**Greetings to all digital dental enthusiasts.** 

<u>Biostek Dental Technologies</u> would like to introduce you patented method of 3D visualization of a Temporo-Mandibular Joints (TMJ)

"Method for constructing and displaying computer 3D-models of temporomandibular joints - CFx method. Patent № 2735984 (RU). PCT/RU2021/050015. CF-X is a digital diagnostic sequential analysis of mandible movements. You can find detailed information about our technological advancement in the video link below.

https://biostek-dt.com/en/publications/

Using the method in clinical setting allows the following:

- to create highly precise 3D models of condyles and TMJ fossas with thickness of contours of 100 microns in diameter.
- precisely position the mandible into treatment position and fabricate all kinds of restorations (fixed and removable prosthesis, inlays/onlays, splints, functional orthodontic and orthotic appliances)
- to avoid distortions, when 3D models of TMJ are obtained using commonly known methods of CT auto-segmentation.

Financial perspectives of a medical project depend on its value and its expediency when used in clinical practice. Understanding and visualization of condyles in respect to mandibular fossas during mastication is essential for clinicians. Orthodontists, prosthodontists and OMFS's use a number of devices and softwares from various manufacturers that became necessary tools in their daily protocols of treatment.

CF-X may be integrated as an additional software module into existing solutions, or based on the CF-X idea, new leading software solutions with highly improved performance can be created. We at Biostek, view the CF-X method as a TMJ assessment protocol which bears all the potential and logical grounds to become a widely recognized standard of TMJ assessment.

We clearly see the possibility for implementation and integration of CF-X into already existing technological solutions, such as: 3Shape, Aligntech, Exocad, Straumann, Dental Wings, Sirona SICAT Function, Planmeca 4D Jaw Motion, Myotronics K7 CMS.

CF-X is a very flexible solution that can lead a new direction in determining the treatment position of the mandible using intraoral scanners.

Partnership with Biostek Dental Technologies will allow the creation of a unique tool with a new level of understanding of processes within TMJ, significantly improved level of precision and user adaptive interface and visualization. The tool that is essential for dentists for clinical and scientific purposes.