

EnBIO launches its OsteoZip™ surface for orthopedic implants

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EnBIO

today launched its OsteoZip™ surface, which has been designed to enhance the osteointegration and early bone fixation of orthopedic implants into host bone tissue. OsteoZip is a revolutionary new hydroxyapatite (HA) surface that is ideal for orthopedic and dental implants. Applied and enabled by EnBIO's CoBlast™ surface modification process, OsteoZip heralds a new era of functional surfaces for orthopedic implants. The CoBlast process is non-complex, room temperature and requires no wet chemistry, providing orthopedic implant OEMs with a state-of-the-art surface at a competitive cost. The CoBlast process is in fact a novel variation of grit-blasting-a well practiced process in the medical device industry-and the CoBlast processing equipment is essentially a modified version of standard grit blasting equipment.

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EnBIO's

in-vitro and in-vivo testing shows that the OsteoZip surface exhibits superior bone fixation and faster osteointegration than other standard orthopedic implant surfaces such as roughened, RBM, and plasma sprayed HA. This enhanced performance is due to the fact that the HA on the OsteoZip surface is ~100% crystalline (HA is not heated during the deposition process) and due to the thin HA layer (~10µm). This thin layer also means that the HA will not shear or delaminate, counteracting the well known problem of traditional HA coatings (applied via plasma spraying [1-3]). It is expected that this will also result in better long term stability relative to traditional HA coatings. EnBIO's

business model is twofold. Fundamentally, the CoBlast technology will be licensed to orthopedic OEMs. EnBIO will work with OEMs to set up and optimize the OsteoZip surface using modified grit blasting equipment. Alternatively, EnBIO can provide a coating service (via established implant coating partners) for any prospective customer who does not wish to set up a CoBlast coating capability in their own facility. EnBIO has filed an OsteoZip master file with the FDA and is also filing a 510K for an OsteoZip coated screw product which can then be used a predicate for other applicants.

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