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Earliest eutherian mammal skull, from the Late Cretaceous (Coniacian) of Uzbekistan

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We describe a partially crushed skull and dentaries of a sub-adult individual of *Daulestes nessovi* sp. n., from the Coniacian of Uzbekistan. This is the earliest known eutherian skull (about 87 Ma) and the sixth genus of Cretaceous eutherians in which a skull is available. Because the skull of *D. nessovi* is sub-adult, certain plesiomorphic features may be ontogenetic and should be interpreted with caution. Four upper premolars and five lower premolariform teeth were in use (possibly to become four lowers when fully adult). The upper cheek-teeth have winged conules; M2 has large parastylar and small metastylar projections. Pre- and postcingula are lacking on DP4 and the upper molars. The talonids of dp4-m2 are about 90% as wide as the trigonids, with widely separated entoconid and hypoconulid. The skull has a large sphenorbital fissure, no foramen rotundum, and apparently no pterygoid process of the sphenoid. A large orbital wing of the palatine prevents maxilla-frontal contact within the orbit. The zygomatic arch is slender. The cochlea has one full turn, with an expanded apex, which suggests that a lagena might have been present. A large malleus with a robust anterior process, and a large promontorium may be due to young age of the individual or a primitive retention, as in the platypus. Because of the similarity to Asioryctidae in both cranial structure and dentition, we assign *Daulestes* tentatively to Asioryctitheria Novacek et al. 1997, family incertae sedis.

Key words: Skull, Eutheria, *Daulestes*, *Asioryctes*, Coniacian, Cretaceous, Uzbekistan.

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