Texas Neurosciences Institute Building 4410 Medical Drive, Suite 610 San Antonio, Texas 78229-3755 (210) 614-2453 Fax (210) 614-2462

Neurosurgical Associates of San Antonio, P.A.

April 26, 2017

To Whom It May Concern

*Karl W. Swann, M.D.
*Donald L. Hilton, Jr., M.D.
*Roberto J. Aranibar, M.D.
Robert G. Johnson, M.D.
*Arnold B. Vardiman, M.D.
*Christopher A. Bogaev, M.D.
*Donald P. Atkins, M.D.
*Jordan Jude, M.D.
*Clark Watts, M.D., J.D., Consultant
*Roberto A. Negron, M.D., Consultant

*Diplomate American Board of Neurological Surgery

RE: Tornado Pedicle Screw Removal Device

Dear Sir/Madam:

I have known Rene Ortiz for close to 20 years. He was an excellent scrub tech at the hospital where I work and is now a first assist. Approximately a year ago, Rene asked me to evaluate and critique the Tornado Pedicle Screw Removal Device that he had engineered.

As you are aware, revision spine surgery is very common. I personally do at least two to three cases per week where a patient has had internal fixation of the lumbar spine with one of many pedicle screw devices available on the market today. The design of pedicle screws, although fundamentally similar, has become varied to the point where they are often difficult to extract. Some of this is because the different companies are trying to get around patents held by other companies. The hospital where I work has what is called a universal extraction set, but very often this does not contain the appropriate instruments to remove an unknown system. Many systems have expired and are no longer manufactured; hence their instrumentation is unavailable. I have even gone to the point of requesting that my hospital require that all pedicle screw systems donate a removal set to the hospital, this would ensure that in the future we have the appropriate instrumentation. Unfortunately, this has never been done and we are still faced with the frustrating task of removing systems that we do not recognize and do not have the appropriate removal sets for.

Very often we are left with a fairly slow and cumbersome technique whereby we will "windmill" the screw out of the pedicle. I have even used a somewhat crude rendition of the Tornado in the past in an effort to remove these screws. The Tornado System gives us, in one simple instrument, a means of removing any tuliped pedicle screw system. Since Rene asked me to evaluate his system, I have used it at least a dozen times on a dozen different systems and it has never failed.

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April 26, 2017

Page 2

It is simple to use and very user friendly. I personally feel that every hospital should have this system available and make its physicians aware of its presence and how to use it. Please let me know if there are further questions.

Yours Sincerely,

Robert G. Johnson, M.D.

RGJ/rlj