

Electronic Supplementary Material Table 1. Taxonomic membership of the genera in the empirical dataset of Cetacea.

Genus	Family	Reference
<i>Acrophyseter</i>	Physeteroidea	[1]
<i>Africanacetus</i>	Ziphiidae	[1]
<i>Aglaocetus</i>	Chaeomysticeti	[1]
<i>Agorophius</i>	Agorophiidae	[1]
<i>Amphicetus</i>	Cetacea	
<i>Ancalecetus</i>	Basilosauridae	[1]
<i>Andrewsiphius</i>	Remingtonocetidae	[1]
<i>Aporotus</i>	Ziphiidae	[1]
<i>Argyrocetus</i>	Eurhinodelphinidae	[1]
<i>Astadelphis</i>	Delphinidae	[1]
<i>Atocetus</i>	Pithanodelphininae	[1]
<i>Attockicetus</i>	Remingtonocetidae	[1]
<i>Babiacetus</i>	Protocetidae	[1]
<i>Balaena</i>	Balaenidae	[1]
<i>Balaenoptera</i>	Balaenopteridae	[1]
<i>Balaenotus</i>	Cetacea	
<i>Balaenula</i>	Balaenidae	[1]
<i>Basilosaurus</i>	Basilosauridae	[1]
<i>Basilotritus</i>	Basilosauridae	[1]
<i>Belemnziphius</i>	Ziphiidae	[2]
<i>Berardius</i>	Ziphiidae	[1]
<i>Brandtocetus</i>	Cetotheriidae	[3]
<i>Caperea</i>	Neobalaenidae	[1]
<i>Cetotheriophanes</i>	Balaenopteridae	[4]
<i>Cetotherium</i>	Cetotheriidae	[1]
<i>Chilcacetus</i>	Eurhinodelphinidae	[1]
<i>Coronodon</i>	Mysticeti	[5]
<i>Dalanistes</i>	Remingtonocetidae	[1]
<i>Delphinapterus</i>	Monodontidae	[1]
<i>Delphinodon</i>	Kentriodontinae	[1]
<i>Delphinus</i>	Delphinidae	[1]
<i>Denebola</i>	Monodontidae	[1]
<i>Dorudon</i>	Basilosauridae	[1]
<i>Eschrichtius</i>	Eschrichtiidae	[1]
<i>Eubalaena</i>	Balaenidae	[1]
<i>Eucetotherium</i>	Cetotheriidae	[6]
<i>Eurhinodelphis</i>	Eurhinodelphinidae	[1]
<i>Feresa</i>	Delphinidae	[1]
<i>Globicephala</i>	Delphinidae	[1]
<i>Globicetus</i>	Ziphiidae	[1]
<i>Goniodelphis</i>	Iniidae	[1]
<i>Grampus</i>	Delphinidae	[1]

Genus	Family	Reference
<i>Hadrodelfhis</i>	Lophocetinae	[1]
<i>Hemisynttrachelus</i>	Delphinidae	[1]
<i>Herpetocetus</i>	Cetotheriidae	[1]
<i>Heterocetus</i>	Cetacea	
<i>Hoplocetus</i>	Physeteroidea	[1]
<i>Hyperoodon</i>	Ziphiidae	[1]
<i>Ichthyolestes</i>	Pakicetidae	[1]
<i>Indopacetus</i>	Ziphiidae	[1]
<i>Kentriodon</i>	Kentriodontinae	[1]
<i>Kharodacetus</i>	Protocetidae	[1]
<i>Kogia</i>	Kogiidae	[1]
<i>Lagenodelphis</i>	Delphinidae	[1]
<i>Lagenorhynchus</i>	Delphinidae	[1]
<i>Masracetus</i>	Basilosauridae	[1]
<i>Mauicetus</i>	Chaeomysticeti	[1]
<i>Megaptera</i>	Balaenopteridae	[1]
<i>Mesoplodon</i>	Ziphiidae	[1]
<i>Mithridatocetus</i>	Cetotheriidae	[6]
<i>Monodon</i>	Monodontidae	[1]
<i>Neophocaena</i>	Phocoenidae	[1]
<i>Neosqualodon</i>	Squalodontidae	[1]
<i>Ninjadelfhis</i>	Allodelphinidae	[7]
<i>Ninoziphius</i>	Ziphiidae	[1]
<i>Notiocetus</i>	Cetacea	
<i>Ocucajea</i>	Basilosauridae	[1]
<i>Orcaella</i>	Delphinidae	[1]
<i>Orcinus</i>	Delphinidae	[1]
<i>Pachyacanthus</i>	Delphinida	[8]
<i>Palaeophocaena</i>	Cetacea	
<i>Parapontoporia</i>	Lipotidae	[1]
<i>Parietobalaena</i>	Chaeomysticeti	[1]
<i>Patriocetus</i>	Patriocetidae	[1]
<i>Peponocephala</i>	Delphinidae	[1]
<i>Phocoena</i>	Phocoenidae	[1]
<i>Physeterula</i>	Physeteridae	[1]
<i>Pinocetus</i>	Balaenopteroidea	[1]
<i>Piscolithax</i>	Phocoenidae	[1]
<i>Platyosphys</i>	Cetacea	
<i>Plesiocetopsis</i>	Tranatocetidae	[3]
<i>Plesiocetus</i>	Cetacea	
<i>Pomatodelphis</i>	Platanistidae	[1]
<i>Pseudorca</i>	Delphinidae	[1]
<i>Sachalinocetus</i>	Waipatiidae	[9]
<i>Saurocetes</i>	Iniidae	[1]

Genus	Family	Reference
<i>Scaldicetus</i>	Physeteroidea	[1]
<i>Schizodelphis</i>	Eurhinodelphinidae	[1]
<i>Simocetus</i>	Simocetidae	[1]
<i>Sitsqwayk</i>	Mysticeti	[10]
<i>Sousa</i>	Delphinidae	[1]
<i>Squalodon</i>	Squalodontidae	[1]
<i>Stenella</i>	Delphinidae	[1]
<i>Stromerius</i>	Basilosauridae	[1]
<i>Thinocetus</i>	Chaeomysticeti	[1]
<i>Tohoraata</i>	Eomysticetidae	[1]
<i>Tokarahia</i>	Eomysticetidae	[1]
<i>Tursiops</i>	Delphinidae	[1]
<i>Tusciziphius</i>	Ziphiidae	[1]
<i>Xiphiacetus</i>	Eurhinodelphinidae	[1]
<i>Zarhachis</i>	Platanistidae	[1]
<i>Ziphiodelphis</i>	Eurhinodelphinidae	[1]
<i>Ziphirostrum</i>	Ziphiidae	[1]
<i>Ziphius</i>	Ziphiidae	[1]
<i>Zygophyseter</i>	Physeteroidea	[1]
<i>Zygorhiza</i>	Basilosauridae	[1]

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