

Character	Node/Clade	Longirostrine character?	Synapomorphy type										
				Thoracosaurus isorhynchus	Thoracosaurus neocesariensis	Eothoracosaurus mississippiensis	Eosuchus minor	Portugalosuchus lerichei	Eogavialis azenahae	Argochampsia africanum	Argochampsia krebsi		
107-1	Gavialoidea	No	Exclusive	1	1	1	1	0	0	1	?		
136-1	Gavialoidea	No	Ambiguous	0	?	0	0	0	0	1	1		
144-1	Gavialoidea	Yes	Ambiguous	1	?	0	0	0	?	1	1		
151-2	Gavialoidea	Yes	Ambiguous	2	?	2	2	2	?	2	2		
154-0	Gavialoidea	No	Ambiguous	0	?	0	0	0	?	0	0		
183-1	Gavialoidea	No	Ambiguous	?	?	?	0	0	?	0	?		
191-0	Gavialoidea	No	Ambiguous	0	?	?	0	0	?	0	0		
206-0	Gavialoidea	No	Exclusive	?	0	0	1	0	?	0	0		
41-1	Gavialoidea	No	Ambiguous	1	1	1	1	1	?	1	1		
50-1	Gavialoidea	Yes	Ambiguous	1	1	1	1	1	?	1	1		
75-2	Gavialoidea	No	Ambiguous	0	0	0	1	0	0	2	1		
46-1	<i>Maomingosuchus</i> + <i>Gavialis</i>	Yes	Shared	1	?	1	1	1	?	1	1		
98-1	<i>Maomingosuchus</i> + <i>Gavialis</i>	No	Ambiguous	1	?	?	?	0	1	1	?		
220-0	<i>Maomingosuchus</i> + <i>Gavialis</i>	Yes	Ambiguous	?	?	0	1	0	?	0	0		
224-2	<i>Maomingosuchus</i> + <i>Gavialis</i>	Yes	Ambiguous	?	?	2	2	2	?	3	?		
219-3	Gavialidae	Yes	Ambiguous	?	?	3	3	3	?	3	?		
221-3	Gavialidae	Yes	Exclusive	?	?	3	2	?	?	3	?		
280-1	Gavialidae	No	Shared	?	?	?	?	?	?	?	?		
328-0	Gavialidae	No	Shared	?	?	?	?	?	?	?	?		
278-1	<i>Toyotamaphimeia</i> + <i>Gavialis</i>	No	Exclusive	1	1	?	1	0	?	1	?		
193-1	<i>Toyotamaphimeia</i> + <i>Gavialis</i>	No	Ambiguous	1	1	1	?	0	1	0	1		
247-0	<i>Toyotamaphimeia</i> + <i>Gavialis</i>	No	Ambiguous	?	?	0	0	?	?	0	1		
276-1	<i>Toyotamaphimeia</i> + <i>Gavialis</i>	No	Ambiguous	1	1	?	1	1	?	?	0		
288-0	<i>Toyotamaphimeia</i> + <i>Gavialis</i>	No	Exclusive	?	?	?	?	?	?	?	?		
307-0	<i>Toyotamaphimeia</i> + <i>Gavialis</i>	No	Ambiguous	?	?	?	0	?	?	1	?		
309-0	<i>Toyotamaphimeia</i> + <i>Gavialis</i>	No	Ambiguous	?	?	?	?	?	?	?	?		
325-0	<i>Toyotamaphimeia</i> + <i>Gavialis</i>	No	Shared	0	?	?	0	0	?	0	0		
327-0	<i>Toyotamaphimeia</i> + <i>Gavialis</i>	No	Ambiguous	?	?	0	0	1	?	0	1		
89-0	<i>Toyotamaphimeia</i> + <i>Gavialis</i>	No	Shared	0	?	0	0	0	0	0	0		
149-1	<i>Penghusuchus</i> + <i>Gavialis</i>	Yes	Shared	1	1	1	1	1	?	1	1		
253-1	<i>Penghusuchus</i> + <i>Gavialis</i>	No	Ambiguous	?	?	1	1	?	?	?	?		
302-0	<i>Penghusuchus</i> + <i>Gavialis</i>	No	Shared	0	0	?	1	?	?	?	0		
90-0	' <i>T.</i> <i>cairense</i> + <i>Gavialis</i>	No	Shared	0	?	?	0	0	0	0	1		
147-7	' <i>T.</i> <i>cairense</i> + <i>Gavialis</i>	Yes	Shared	7	?	7	7	7	?	7	7		
304-0	' <i>T.</i> <i>cairense</i> + <i>Gavialis</i>	No	Shared	0	0	?	?	?	?	?	?		

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		Yes	No	Thoracosaurus isorhynchus	Thoracosaurus neocesariensis	Eothoracosaurus mississippiensis	Eosuchus minor	Eosuchus lerichei	Portugalosuchus azenhae	Eogavialis africanum	Argochampsia krebsi
63-1	<i>Portugalosuchus</i> + <i>Gavialis</i>	No	Shared	0	?	1	0	0	1	?	0
91-1	<i>Portugalosuchus</i> + <i>Gavialis</i>	No	Shared	0	?	?	?	?	1	1	1
94-1	<i>Portugalosuchus</i> + <i>Gavialis</i>	No	Ambiguous	1	?	1	0	0	1	1	1
115-0	<i>Portugalosuchus</i> + <i>Gavialis</i>	No	Shared	?	?	0	?	1	?	0	0
158-1	<i>Portugalosuchus</i> + <i>Gavialis</i>	Yes	Exclusive	0	?	1	1	0	?	1	1

Table 1: List of all synapomorphies for Gavialoidea and less inclusive clades that group 'thoracosauers' and *Portugalosuchus* with other gavialoids. Red cells highlight character states that contrast with most or all other members of the respective node. Grey cells highlight missing data. Nodes described as *taxon x* + *taxon y*, indicate the least inclusive clade defined by those taxa. Underlined rows are exclusive synapomorphies that are discussed in the main text.