



Supplementary Figure S1 *Stenopterygius* specimen MH 432 (see Lindgren et al. 2018 for further information). A, Photograph of MH 432 and its approximate anatomical location indicated by the box on the grey ichthyosaur silhouette. B–D, Integument soft-tissue structures of MH 432. B, Stereomicrograph of skin surface sampled from the upper portion of the flank of MH 432. Note abundant melanophores (dots) within the partially translucent epidermal surface. C, Light microscopy image of sectioned skin showing the morphologically distinct epidermis and dermis, as well as cellular features (e.g., melanophores). The sample highlights the arrested decomposition of the skin, where the intrusion of sediment (and presumably also microbes) into the proximal epidermis and distal dermis led to the destruction of primary tissues. Note accumulation of melanosomes associated with the intruded sediments. D, TEM micrograph of a melanophore cell with internal melanosomes. Scale bars: 200 μm (B), 100 μm (C), 5 μm (D).