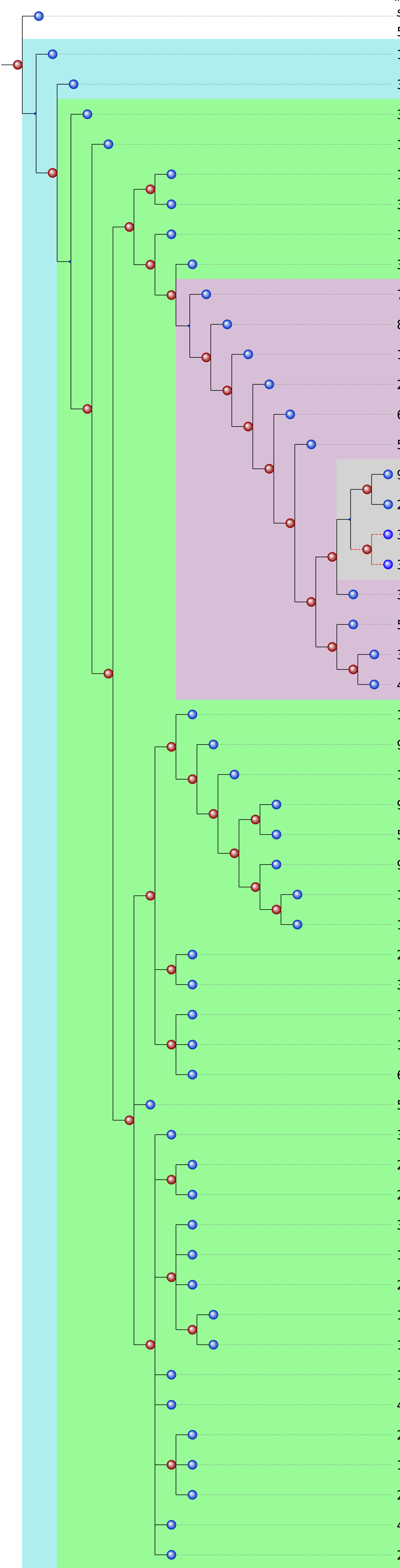
- Analysis performed: 190624_174359
- Analyzed sequences (hits resulting from 676 blast searches, 52 animal groups x 13 query sequences):49992 (out of which unique: 8666, programmatically recognized as VEGF/PDGF family members: 90.5%).
- Red dotted lines in the tree indicate paraphyletic relationships.
- The tree background color indicates the presence of the proteins with the corresponding color according to our hypotheses.
- The red-to-white background of the table indicates a heuristic reliability of the results, where a brighter color indicates a higher reliability. This is calculated using the number of fully sequenced genomes, the number of species in the phylum and the number of protein sequences available for that phylum.
- The numbers in the table denote the number of: orthologs found (black), P = paralogs found, ? = homologs found, whose relationship could not be programmatically determined, ∑ = total homologs found.



# animal species	# se-quences	# compl. genomes	# unique blasthits	Group	PDGF-A	PDGF-B	PDGF-C	PDGF-D	PlGF-1	VEGF-A121	VEGF-A165	VEGF-A206	VEGF-B167	VEGF-B186	VEGF-C	VEGF-D	VEGF-F
55	6	3	0	ctenophora (comb jellies)													
1354	34k	2	11	porifera (sponges)											1 P0, ?7, ∑8	0 P1, ?1, ∑2	0 P0, ?3, ∑3
3	36k	2	0	placozoa													
3668	115k	18	94	cnidaria (medusae/polyps)	0 P6, ?4, ∑10	1 P3, ?1, ∑5	0 P1, ?0, ∑1		0 P2, ?1, ∑3	0 P6, ?7, ∑13	1 P7, ?13, ∑21	0 P6, ?9, ∑15	0 P18, ?61, ∑79	0 P6, ?0, ∑6	11 P1, ?43, ∑55	0 P7, ?19, ∑26	0 P3, ?2, ∑5
151	925	0	1	xenacoelomorpha													
1791	136k	11	42	echinodermata	0 P5, ?1, ∑6	0 P5, ?0, ∑5	0 P11, ?1, ∑12	0 P12, ?1, ∑13	0 P9, ?3, ∑12	3 P2, ?7, ∑12	3 P3, ?11, ∑17	3 P2, ?7, ∑12	0 P10, ?9, ∑19	0 P10, ?8, ∑18	2 P8, ?12, ∑22	1 P9, ?7, ∑17	0 P7, ?3, ∑10
39	23k	2	9	hemichordata (acorn wormws)	0 P2, ?0, ∑2	0 P2, ?0, ∑2	0 P2, ?1, ∑3	0 P2, ?0, ∑2	0 P1, ?0, ∑1	0 P1, ?2, ∑3	0 P1, ?1, ∑2	0 P1, ?1, ∑2	0 P2, ?1, ∑3	0 P2, ?2, ∑4	2 P1, ?1, ∑4	0 P3, ?1, ∑4	0 P2, ?0, ∑2
11	95k	4	20	cephalochordata (lancelets)	0 P6, ?1, ∑7	0 P6, ?1, ∑7	0 P5, ?1, ∑6	0 P5, ?1, ∑6	0 P5, ?0, ∑5	1 P5, ?1, ∑7	1 P5, ?1, ∑7	1 P5, ?1, ∑7	0 P6, ?2, ∑8	0 P6, ?1, ∑7	6 P1, ?5, ∑12	0 P6, ?1, ∑7	0 P6, ?1, ∑7
360	64k	6	2	tunicata	0 P1, ?0, ∑1	0 P1, ?0, ∑1			0 P1, ?0, ∑1	1 P0, ?0, ∑1	1 P0, ?0, ∑1	1 P0, ?0, ∑1	0 P1, ?0, ∑1	0 P1, ?0, ∑1	0 P1, ?0, ∑1	0 P1, ?0, ∑1	0 P1, ?0, ∑1
77	8k	3	0	cyclostomata (hagfish/lamprey)													
825	115k	6	52	chondrichthyes (cartilaginous fishes)	6 P21, ?0, ∑27	2 P25, ?0, ∑27	2 P18, ?0, ∑20	2 P11, ?0, ∑13	0 P25, ?0, ∑25	11 P14, ?0, ∑25	11 P14, ?0, ∑25	11 P13, ?0, ∑24	0 P29, ?0, ∑29	0 P29, ?1, ∑30	6 P23, ?0, ∑29	2 P26, ?0, ∑28	0 P25, ?0, ∑25
18907	2M	186	2134	actinopterygii (ray-finned fishes)	217 P665, ?170, ∑1052	27 P863, ?170, ∑1060	117 P282, ?15, ∑414	148 P269, ?9, ∑426	102 P882, ?159, ∑1143	426 P811, ?209, ∑1446	430 P462, ?137, ∑1029	433 P463, ?130, ∑1026	59 P1041, ?154, ∑1254	58 P1161, ?173, ∑1392	175 P1034, ?141, ∑1350	102 P1012, ?136, ∑1250	30 P1054, ?169, ∑1253
2	35k	1	31	coelacanthimorpha (lobe-finned fishes)	1 P15, ?0, ∑16	2 P12, ?0, ∑14	1 P12, ?0, ∑13	2 P4, ?0, ∑6	2 P12, ?0, ∑14	3 P12, ?0, ∑15	3 P11, ?0, ∑14	3 P11, ?0, ∑14	3 P14, ?0, ∑17	3 P14, ?1, ∑18	2 P15, ?0, ∑17	1 P16, ?0, ∑17	0 P14, ?0, ∑14
6	1k	0	10	dipnoi (lungfishes)	1 P3, ?0, ∑4	1 P3, ?0, ∑4	0 P4, ?0, ∑4	0 P4, ?0, ∑4	0 P4, ?0, ∑4	2 P2, ?0, ∑4	2 P2, ?0, ∑4		0 P4, ?0, ∑4	0 P4, ?0, ∑4	0 P4, ?0, ∑4	0 P4, ?0, ∑4	0 P4, ?2, ∑6
5659	478k	6	144	amphibia	16 P59, ?1, ∑76	12 P62, ?1, ∑75	6 P54, ?0, ∑60	5 P17, ?0, ∑22	0 P66, ?1, ∑67	27 P38, ?1, ∑66	27 P30, ?1, ∑58	27 P33, ?1, ∑61	3 P69, ?1, ∑73	3 P73, ?1, ∑77	5 P71, ?1, ∑77	6 P72, ?1, ∑79	0 P68, ?1, ∑69
9445	3M	132	1551	aves (birds)	127 P340, ?5, ∑472	118 P461, ?5, ∑584	98 P452, ?2, ∑552	154 P316, ?0, ∑470	109 P463, ?4, ∑576	140 P390, ?9, ∑539	141 P329, ?5, ∑475	141 P329, ?5, ∑475	0 P672, ?8, ∑680	0 P764, ?8, ∑772	130 P704, ?4, ∑838	96 P707, ?4, ∑807	1 P729, ?8, ∑738
24	179k	4	102	crocodylia (crocodiles)	5 P26, ?0, ∑31	1 P14, ?0, ∑15	4 P35, ?0, ∑39	6 P21, ?0, ∑27	7 P46, ?0, ∑53	17 P40, ?0, ∑57	17 P35, ?0, ∑52	17 P29, ?0, ∑46	0 P57, ?0, ∑57	0 P63, ?0, ∑63	9 P54, ?0, ∑63	8 P55, ?0, ∑63	0 P53, ?0, ∑53
3227	96k	6	66	lepidosauria excl. toxicofera (non-poisonous lizards)	3 P52, ?0, ∑55	6 P45, ?0, ∑51	3 P38, ?1, ∑42	5 P18, ?0, ∑23	6 P46, ?1, ∑53	26 P31, ?1, ∑58	26 P26, ?1, ∑53	26 P22, ?1, ∑49	2 P54, ?0, ∑56	2 P59, ?0, ∑61	7 P56, ?1, ∑64	5 P57, ?0, ∑62	4 P48, ?0, ∑52
3776	467k	15	161	toxicofera (poisonous reptiles)	12 P122, ?0, ∑134	9 P113, ?0, ∑122	9 P89, ?0, ∑98	11 P26, ?0, ∑37	14 P91, ?28, ∑133	53 P63, ?29, ∑145	53 P43, ?29, ∑125	53 P45, ?28, ∑126	7 P109, ?26, ∑142	7 P120, ?26, ∑153	11 P108, ?26, ∑145	2 P119, ?23, ∑144	24 P107, ?5, ∑136
358	184k	10	188	testudines (turtles)	9 P65, ?1, ∑75	8 P66, ?1, ∑75	7 P60, ?7, ∑74	17 P20, ?0, ∑37	10 P61, ?1, ∑72	30 P48, ?1, ∑79	30 P52, ?4, ∑86	30 P36, ?1, ∑67	8 P65, ?1, ∑74	8 P88, ?2, ∑98	6 P91, ?2, ∑99	5 P92, ?1, ∑98	0 P70, ?1, ∑71
5	26k	1	25	monotremata (egg-laying mammals)	1 P6, ?0, ∑7	1 P5, ?0, ∑6	3 P10, ?0, ∑13	3 P10, ?0, ∑13	1 P5, ?0, ∑6	1 P6, ?0, ∑7	1 P6, ?0, ∑7	1 P6, ?0, ∑7	0 P8, ?0, ∑8	0 P8, ?0, ∑8	2 P6, ?0, ∑8	1 P7, ?0, ∑8	0 P6, ?0, ∑6
333	142k	5	88	metatheria (marsupials)	7 P36, ?0, ∑43	5 P36, ?0, ∑41	4 P33, ?0, ∑37	10 P16, ?0, ∑26	4 P25, ?0, ∑29	4 P28, ?0, ∑32	4 P22, ?0, ∑26	4 P22, ?0, ∑26	4 P32, ?0, ∑36	4 P36, ?0, ∑40	4 P35, ?0, ∑39	5 P34, ?0, ∑39	0 P39, ?0, ∑39
4755	8M	181	2995	eutheria (placentals)	247 P762, ?6, ∑1015	223 P892, ?13, ∑1128	218 P659, ?1, ∑878	235 P417, ?0, ∑652	261 P1262, ?9, ∑1532	434 P900, ?6, ∑1340	440 P862, ?6, ∑1308	440 P857, ?6, ∑1303	249 P1420, ?11, ∑1680	249 P1504, ?10, ∑1763	171 P1406, ?9, ∑1586	164 P1601, ?9, ∑1774	0 P1596, ?10, ∑1606
197	46k	2	9	tardigrada (water bears)	0 P1, ?3, ∑4	0 P3, ?1, ∑4	0 P2, ?0, ∑2	0 P1, ?0, ∑1	0 P2, ?0, ∑2	0 P0, ?4, ∑4	0 P0, ?6, ∑6	0 P0, ?3, ∑3	0 P4, ?0, ∑4	0 P3, ?1, ∑4	0 P2, ?2, ∑4	0 P4, ?0, ∑4	0 P2, ?1, ∑3
94	2k	1	0	onychophora (velvet worms)													
195	2k	0	0	pycnogonida (sea spiders)													
9964	646k	27	103	arachnida (spiders)	2 P20, ?3, ∑25	0 P20, ?3, ∑23	0 P21, ?5, ∑26	0 P9, ?2, ∑11	2 P24, ?39, ∑65	14 P5, ?22, ∑41	14 P5, ?20, ∑39	13 P5, ?16, ∑34	0 P25, ?13, ∑38	0 P24, ?11, ∑35	1 P16, ?16, ∑33	1 P14, ?2, ∑17	1 P26, ?30, ∑57
5	39k	1	41	xiphosura (horseshoe crabs)	0 P6, ?3, ∑9	0 P6, ?1, ∑7	0 P7, ?3, ∑10	0 P3, ?2, ∑5	0 P7, ?20, ∑27	7 P0, ?11, ∑18	7 P0, ?11, ∑18	7 P0, ?11, ∑18	0 P7, ?11, ∑18	0 P7, ?11, ∑18	0 P7, ?4, ∑11	0 P2, ?0, ∑2	0 P7, ?11, ∑18
966	7k	1	1	myriapoda (millipeds)										0 P0, ?1, ∑1			
10889	947k	25	53	crustacea	0 P10, ?8, ∑18	0 P11, ?4, ∑15	1 P4, ?3, ∑8	0 P1, ?8, ∑9	0 P5, ?7, ∑12	5 P4, ?11, ∑20	5 P4, ?12, ∑21	4 P4, ?8, ∑16	1 P9, ?19, ∑29	1 P6, ?19, ∑26	1 P8, ?13, ∑22	1 P6, ?8, ∑15	1 P7, ?9, ∑17
113906	7M	339	618	hexapoda (insects)	20 P77, ?117, ∑214	3 P89, ?113, ∑205	1 P42, ?34, ∑77	2 P23, ?16, ∑41	3 P52, ?141, ∑196	49 P53, ?154, ∑256	59 P61, ?198, ∑318	39 P45, ?129, ∑213	5 P110, ?177, ∑292	5 P94, ?156, ∑255	16 P18, ?98, ∑132	2 P36, ?55, ∑93	3 P95, ?236, ∑334
29	368	0	0	nematomorpha (horsehair worms)													
3486	2M	100	44	nematoda (roundworms)	0 P0, ?35, ∑35	0 P0, ?11, ∑11							0 P1, ?22, ∑23	0 P0, ?21, ∑21	0 P0, ?4, ∑4	0 P0, ?2, ∑2	0 P0, ?24, ∑24
7	21k	1	8	priapulida (penis worms)	1 P0, ?0, ∑1	0 P1, ?7, ∑8					0 P1, ?0, ∑1		0 P1, ?0, ∑1	0 P1, ?0, ∑1	0 P1, ?0, ∑1		0 P1, ?0, ∑1
1	1	0	0	loricifera													
62	436	0	0	kinorhyncha (mud dragons)													
56	2k	0	0	chaetognatha (arrow worms)													
320	3k	0	1	bryozoa (moss animals)										0 P0, ?1, ∑1			
26	155	0	2	entoprocta										0 P0, ?1, ∑1		0 P0, ?1, ∑1	
2	278	0	0	cycliophora (symbion)													
3315	129k	5	8	annelida (segmented worms)	0 P0, ?3, ∑3	0 P2, ?2, ∑4	0 P1, ?1, ∑2	0 P1, ?1, ∑2	0 P1, ?2, ∑3	0 P0, ?3, ∑3	0 P0, ?3, ∑3	0 P0, ?3, ∑3	0 P1, ?2, ∑3	0 P1, ?1, ∑2	0 P0, ?3, ∑3	0 P1, ?1, ∑2	0 P1, ?2, ∑3
14098	742k	26	38	mollusca	0 P4, ?6, ∑10	0 P8, ?0, ∑8	0 P4, ?4, ∑8	0 P1, ?4, ∑5	0 P2, ?1, ∑3	2 P2, ?9, ∑13	2 P2, ?9, ∑13	2 P2, ?5, ∑9	0 P9, ?6, ∑15	0 P4, ?6, ∑10	0 P1, ?15, ∑16	0 P7, ?4, ∑11	0 P8, ?4, ∑12
261	5k	1	0	nemertea (ribbon worms)													
100	42k	1	6	brachiopoda (lamp shells)	0 P1, ?0, ∑1	0 P1, ?0, ∑1	0 P0, ?1, ∑1	0 P1, ?0, ∑1		0 P1, ?0, ∑1	0 P1, ?0, ∑1	0 P1, ?0, ∑1	0 P1, ?1, ∑2	0 P1, ?0, ∑1	0 P1, ?2, ∑3	1 P0, ?0, ∑1	0 P1, ?0, ∑1
14	165	1	0	phoroniformea (horseshoe worms)													
129	389	0	0	gastrotricha (hairybacks)													
4427	561k	26	1	platyhelminthes (flatworms)										0 P0, ?1, ∑1			
21	79	0	0	gnathostomulida (jaw worms)													
1	2	0	0	micrognathozoa													
237	64k	6	6	rotifera (wheel animals)	1 P0, ?0, ∑1	0 P1, ?0, ∑1	0 P1, ?1, ∑2		0 P1, ?0, ∑1		0 P1, ?0, ∑1		0 P1, ?0, ∑1	0 P1, ?1, ∑2	0 P1, ?0, ∑1	0 P1, ?0, ∑1	0 P1, ?2, ∑3
4	9k	1	1	orthonectida													
24	150	0	0	dicyemida													

Force topology is enabled!
Branch lengths do not represent real values.