UNITED STATES DISTRICT COURT

SOUTHERN DISTRICT OF CALIFORNIA – SAN DIEGO DIVISION

NUVASIVE, INC., a Delaware corporation, Plaintiff, v. ALPHATEC HOLDINGS, INC., a Delaware corporation, and ALPHATEC SPINE, INC., a California corporation, Defendants.	Case No. 18-cv-00347-MDD-CAB

EXPERT REPORT OF JIM YOUSSEF RE DAMAGES

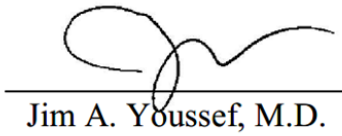
25. I also considered the features that Alphatec touts on Alphatec's website and in its surgical guides for the accused products. I addressed each in detail in my Opening Report at ¶¶ 1372-1380. Consistent with my opinions there, and above, the features that Alphatec touts on Alphatec's website provide minimal, if any, impact on the three primary demand drivers.

4. SURGEON CHOICE OF PLATFORM

26. Based on my experience, surgeons base their usage/adoption decisions for lateral procedures at the platform-level versus the component-level. This is primarily based on the fact that lateral platforms such as NuVasive's MAS platform include integrated components such as a neuromonitoring system, access system (including MaXcess retractor), neuromonitoring disposables, MaXcess disposables, and implants, each of which have been specifically designed to operate collectively as a functional unit in order to achieve a safe and reproducible, minimally invasive, and successful lateral spinal fusion. The three main components necessary for performance of an XLIF procedure – (1) access tools; (2) implants; and (3) neuromonitoring – collectively function in such a way that allows surgeons to achieve safe and reproducible, minimally invasive, and clinically successful interbody fusions. Additionally, because the absence of any one of these components would dramatically impair surgeons' ability to achieve these objectives, it is my opinion that each of these components contributes equally but in different ways to the adoption and continued use of the XLIF procedure and platform. For example, the implant, by itself, is of little value without neuromonitoring and access systems as the surgeon would have no safe and reproducible way to place the implant in the targeted disc space. Similarly, the retractor and/or neuromonitoring components would provide significantly reduced value without an implant, which are required for fusion, restoring the disc height, and providing stability to the spine. Therefore, it is my opinion that no one of these three key components of XLIF has more clinical value to a surgeon than any other.

27. In Section 21 of my Opening Report and Section 1 above, I have compared the features and components of NuVasive's MAS platform and Alphatec's Battalion platform and

Dated: November 8, 2019



Jim A. Youssef, M.D.