EDITORIAL

2022 AO Summit: Controversial Trends

Dear Members of the IJOMI readership,

In this special edition of IJOMI, we present the outcomes of the latest scientific consensus conference held by the Academy of Osseointegration (AO). The 3-day conference was held in Chicago in August of 2022. The conference brought together global experts to debate three topic areas. The meeting was chaired by Dr Jörg Neugebauer, AO board member and vice president.

Prior to the conference, a series of preparatory meetings, working groups, and hard-working residents assembled to debate the three topics, craft PICO questions, and search, assemble, and debate the relevant literature. These efforts resulted in a preliminary set of papers that were presented at the August meeting. Many authors were involved in this project, including young dentists in specialty training who were intentionally engaged to provide real-world experience with the professional struggles around using best evidence to support patient care. As with prior summits, there were three themes or questions asked. For each, there was a plenary speaker, followed by a presentation on the results of the systematic reviews and a lively debate.

Group 1, led by Dr Tara Aghaloo, addressed the role of "flapless and guided surgery." Group 2, led by Drs Jörg Neugebauer and Joseph Fiorellini, addressed the role of "ceramic implants." Group 3, led by Drs Todd Schoenbaum, Dwayne Karateew, and Clark Stanford, addressed the role of the "implant-abutment junction to biological and clinical outcomes." For group 1, the plenary (or evidence) position was provided by Professor Fugener, a German industrial design engineer, who discussed the interactions between design and engineering, the universal concepts of design, and how design is brought to functional use (eg, enhanced safety). Dr Mehrdad Favagehi then presented the initial results of clinical cases, followed by Dr Aghaloo, who presented on the group 1 results. Group 2 had a set of engineering consultants and regulatory experts from Covington present on medical device regulations in the USA as the plenary. A robust conversation then occurred, especially when the ceramic oral implant results were presented. The third plenary group was led by Dr Andrew Steen of the American FDA and covered medical compliance law and performance expectations of medical devices. The discussion was again robust, especially around the role of the abutment junction being a flat butt joint as opposed to a more conical connection, along with the role of who (eg, manufacturers, labs, local providers, etc) makes "custom abutments" and the regulatory code related to milling centers regarding what is considered a "medical device." The data of the exhaustive studies performed by Dr Schoenbaum were then presented and discussed. Please see the results provided in the group 3 paper.

The role of the periodic AO summits is critical to the future of the AO Academy. These consensus meeting occur every 4 years, and they represent an important investment in our membership. We utilize these approaches to provide members with the most up-to-date information, science, and critical thought. The papers are a distillation of the narratives and reflections of the debates, if not negotiations, about different positions on important topics in implant dentistry, and they represent the very best of what the AO stands for. The Board of Directors of the AO and the AO Foundation are to be commended, along with the various sponsors who supported the 2022 AO Summit: Controversial Trends. Thank you to all the participants, our sponsors, and Quintessence for publishing these results!

Regards,

Clark Stanford DDS, PhD, MHA Former AO President UOMI Editor-in-Chief

Working Groups at the Association of Osseointegration Summit, 2022

Chair: Jörg Neugebauer, DDS, PhD

Group 1 – Flapless and Guided Surgery

Tara Aghaloo, DDS, MD, PhD, Chair Mehrdad Favagehi, DDS, MS, Co-Chair Ilser Turkyilmaz, DDS, PhD, Co-Chair Marcus Abboud, DMD, PhD Hugo De Bruyn, DDS, MSc, PhD Jeff Ganeles, DMD Scott Ganz, DMD Stephen Jacobs, BDS, FDSRCPS, MJDF, RCS Robert Levine, DDS Jay Malmquist, DMD George Mandelaris, DDS, MS Radi Masri, DDS, MD, PhD Alessandro Pozzi, DDS, MSc Lambert Stumpel, DDS Nipul Tanna, DDS, MS Hom-Lay Wang, DDS, MSD, PhD

Group 2 – Ceramic Implants

Jörg Neugebauer, DDS, PhD, Chair Markus B. Blatz, DMD, PhD, Co-Chair Joseph Fiorellini, DMD, DMSc, Co-Chair Wael Att, DDS, DMD, PhD Jessica Becaud, PhD - Straumann Roland Glauser, MD - Zircon Joseph YK Kan, DDS, MS Robert Lemke, DDS, MD Joan Pi-Anfruns, DMD Ulrich Volz, MSc, PhD - Swiss Dental Solutions

Group 3 - Implant Abutment Connection

Clark Stanford, DDS, PhD, MHA, Chair E. Dwayne Karateew, DDS, Co-Chair Todd R. Schoenbaum, DDS, MS, Co-Chair

Sukirth Ganesan, BDS, PhD Peter Gehrke, DDS, PhD Daniel Givan, DMD, PhD Anna-Karin Lundgren, DDS, PhD - Dentsply Katja Nelson, DDS, PhD Russell Nishimura, DDS Marc Quirynen, DDS Georgios Romanos, DDS, PhD, Prof Dr med dent Amerian Sones, DMD, MS Robert Vogel, DDS Chandur Wadhwani, MSD Burak Yilmaz, DDS, PhD

Moderator

Michael Norton, BDS, FDS, RCS(Ed)