Analysis performed: 190816\_184756
Analyzed sequences (hits resulting from 676 blast searches, 52 animal groups x 13 query sequences):5156 (out of which unique: 2379, programmatically recognized as VEGF/PDGF family members: 98.5%).
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, Σ = total homologs found.

				,, ,				•	The numbers in the table	denote the number of	: orthologs found (blac	(x), P = paralogs lound, ?	= nomologs round, whose	e relationship could not be	e programmatically deteri	mined, $\Sigma = \text{total homologs}$	s iouna.			
						mpl. # unique blasthits mes (excl. false pos.)		PDGF-A	PDGF-B	PDGF-C	PDGF-D	PIGF-1	VEGF-A121	VEGF-A165	VEGF-A206	VEGF-B167	VEGF-B186	VEGF-C	VEGF-D	VEGF-F
				55		0 (0)	ctenophora (comb jellies)											- DO 27 FO	o D1 21 E2	• 00 22 52
				1373		11 (0)	porifera (sponges)											1 P0, ?7, ∑8	0 P1, ?1, ∑2	0 P0, ?3, ∑3
					36k 2	0 (0)	placozoa								50.00		50.00.50			
	)				115k 18		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 (0)	xenacoelomorpha												0 P0, ?1, ∑1	
		<b>O</b>		1797	136k 11		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, <u>∑</u> 22	1 P9, ?7, ∑17	0 P7, ?3, ∑10
		<u> </u>		39	23k 2	4 (4)	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
		<b>O</b>		······ 11	95k 4	7 (7)	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, ?6, ∑13	0 P6, ?1, ∑7	0 P6, ?1, ∑7
				362	64k 6	2 (1)	tunicata 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	0 P1, ?0, ∑1	0 P1, ?0, ∑1	0 P1, ?0, ∑1	0 P1, ?0, ∑1	0 P1, ?0, ∑1
				77	8k 3	0 (0)	cyclostomata (hagfish/lamprey)													
				833	115k 6	52 (n.a.)	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, <u>∑</u> 29	0 P29, ?1, ∑30	6 P23, ?0, ∑29	2 P26, ?0, ∑28	0 P25, ?0, ∑25
				19097	2M 186	674 (n.a.)	actinopterygii (ray-finned fishes)	217 P665, ?170, ∑1052	27 P863, ?170, ∑1060	117 P282, ?15, <u>∑</u> 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 (30)	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	o P14, ?0, ∑14
				6	1k 0	10 (8)	dipnoi (lungfishes)	1 P3, ?0, ∑4	1 P3, ?0, ∑4	o P4, ?0, Σ4	0 P4, ?0, ∑4	o P4, ?0, <u>∑</u> 4	2 P2, ?0, ∑4	2 P2, ?0, <u>Σ</u> 4		0 P4, ?0, Σ4	0 P4, ?0, ∑4	o P4, ?0, <u>∑</u> 4	0 P4, ?0, ∑4	o P4, ?2, ∑6
				5700	478k 6	144 (n.a.)	amphibia	16 P59, ?1, ∑76	12 P62, ?1, ∑75	6 P54, ?0, ∑60	5 P17, ?0, ∑22	o 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	o P68, ?1, ∑69
				9458	3M 132	462 (n.a.)	aves (birds)	127 P340, ?5, <u>∑</u> 472	118 P461, ?5, ∑584	98 P452, ?2, ∑552	154 P316, ?0, ∑470	109 P463, ?4, ∑576	140 P390, ?9, ∑539	141 P329, ?5, <b>∑</b> 475	141 P329, ?5, ∑475	o P672, ?8, ∑680	o P764, ?8, ∑772	130 P704, ?4, ∑838	96 P707, ?4, ∑807	1 P729, ?8, ∑738
					179k 4		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	o P57, ?0, ∑57	o P63, ?0, ∑63	9 P54, ?0, ∑63	8 P55, ?0, ∑63	0 P53, ?0, ∑53
				<sub></sub> 3249	96k 6		lepidosauria excl. toxicofera (non-poisonous lizards		6 P45, ?0, ∑51	3 P38, ?1, <u>∑</u> 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, <u>∑</u> 64	5 P57, ?0, <u>∑</u> 62	4 P48, ?0, ∑52
					467k 15		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
					184k 10		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	o P70, ?1, ∑71
					26k 1		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, Σ8	0 P8, ?0, ∑8	2 P6, ?0, ∑8	1 P7, ?0, ∑8	0 P6, ?0, ∑6
					142k 5		metatheria (marsupials)	7 P36, ?0, ∑43	5 P36, ?0, Σ41	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, Σ40	4 P35, ?0, ∑39	5 P34, ?0, ∑39	0 P39, ?0, ∑39
					8M 181			247 P762, ?6, ∑1015	223 P892, ?13, ∑1128	218 P659, ?1, ∑878	235 P417, ?0, ∑652			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
							eutheria (placentals)						434 P900, ?6, ∑1340							
					46k 2		tardigrada (water bears)	0 P1, ?3, ∑4	0 P3, ?1, ∑4	0 P2, ?0, ∑2	0 P1, ?0, ∑1	0 P2, ?0, <u>∑</u> 2	0 P0, ?4, ∑4	0 P0, ?6, ∑6	0 P0, ?3, ∑3	0 P4, ?0, ∑4	0 P3, ?1, ∑4	0 P2, ?2, <u>∑</u> 4	0 P4, ?0, ∑4	0 P2, ?1, ∑3
					2k 1		onychophora (velvet worms)													
					2k 0		pycnogonida (sea spiders)	P20 22 <b>F</b> 25			DO 22 F11	P2 4 220 <b>T</b> 65	DE 202 <b>=</b> 41	DE 200 =20	PE 216 F24	POE 012 F20	DOM 211 TOF	P1 6 21 6 <b>T</b> 22	D14 00 E17	P26 220 F57
					646k 27		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
			)		39k 1		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
			)		7k 1		myriapoda (millipeds)										0 P0, ?1, ∑1			
					947k 25		<b>**</b> 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		4 P4, ?8, ∑16	1 P9, ?19, ∑29	1 P6, ?19, ∑26	1 P8, ?13, ∑22	1 P6, ?8, ∑15	1 P7, ?9, ∑17
		L	<u> </u>	114720	7M 339	2 (2)	hexapoda (insects)	20 P77, ?117, ∑214	3 P89, ?113, ∑205	1 P42, ?34, ∑77	2 P23, ?16, <u>∑</u> 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
				30	368 0	0 (0)	nematomorpha (horsehair worms)													
				3524	2M 100	1 (1)	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 (1)	y 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
		0		······· 1	1 0	0 (0)	<b>i</b> loricifera													
				62	436 0	0 (0)	/ kinorhyncha (mud dragons)													
	0			56	2k 0	0 (0)	/ chaetognatha (arrow worms)													
		<b>O</b>		327	3k 0	1 (0)	bryozoa (moss animals)										0 P0, ?1, ∑1			
				26	155 0	2 (0)	entoprocta										0 P0, ?1, ∑1		o P0, ?1, ∑1	
				2	278 0	0 (0)	cycliophora (symbion)													
				3338	129k 5	1 (1)	annelida (segmented worms)	0 P0, ?3, ∑3	0 P2, ?2, <u>Σ</u> 4	0 P1, ?1, <u>Σ</u> 2	0 P1, ?1, ∑2	o P1, ?2, ∑3	0 P0, ?3, ∑3	0 P0, ?3, ∑3	o Po, ?3, ∑3	0 P1, ?2, ∑3	0 P1, ?1, ∑2	0 P0, ?3, ∑3	0 P1, ?1, ∑2	o P1, ?2, ∑3
				14215	742k 26	2 (2)	mollusca	o P4, ?6, ∑10	0 P8, ?0, ∑8	o P4, ?4, ∑8	o P1, ?4, ∑5	0 P2, ?1, ∑3	2 P2, ?9, ∑13	2 P2, ?9, ∑13	2 P2, ?5, ∑9	o P9, ?6, ∑15	o P4, ?6, ∑10	o P1, ?15, ∑16	o P7, ?4, ∑11	o P8, ?4, ∑12
		<u> </u>		262	5k 1	0 (0)	nemertea (ribbon worms)													
					42k 1		brachiopoda (lamp shells)	o P1, ?0, ∑1	0 P1, ?0, ∑1	0 P0, ?1, ∑1	0 P1, ?0, ∑1		o 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
					165 1		phoroniformea (horseshoe worms)													
		<u></u>			389 0		gastrotricha (hairybacks)													
		<u> </u>			561k 26		platyhelminthes (flatworms)										0 P0, ?1, ∑1			
					79 0		gnathostomulida (jaw worms)										J . J, . L, <u>Z</u> L			
		0_0			2 0		micrognathozoa  rotifora (whool animals)	1 PO 20 51	0 P1 20 T1	0 D1 21 T2		0 D1 20 T1		0 D1 20 T1		0 D1 20 T1	0 D1 21 T2	0 P1 20 T1	0 P1 20 T1	0 D1 22 T2
					64k 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
					9k 1		orthonectida 											0 P0, ?1, ∑1		
	<u> </u>	<u> </u>		24	150 0	0 (0)	dicyemida													