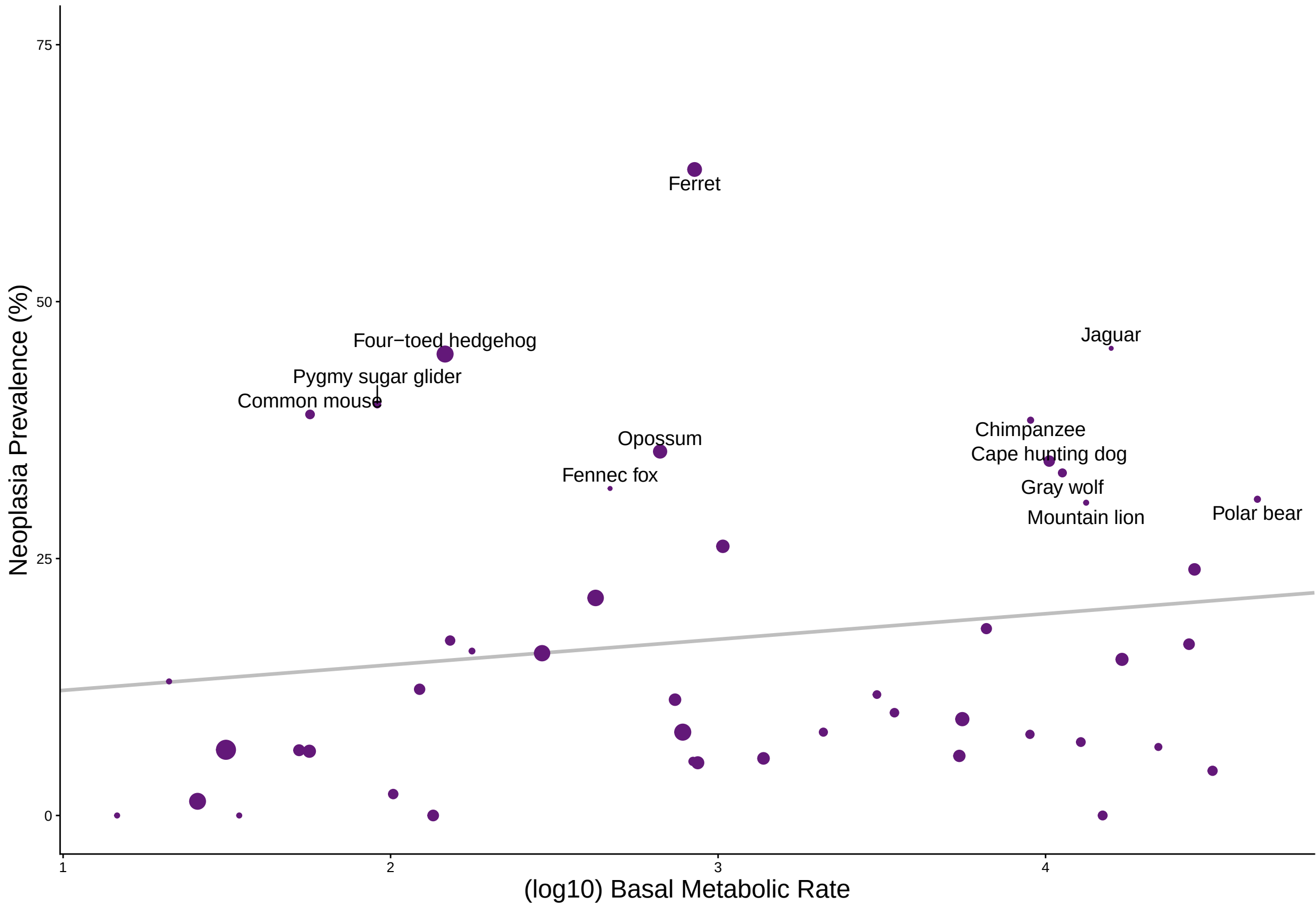
p-value : 0.276 R² : 0.11 Δ : 0.472332



Clade ● Mammalia ● Sauropsida ● Amphibia Total Necropsies ● 100 ● 200 ● 300 ● 400

S6 Neoplasia Prevalence vs. Metabolic Rate in Mammals

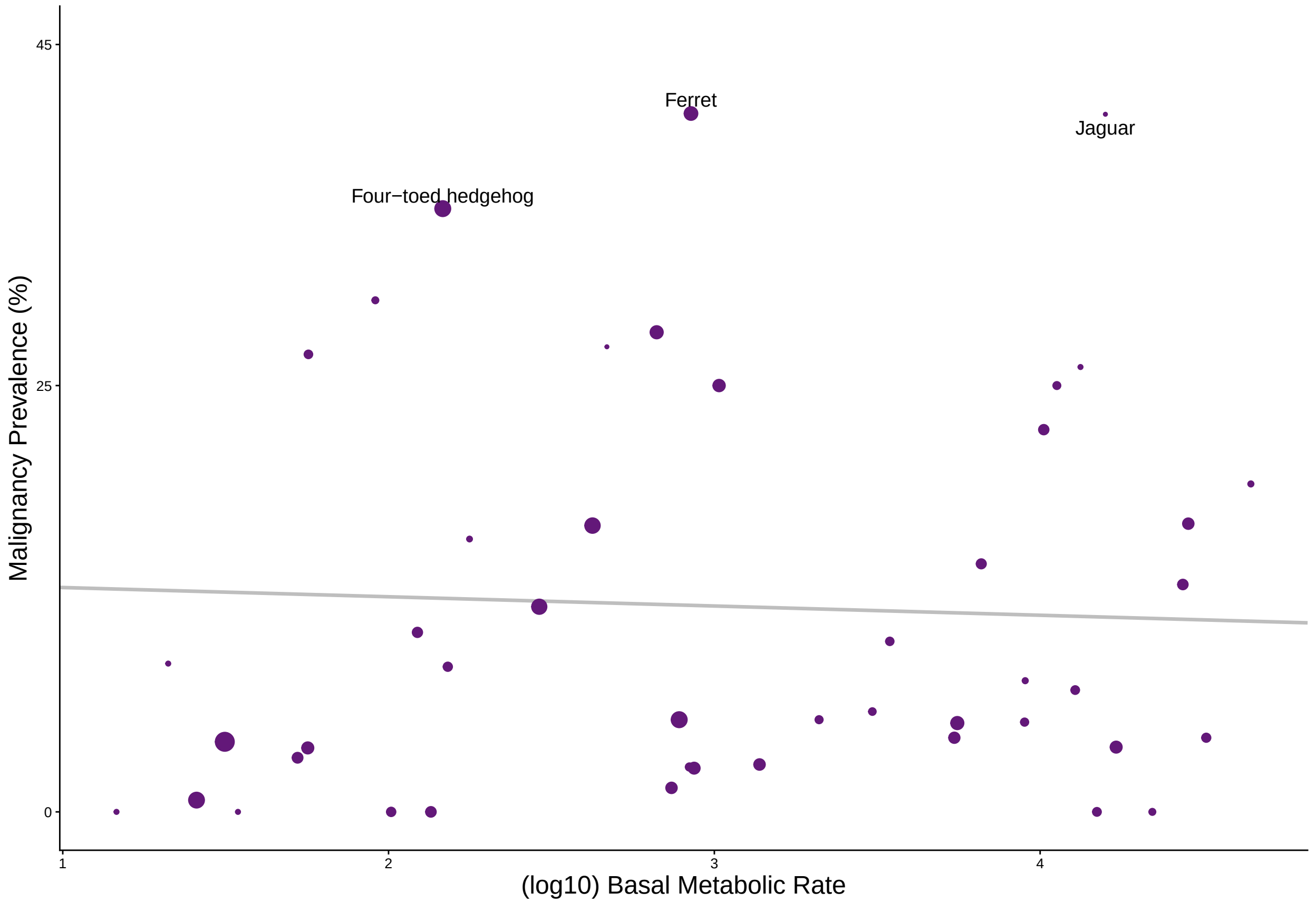
p-value : 0.255 R² : 0.9 Δ : 6.6e-05



Clade Mammalia Sauropsida Amphibia Total Necropsies 50 100 150 200

S7 Malignancy Prevalence vs. Metabolic Rate

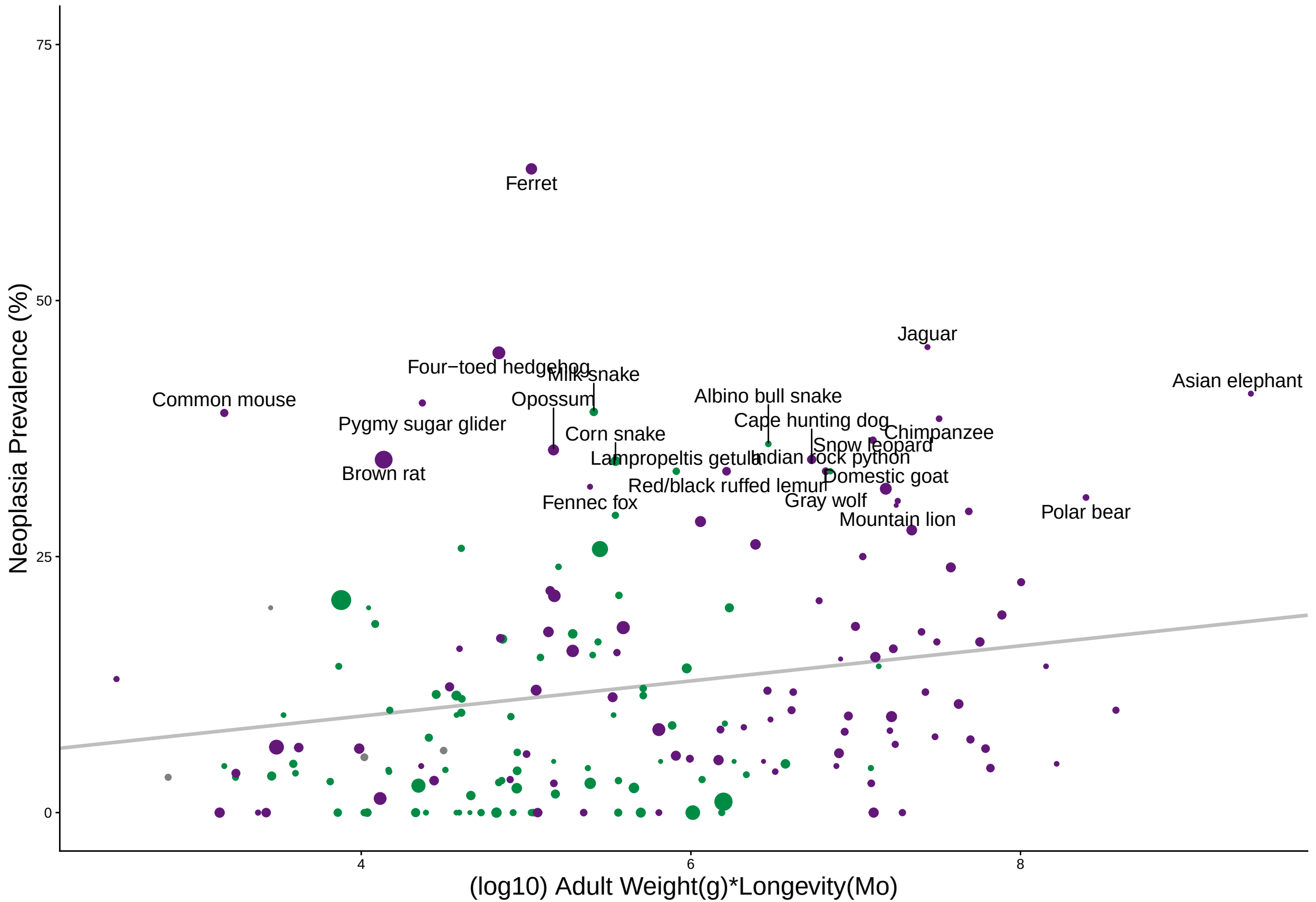
p-value : 0.782 R² : 0.59 Δ : 0.45



Clade Mammalia Sauropsida Amphibia Total Necropsies 50 100 150 200

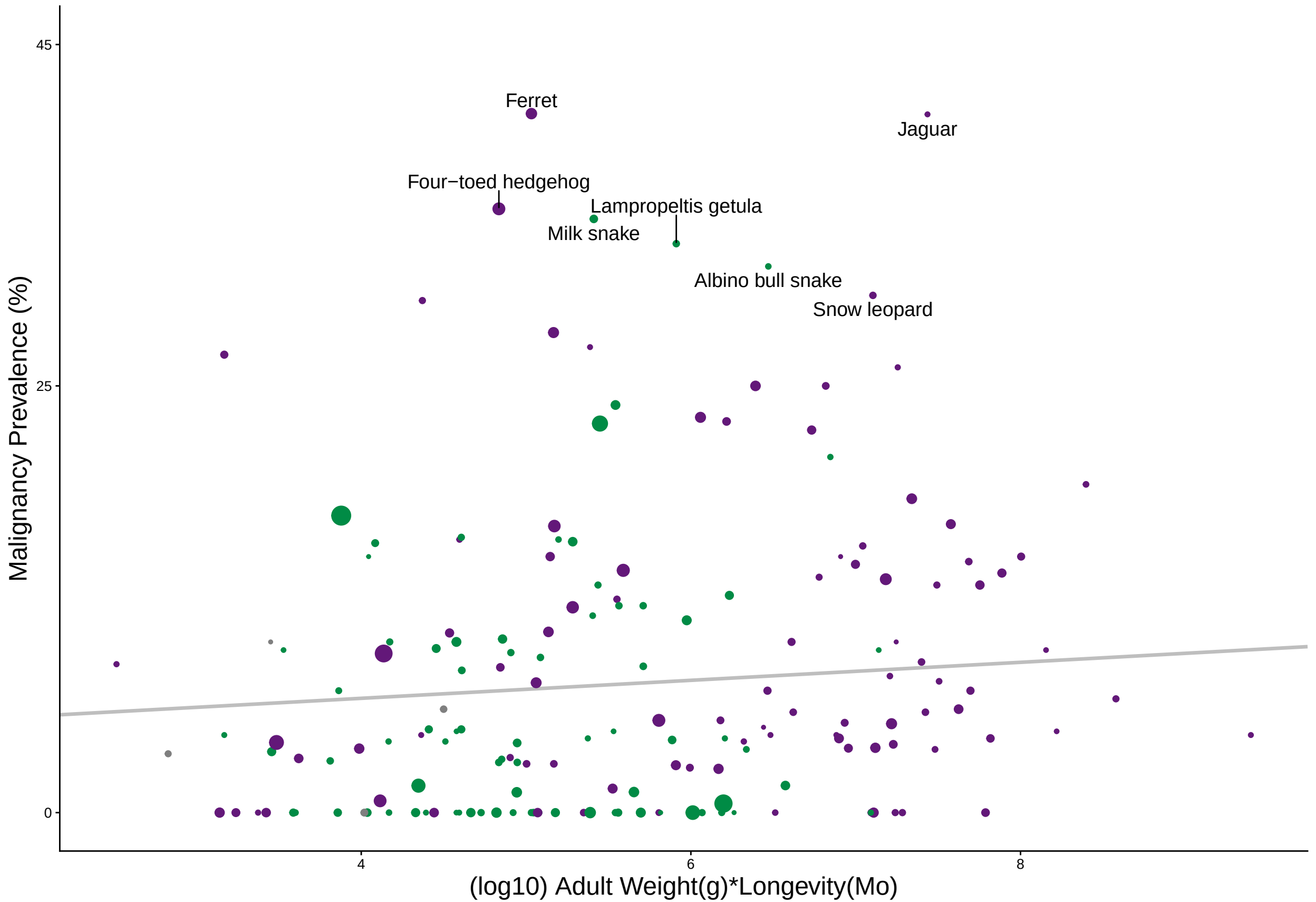
S8 Neoplasia Prevalence vs. Max Longevity*Weight

p-value : 0.0216 R² : 0.5 Δ : 0.34



S9 Malignancy Prevalence vs. Max Longevity*Weight

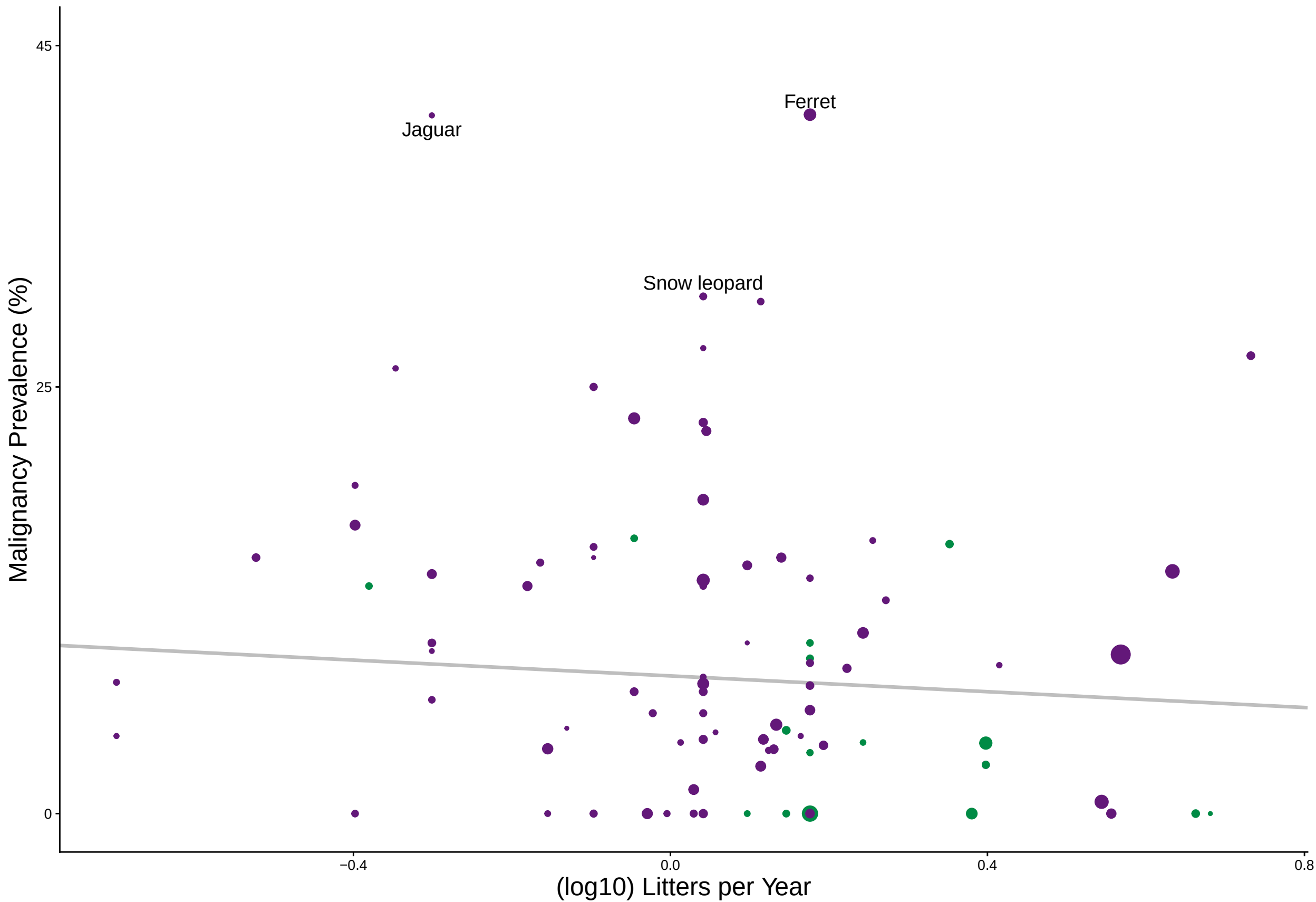
p-value : 0.376 R² : 0.36 Δ : 0.55



Clade ● Mammalia ● Sauropsida Total Necropsies ● 100 ● 200 ● 300 ● 400

S10 Malignancy Prevalence vs. Litters per Year

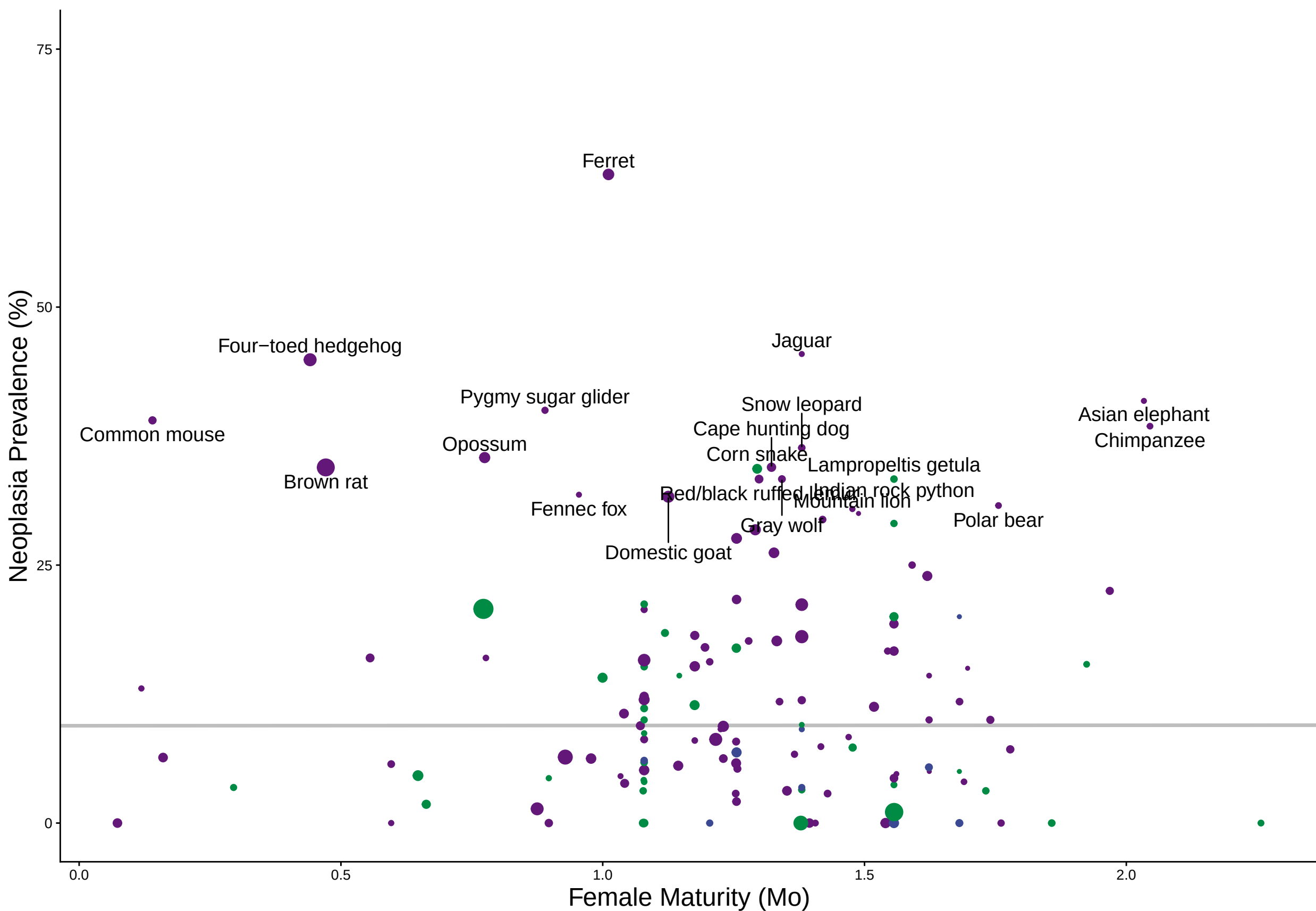
p-value : 0.542 R^2 : 0.029 Δ : 0.36



Total Necropsies ● 100 ● 200 ● 300 Clade ● Mammalia ● Sauropsida

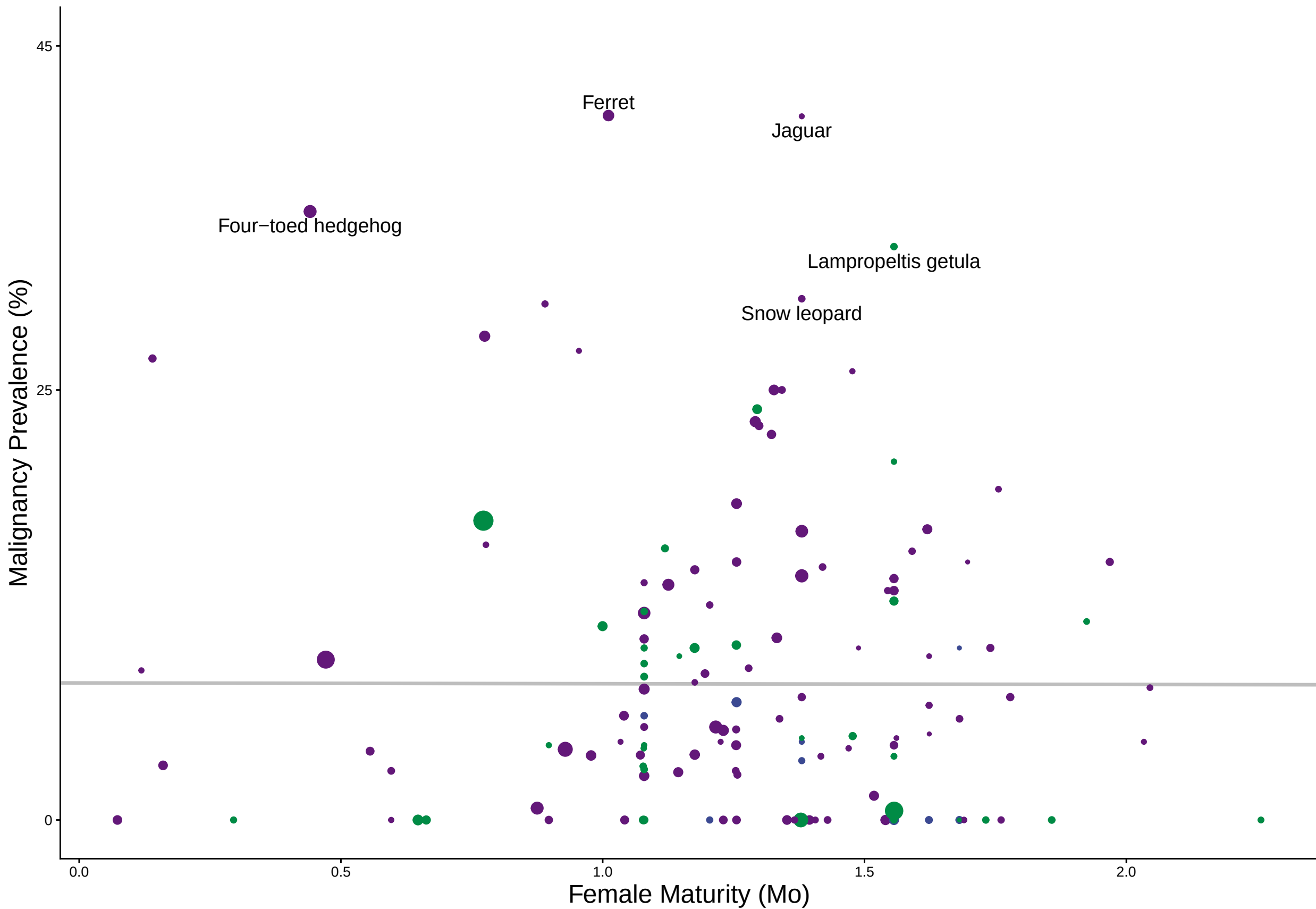
S11 Neoplasia Prevalence vs. Female Maturity

p-value : 0.658 R^2 : 0.11 Δ : 0.43



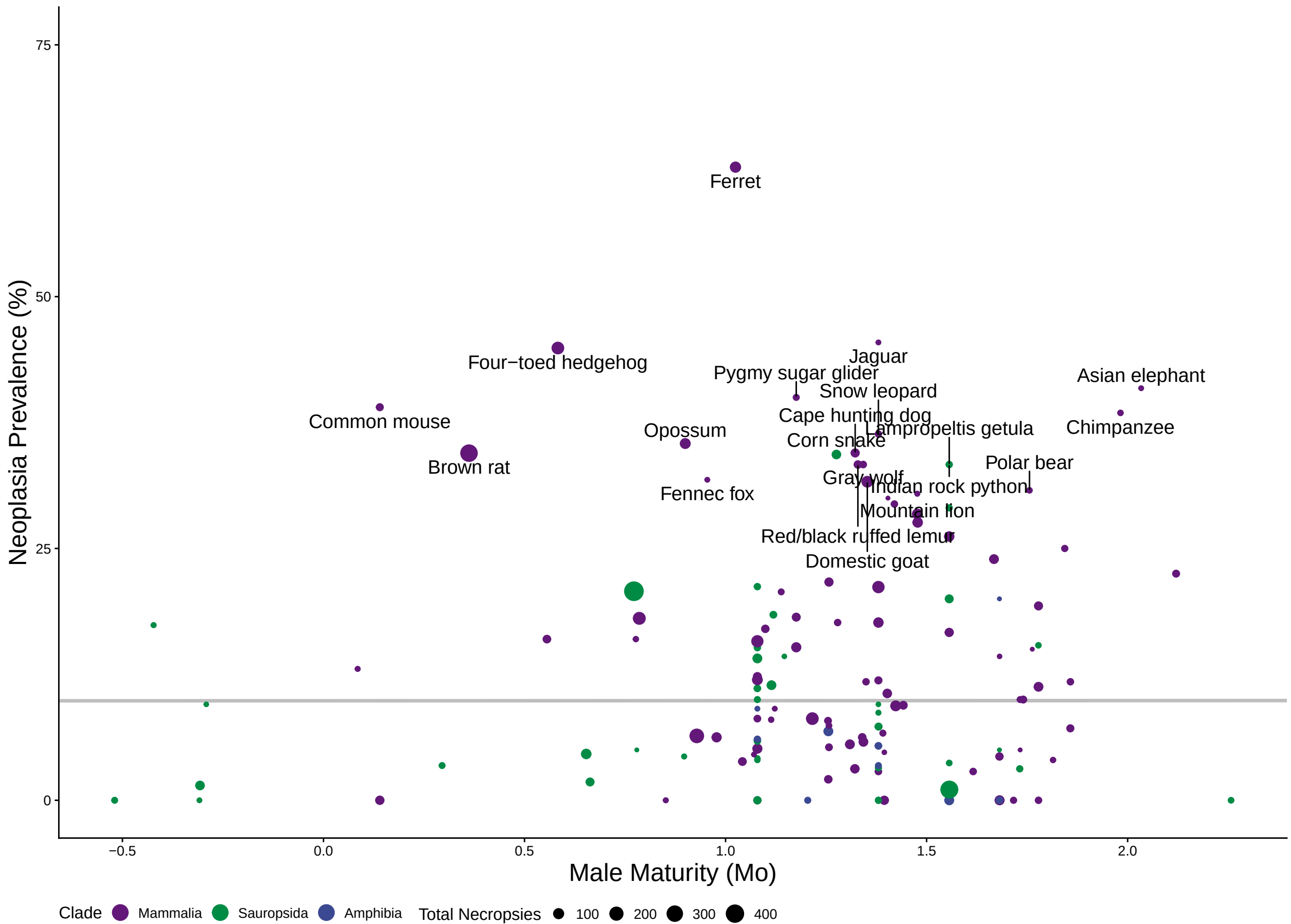
S12 Malignancy Prevalence vs. Female Maturity

p-value : 0.21 R^2 : 0.097 Δ : 0.5

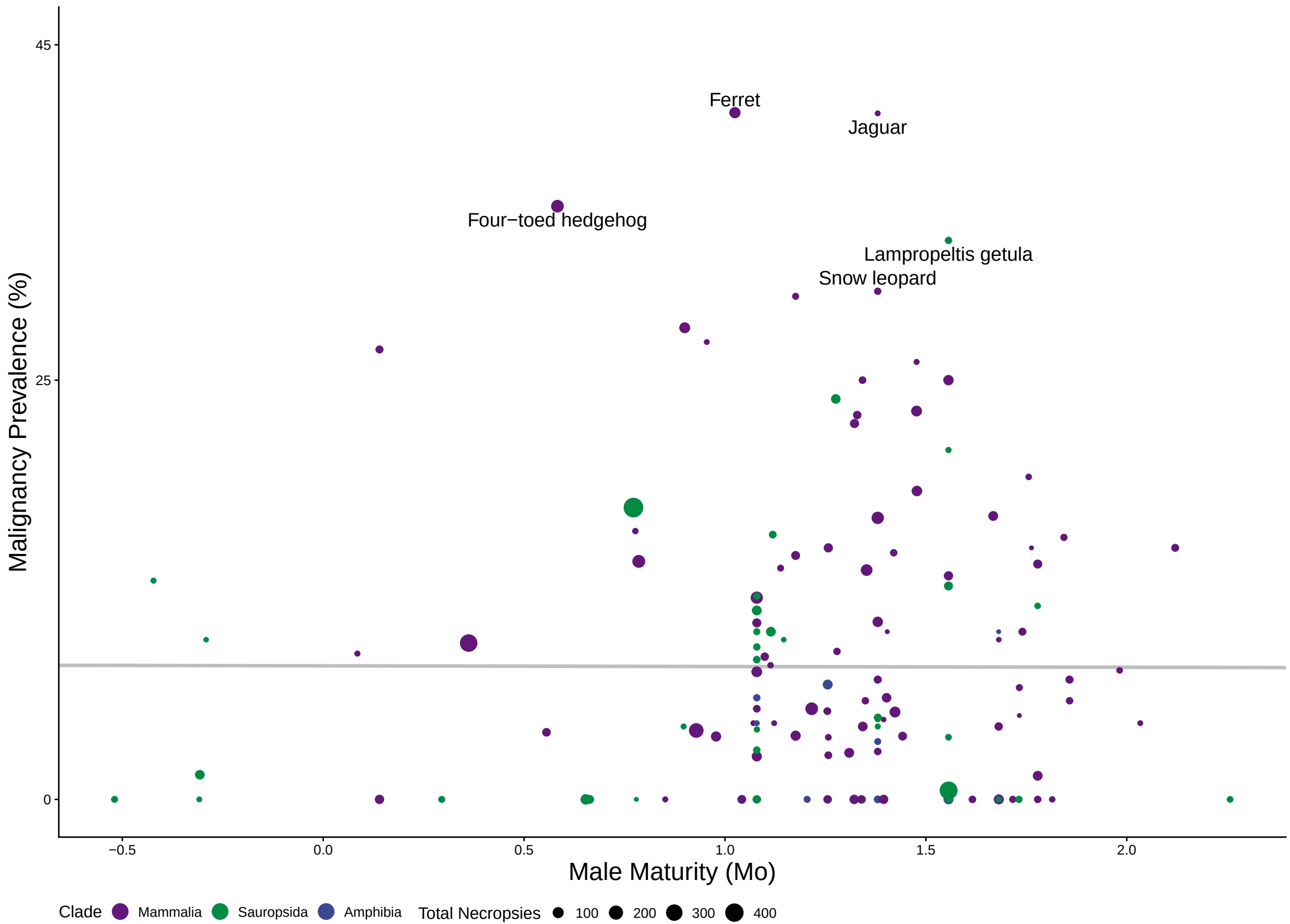


Clade ● Mammalia ● Sauropsida ● Amphibia Total Necropsies ● 100 ● 200 ● 300 ● 400

p-value : 0.843 R^2 : 0.11 Λ : 0.3

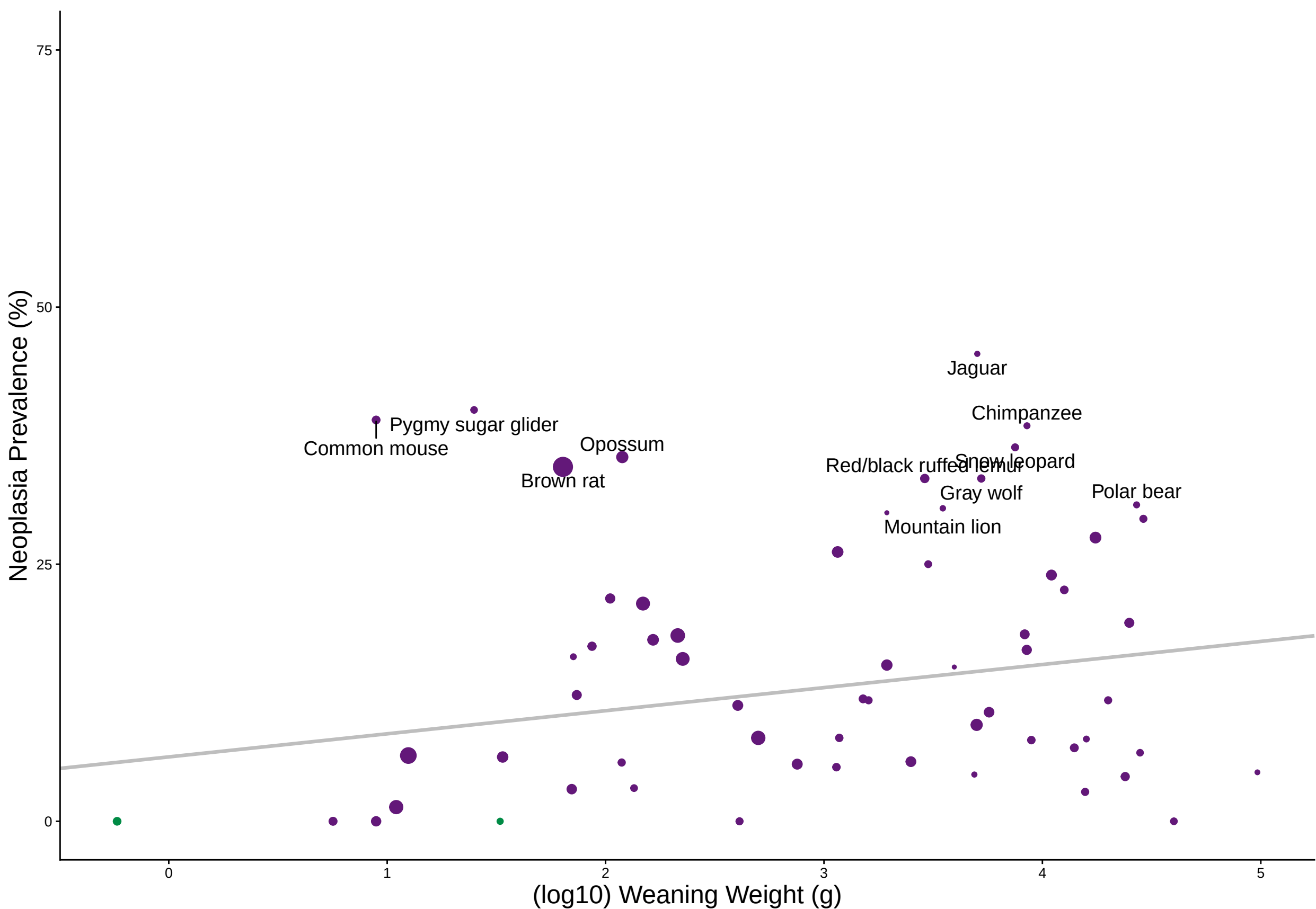


p – value : 0.291 R^2 : 0.088 Λ : 0.41



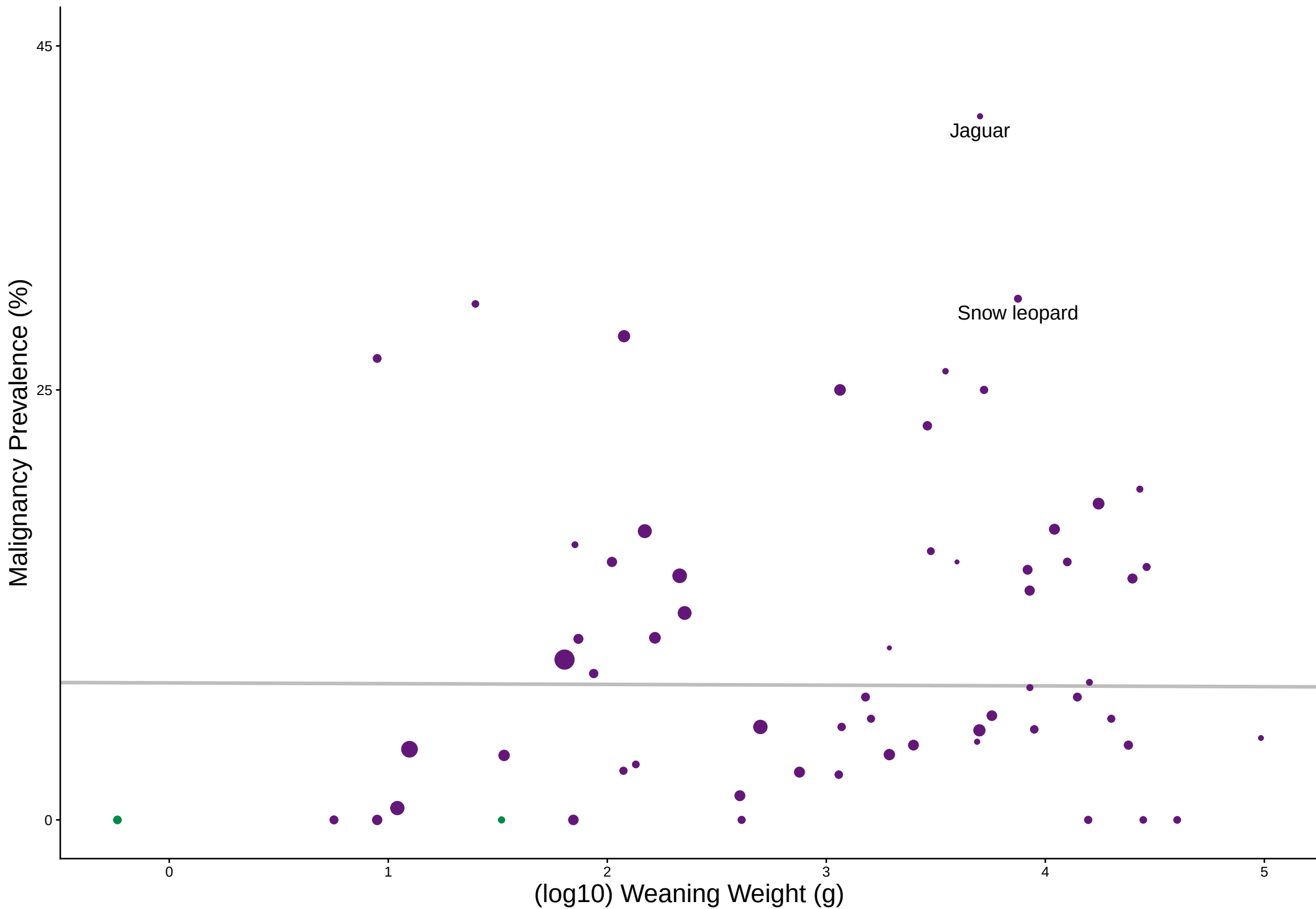
S15 Neoplasia Prevalence vs. Weaning Weight

p-value : 0.138 R^2 : 0.19 Δ : 0.67



S16 Malignancy Prevalence vs. Weaning Weight

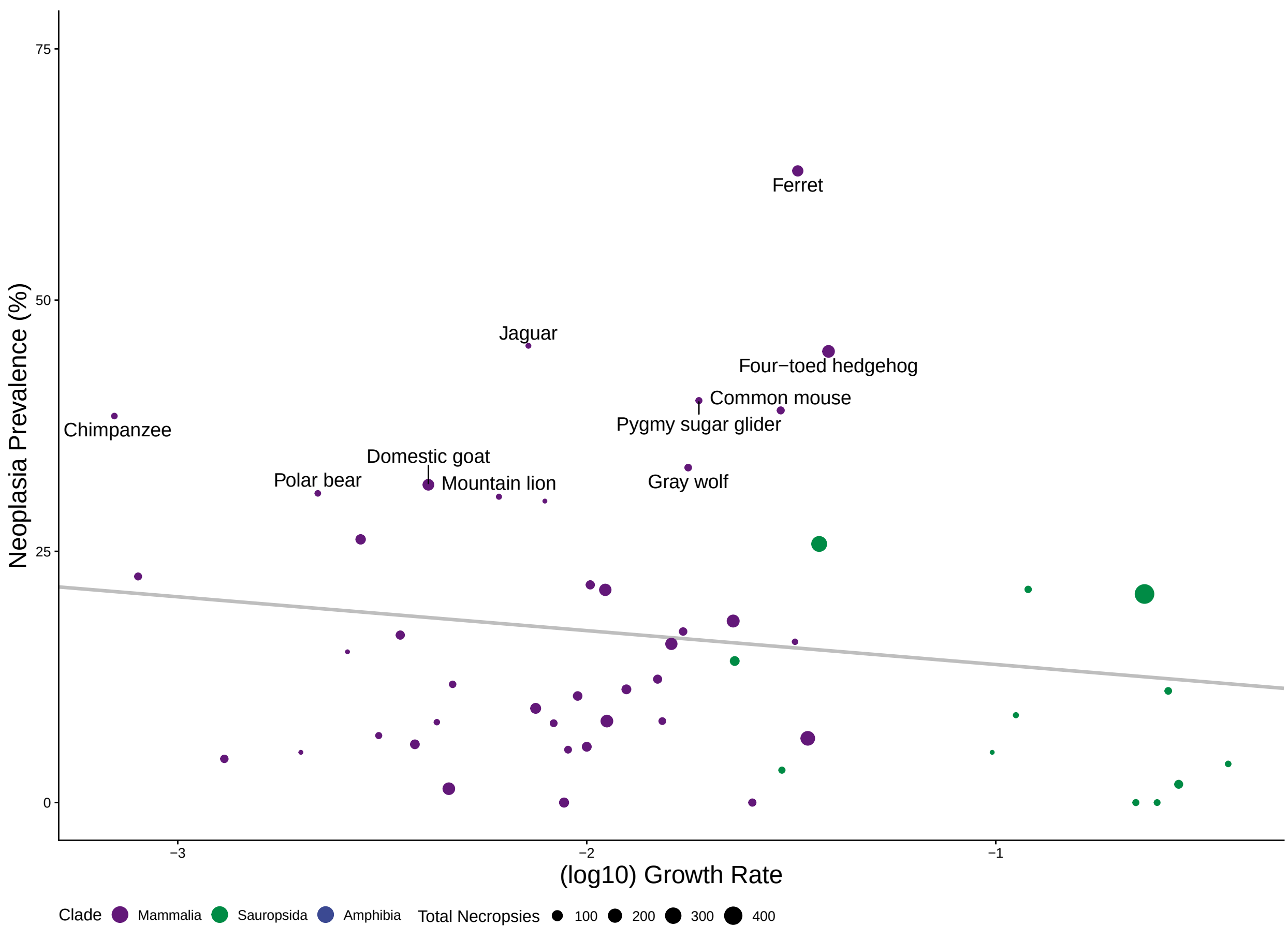
p-value : 0.178 R^2 : 0.86 Δ : 6.6e-05



Clade ● Mammalia ● Sauropsida ● Amphibia Total Necropsies ● 100 ● 200 ● 300

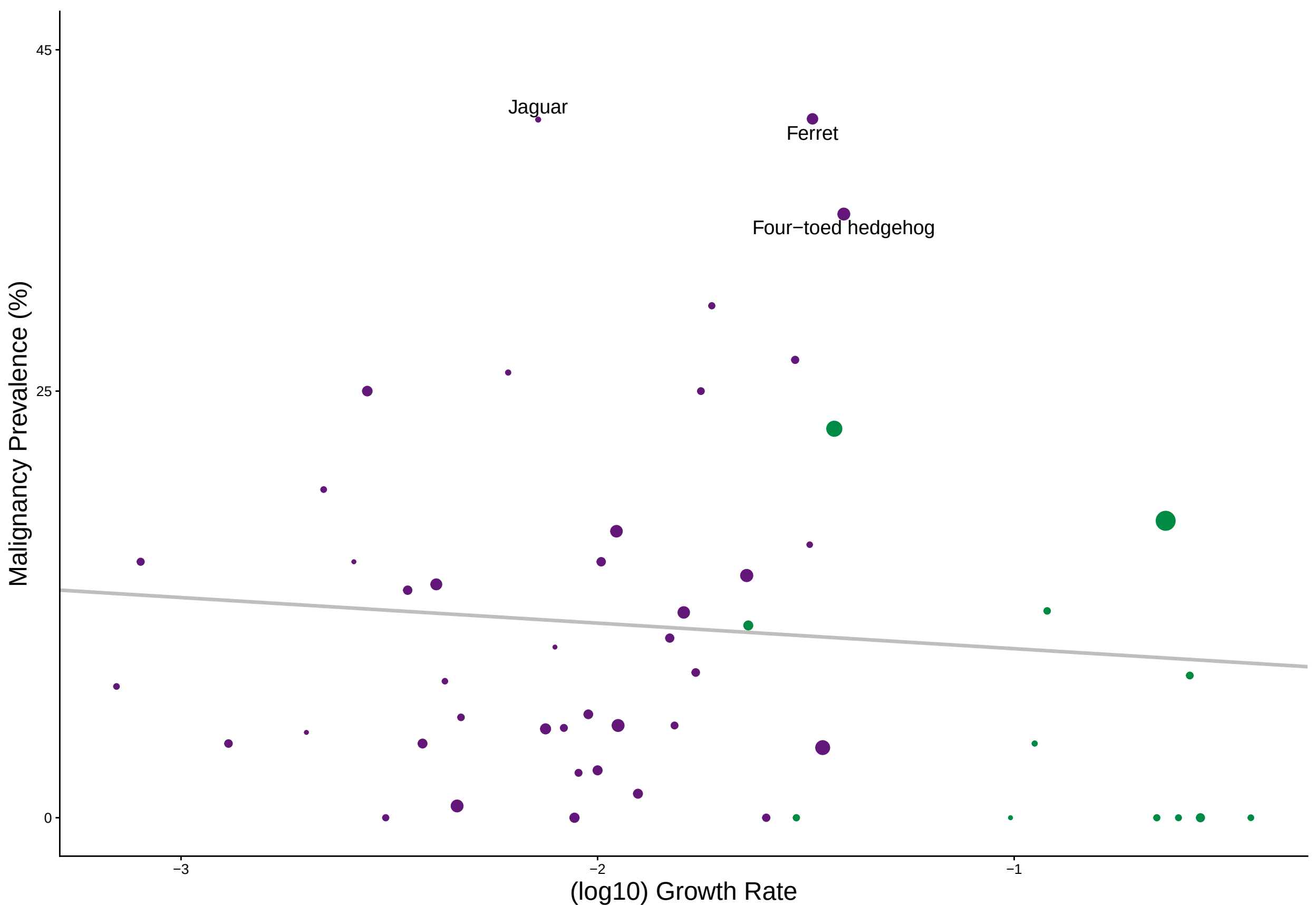
S17 Neoplasia Prevalence vs. Growth Rate

p-value : 0.258 R^2 : 0.88 Λ : 6.6e-05



S18 Malignancy Prevalence vs. Growth Rate

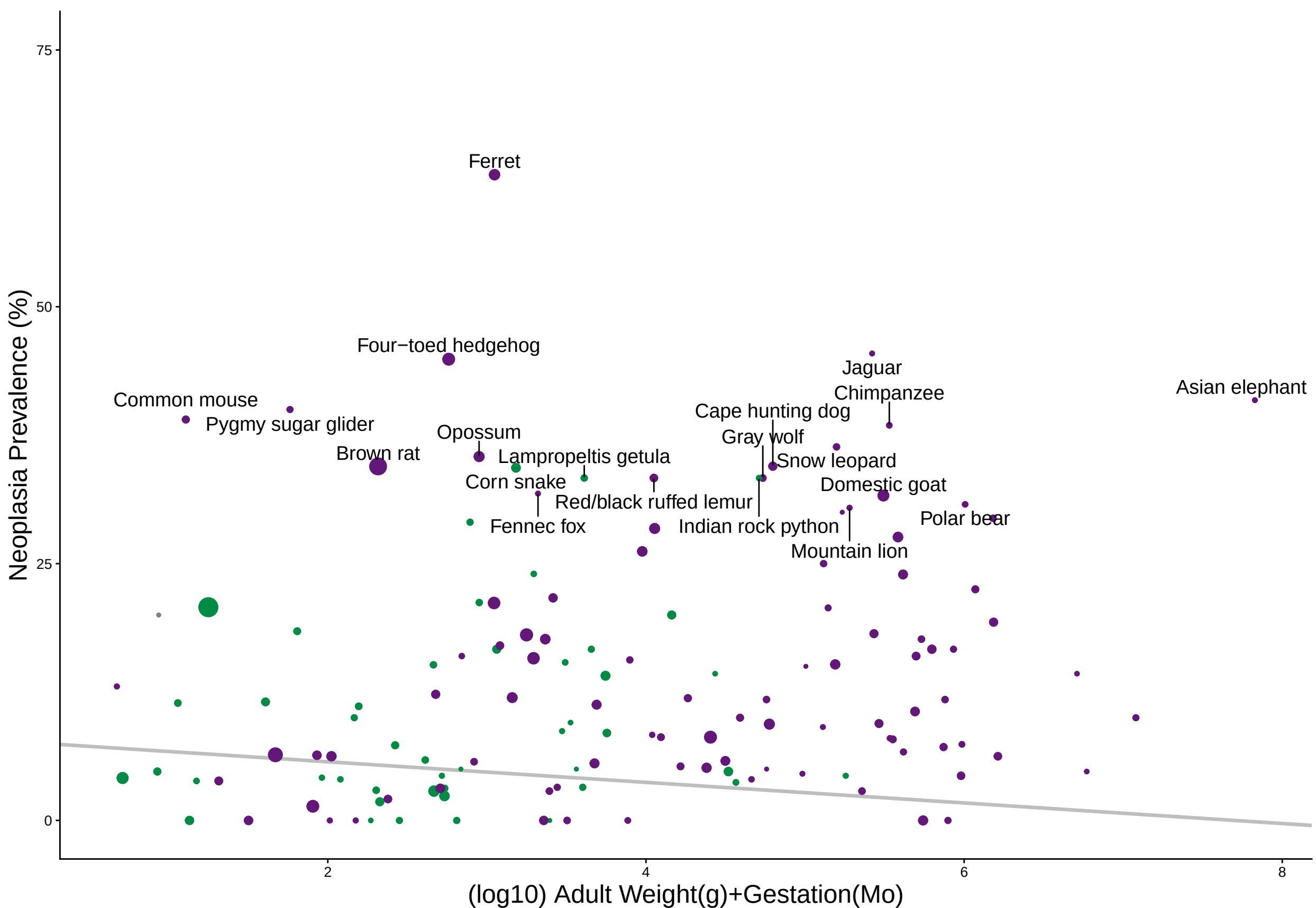
p-value : 0.51 R^2 : 0.88 Δ : 6.6e-05



Clade ● Mammalia ● Sauropsida ● Amphibia Total Necropsies ● 100 ● 200 ● 300 ● 400

S19 Neoplasia Prevalence vs. Max Longevity+Gestation

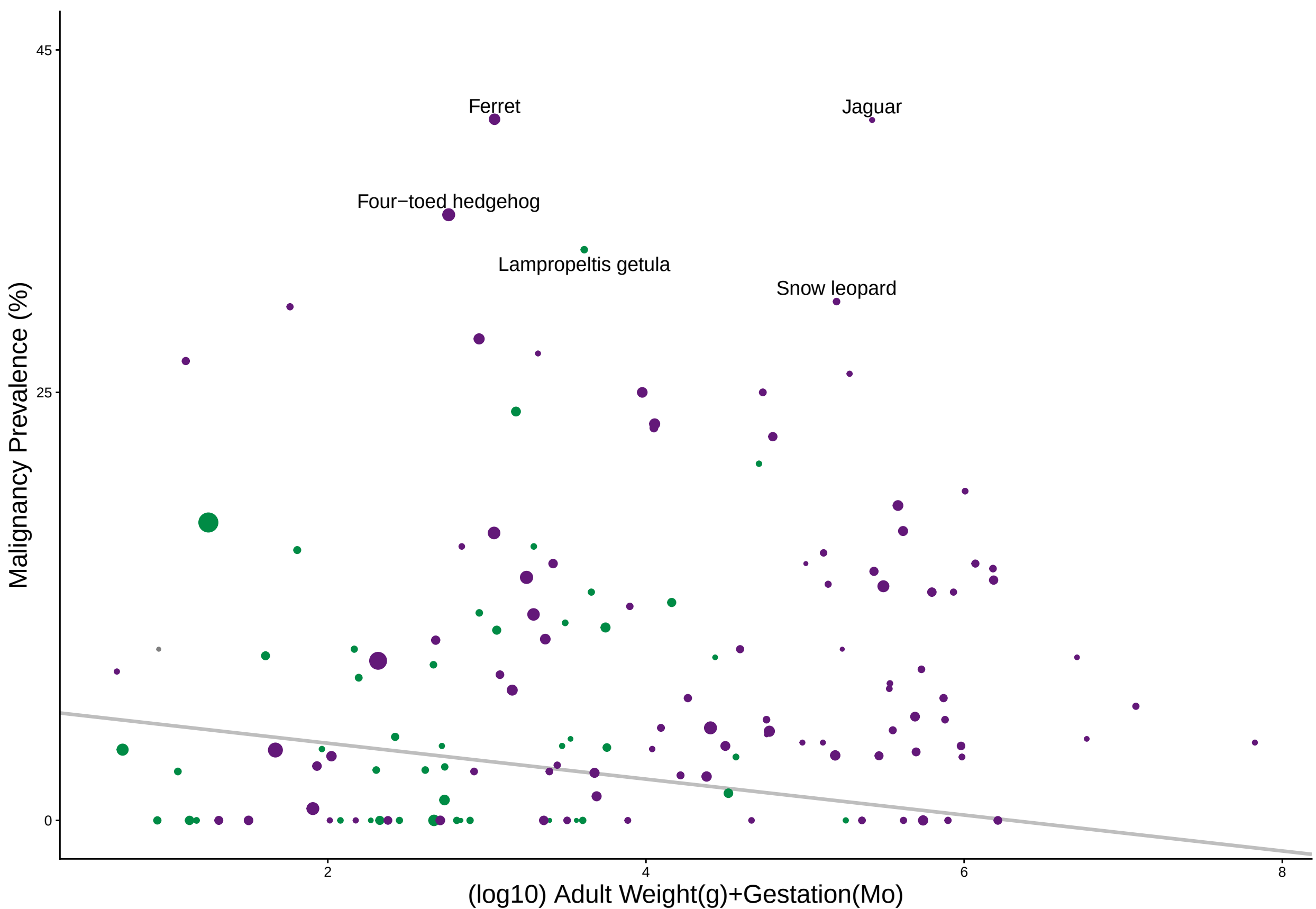
p-value : 0.016 R^2 : 0.016 Δ : 0.2



Clade ● Mammalia ● Sauropsida Total Necropsies ● 100 ● 200 ● 300 ● 400

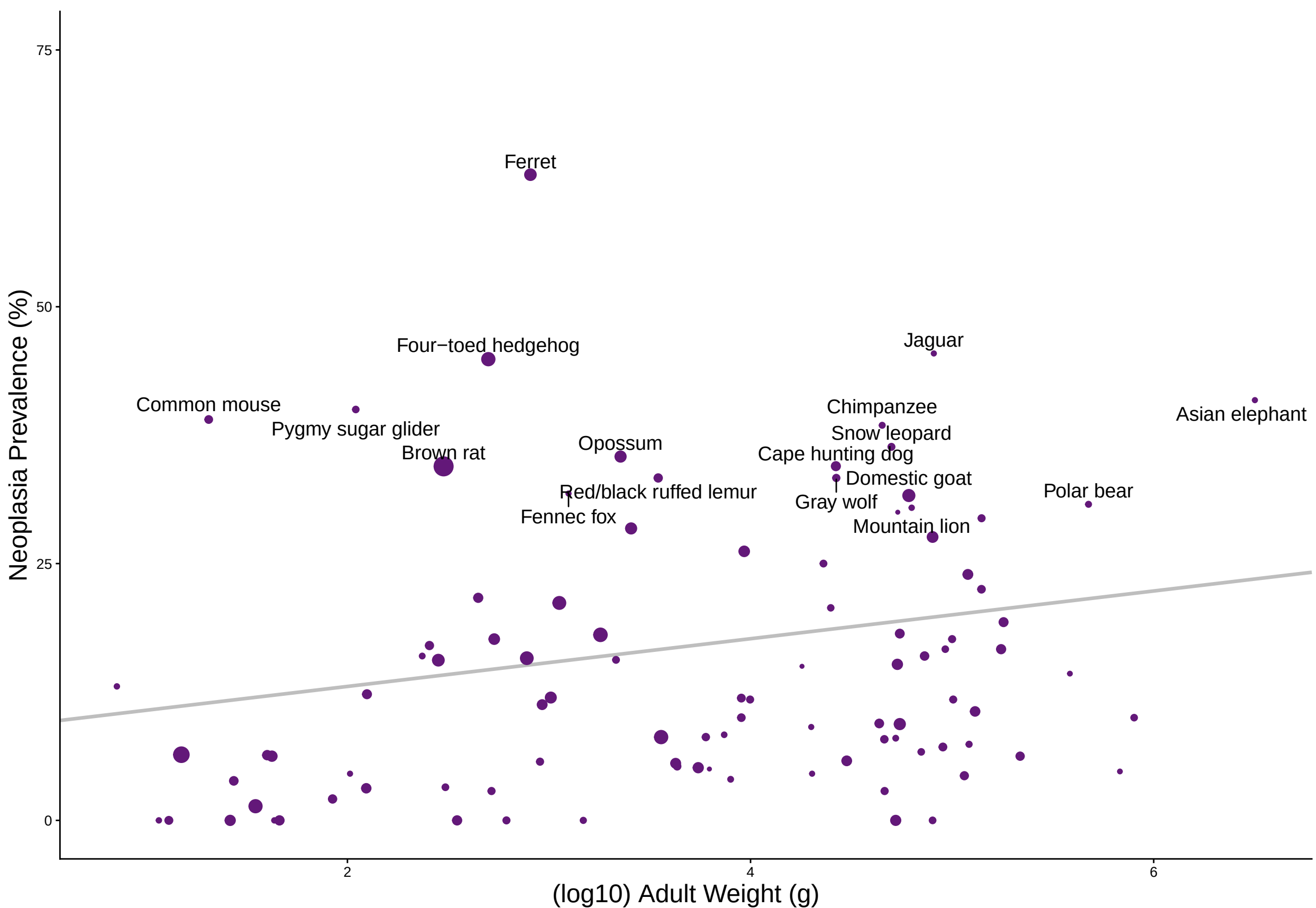
S20 Malignancy Prevalence vs. Max Longevity+Gestation

p-value : 0.000828 R^2 : 0.014 Δ : 0.31



S21 Neoplasia vs. Adult Weight

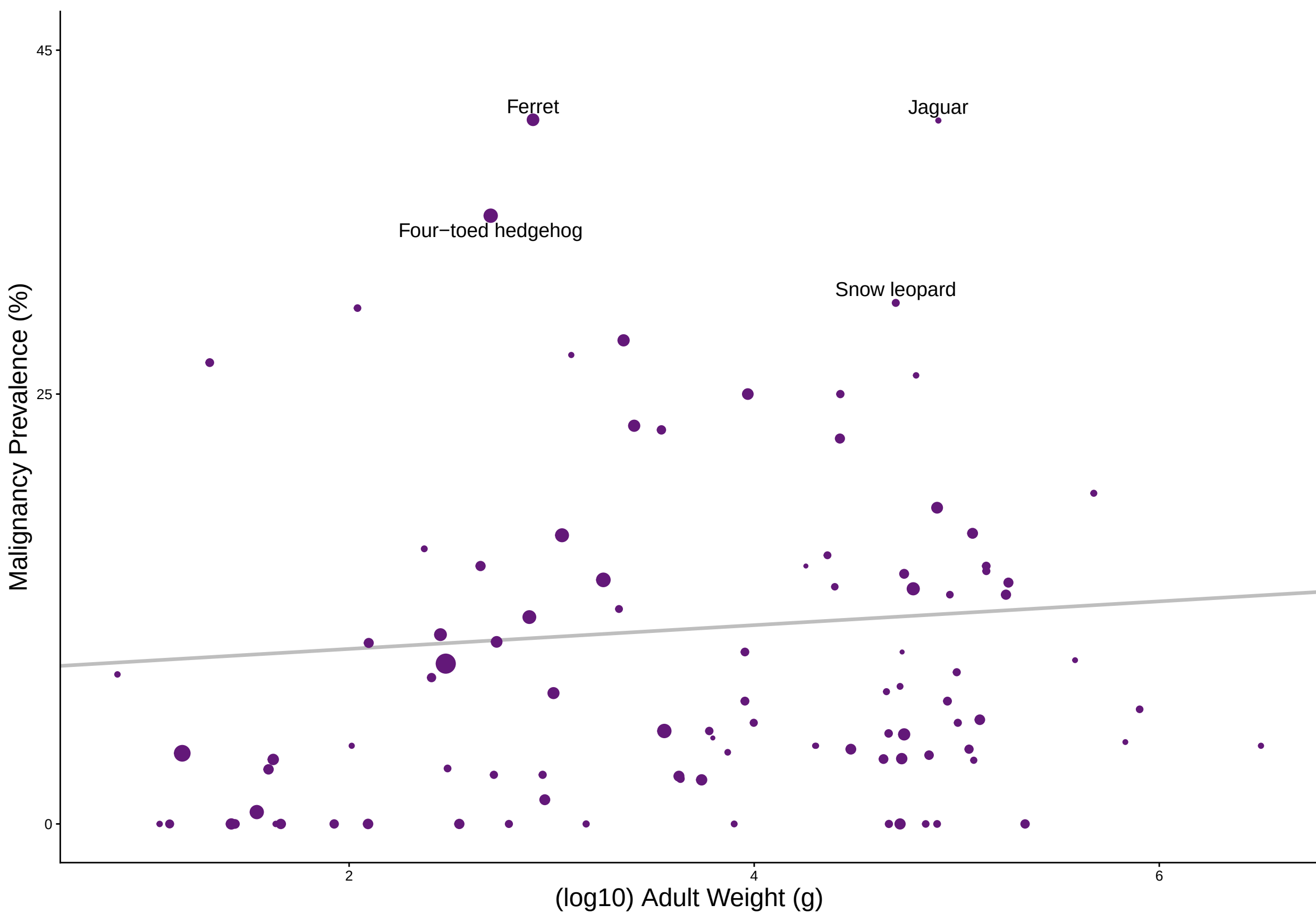
p-value : 0.458 R^2 : 0.39 Δ : 0.43



Clade Mammalia Total Necropsies • 20 ● 100 ● 200 ● 300

S22 Malignancy Prevalence vs. Adult Weight

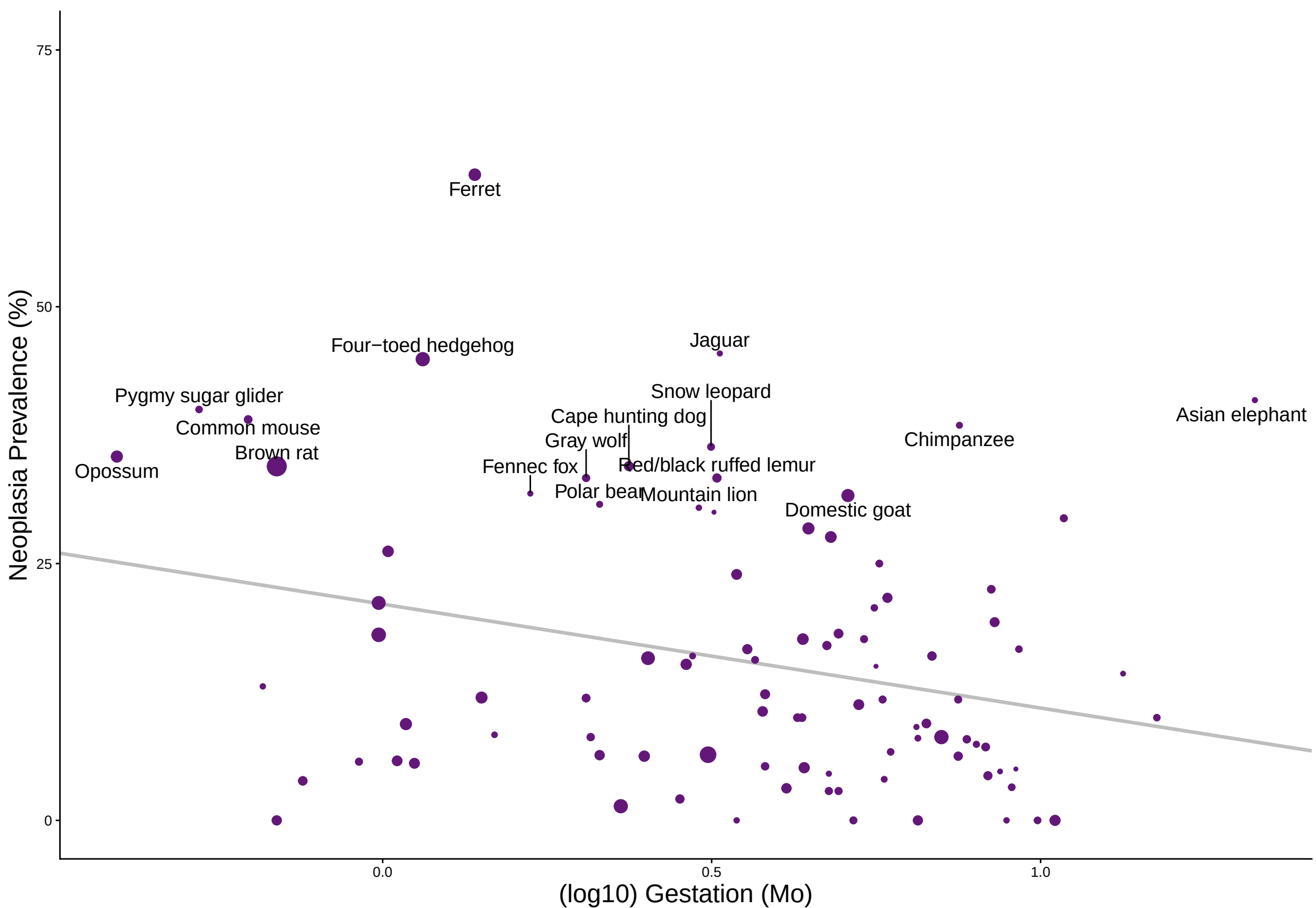
p-value : 0.458 R^2 : 0.39 Δ : 0.43



Total Necropsies ● 100 ● 200 ● 300

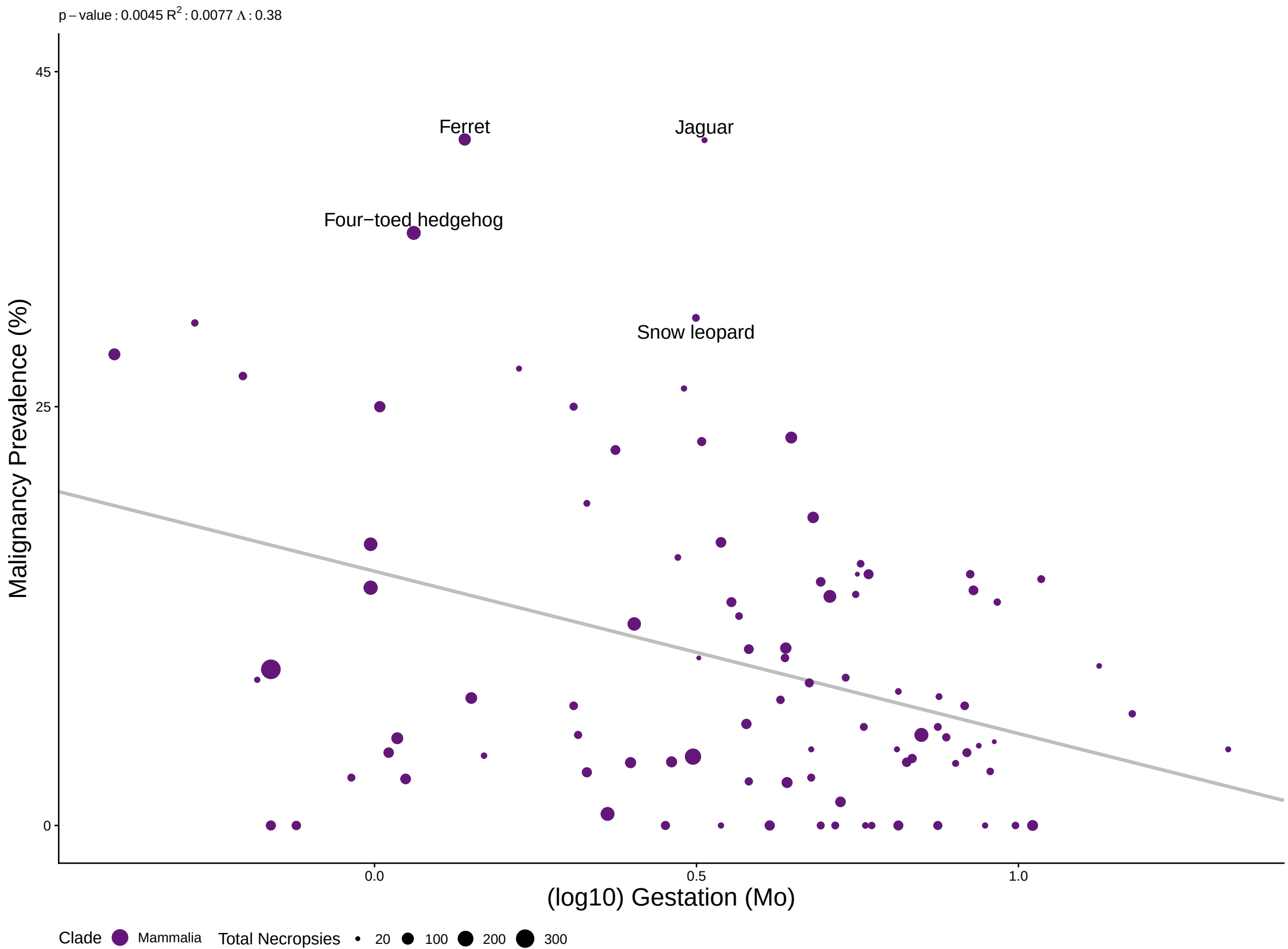
S23 Neoplasia Prevalence vs. Gestation in Mammals

p-value : 0.0369 R² : 0.088 Δ : 0.43



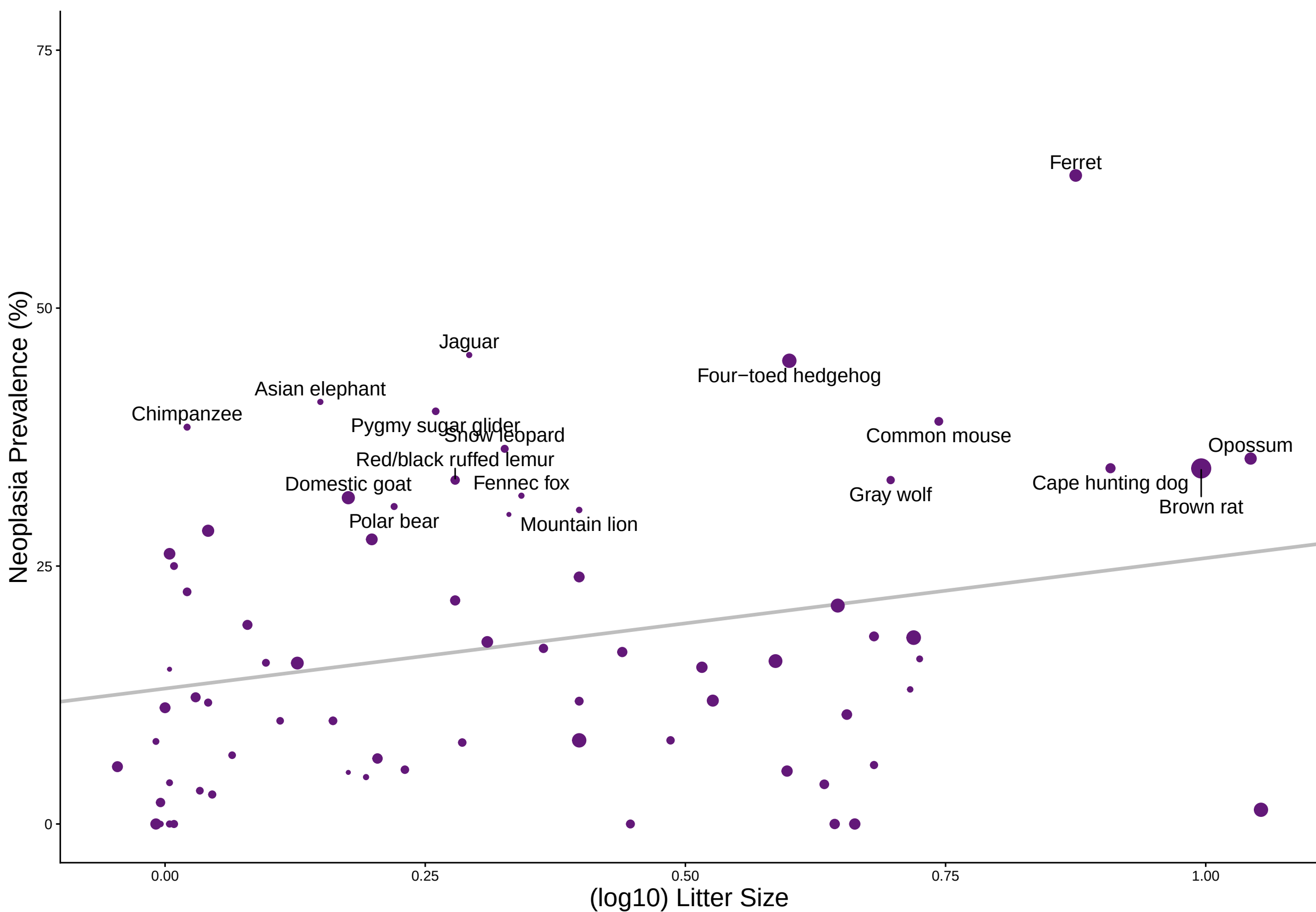
Clade ● Mammalia Total Necropsies • 20 ● 100 ● 200 ● 300

S24 Malignancy Prevalence vs. Gestation in Mammals



S25 Neoplasia Prevalence vs. Litter Size in Mammals

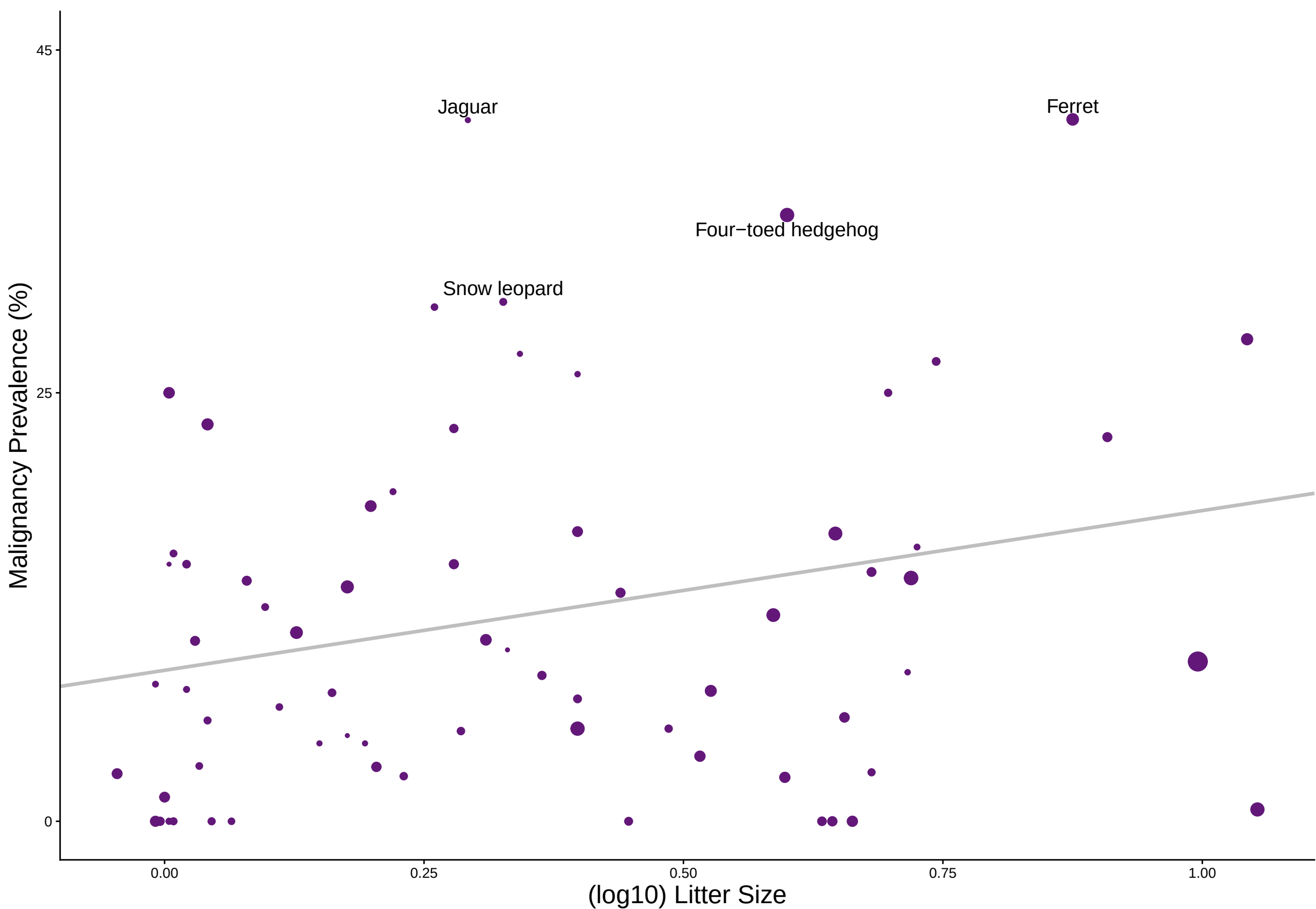
p-value : 0.0205 R^2 : 0.55 Δ : 8e-05



Clade ● Mammalia Total Necropsies • 20 ● 100 ● 200 ● 300

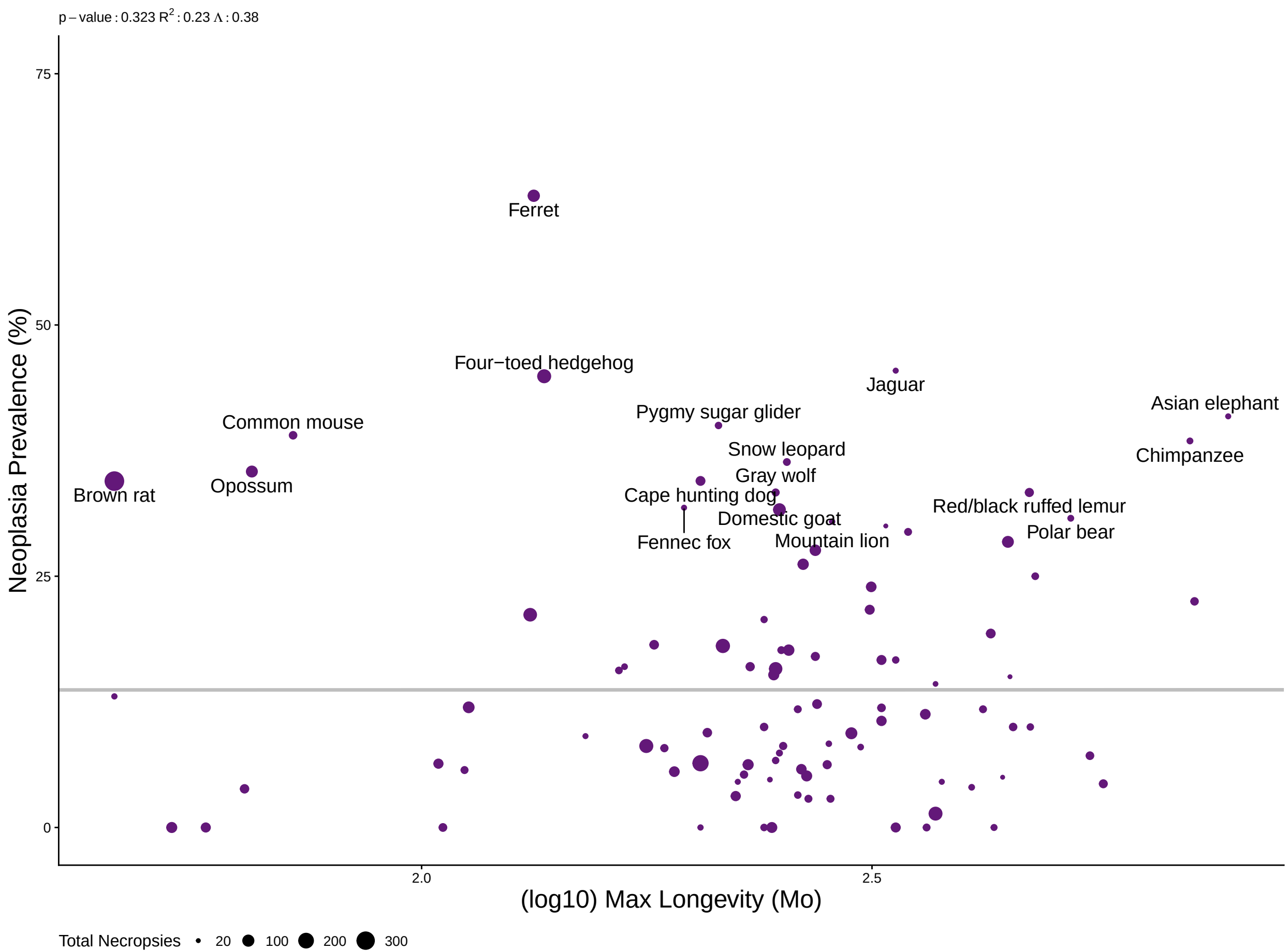
S26 Malignancy Prevalence vs. Litter Size in Mammals

p-value : 0.0306 R^2 : 0.2 Δ : 0.2

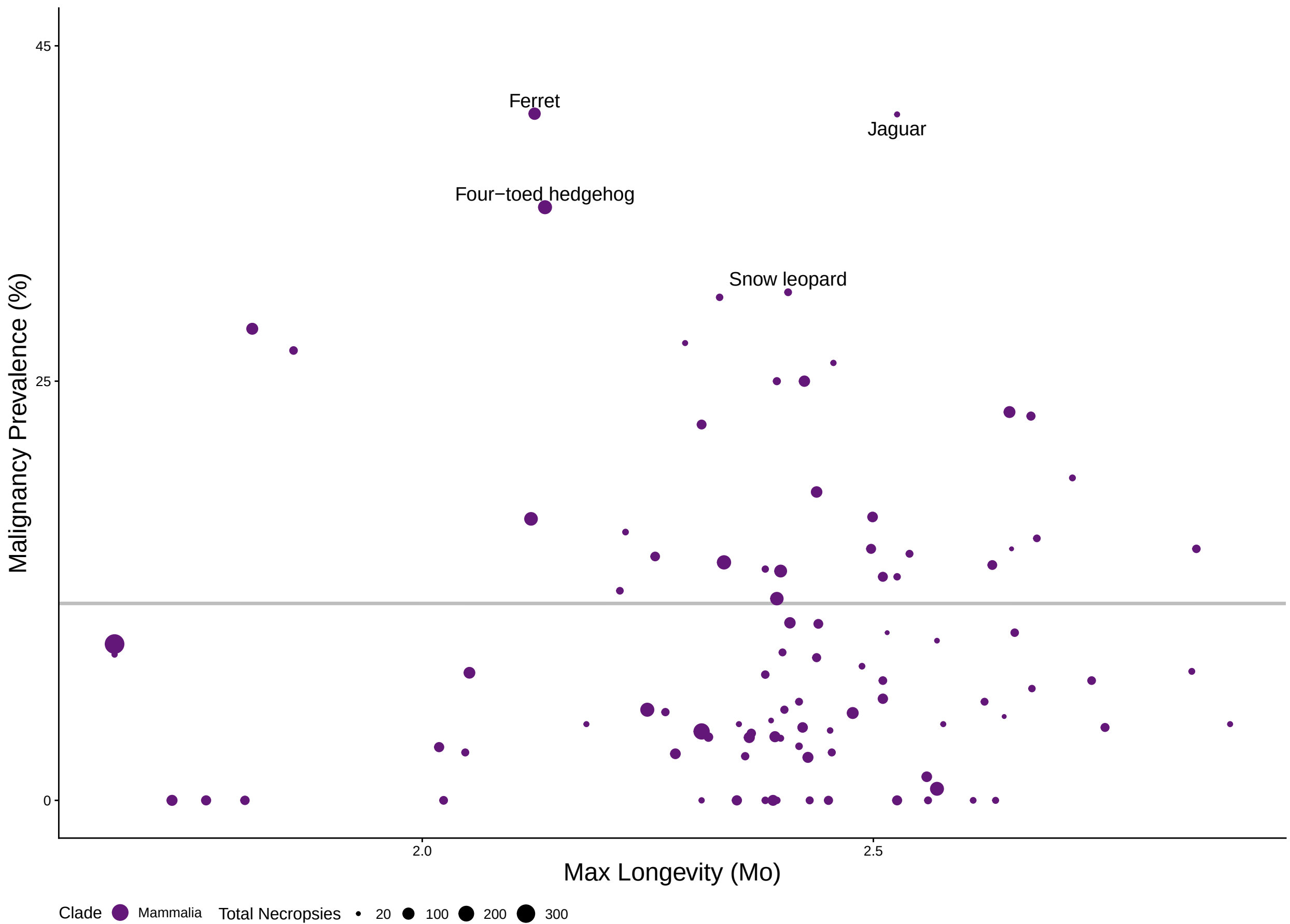


Clade ● Mammalia Total Necropsies ● 20 ● 100 ● 200 ● 300

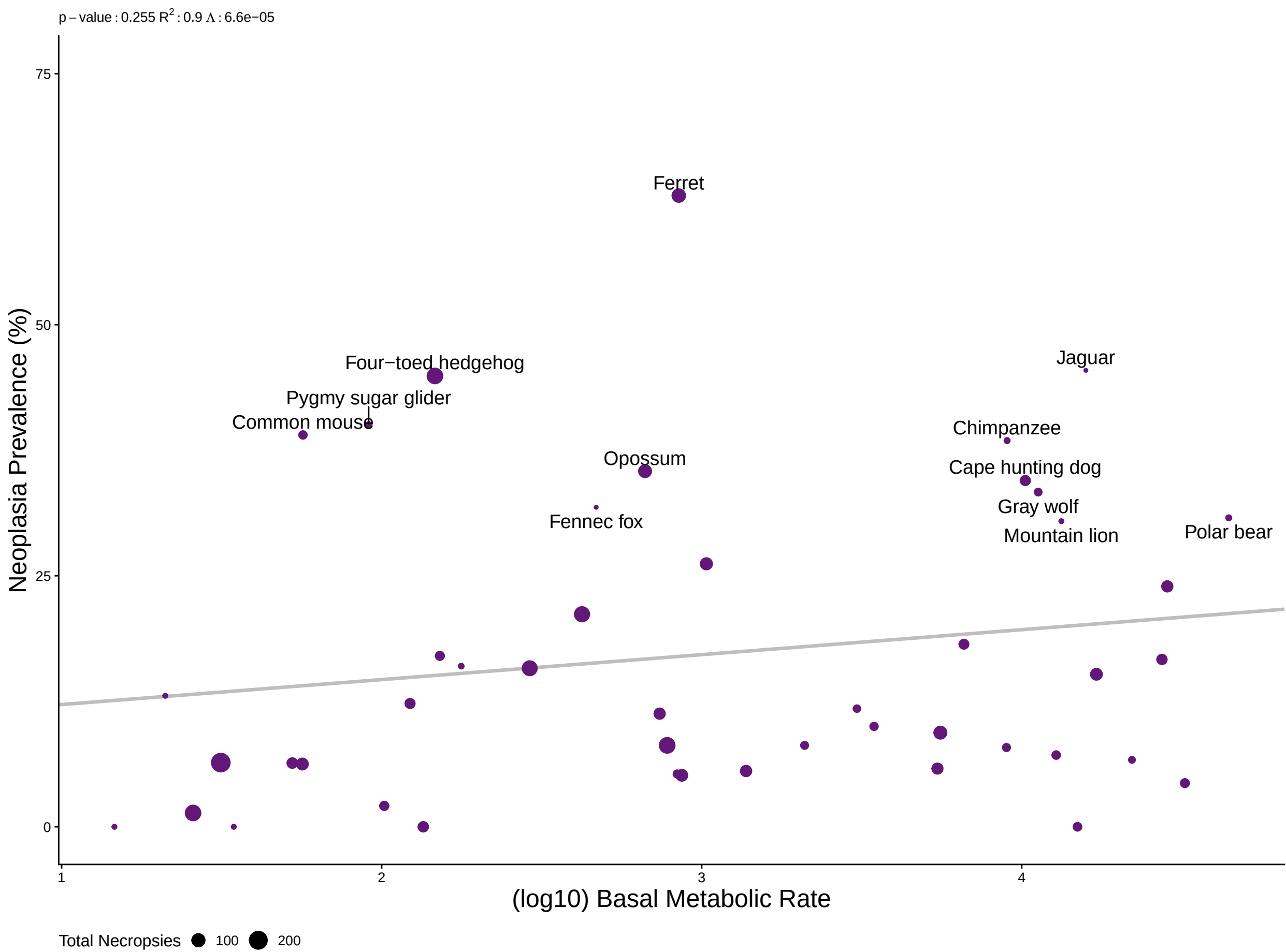
S27 Neoplasia Prevalence vs. Max Longevity in Mammals



p-value : 0.761 R^2 : 0.21 Λ : 0.40469

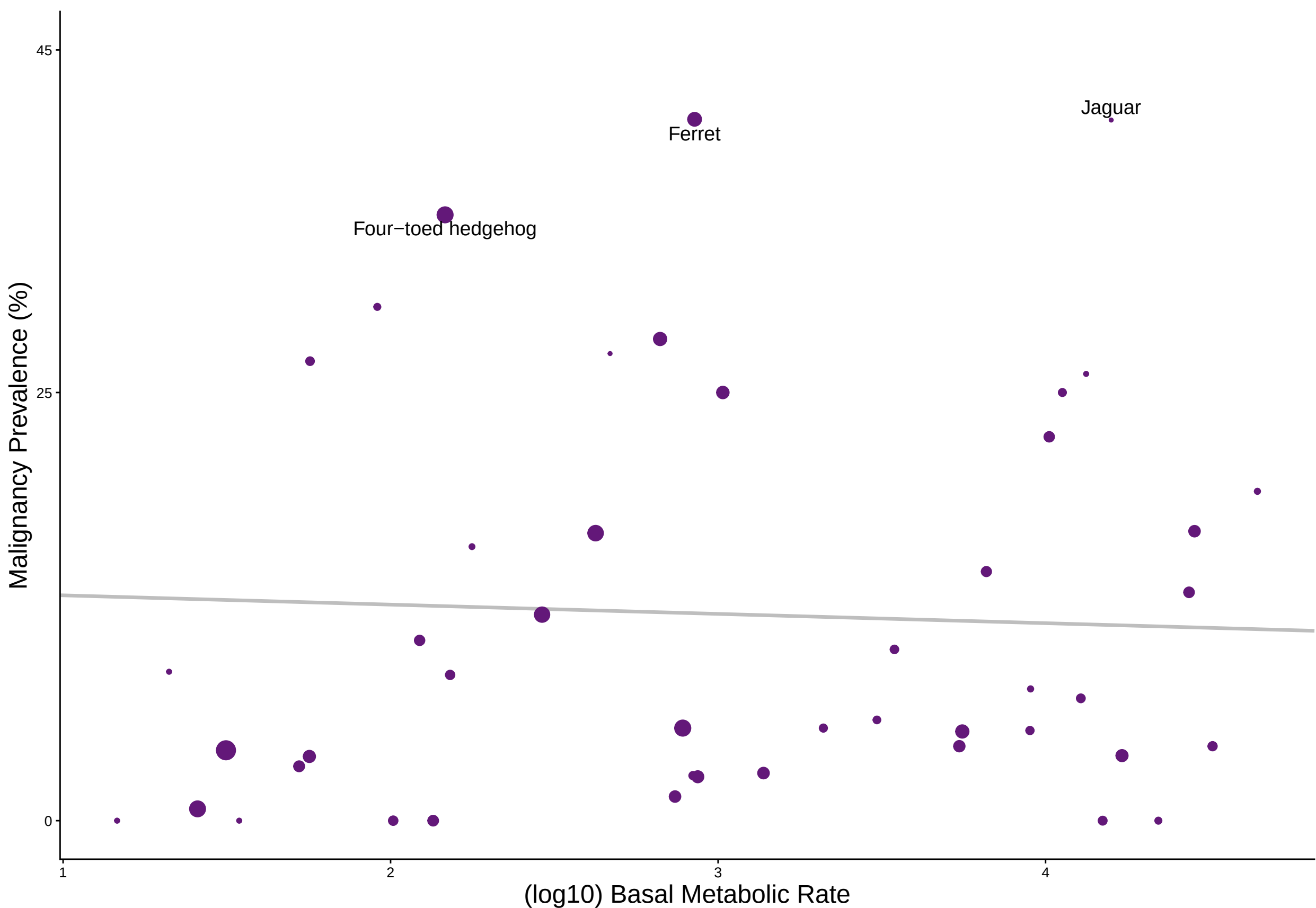


S29 Neoplasia Prevalence vs. Metabolic Rate in Mammals



S30 Malignancy Prevalence vs. Metabolic Rate in Mammals

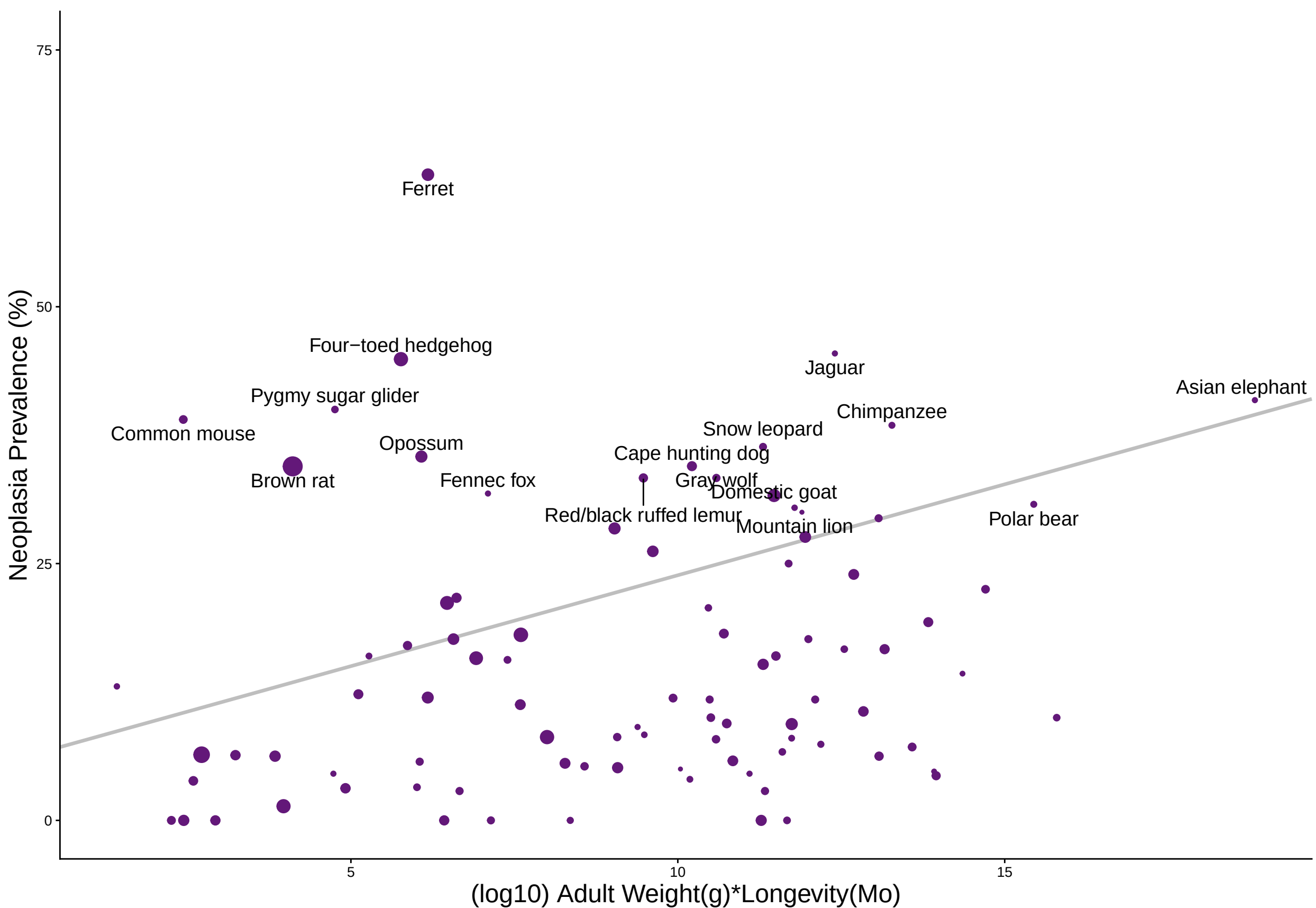
p-value : 0.782 R^2 : 0.59 Δ : 0.45



Clade ● Mammalia Total Necropsies ● 100 ● 200

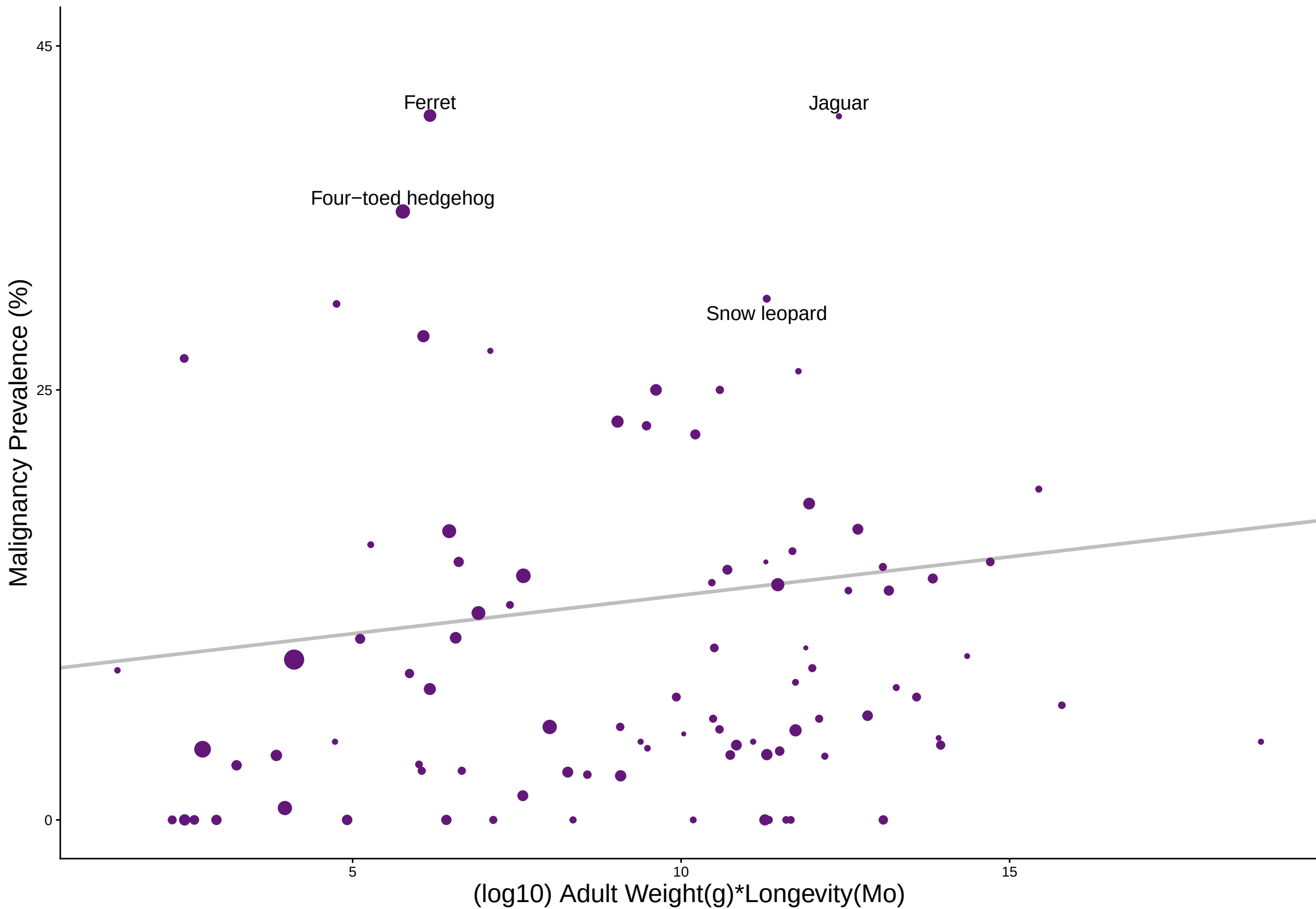
S31 Neoplasia Prevalence vs. Max Longevity*Weight in Mammals

p-value : 0.112 R^2 : 0.63 Δ : 0.35



S32 Malignancy Prevalence vs. Max Longevity*Weight in Mammals

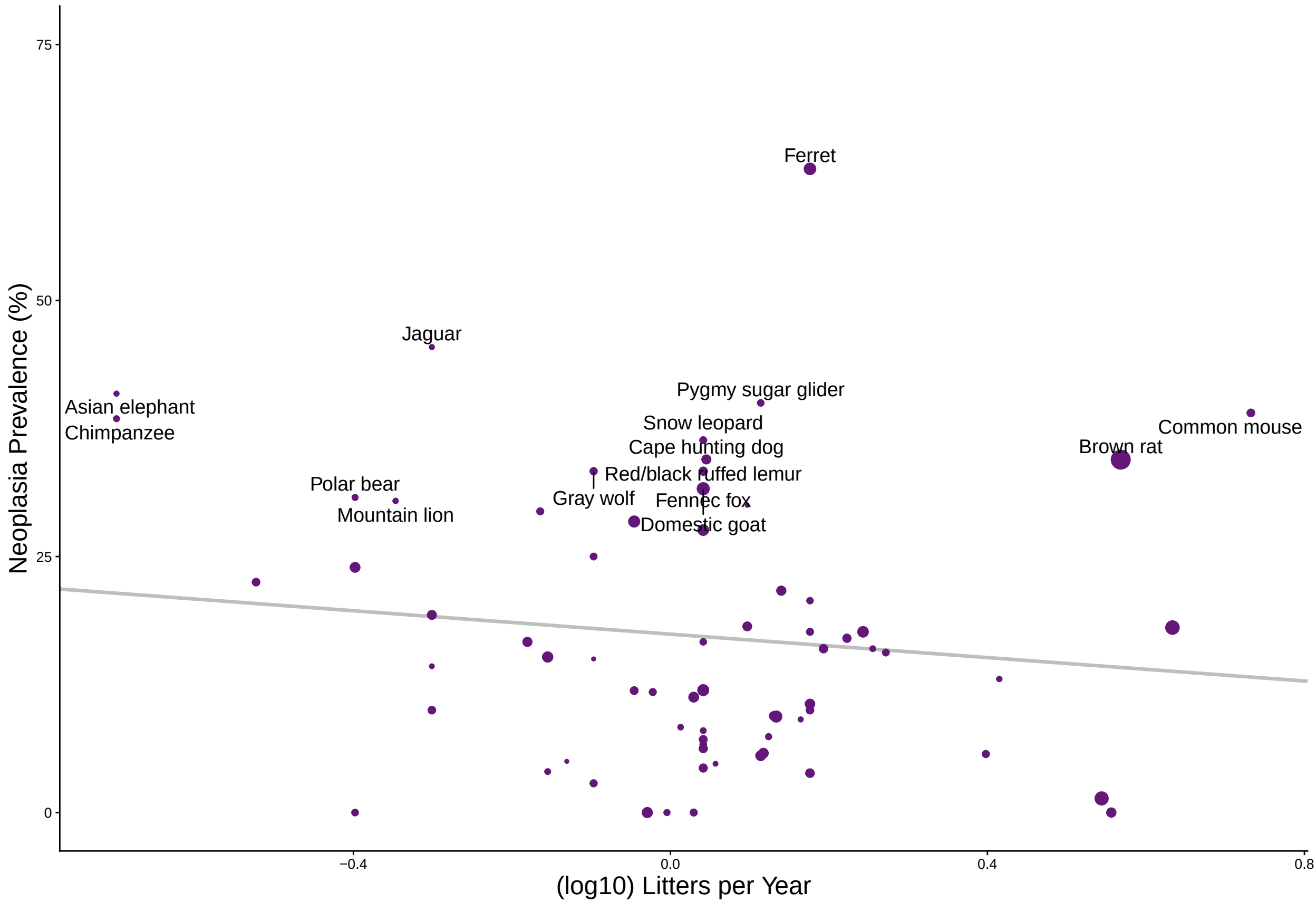
p-value : 0.59 R^2 : 0.61 Δ : 0.4



Clade ● Mammalia Total Necropsies ● 20 ● 100 ● 200 ● 300

S33Neoplasia Prevalence vs. Litters Per Year in Mammals

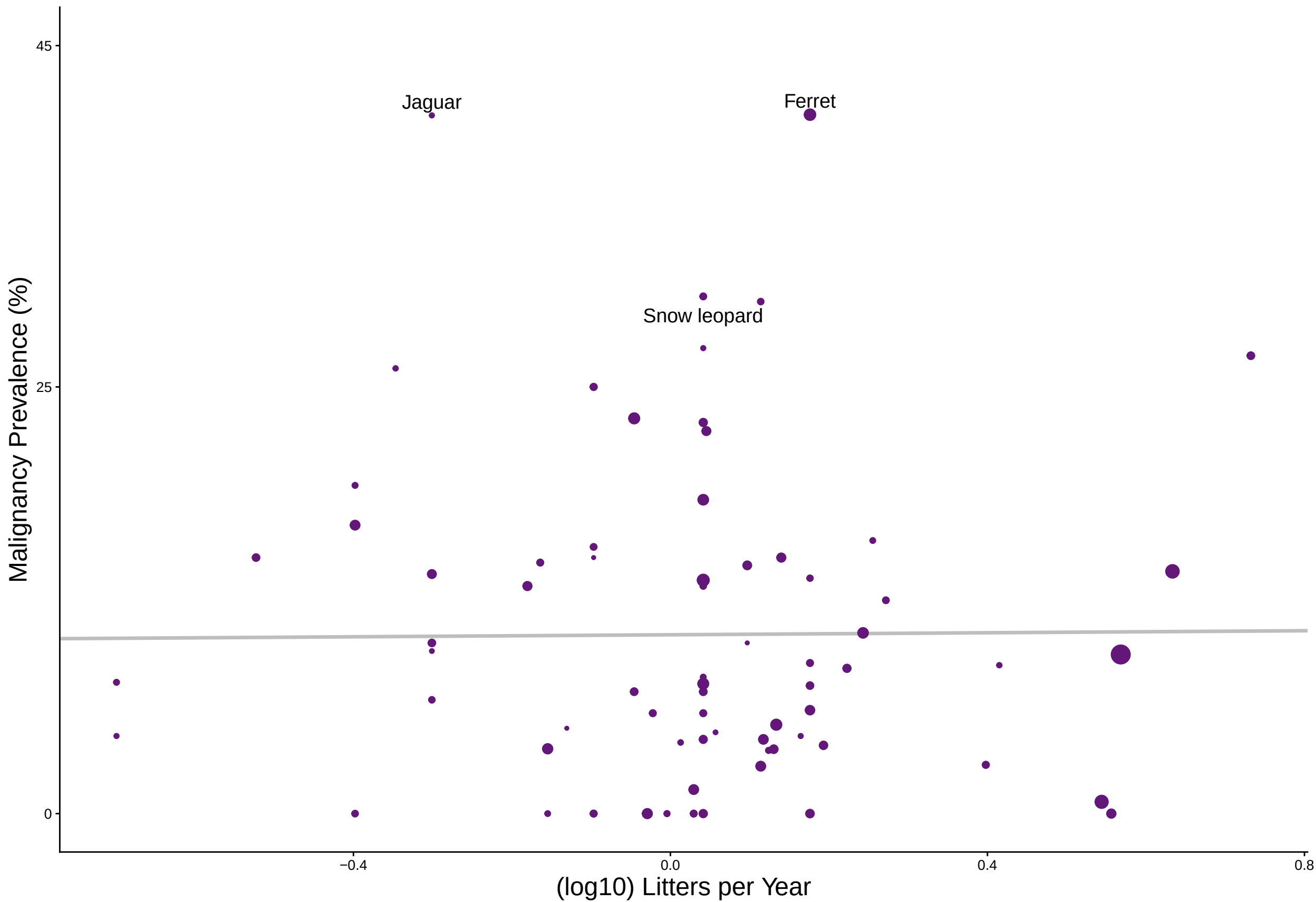
p-value : 0.366 R² : 0.0031 Δ : 0.3



Clade ● Mammalia Total Necropsies • 20 ● 100 ● 200 ● 300

S34 Malignancy Prevalence vs. Litters per Year in Mammals

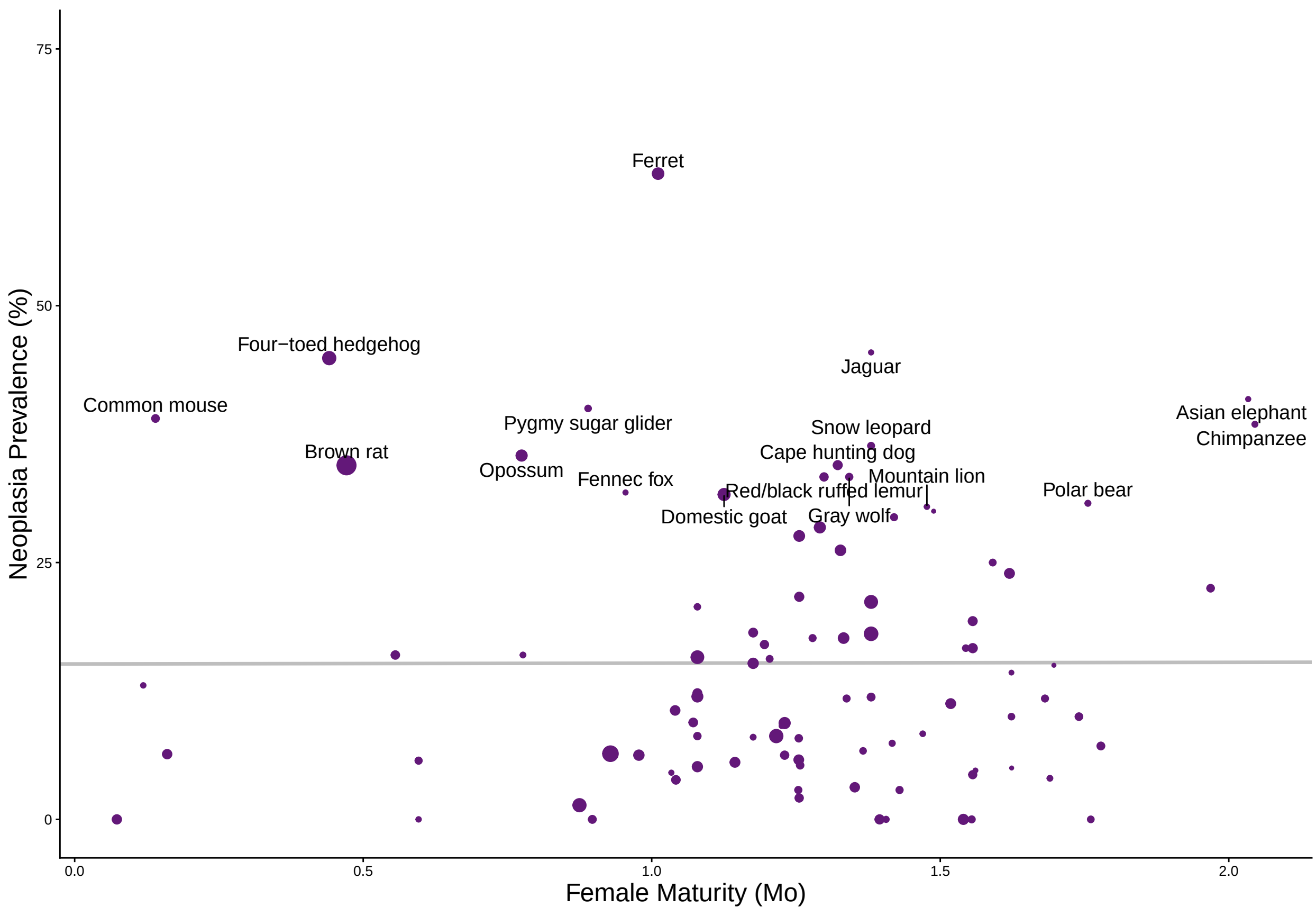
p-value : 0.949 R^2 : 0.0026 Δ : 0.35



Clade ● Mammalia Total Necropsies ● 20 ● 100 ● 200 ● 300

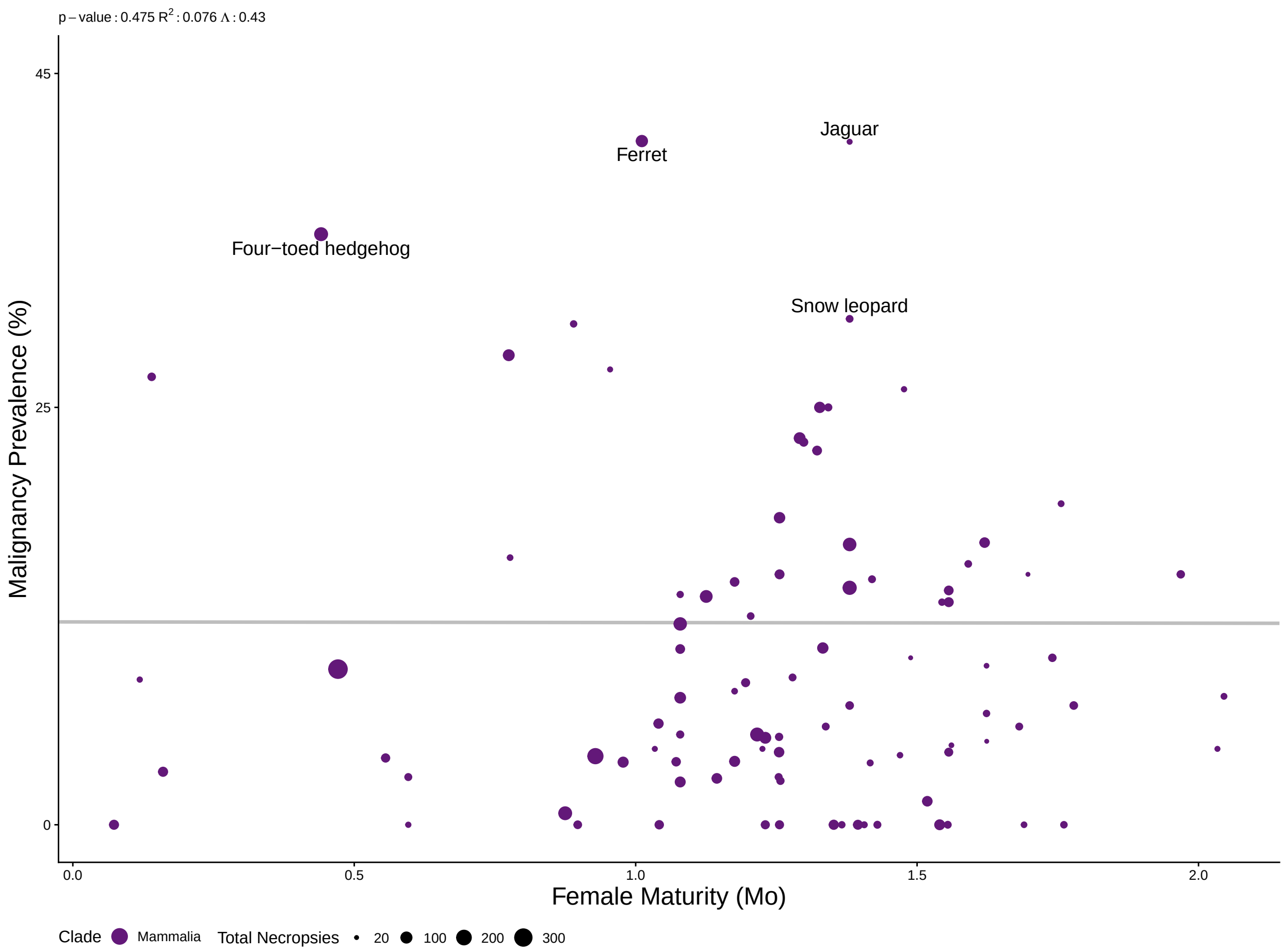
S35 Neoplasia Prevalence vs. Female Maturity in Mammals

p-value : 0.294 R^2 : 0.077 Δ : 0.42



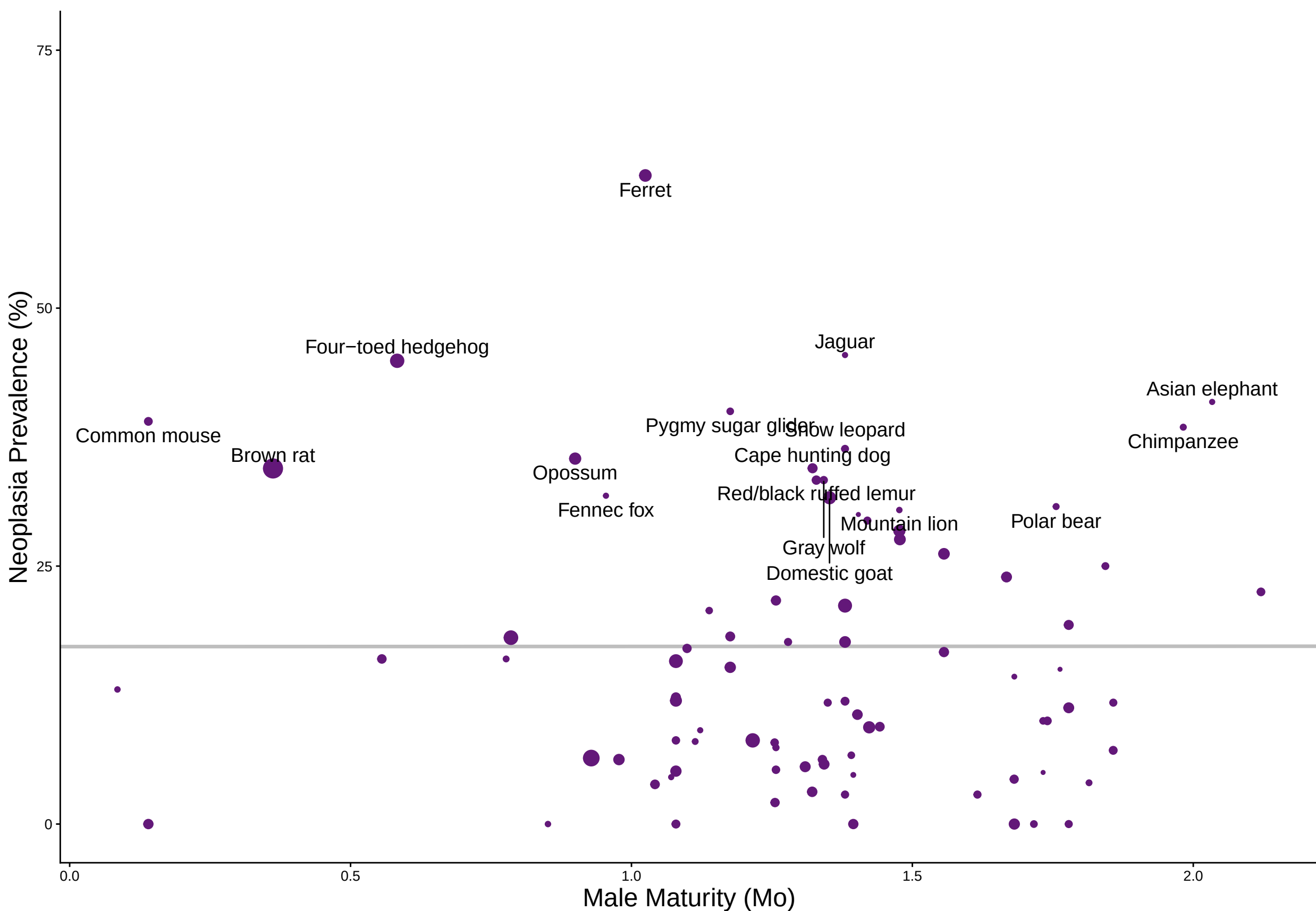
Clade ● Mammalia Total Necropsies ● 20 ● 100 ● 200 ● 300

S36 Malignancy Prevalence vs. Female Maturity in Mammals

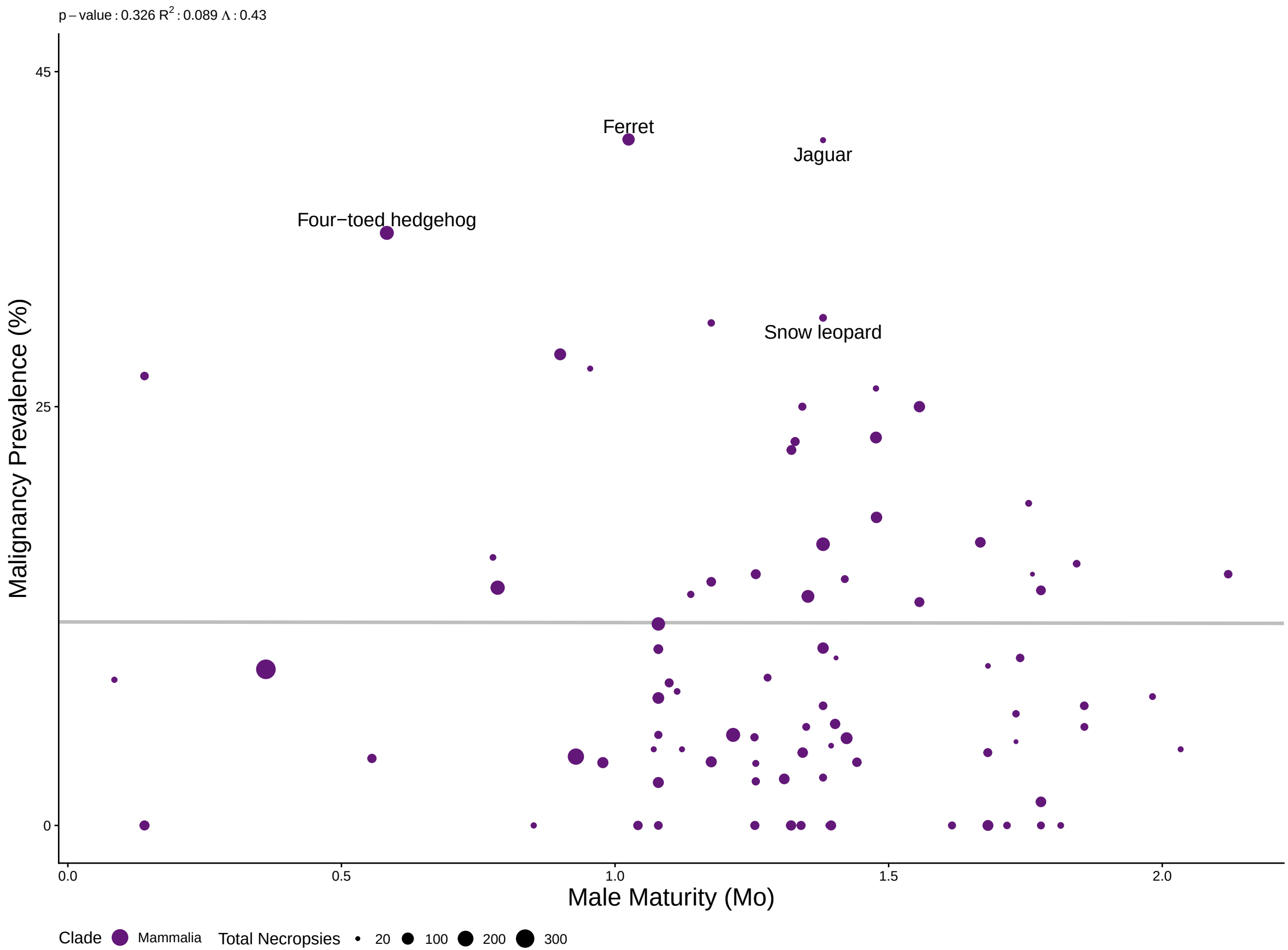


S37 Neoplasia Prevalence vs. Male Maturity in Mammals

p-value : 0.804 R^2 : 0.091 Δ : 0.42

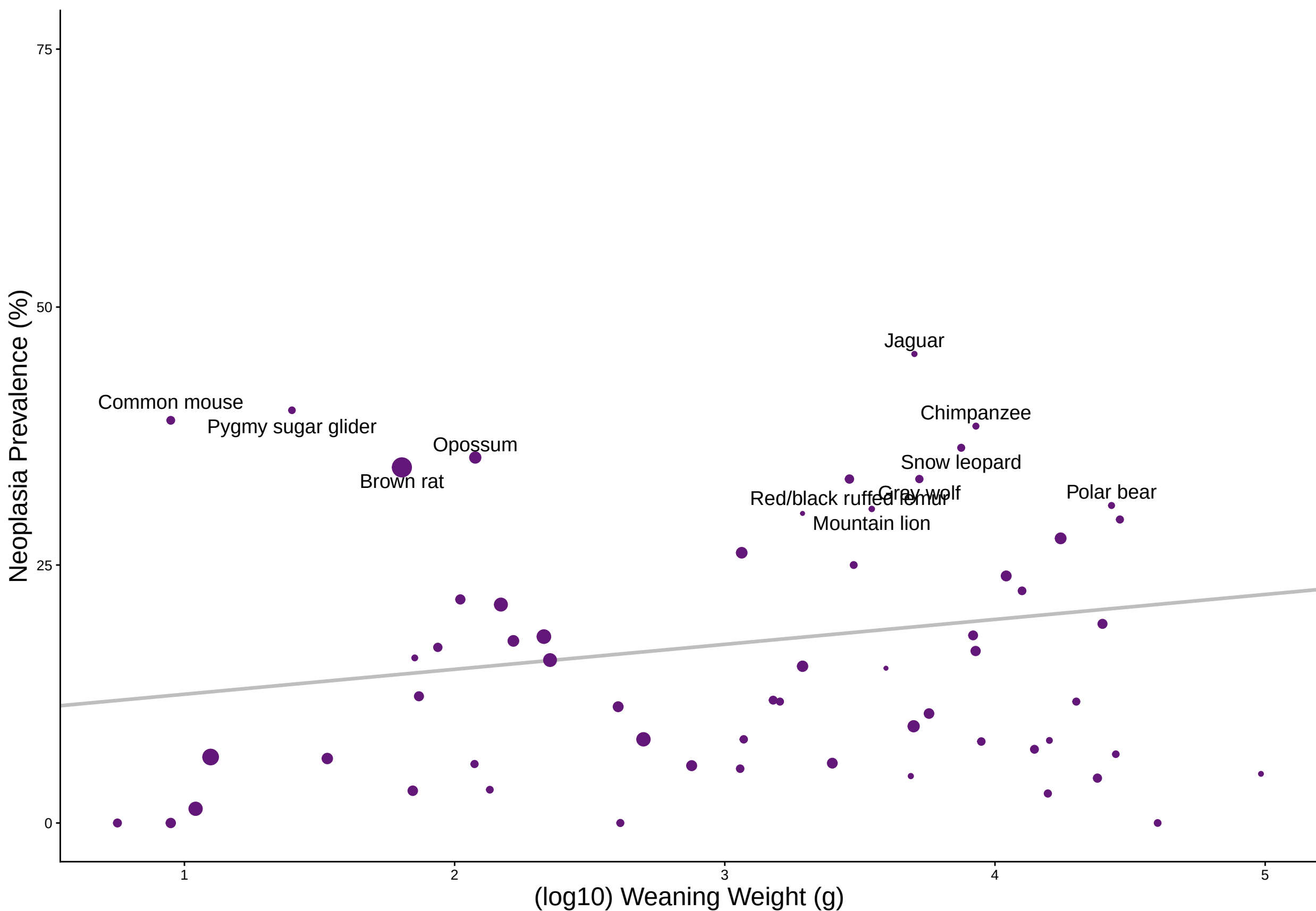


S38 Malignancy Prevalence vs. Male Maturity in Mammals



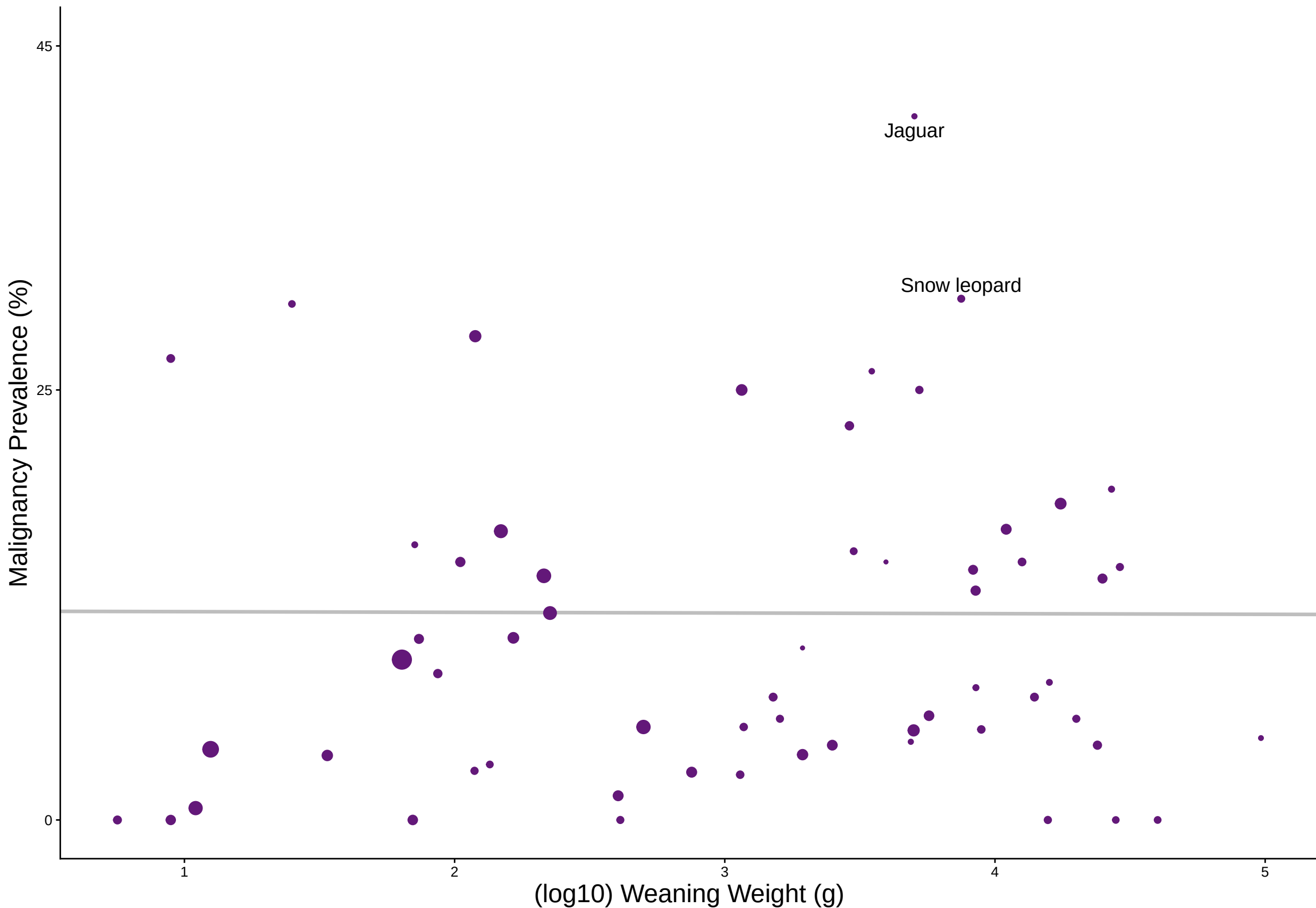
S39 Neoplasia Prevalence vs. Weaning Weight in Mammals

p-value : 0.158 R^2 : 0.42 Δ : 0.73



S40 Malignancy Prevalence vs. Weaning Weight in Mammals

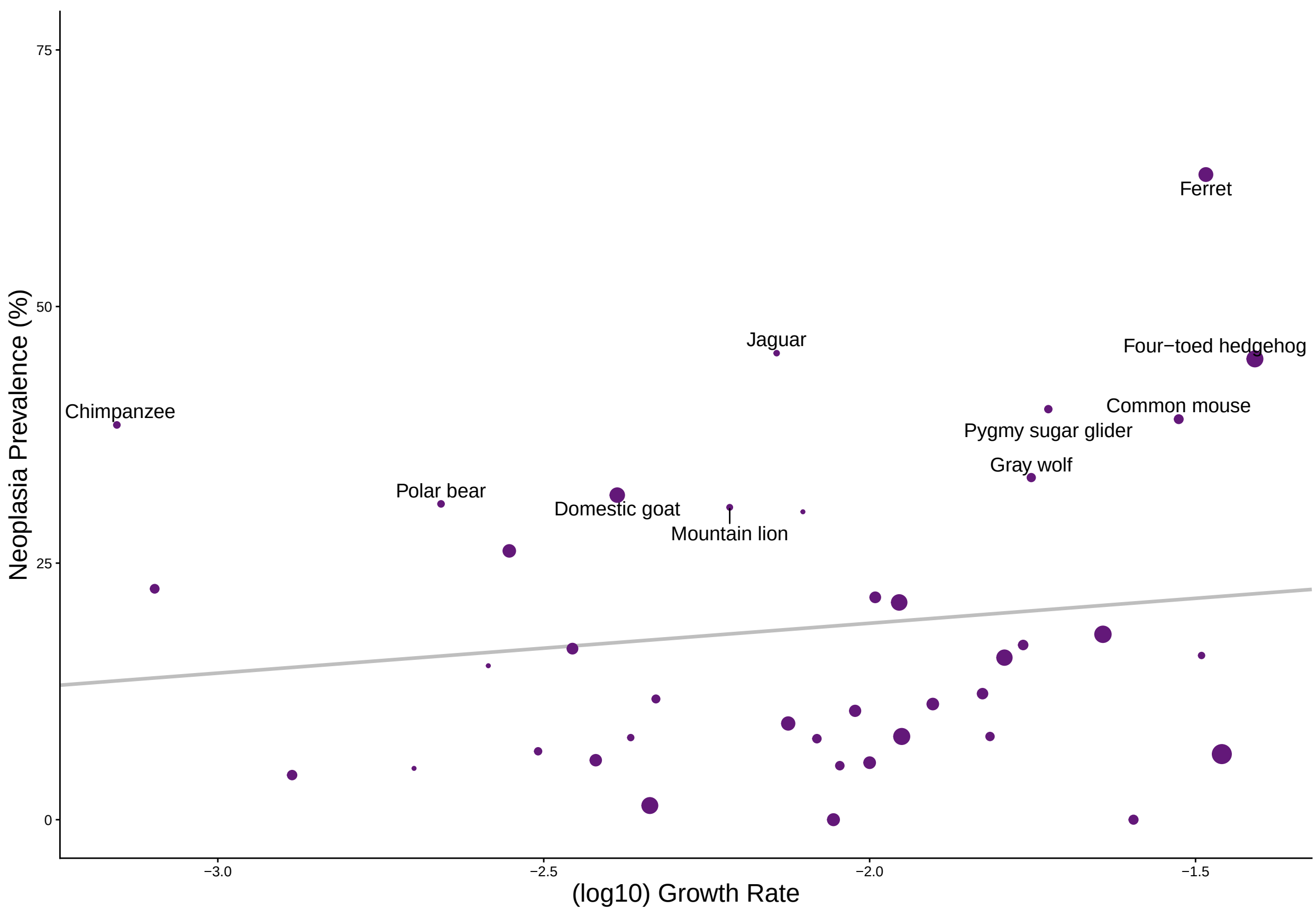
p-value : 0.281 R^2 : 0.87 Δ : 6.6e-05



Clade ● Mammalia Total Necropsies ● 20 ● 100 ● 200 ● 300

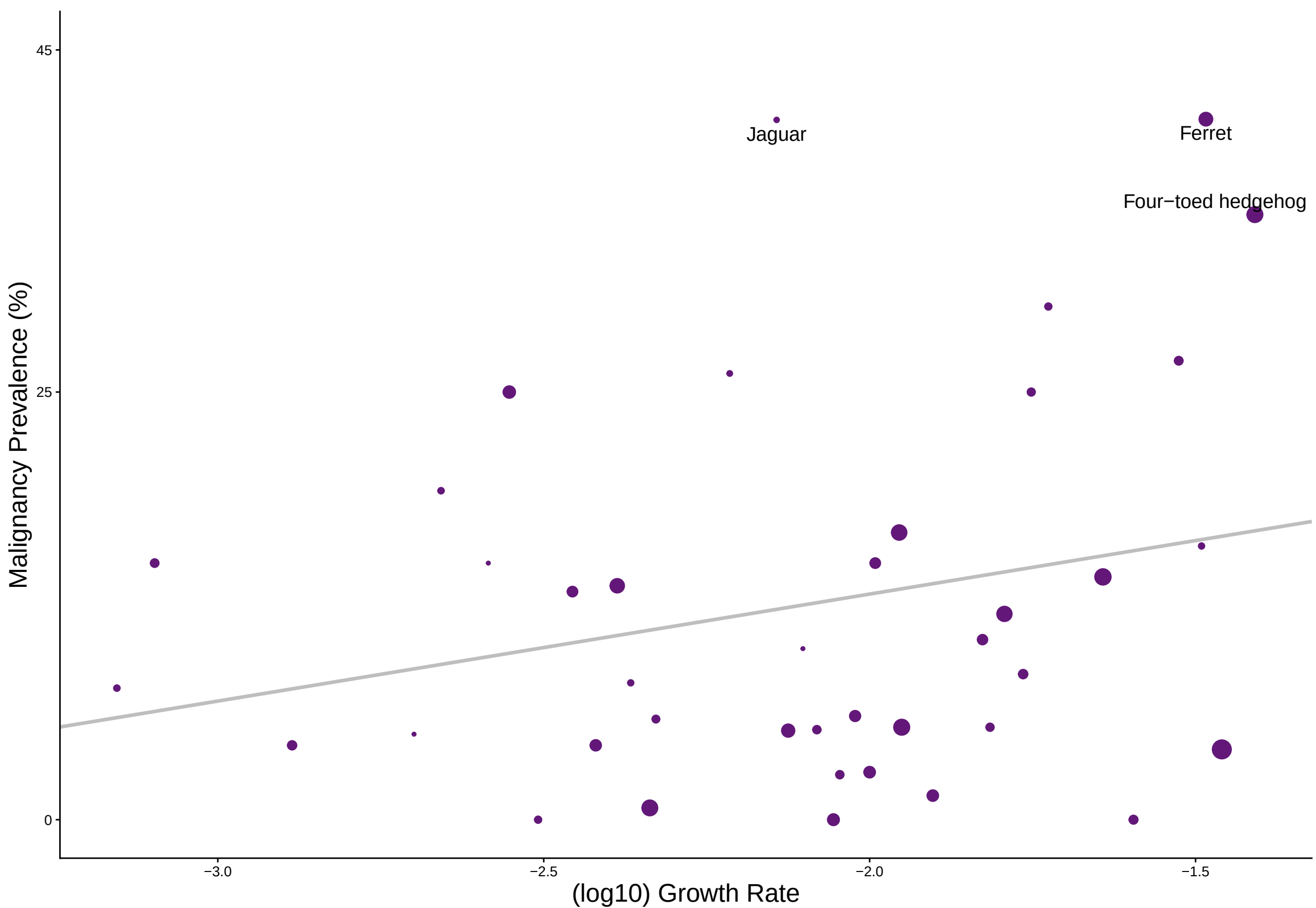
S41 Neoplasia Prevalence vs. Growth Rate in Mammals

p-value : 0.368 R^2 : 0.96 Δ : 6.6e-05



S42 Malignancy Prevalence vs. Growth Rate in Mammals

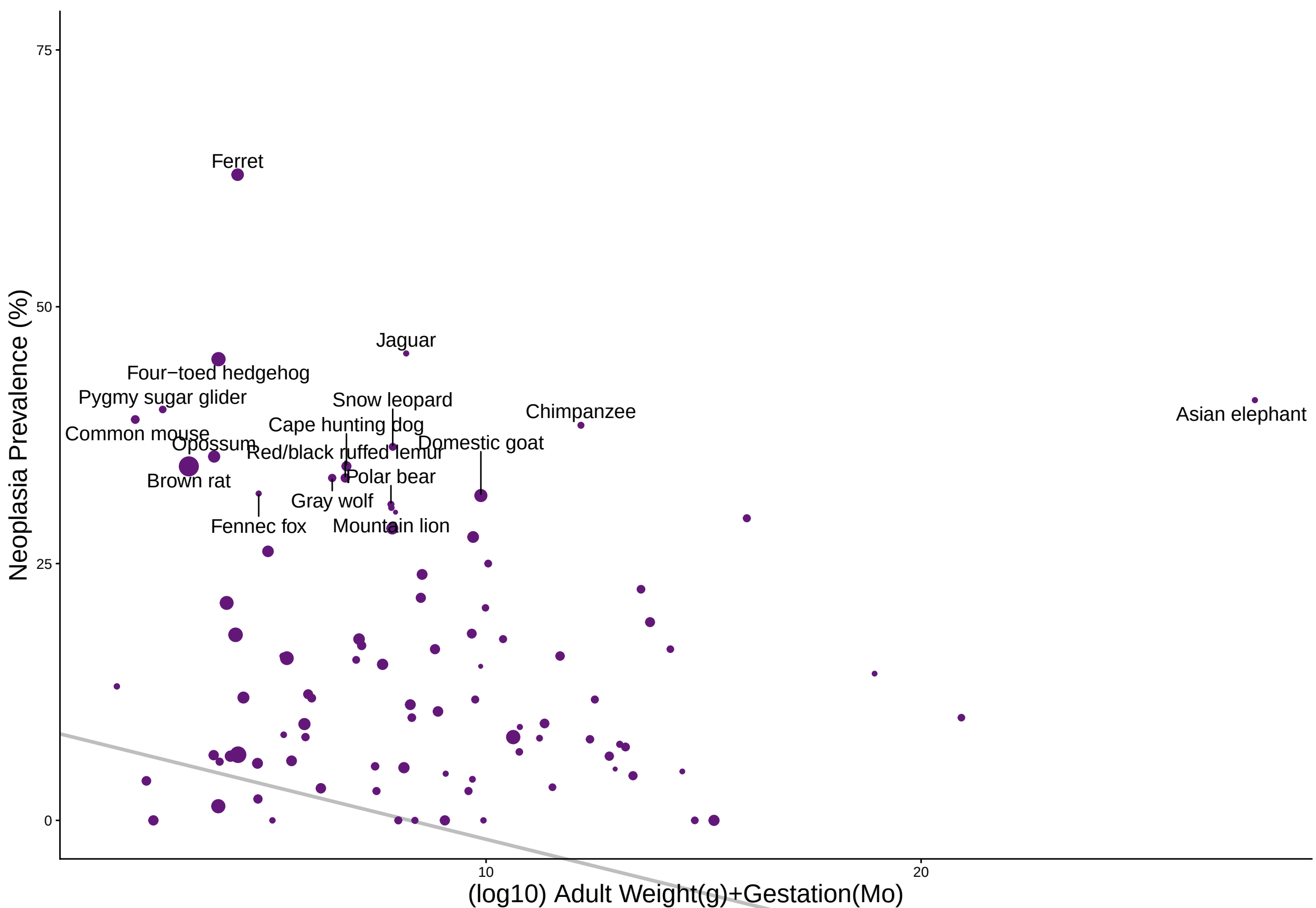
p-value : 0.12 R^2 : 0.96 Δ : 6.6e-05



Clade ● Mammalia Total Necropsies ● 20 ● 100 ● 200

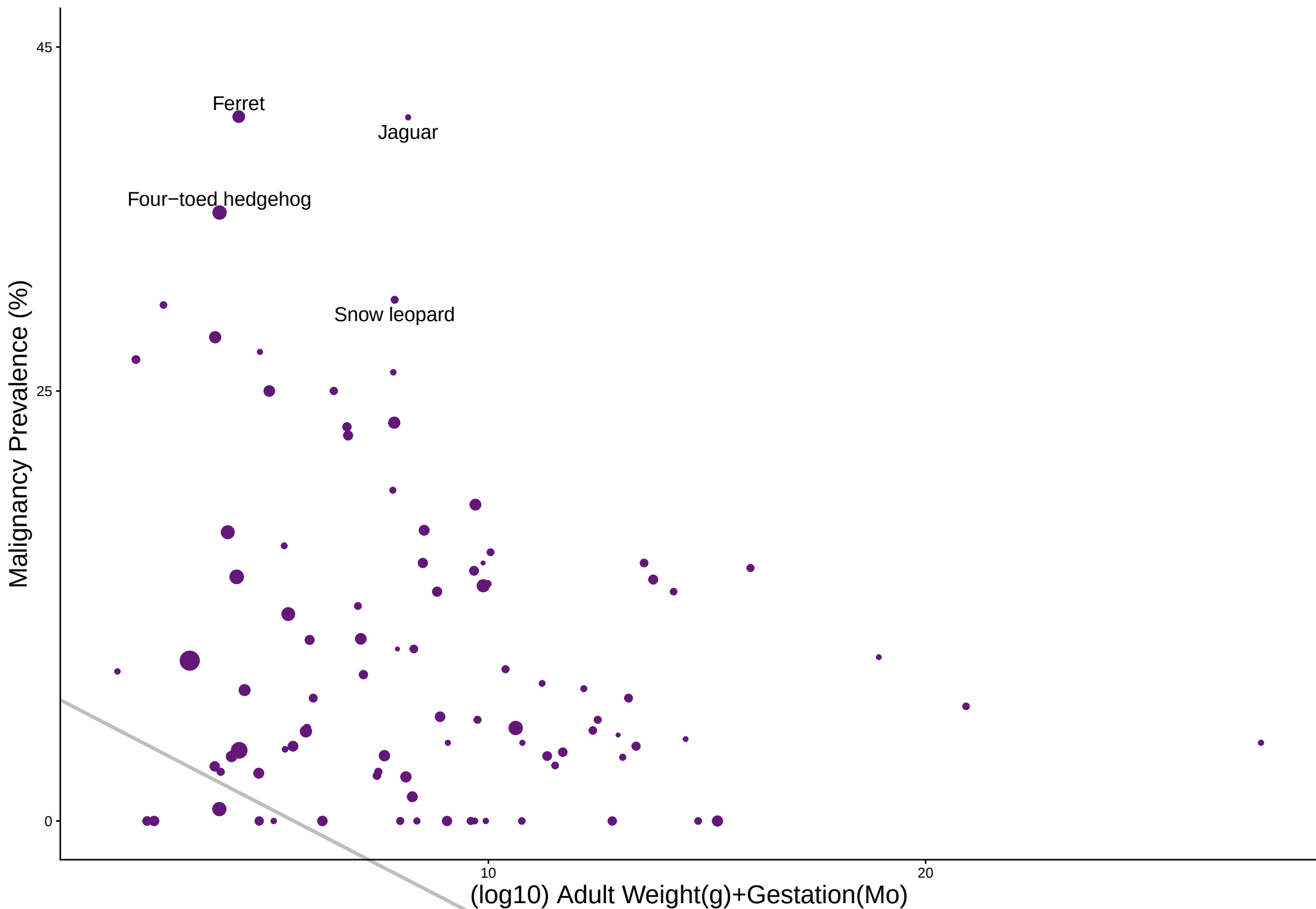
S43 Neoplasia Prevalence vs. Max Longevity+Gestation in Mammals

p-value : 0.0364 R^2 : 0.02 Δ : 0.22



S44 Malignancy Prevalence vs. Max Longevity+Gestation in Mammals

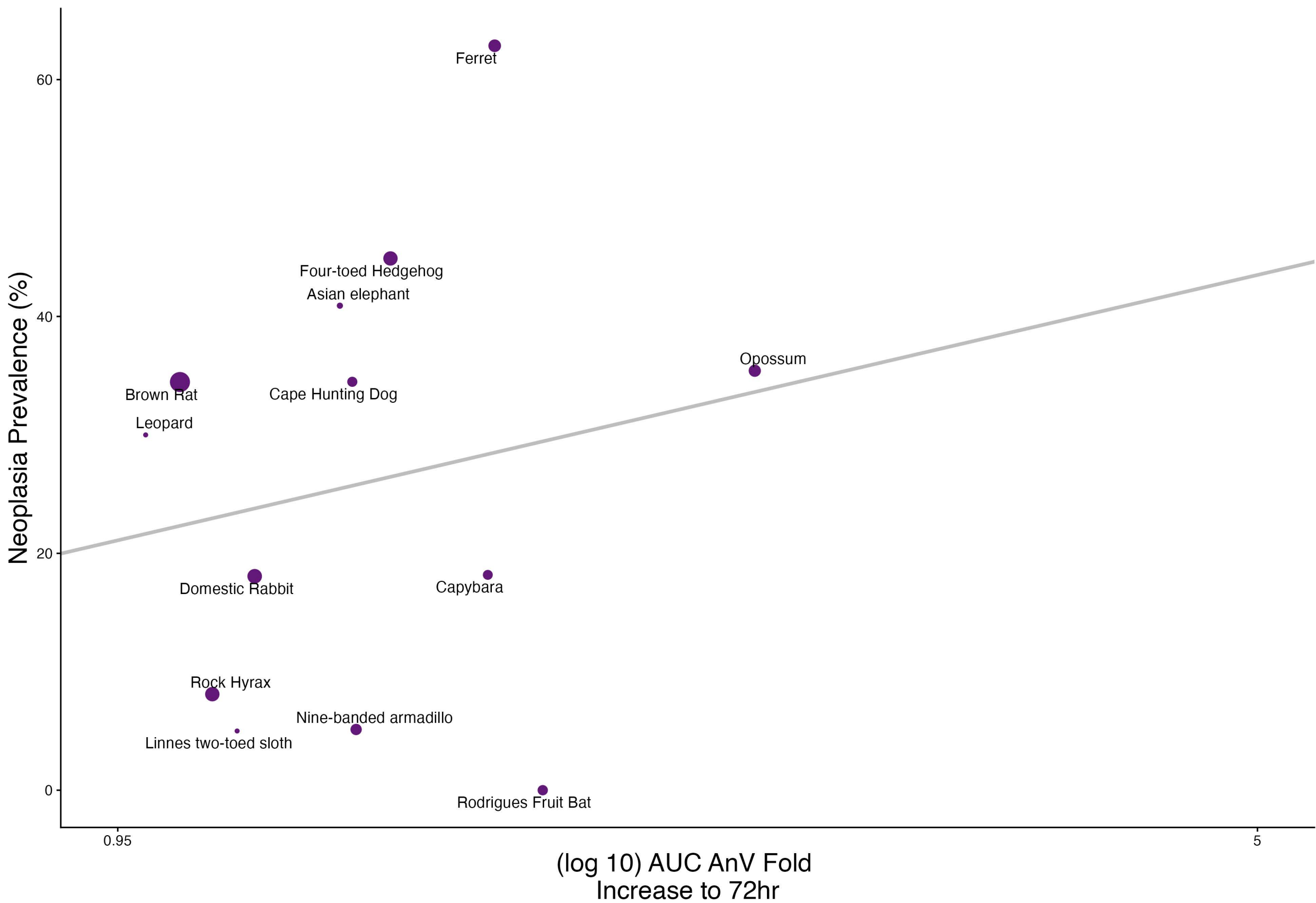
p-value : 6.38e-05 R² : 0.0035 Δ : 7.8e-05



Clade ● Mammalia Total Necropsies ● 20 ● 100 ● 200 ● 300

S45 Neoplasia vs. AUC 0.11uM Doxorubicin

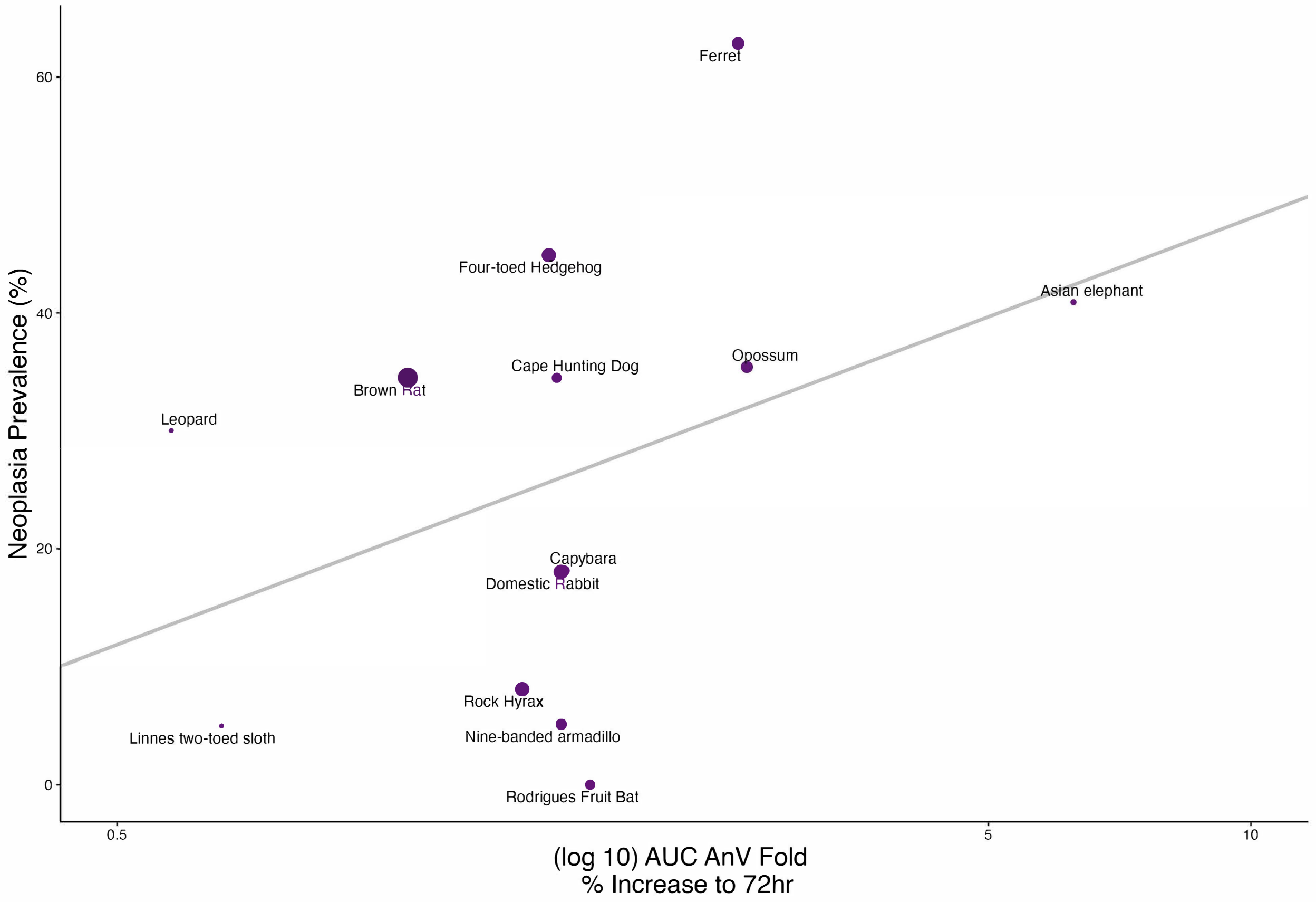
p - value : 0.556 R^2 : 0.633 Δ : 6.61e-05



Total Necropsies ● 55 ● 150 ● 250 ● 350

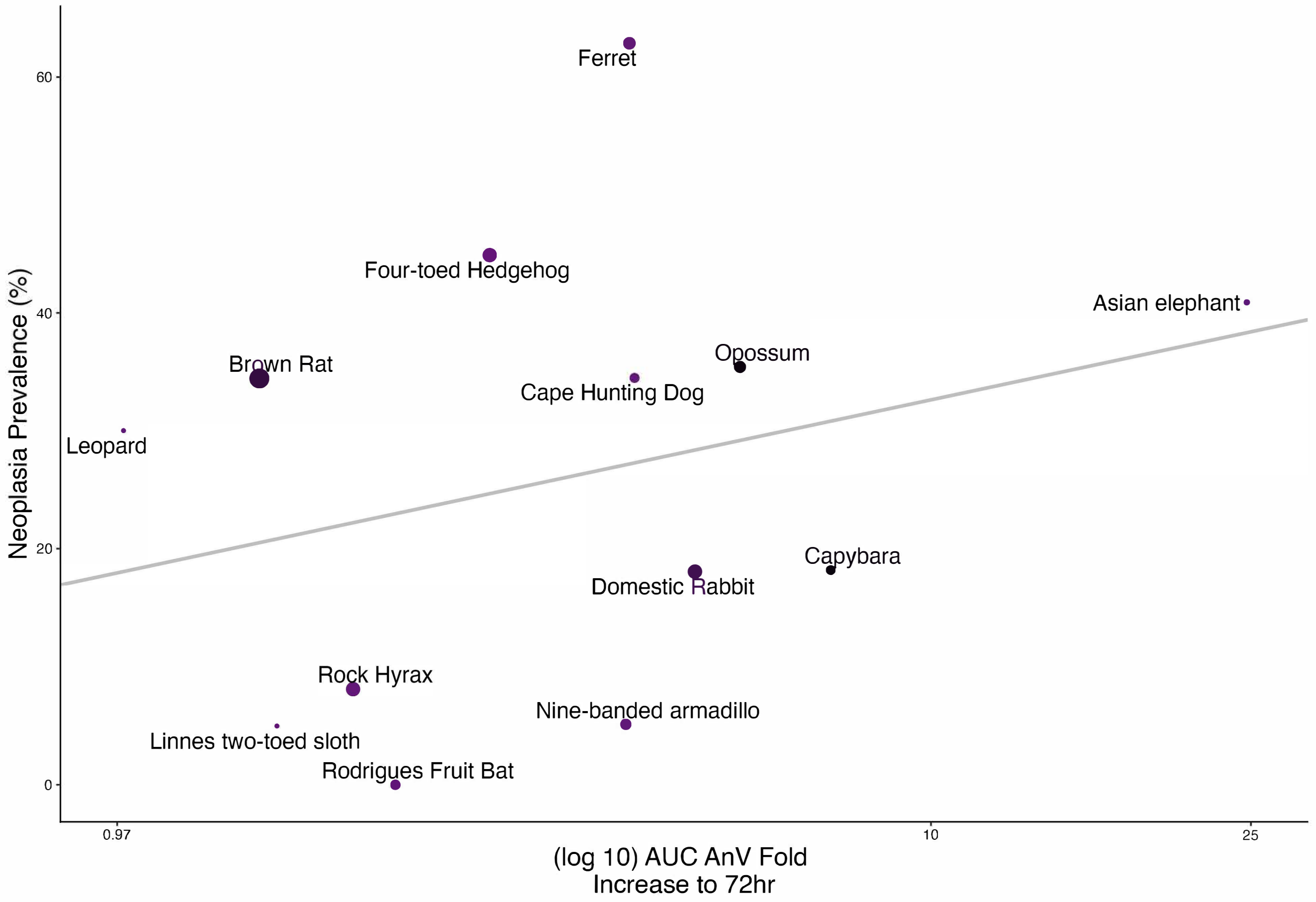
S46 Neoplasia vs. AUC 0.33uM Doxorubicin

p - value : 0.189 R² : 0.404 Δ : 6.6107e-05



S47 Neoplasia vs. AUC 1uM Doxorubicin

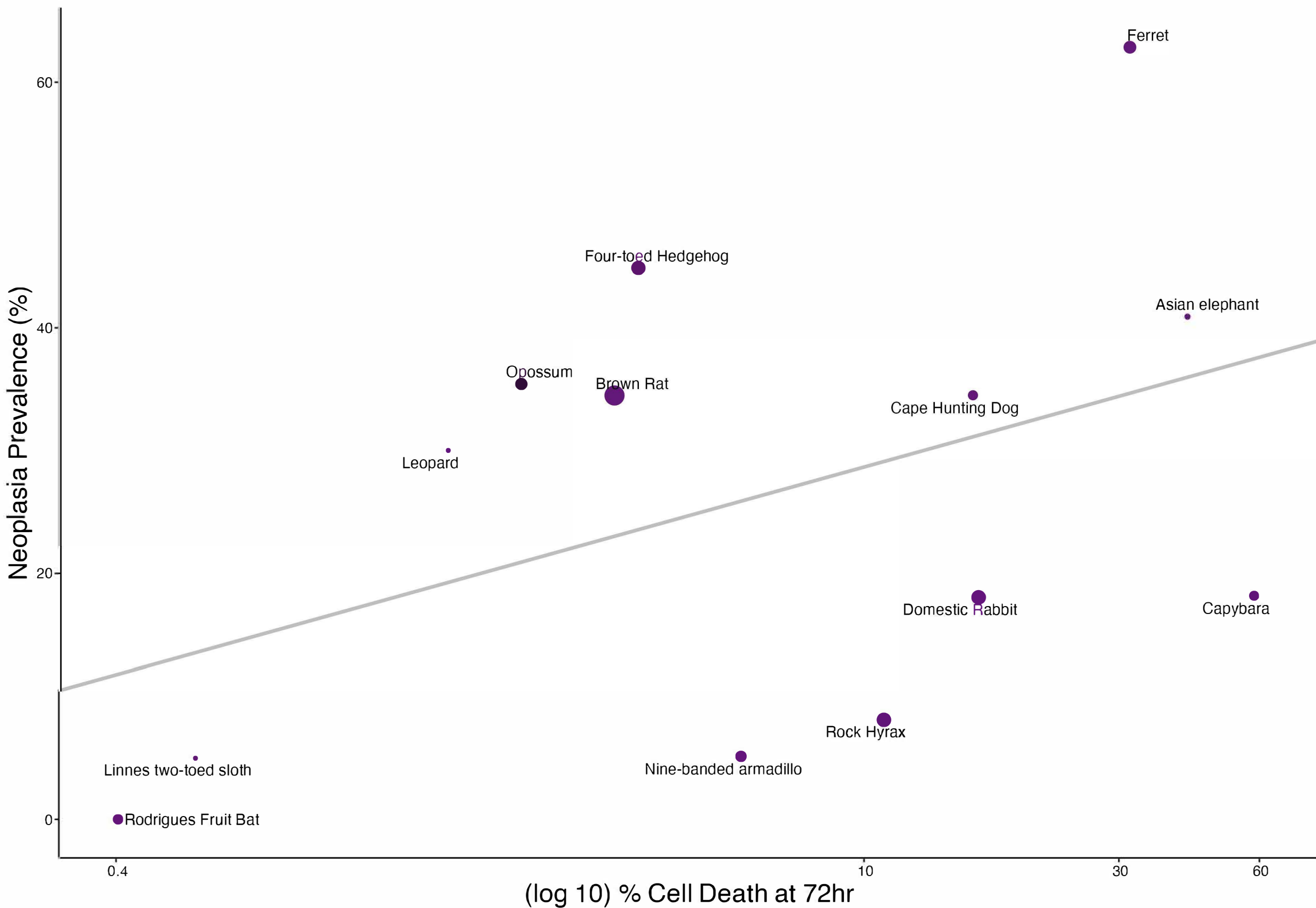
p-value : 0.345 R² : 0.703 Δ : 6.6107e-05



Total Necropsies ● 55 ● 150 ● 250 ● 350

S48 Neoplasia vs. Cell Death 1uM Doxorubicin

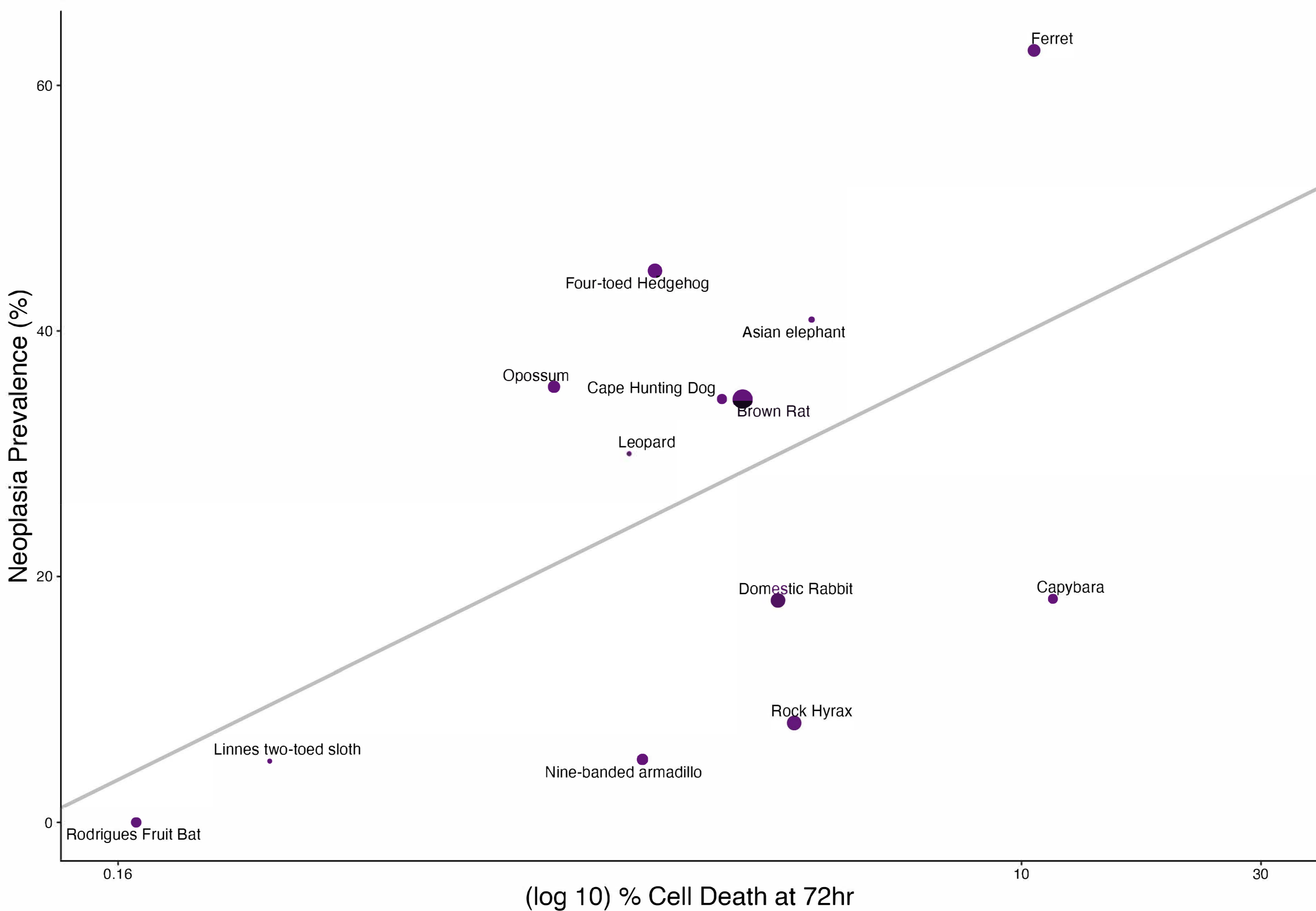
p - value : 0.132 R^2 : 0.582 Δ :



Total Necropsies ● 55 ● 150 ● 250 ● 350

S49 Neoplasia vs. Cell Death 0.11uM Doxorubicin

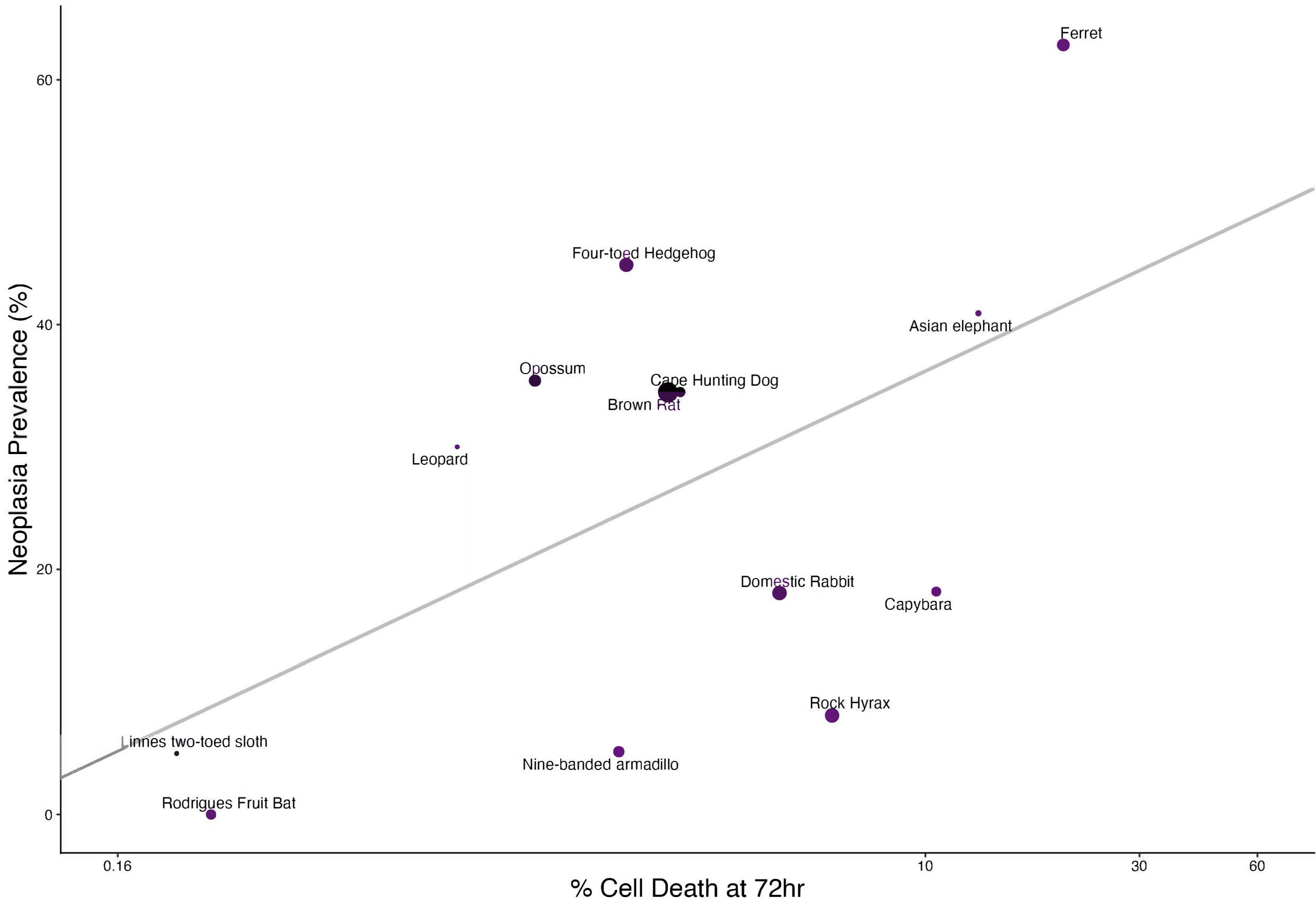
p-value : 0.0503 R^2 : 0.293 Δ :



Total Necropsies ● 55 ● 150 ● 250 ● 350

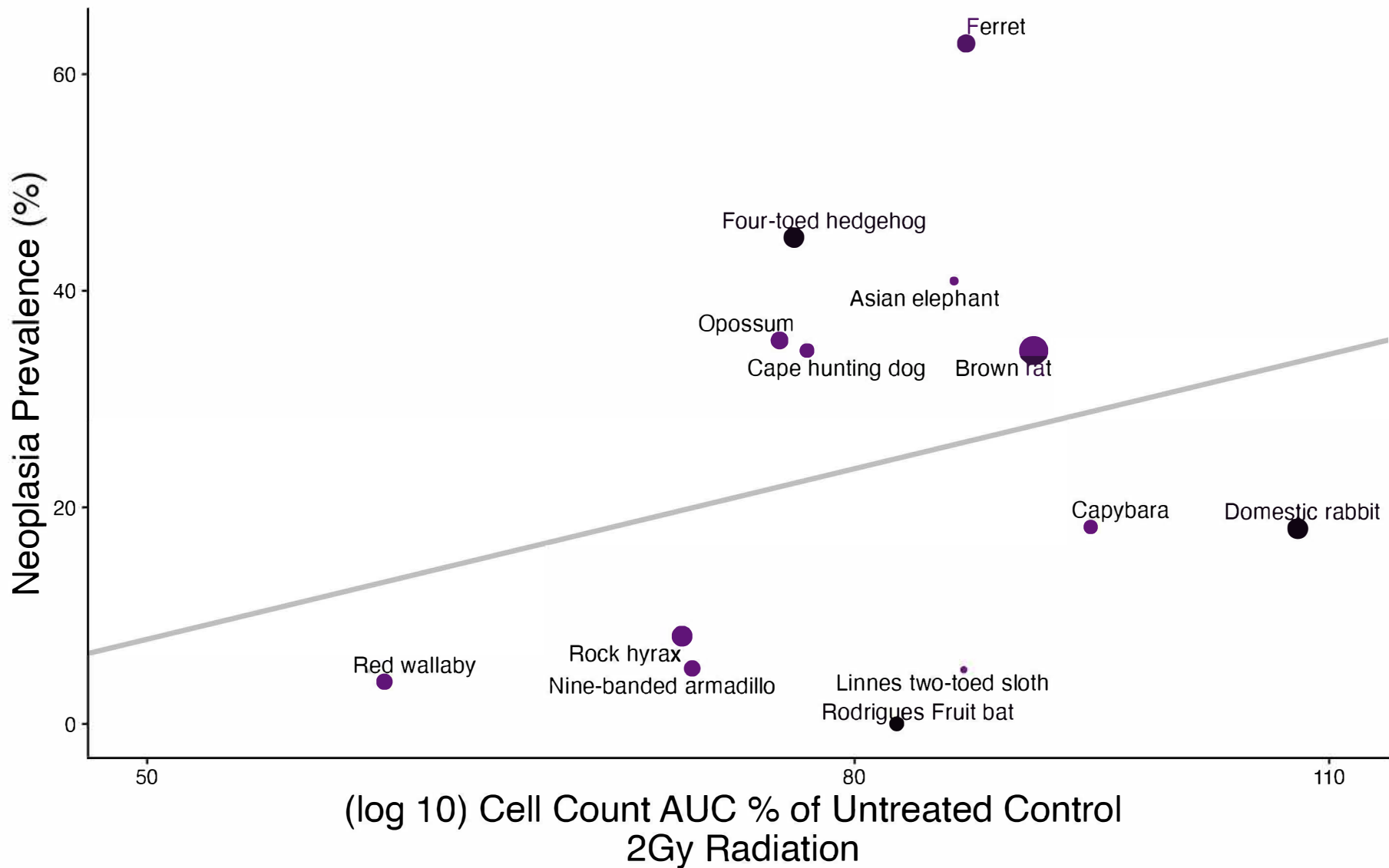
S50 Neoplasia vs. Cell Death 0.33uM Doxorubicin

p - value : 0.0485 R^2 : 0.329 Δ :



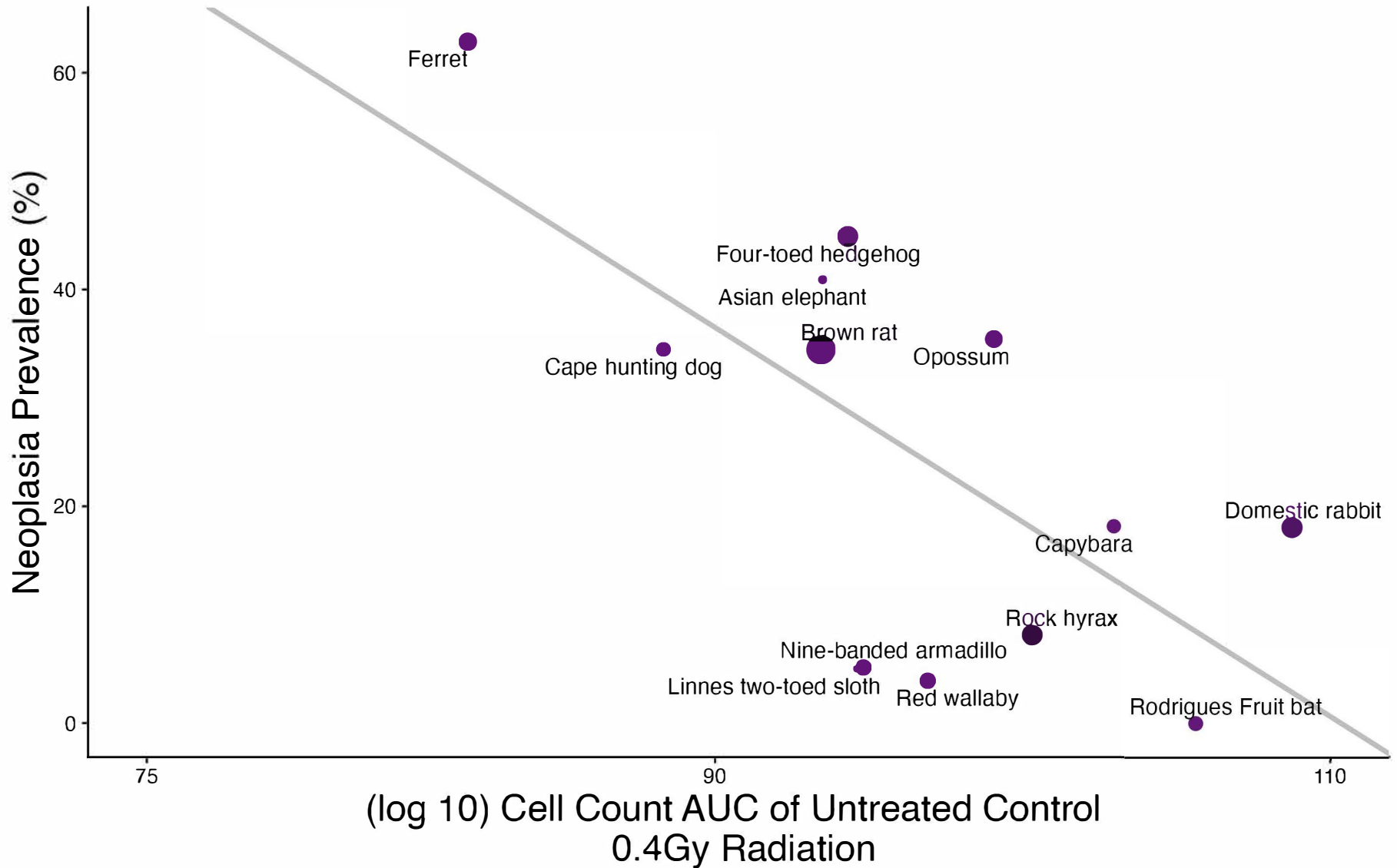
S51 Neoplasia vs. AUC 2GY Radiation

p-value: 0.4 $R^2: 1$ $\Delta: 6.6e-05$



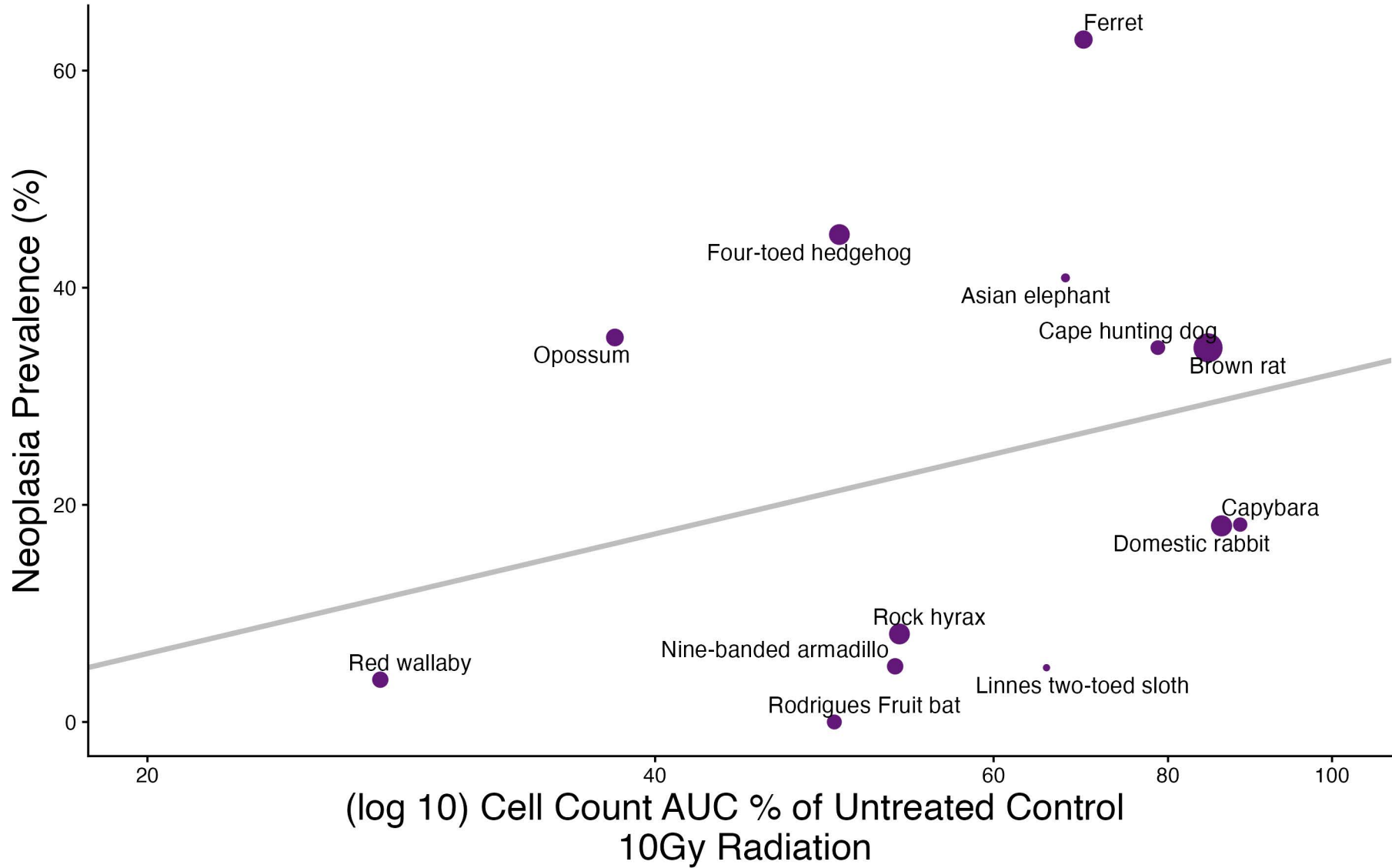
S52 Neoplasia vs. AUC 0.4Gy Radiation

p-value : 0.013 R^2 : 1 Δ : 6.6e-05



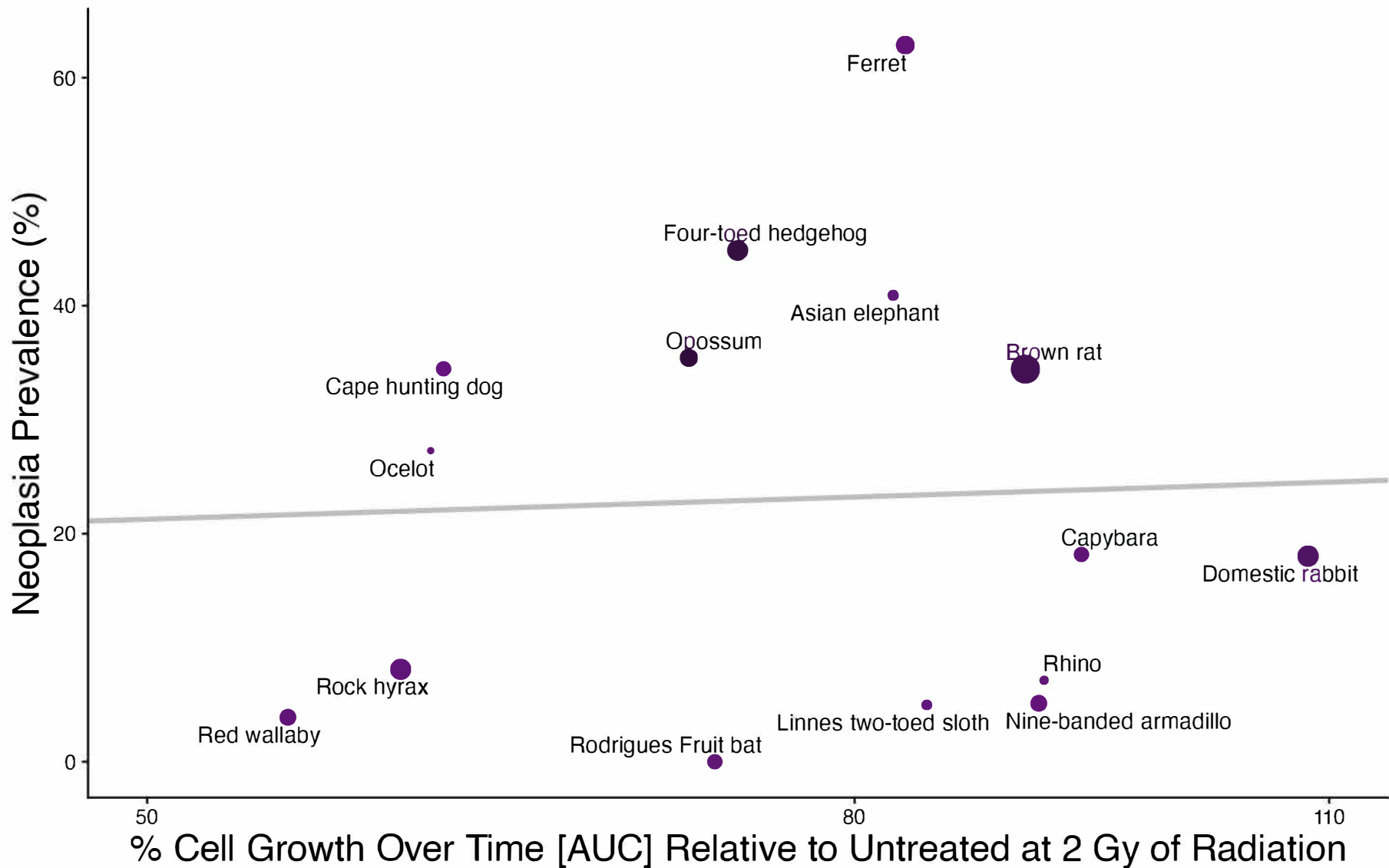
S53 Neoplasia vs. AUC 10Gy Radiation

p-value : 0.35 R^2 : 0.99 Δ : 6.6e-05



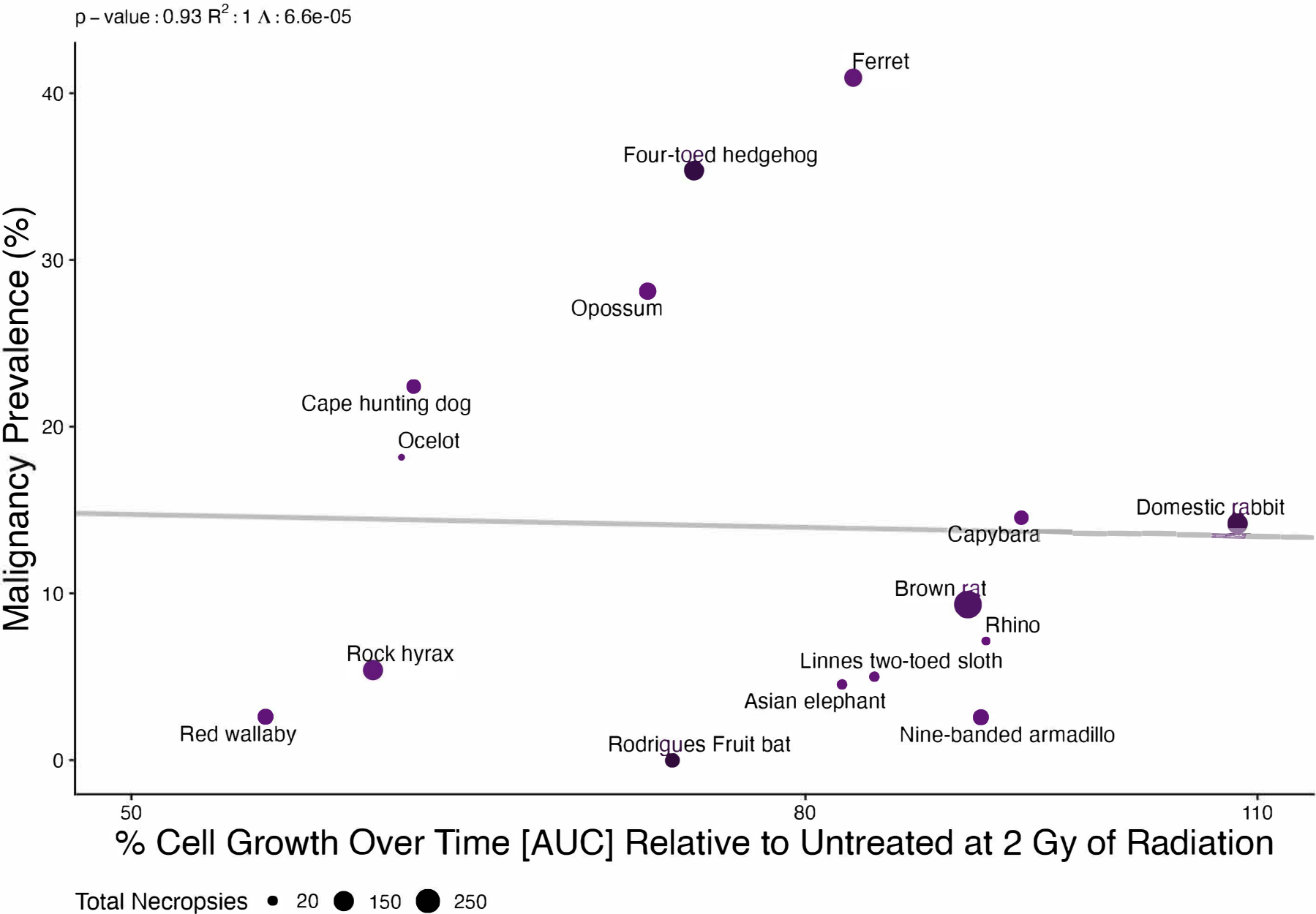
S54 Neoplasia vs. AUC Area Change From UT 2Gy Radiation

p-value : 0.88 R^2 : 1 Δ : 6.6e-05



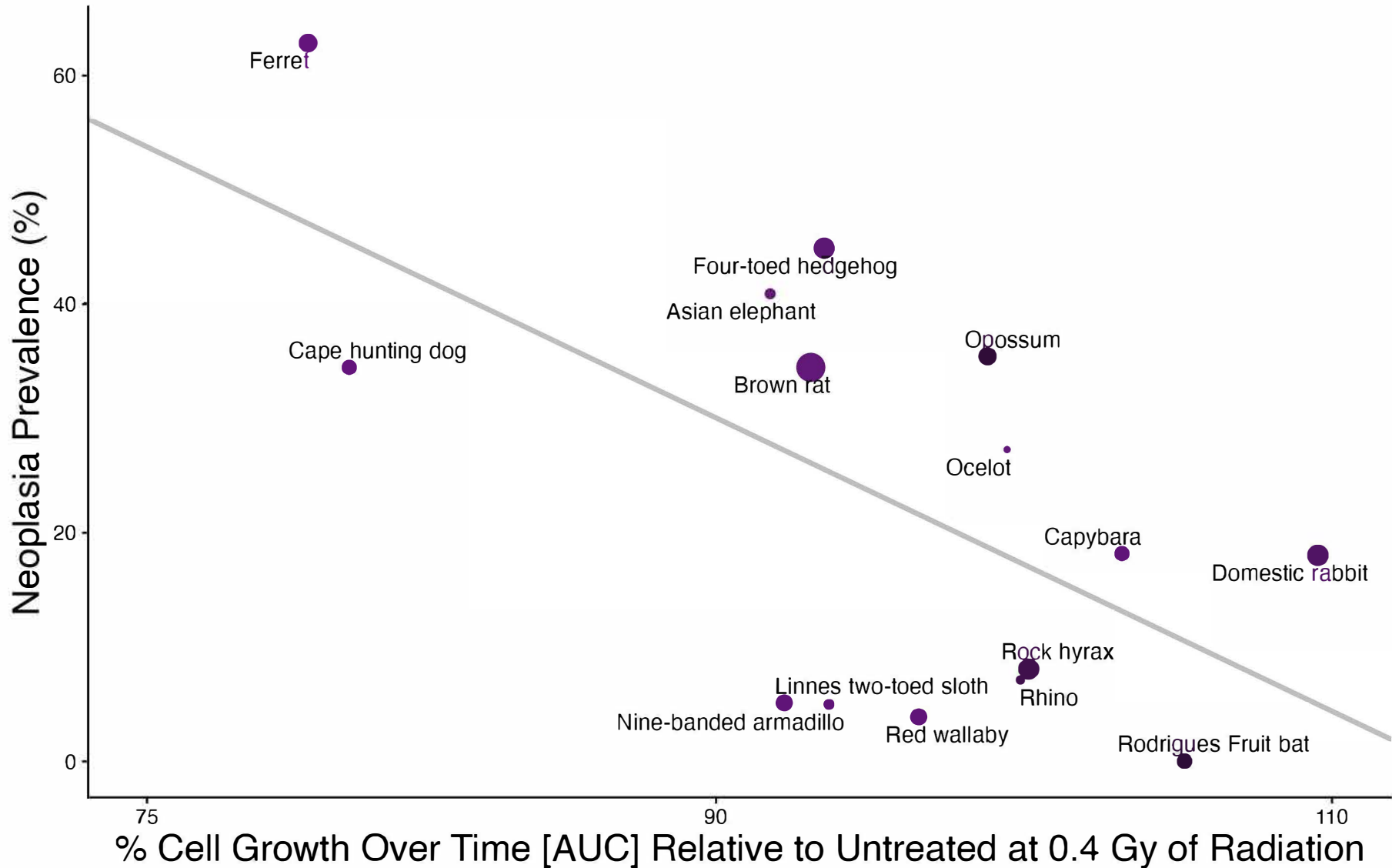
Total Necropsies • 20 • 150 • 250

S55 Malignancy vs. AUC Area Change From UT 2Gy Radiation

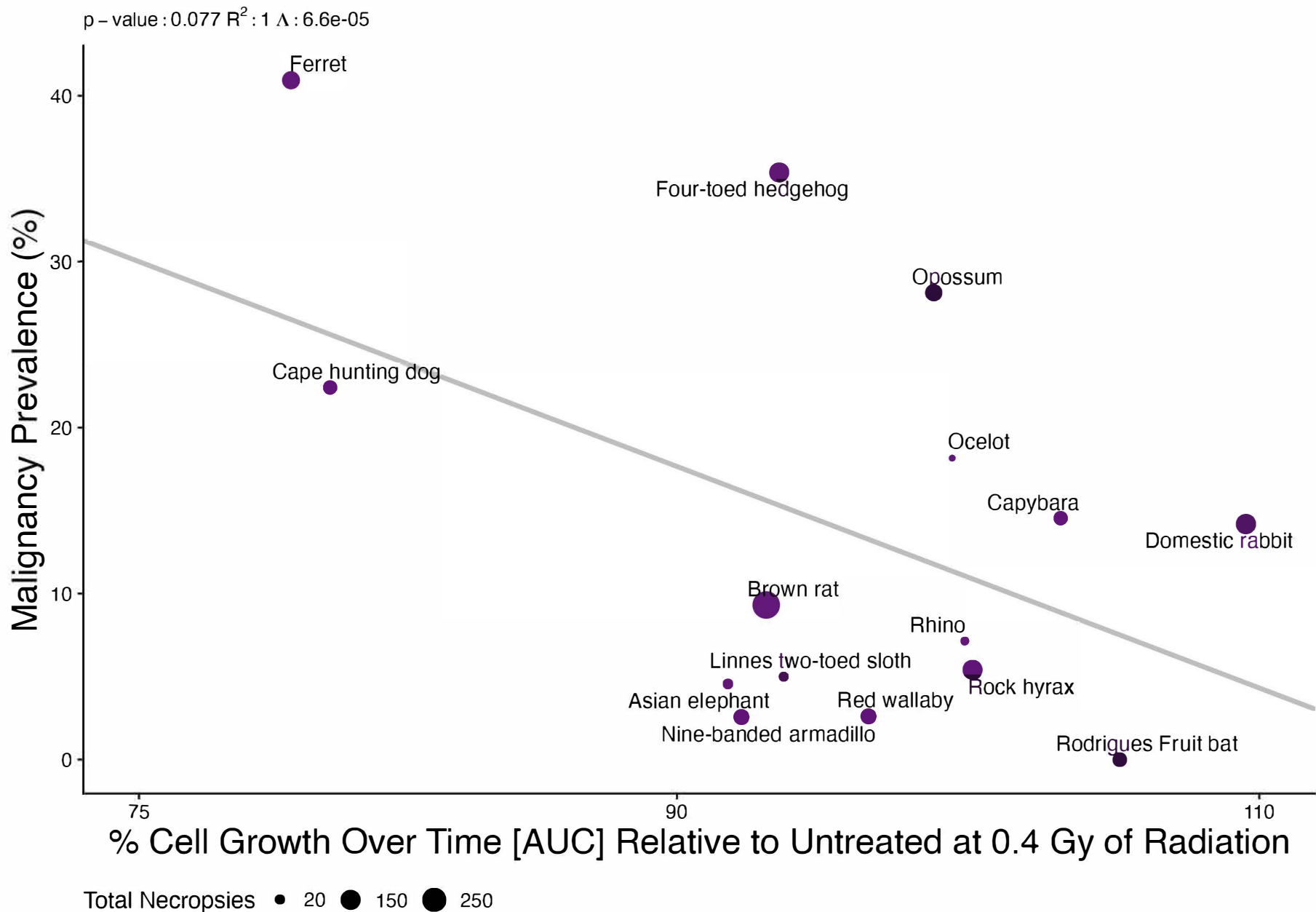


S56 Neoplasia vs. AUC Area Change From UT .4Gy Radiation

p-value : 0.015 R^2 : 1 Δ : 6.6e-05

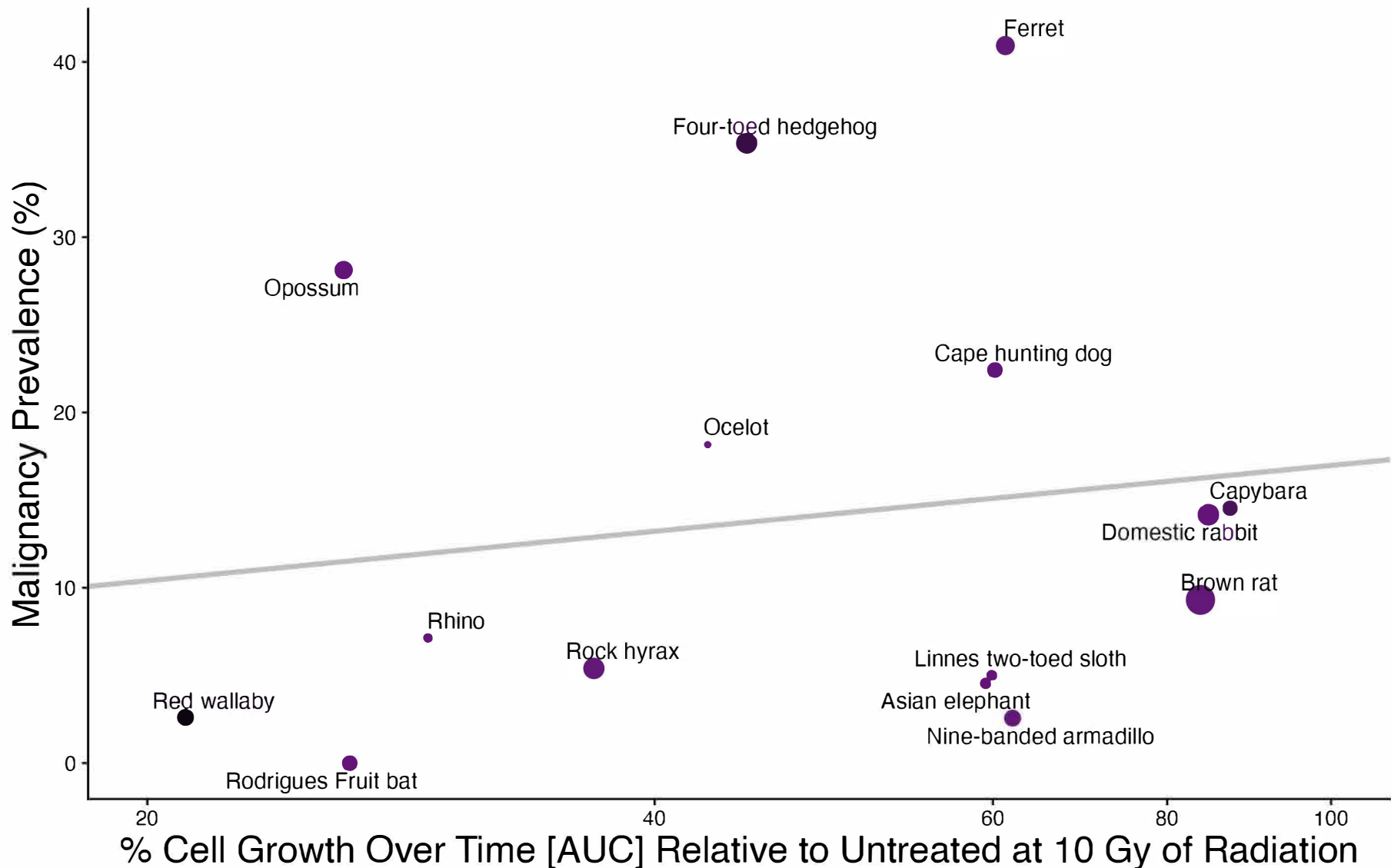


S57 Malignancy vs. AUC Area Change From UT .4Gy Radiation



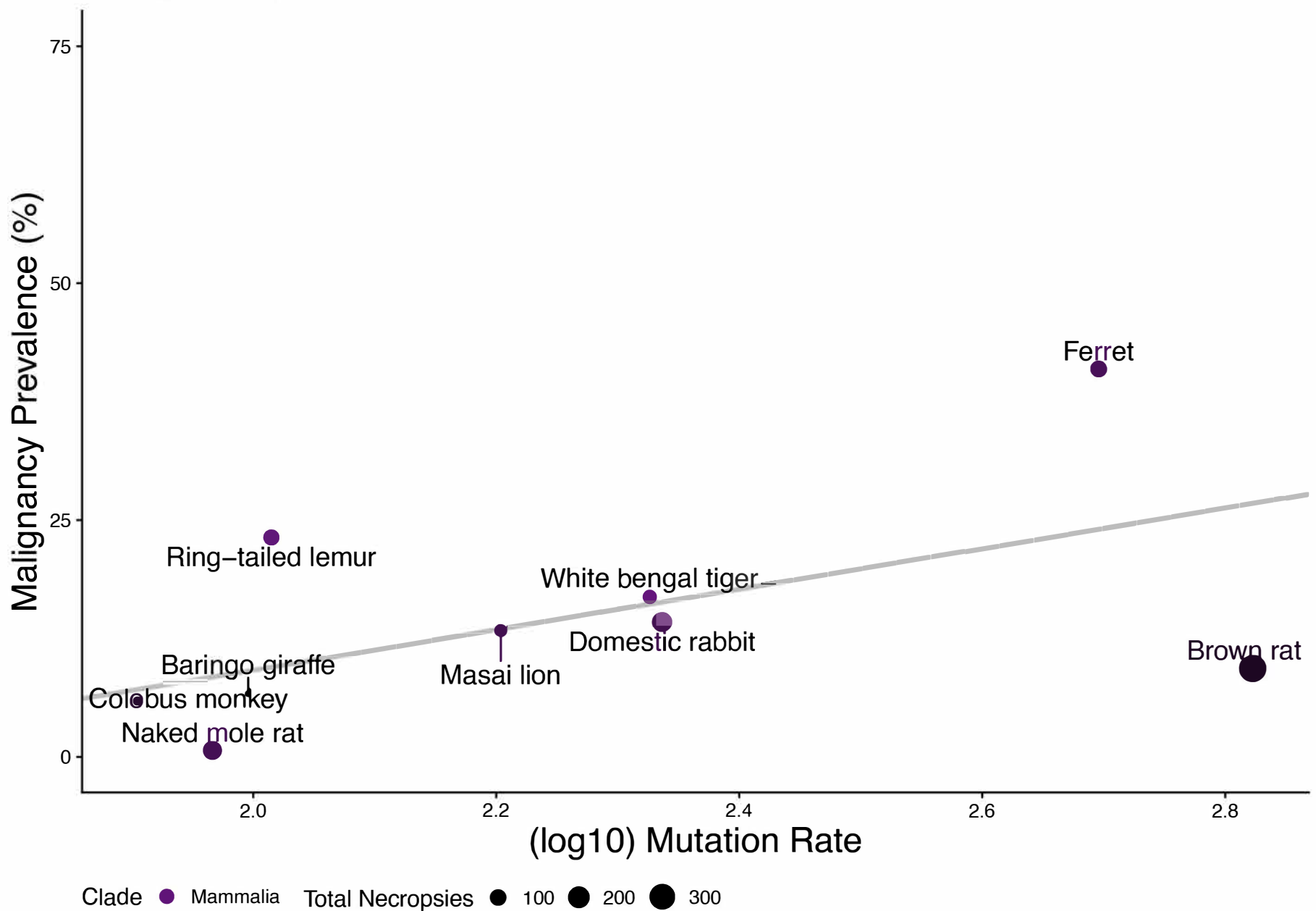
S58 Malignancy vs. AUC Area Change From UT 10Gy Radiation

p-value : 0.59 R^2 : 0.99 Δ : 6.6e-05



Total Necropsies • 20 • 150 • 250

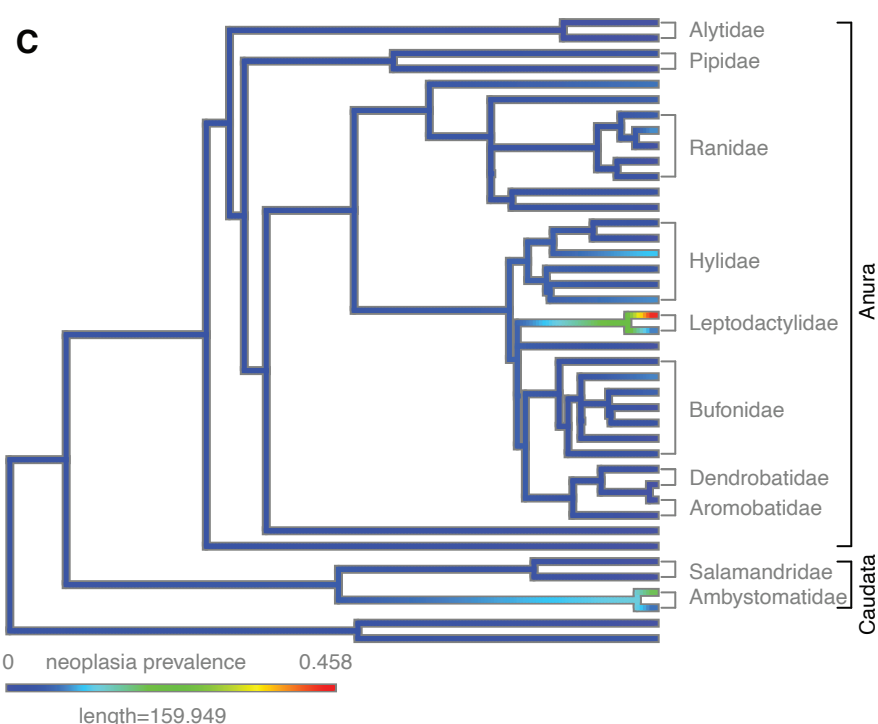
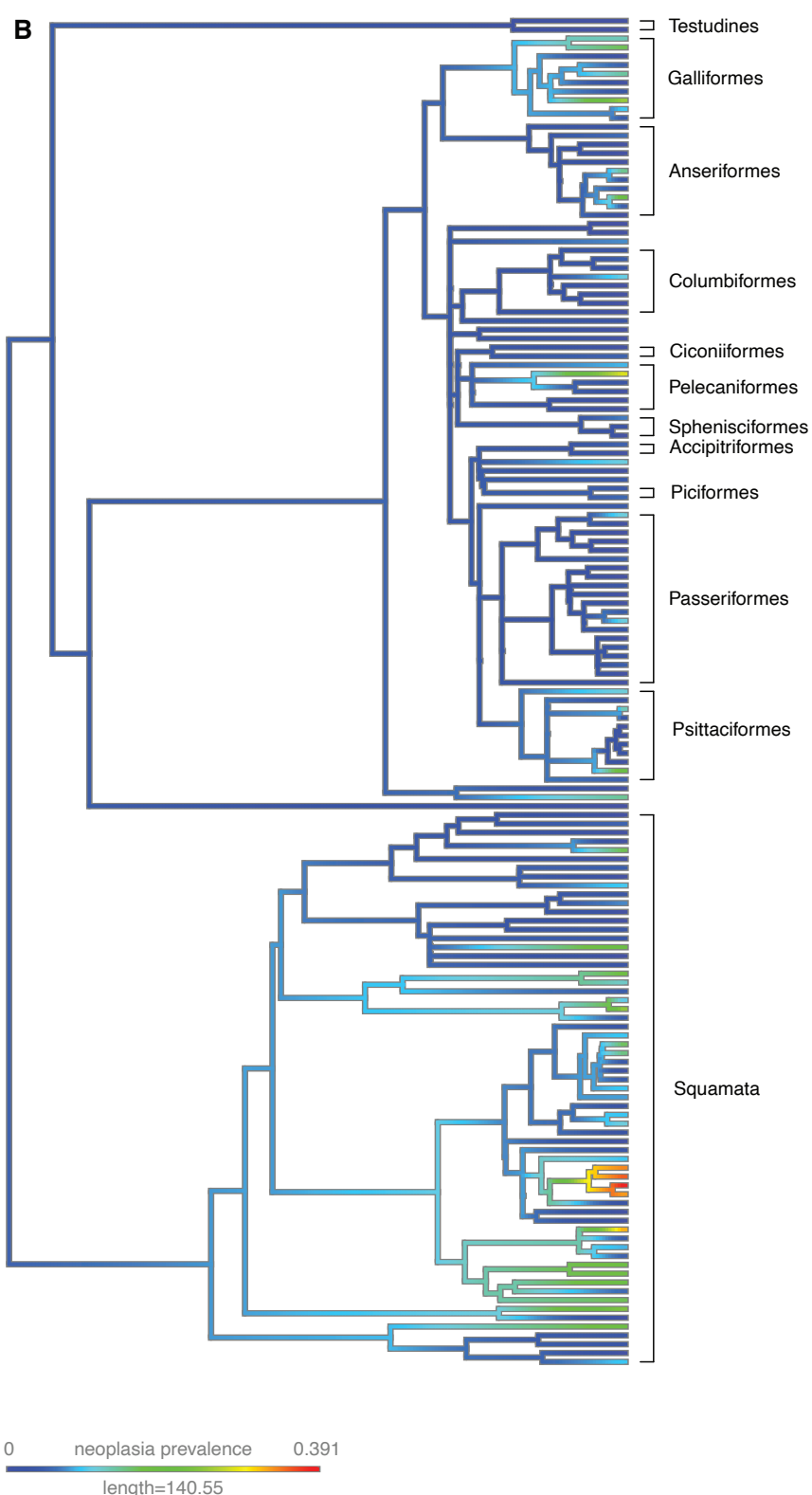
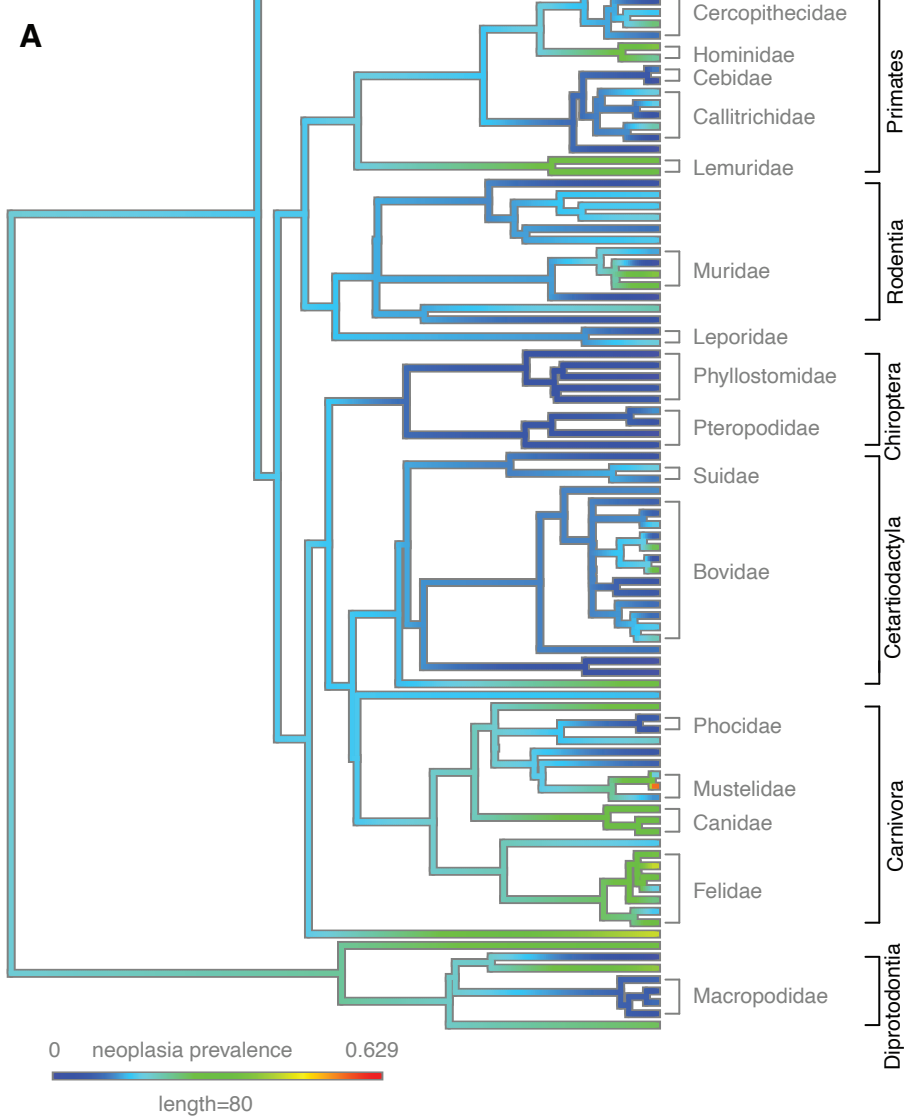
S59 Malignancy vs. Mutation Rate



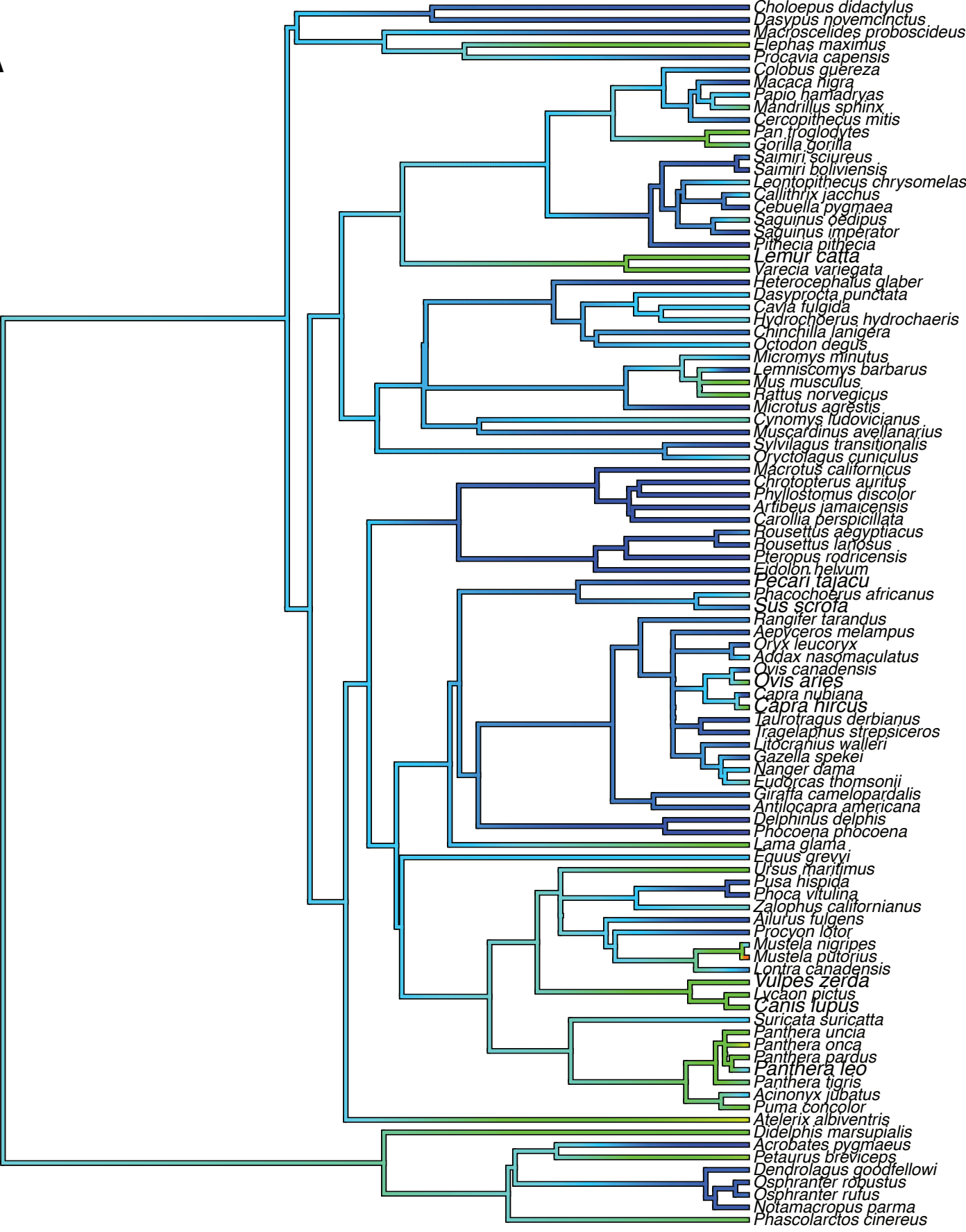
A



S61

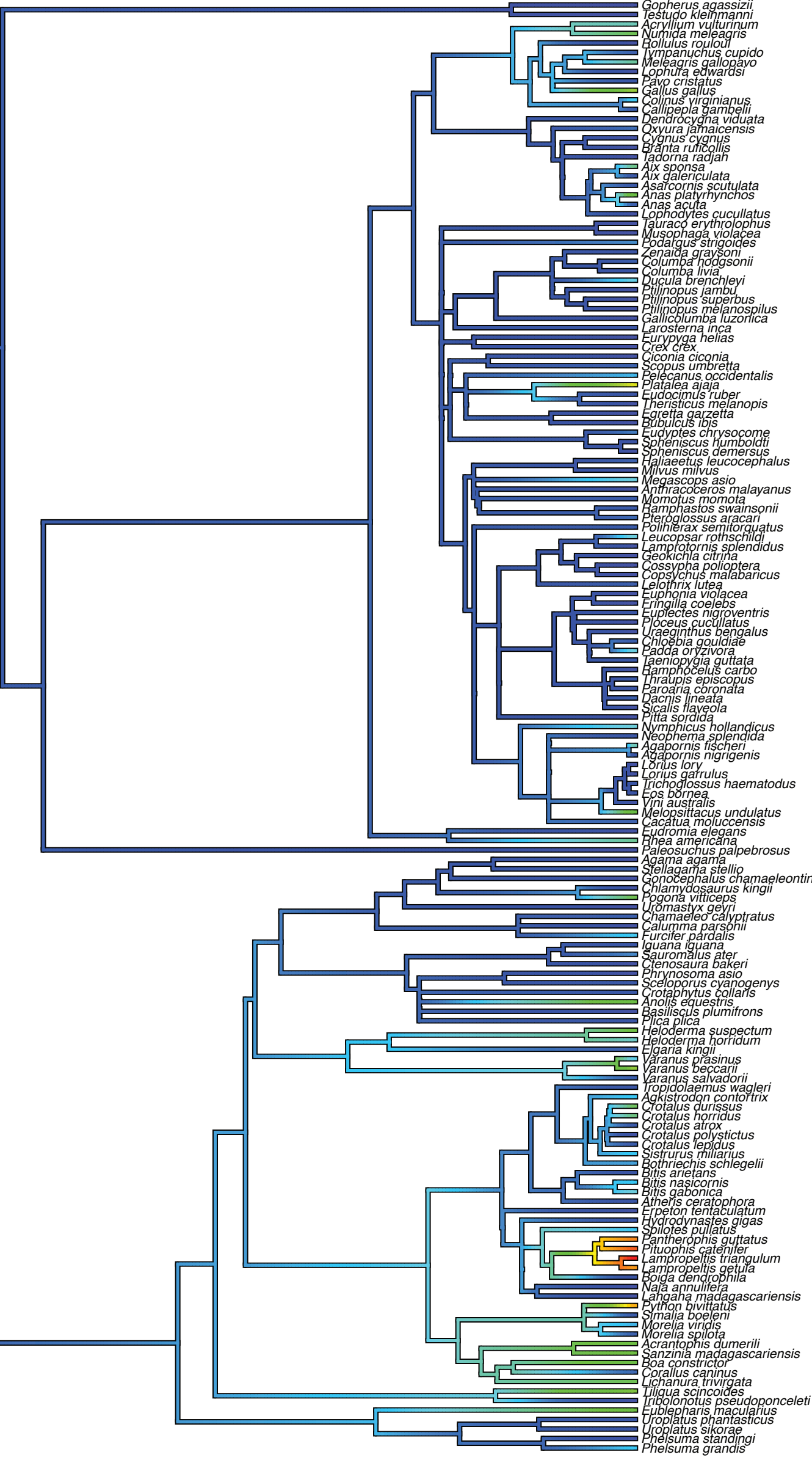


A



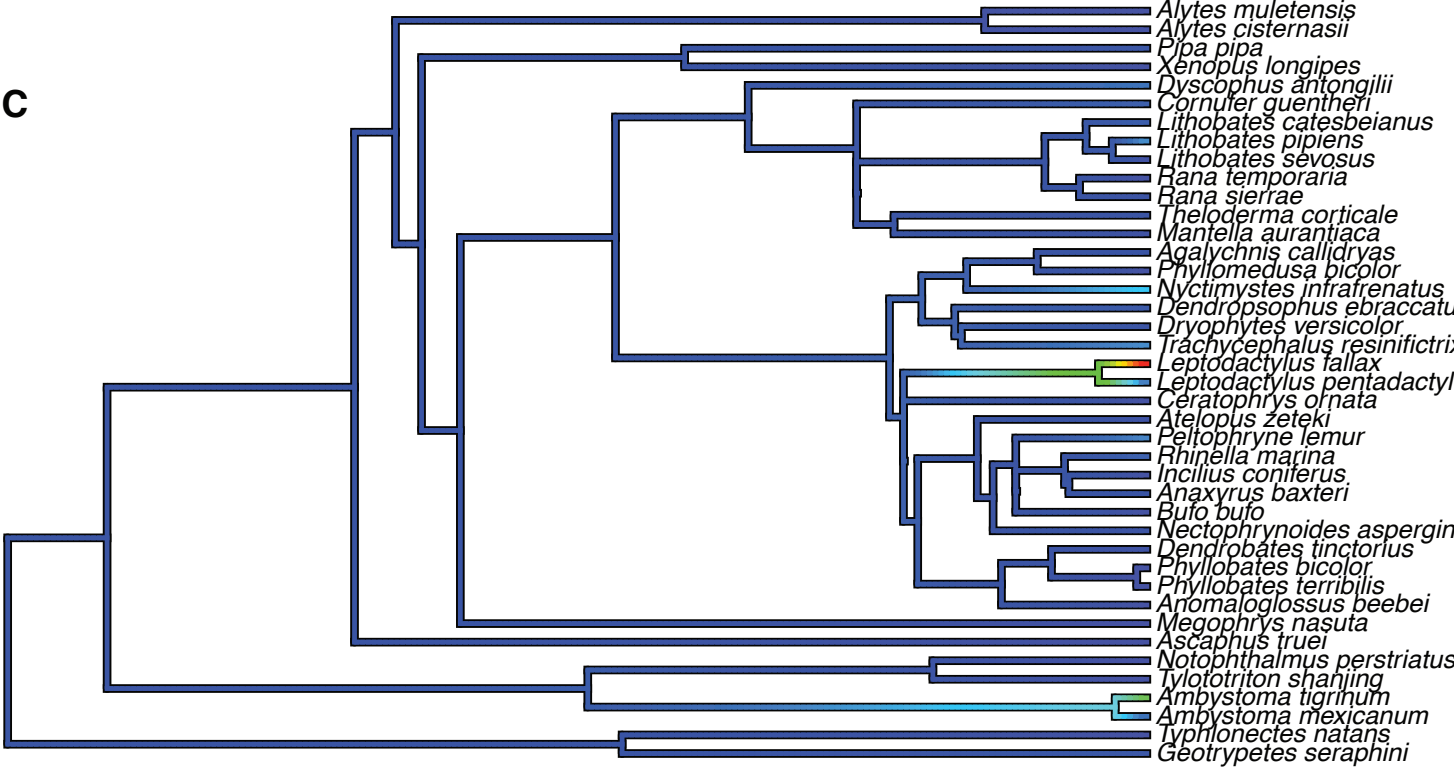
0 neoplasia prevalence 0.629
length=80

B



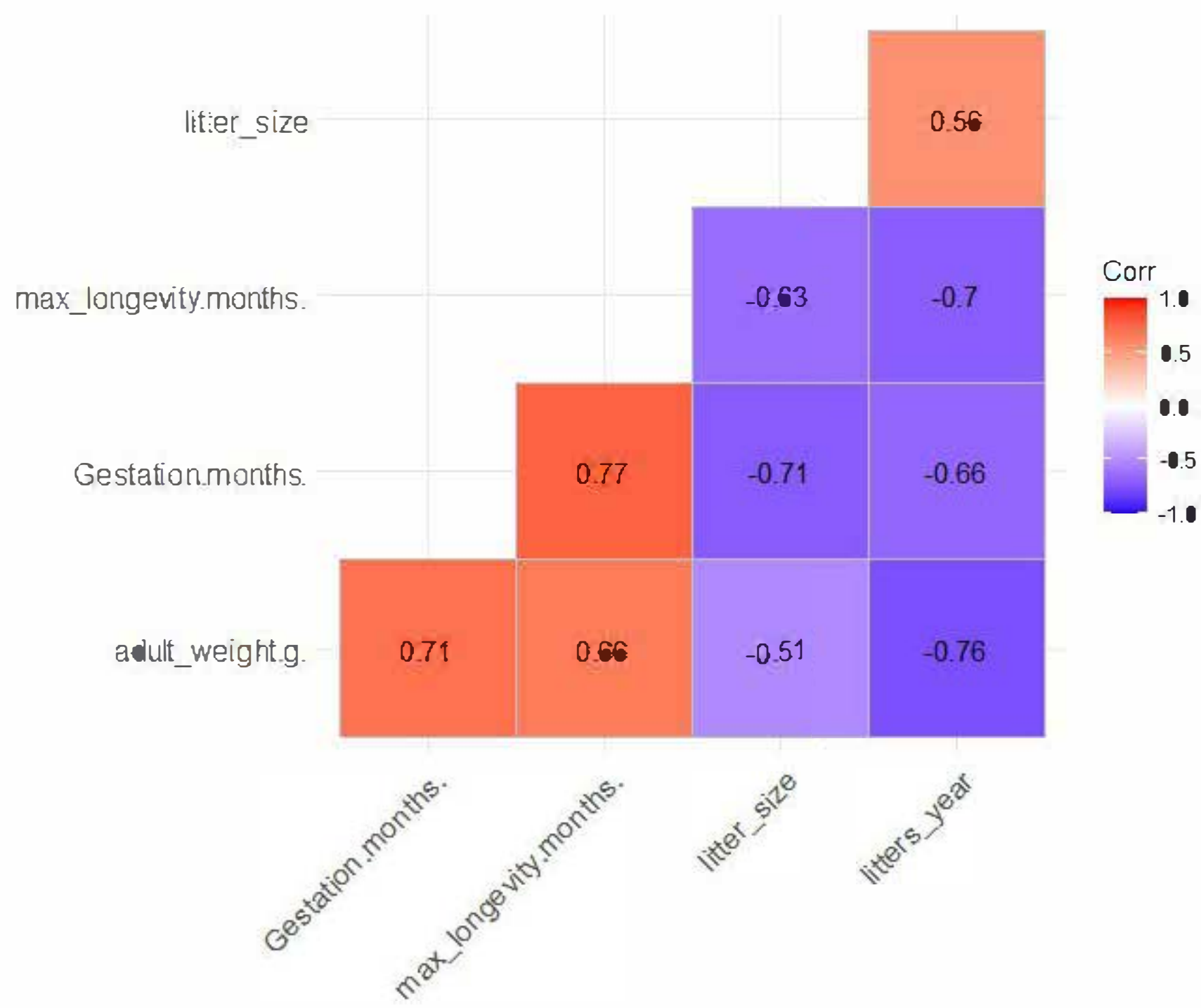
0 neoplasia prevalence 0.391
length=140.55

C



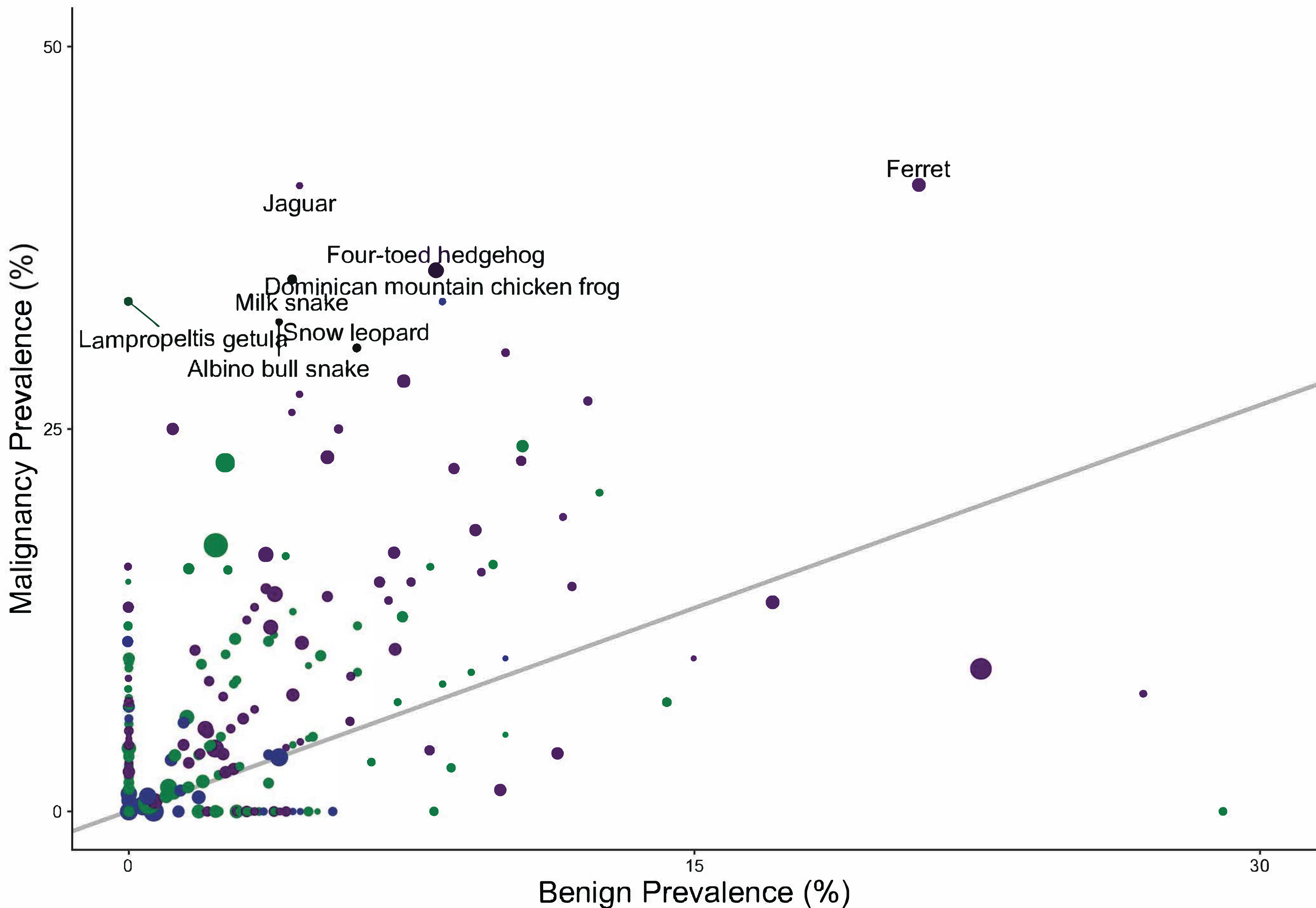
0 neoplasia prevalence 0.458
length=159.949

S63



Malignancy Prevalence v. Benign Prevalence

p - value : 2.2e-35 R^2 : 0.043



Clade Mammalia Sauropsida Amphibia Total Necropsies • 20 ● 100 ● 200 ● 300 ● 477