Some of the Co-Axis Implants (IBT12°, BAT 24°, BBT24°) required a shorter prosthetic screw, by 1.2mm, and hence the “Z” series screws are advocated for these Implants. The original screw for the External Hex, engages 7.25 threads (worst scenario) compared to the “Z” screw engaging 5.25 threads. Both of these can be viewed as excessive, when compared to some of the newer implants which rely on only 3 threads engaging.

What has changed since the original Externally Hexed design, is that we now mill the threads, as opposed to the old method of tapping a thread. This new process results in much greater perfection in the thread profile, and hence greater load carrying capacity. This also paved the way for Zygomatic and Co-Axis Implants with slightly reduced thread length.

Since the introduction of these marginally reduced length prosthetic screws, an excessive amount of fatigue testing has been performed at the University of Toronto, and prospective clinical trials have been conducted with these marginally shorter screws. The result of these evaluations is that there is benefit in advocating the “Z” series screw (1.2mm shorter) for all cases. This also reduces the possibility of incorrectly using a longer screw in a co-axis implant.

The longer screw will remain available on request, but the standard screw supplied will be the marginally shorter “Z” screws.