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The Triassic eucynodont *Candelariodon barberenai* revisited and the early diversity of stem prozostrodontians

Agustín G. Martinelli, Marina Bento Soares, Téo Veiga De Oliveira, Pablo G. Rodrigues, and Cesar L. Schultz
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The dental anatomy of *Candelariodon barberenai* from the *Dinodontosaurus* Assemblage Zone (Pinheiros-Chiniquá Sequence, Santa Maria Supersequence, late Ladinian–early Carnian) of south Brazil, is redescribed. *Candelariodon* was originally classified as *Eucynodontia* incertae sedis and our analysis recovered this taxon deeply nested within Probainognathia, as the sister taxon of *Potheriodon* plus Prozostrodontia. The lower postcanine dentition of *Candelariodon* has several apomorphies shared with *Prozostrodon*, *Santacruzgnathus*, *Brasilodon*/*Brasilitherium*, and some basal mammaliaforms (*Morganucodon*, *Megazostrodon*), such as a lingual cingulum with discrete cusps e and g and two distinct morphologies in the tooth row. The reinterpretation of *Candelariodon* as a probainognatian cynodont more derived than *Probainognathus* and the rich Brazilian fossil record document an important adaptive radiation of non-mammaliaform prozostrodontians and closely related forms prior to the origin of the mammaliaform clade.

Key words: Cynodontia, Probainognathia, Prozostrodontia, *Dinodontosaurus* Assemblage Zone, South America, Brazil.

Agustín G. Martinelli [agustin_martinelli@yahoo.com.ar], Marina Bento Soares [marina.soares@ufrgs.br], Pablo G. Rodrigues [pablogr@bol.com.br], and Cesar L. Schultz [cesar.schultz@ufrgs.br], Laboratório de Paleontologia de Vertebrados, Departamento de Paleontologia e Estratigrafia, Instituto de Geociências, Universidade Federal do Rio Grande do Sul (UFRGS), Av. Bento Gonçalves 9500, Agronomia, 91540-000, Porto Alegre, RS, Brazil. Téo Veiga de Oliveira [teovoli@yahoo.com.br], Divisão de Mamíferos do Museu de Zoologia da UEFS, Departamento de Ciências Biológicas, Universidade Estadual de Feira de Santana (UEFS), Av. Transnordestina s/n, Bairro Novo Horizonte, 44036-900, Feira de Santana, BA, Brazil.

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