

**Table S1.** Estimated divergence dates for given clades for the temporally calibrated ancestral state reconstructions. Numbers refer to clades shown in Figure 1.

Clade	Divergence date (in million years)	Source
1	34.6	Pyron et al. [49]
2	33	TimeTree [34]
3 ( <i>Coelognathus</i> )	30	TimeTree [34]
4	25.7	TimeTree [34]
5	15.4	TimeTree [34]
6	29.1	Pyron et al. [49]
7 ( <i>Euprepiophis</i> )	16.6	TimeTree [34]
8	28.1	Pyron et al. [49]
9	24.1	TimeTree [34]
10 ( <i>Orthriophis</i> )	19.7	TimeTree [34]
11	23.1	TimeTree [34]
12 ( <i>Zamenis</i> )	12.1	TimeTree [34]
13	9.5	TimeTree [34]
14	22.8	Pyron et al. [49]
15	21.9	TimeTree [34]
16 ( <i>Elaphe</i> )	14	TimeTree [34]
17	13.7	TimeTree [34]
18	12.4	TimeTree [34]
19	10.5	TimeTree [34]
20	13.4	TimeTree [34]
21	16.8	TimeTree [34]
22 ( <i>Pantherophis</i> )	11.4	TimeTree [34]
23	5.5	TimeTree [34]
24	10.7	TimeTree [34]

25 ( <i>Lampropeltis</i> )	11.4	TimeTree [34]
26	8.2	TimeTree [34]
27	8	TimeTree [34]