• Analysis performed: 200803_190620
• Analyzed sequences (hits resulting from 714 blast searches, 51 animal groups x 14 query sequences):68459 (out of which unique: 8056, programmatically recognized as VEGF/PDGF family members: 90.0%).
• 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 (excl. false pos.)		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-E	VEGF-F
55	273M	4	0 (0)	ctenophora (comb jellies)														
1455	273M	6	8 (-6)	porifera (sponges)											1 P0, ?7, ∑8	0 P1, ?1, ∑2		
3	273M	2	0 (0)	placozoa														
3810	273M	43	105 (91)	cnidaria (medusae/polyps)	0 P6, ?4, ∑10	1 P3, ?1, ∑5	0 P1, ?0, ∑1		0 P2, ?2, ∑4	0 P8, ?12, ∑20	1 P11, ?15, ∑27	0 P6, ?13, ∑19	0 P13, ?16, ∑29	0 P6, ?1, ∑7	16 P1, ?56, ∑73	1 P11, ?25, ∑37	0 P2, ?34, ∑36	0 P3, ?1, ∑4
153	273M	2	2 (-12)	xenacoelomorpha										0 P0, ?1, ∑1		0 P0, ?1, ∑1		
1825	273M	24	38 (24)	echinodermata	0 P7, ?1, ∑8	0 P7, ?0, ∑7	0 P13, ?1, ∑14	0 P12, ?1, ∑13	0 P10, ?3, ∑13	4 P2, ?9, ∑15	4 P4, ?13, ∑21	4 P2, ?9, ∑15	0 P12, ?11, ∑23	0 P12, ?11, ∑23	3 P8, ?24, ∑35	1 P13, ?10, ∑24	0 P5, ?7, ∑12	0 P8, ?2, ∑10
41	273M	2	8 (-7)	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, ?1, ∑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, ?1, ∑3	0 P2, ?0, ∑2
11	273M	6	11 (-3)	cephalochordata (lancelets)	0 P6, ?1, ∑7	0 P6, ?1, ∑7	0 P5, ?1, ∑6	0 P5, ?0, ∑5	1 P5, ?1, ∑7	1 P5, ?1, ∑7	1 P5, ?1, ∑7	1 P5, ?1, ∑7	0 P6, ?2, ∑8	0 P6, ?1, ∑7	5 P1, ?4, ∑10	0 P6, ?1, ∑7	0 P3, ?4, ∑7	0 P6, ?1, ∑7
369	273M	16	2 (-12)	tunicata	0 P1, ?0, ∑1	0 P1, ?0, ∑1		0 P1, ?1, ∑2	1 P0, ?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	0 P1, ?0, ∑1
82	273M	6	68 (54)	cyclostomata (hagfish/lamprey)	3 P15, ?0, ∑18	0 P18, ?0, ∑18	1 P8, ?0, ∑9	0 P6, ?0, ∑6	0 P17, ?0, ∑17	13 P5, ?0, ∑18	13 P5, ?0, ∑18	13 P4, ?0, ∑17	0 P17, ?0, ∑17	0 P18, ?0, ∑18	1 P17, ?50, ∑68	0 P18, ?0, ∑18	0 P17, ?0, ∑17	0 P17, ?0, ∑17
853	273M	13	72 (58)	chondrichthyes (cartilaginous fishes)	15 P42, ?1, ∑58	5 P48, ?1, ∑54	5 P35, ?0, ∑40	6 P23, ?0, ∑29	1 P48, ?2, ∑51	16 P36, ?2, ∑54	17 P35, ?2, ∑54	17 P28, ?5, ∑50	0 P61, ?1, ∑62	0 P63, ?2, ∑65	13 P44, ?1, ∑58	4 P52, ?1, ∑57	0 P46, ?7, ∑53	0 P52, ?1, ∑53
19897	273M	406	2371 (n.a.)	actinopterygii (ray-finned fishes)	300 P959, ?256, ∑1515	47 P1207, ?252, ∑1506	162 P373, ?28, ∑563	193 P347, ?10, ∑550	154 P1305, ?252, ∑1711	662 P829, ?248, ∑1739	667 P710, ?206, ∑1583	670 P701, ?201, ∑1572	91 P1542, ?234, ∑1867	90 P1720, ?264, ∑2074	276 P1525, ?227, ∑2028	157 P1537, ?203, ∑1897	0 P1518, ?262, ∑1780	44 P1561, ?256, ∑1861
2	273M	2	18 (4)	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	0 P14, ?0, ∑14
6	273M	0	6 (-8)	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	2 P2, ?0, ∑4	0 P4, ?0, ∑4	0 P4, ?0, ∑4	0 P4, ?0, ∑4	0 P4, ?0, ∑4	0 P4, ?0, ∑4	0 P4, ?2, ∑6
6004	273M	22	116 (102)	amphibia	26 P77, ?1, ∑104	17 P87, ?0, ∑104	6 P58, ?0, ∑64	6 P20, ?0, ∑26	0 P86, ?5, ∑91	28 P53, ?5, ∑86	28 P41, ?5, ∑74	28 P48, ?5, ∑81	9 P92, ?1, ∑102	9 P97, ?3, ∑109	9 P96, ?1, ∑106	8 P95, ?1, ∑104	0 P100, ?1, ∑101	4 P96, ?1, ∑101
9600	273M	310	1179 (n.a.)	aves (birds)	145 P383, ?5, ∑533	131 P543, ?5, ∑679	108 P530, ?0, ∑638	190 P348, ?0, ∑538	134 P566, ?3, ∑703	191 P443, ?8, ∑642	192 P395, ?4, ∑591	192 P393, ?4, ∑589	0 P822, ?7, ∑829	0 P924, ?7, ∑931	155 P811, ?3, ∑969	112 P891, ?3, ∑1006	0 P830, ?7, ∑837	1 P831, ?7, ∑839
24	273M	8	63 (49)	crocodylia (crocodiles)	7 P46, ?0, ∑53	5 P52, ?0, ∑57	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	0 P53, ?0, ∑53
7376	275M	36	263 (n.a.)	lepidosauria (lizards & snakes)	18 P190, ?0, ∑208	20 P180, ?0, ∑200	14 P128, ?0, ∑142	20 P41, ?0, ∑61	22 P167, ?31, ∑220	91 P107, ?32, ∑230	91 P76, ?31, ∑198	91 P79, ?31, ∑201	12 P188, ?26, ∑226	12 P203, ?26, ∑241	21 P195, ?29, ∑245	9 P212, ?23, ∑244	0 P197, ?26, ∑223	28 P179, ?7, ∑214
359	273M	25	159 (142)	testudines (turtles)	14 P97, ?1, ∑112	11 P100, ?1, ∑112	9 P79, ?10, ∑98	22 P27, ?0, ∑49	13 P93, ?2, ∑108	38 P78, ?2, ∑118	38 P56, ?2, ∑96	38 P58, ?2, ∑98	13 P98, ?1, ∑112	13 P127, ?4, ∑144	12 P132, ?2, ∑146	11 P134, ?1, ∑146	0 P105, ?8, ∑113	1 P110, ?1, ∑112
5	273M	4	18 (4)	monotremata (egg-laying mammals)	2 P15, ?0, ∑17	1 P12, ?0, ∑13	3 P12, ?0, ∑15	4 P10, ?0, ∑14	1 P10, ?0, ∑11	1 P13, ?0, ∑14	1 P13, ?0, ∑14	1 P13, ?0, ∑14	0 P14, ?0, ∑14	0 P18, ?0, ∑18	4 P14, ?0, ∑18	2 P16, ?0, ∑18	0 P11, ?0, ∑11	0 P11, ?0, ∑11
344	273M	15	54 (40)	metatheria (marsupials)	9 P35, ?0, ∑44	6 P35, ?0, ∑41	4 P34, ?0, ∑38	10 P13, ?0, ∑23	6 P34, ?0, ∑40	5 P39, ?0, ∑44	5 P24, ?0, ∑29	5 P24, ?0, ∑29	5 P38, ?0, ∑43	5 P49, ?0, ∑54	4 P50, ?0, ∑54	5 P49, ?0, ∑54	0 P36, ?0, ∑36	0 P40, ?0, ∑40
4924	275M	1010	2577 (n.a.)	eutheria (placentals)	298 P850, ?11, ∑1159	232 P909, ?15, ∑1156	221 P651, ?2, ∑874	258 P456, ?0, ∑714	298 P1452, ?12, ∑1762	484 P1040, ?11, ∑1535	491 P1010, ?11, ∑1512	491 P1010, ?11, ∑1512	302 P1652, ?13, ∑1967	301 P1730, ?13, ∑2044	199 P1615, ?12, ∑1826	203 P1799, ?12, ∑2014	0 P1913, ?16, ∑1929	0 P1829, ?13, ∑1842
225	273M	4	7 (-7)	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 P3, ?1, ∑4	0 P2, ?1, ∑3
96	273M	1	0 (0)	onychophora (velvet worms)														
223	273M	0	0 (0)	pycnogonida (sea spiders)														
11020	273M	42	95 (81)	arachnida (spiders)	2 P21, ?6, ∑29	0 P26, ?4, ∑30	0 P23, ?2, ∑25	0 P7, ?2, ∑9	2 P25, ?25, ∑52	17 P8, ?28, ∑53	19 P8, ?26, ∑53	17 P8, ?22, ∑47	0 P38, ?18, ∑56	0 P36, ?18, ∑54	1 P17, ?21, ∑39	1 P17, ?5, ∑23	0 P18, ?34, ∑52	1 P33, ?34, ∑68
5	273M	5	22 (8)	xiphosura (horseshoe crabs)	0 P6, ?3, ∑9	0 P6, ?1, ∑7	0 P7, ?3, ∑10	0 P3, ?2, ∑5	0 P7, ?10, ∑17	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 P6, ?11, ∑17	0 P7, ?11, ∑18
1150	273M	1	1 (-13)	myriapoda (millipeds)										0 P0, ?1, ∑1				
11723	273M	45	68 (54)	crustacea	0 P14, ?14, ∑28	0 P16, ?12, ∑28	1 P7, ?7, ∑15	0 P6, ?9, ∑15	0 P8, ?11, ∑19	5 P8, ?18, ∑31	6 P8, ?21, ∑35	5 P7, ?14, ∑26	2 P12, ?29, ∑43	2 P10, ?28, ∑40	3 P9, ?16, ∑28	1 P9, ?11, ∑21	0 P6, ?29, ∑35	2 P10, ?16, ∑28
123334	273M	797	630 (n.a.)	hexapoda (insects)	20 P91, ?138, ∑249	4 P105, ?131, ∑240	1 P45, ?37, ∑83	2 P23, ?17, ∑42	3 P63, ?160, ∑226	62 P60, ?177, ∑299	75 P72, ?231, ∑378	48 P45, ?140, ∑233	5 P134, ?212, ∑351	5 P110, ?180, ∑295	19 P23, ?106, ∑148	4 P42, ?57, ∑103	0 P37, ?269, ∑306	4 P114, ?279, ∑397
32	273M	0	0 (0)	nematomorpha (horsehair worms)														
3745	273M	194	45 (31)	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	273M	1	1 (-13)	priapulida (penis worms)	1 P0, ?0, ∑1	0 P1, ?0, ∑1					0 P1, ?0, ∑1		0 P1, ?0, ∑1	0 P1, ?0, ∑1	0 P1, ?0, ∑1		0 P1, ?0, ∑1	0 P1, ?0, ∑1
1	273M	0	0 (0)	loricifera														
62	273M	0	0 (0)	kinorhyncha (mud dragons)														
58	273M	0	0 (0)	chaetognatha (arrow worms)														
350	273M	2	1 (-13)	bryozoa (moss animals)										0 P0, ?1, ∑1				
26	273M	0	1 (-13)	entoprocta												0 P0, ?1, ∑1		
2	273M	0	0 (0)	cycliophora (symbion)														
3616	273M	8	6 (-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, ?1, ∑2	0 P1, ?2, ∑3
14931	273M	55	32 (18)	mollusca	1 P5, ?6, ∑12	0 P8, ?0, ∑8	0 P5, ?3, ∑8	0 P1, ?4, ∑5	0 P2, ?1, ∑3	2 P3, ?9, ∑14	2 P3, ?9, ∑14	2 P3, ?5, ∑10	0 P10, ?6, ∑16	0 P5, ?6, ∑11	0 P2, ?16, ∑18	1 P7, ?4, ∑12	0 P9, ?6, ∑15	0 P10, ?4, ∑14
272	273M	1	0 (0)	nemertea (ribbon worms)														
86	273M	1	5 (-10)	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	0 P1, ?0, ∑1
13	273M	1	0 (0)	phoroniformea (horseshoe worms)														
134	273M	0	0 (0)	gastrotricha (hairybacks)														
4732	273M	55	0 (0)	platyhelminthes (flatworms)														
21	273M	0	0 (0)	gnathostomulida (jaw worms)														
1	273M	0	0 (0)	micrognathozoa														
246	273M	19	3 (-12)	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, ?0, ∑1	0 P1, ?0, ∑1
4	273M	1	1 (-13)	orthonectida											0 P0, ?1, ∑1			
24	273M	1	0 (0)	dicyemida														

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