New specimen and revision of the late Jurassic teleosaurid '*Steneosaurus' megarhinus*

Davide Foffa [1], Mark T. Young [1,2], Stephen L. Brusatte [1,3] & Lorna Steel [4]

[1] *School of GeoSciences, University of Edinburgh, Edinburgh, UK*
[2] *National Oceanography Centre, University of Southampton, Southampton, UK*
[3] *National Museums Scotland, Edinburgh, UK*
[4] *Department of Earth Sciences, Natural History Museum, London, UK*

Teleosaurids were a successful group of semi-aquatic crocodylomorphs that were an abundant part of coastal marine/lagoonal faunas during the Jurassic. Their fossil record suggests that the group declined in diversity and abundance during the Late Jurassic. *'Steneosaurus' megarhinus* (Hulke, 1871) from the Kimmeridge Clay Formation is a little known gracile longirostrine species of teleosaurid from the Late Jurassic (late Kimmeridgian). The holotype, an incomplete snout NHMUK PV OR43086, was firstly described by Hulke in 1871. Since then only one other specimen, an almost complete skull from the slightly older *Aulacostephanus eudoxus* Sub-Boreal ammonite Zone of "La Crouzette", Francoulès (Quercy, France), has been referred to this species. Here, we describe, DORCM G.5067i-v, the anterior rostrum of a teleosaurid from the same horizon and locality as the holotype. We demonstrate that DORCM G.5067i-v is referable to *Steneosaurus' megarhinus* based on a unique combination of characters, which include: strongly ventrally deflected anterior margin of the premaxilla; five premaxillary alveoli, the caudal-most being considerably reduced in size; anterodorsally oriented external nares; conical teeth bearing carinae which are only visible on the apical third of the crown. Importantly, the tooth count, shape of external nares and strong premaxillary deflection distinguish *Steneosaurus' megarhinus* from all other Middle and Late Jurassic longirostrine teleosaurids. Some of these characteristics resemble those seen in pholidosaurids, suggesting some convergence between these clades.