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***Overosaurus paradasorum* gen. et sp. nov., a new sauropod dinosaur (Titanosauria: Lithostrotia) from the Late Cretaceous of Neuquén, Patagonia, Argentina**

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Abstract

A new lithostrotian sauropod, the small-sized *Overosaurus paradasorum* n. gen et sp. from the Anacleto Formation (Campanian, Late Cretaceous, Neuquén Group, Patagonia, Argentina) is here described. The specimen (MAU-Pv-CO-439) consists of a fully articulated vertebral series from the 10th cervical to the 20th caudal vertebra, the last cervical ribs, several dorsal ribs in articulation with their respective vertebrae, the complete right ilium and fragments of the left ilium. *Overosaurus paradasorum* is diagnosed by a unique combination of characters that includes (1) posterior cervical vertebrae with long pre- and postzygapophyses that project beyond the anterior and posterior borders of the centrum, respectively, (2) postspinal lamina absent in all dorsal neural spines, (3) wide and massive 9th and 10th caudal centra that are slightly excavated laterally and have relatively flat ventral surfaces, (4) laminar projection on the posterior border of the second and third dorsal rib, (5) ilium proportionally shorter anteroposteriorly and taller dorsoventrally than in other lithostrotians, and (6) the preacetabular process of the ilium strongly deflected laterally and with a ventrolaterally tapering end. Analysis of the phylogenetic relationships of *Overosaurus* places it within the Aeolosaurini, as the sister taxon of a monophyletic group formed by *Aeolosaurus rionegrinus*, *A. maximus*, *Gondwanatitan faustoi* and *Pitekunsaurus macayai*. *Overosaurus* is a new representative of a highly diversified assemblage of Campanian lithostrotians from Patagonia that includes both Aeolosaurini and saltasaurids (e.g. *Saltasaurus*, *Neuquensaurus*)—this small new taxon falls within the low end of the size spectrum represented by these Late Cretaceous sauropods.

Key words: titanosaur, Campanian, Neuquén, Aeolosaurini

Introduction

During the last decade our knowledge of the taxonomic and morphological diversity of South American titanosaur sauropods has been dramatically augmented by the discovery of numerous new taxa (Calvo *et al.* 2007a,b; Calvo & Porfiri 2010; Costa Franco-Rosas *et al.* 2004; Filippi & Garrido 2008; Filippi *et al.* 2011 a,b; González Riga 2003; Salgado & de Souza Carvalho 2008; Salgado & Coria 2009; Santucci & de Arruda-Campos 2011) and taxonomic revisions (e.g. Carballido *et al.* 2011; D’Emic & Wilson 2011; García & Salgado 2013; Mannion & Calvo 2011). Such discoveries have increased our understanding of the overall anatomy of these dinosaurs and provided a more complete picture of their evolutionary history, even if the specifics of their phylogenetic relationships are yet to be clarified. This increasing knowledge notwithstanding (Campos *et al.* 2005; Curry Rogers 2009; Gallina 2011), information related to the morphological variation within the vertebral series is limited, primarily due to the scarcity of specimens with articulated vertebral columns.

In November 2002, a joint expedition of the Museo Carmen Funes (Plaza Huincul), the Museo Argentino