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Not the Same Cup

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We thank the authors for their work on “Implant Survival of 6080 Tritanium Cups in Primary Total hip Arthroplasty”

We too, anecdotally, have seen a higher than expected failure rate with the Tritanium Primary Acetabular System, and as a result have stopped using this implant system.

However, we would like to point out some very important errors in the author’s manuscript. In the introduction, the authors describe the manufacturing process of the Tritanium primary acetabular component system. In fact, they are describing the manufacturing process of the Trident Tritanium Acetabular System – a revision multi-hole cup. The revision cup is distinctly different from the primary cup with a different manufacturing process resulting in a different surface finish (1) and most importantly, likely very different clinical results. The primary and revision tritanium cups only share a similar name.

The authors also lump together the literature on the Tritanium cup, when in fact some studies describe the primary cup, others the revision cup, some both cup designs, and one referenced study does not describe either cup. The comparison of different cup designs clearly explains the contradictory results noted in their discussion. Most notable the study by Carli et al (2), is in reference to the primary cup; the study by Ramappa et al (3), are in reference to the revision cup; based on the release dates, Vetescu et al (4), describes the revision cup but may have also included primary cups; Narizi (5) states the primary cup was used but pictures both the primary and revision cup in the article; and lastly the study by Perticarini et al (6), does not in fact reference any Tritanium cups but rather the Lima DELTA-TT cup. It is also quite possible that the various national joint registries referenced combined results of the primary and revision

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cups given the similar name. Unfortunately, many of the referenced articles in this study also incorrectly describe the manufacturing process of the primary cup and often refer to the primary cup as the highly porous titanium cup. This mistake continues to be perpetuated in the literature.

The Tritanium primary cup was, as described released to the US market in 2008. The revision cup was brought to market in 2006. Their study period began in 2009. It is quite possible that the authors may have included both primary and revision cups in their series, potentially underestimating the true revision rate for the primary cup.

We appreciate the authors' message of concern with the Tritanium primary implant as we share the same concern, but also highlight the need to clearly define which cup is referenced as the primary and revision cups are two very distinct and different cup designs that happen to share a similar name.

Disclaimer: e-Letters represent the opinions of the individual authors and are not copy-edited or verified by JBJS.

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Conflict of Interest: None Declared

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Article Author Response

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Article Author(s) to Letter Writer(s)

Dear Doctors Spangehl and Bingham, Dear Readers of JBJS Am,

thank you for carefully reading our study. Our analyses included the Tritanium cups which Stryker has sold in Finland for the purpose of primary total hip arthroplasty. All the index operations in our study were primary surgery. We agree with the sharp-eyed readers that in the previous literature there may be some overlap between the products.

Best wishes,

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