T-PLATE Anterior Fixation System
510(K) Summary
August 2007

I. Company: ESM Technologies, LLC.
403 Farwell Drive
Madison, WI
53704

Contact: Cliff Tribus, MD
President, ESM Technologies
Telephone: 608 467-8324
Cell: 608 332-8521
e-mail: ctribus@esmtech.com

II. Proprietary Trade Name: T-PLATE Anterior Fixation System
Proposed Name of Modified Devices:
The T-PLATE ANTERIOR PLATE Fixation System:
1. The Translation Plate Phase 1 (T-1 plate)
2. The Translation Plate Phase 2 (T-2 plate)

Classification Name: Spinal Intervertebral Body Fixation Orthosis (per 21 CFR Section 888.3060
Product Codes: KWQ

Predicate (unmodified) Device:
The T-PLATE ANTERIOR PLATE Fixation System
K051764, July 13, 2005

III. Product Description
The modified T-PLATE Anterior Fixation System (The Translation Plate Phase 1 (T-1 plate) and The Translation Plate Phase 2 (T-2 plate)) is a temporary implant used for the correction and stabilization of the spine. The system is also intended to help provide temporary stabilization and to help augment the development of a solid spinal fusion. The modified T-PLATE Anterior Fixation System (The Translation Plate Phase 1 (T-1 plate) and the Translation Plate Phase 2 (T-2 plate)) is a supplemental fixation device consisting of a variety of sizes of plates, and screws, as well as ancillary products and instrument sets. The modified T-PLATE Anterior Fixation System (The Translation Plate Phase 1 (T-1 plate) and the Translation Plate Phase 2 (T-2 plate)) components can be locked into a variety of configurations, with
each construct being tailor-made for the individual case. The implant components are made from medical grade titanium alloy. Stainless steel and titanium components must not be used together in a construct.

IV. Indications
The T-PLATE ANTERIOR PLATE FIXATION SYSTEM is indicated for use as an anteriorly placed supplemental fixation device for the lumbosacral level below the bifurcation of the vascular structures. When properly used this system will help provide temporary stabilization until a solid spinal fusion develops. Specific indications include: 1) Degenerative disc disease (as defined by back pain of discogenic origin with degeneration of the disc confirmed by history and radiographic studies); 2) Pseudoarthrosis; 3) Spondylolysis; 4) Spondylolisthesis; 5) Fracture; 6) Neoplastic disease; 7) Unsuccessful previous fusion surgery; 8) Lordotic deformities of the spine; 9) Idiopathic thoracolumbar or lumbar scoliosis; 10) Deformity (i.e., scoliosis, lordosis, and/or kyphosis) associated with deficient posterior elements such as that resulting from laminectomy, spina bifida, or myelomenigocele; and/or 11) Neuromuscular deformity (i.e., scoliosis, lordosis, and / or kyphosis) associated with pelvic obliquity.

V. Substantial Equivalence
Mechanical testing was performed on the The modified T-PLATE Anterior Fixation System (The Translation Plate Phase 1 (T-1 plate) and The Translation Plate Phase 2 (T-2 plate)), which determined it to be substantially equivalent to the THE T-PLATE ANTERIOR PLATE FIXATION SYSTEM. (K051764, July 13, 2005)
Dear Dr. Tribus:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.
This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Center for Devices and Radiological Health’s (CDRH’s) Office of Compliance at (240) 276-0120. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). For questions regarding postmarket surveillance, please contact CDRH’s Office of Surveillance and Biometric’s (OSB’s) Division of Postmarket Surveillance at (240) 276-3474. For questions regarding the reporting of device adverse events (Medical Device Reporting (MDR)), please contact the Division of Surveillance Systems at (240) 276-3464. You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (240) 276-3150 or at its Internet address http://www.fda.gov/cdrh/industry/support/index.html.

Sincerely yours,

Mark N. Melkerson
Director
Division of General, Restorative and Neurological Devices
Office of Device Evaluation
Center for Devices and Radiological Health

Enclosure
Indications for Use

510(k) Number (if known): K072231

Device Name: T-PLATE Anterior Fixation System

1. The Translational Plate Phase 1 (T-1 plate)
2. The Translational Plate Phase 2 (T-2 plate)

Indications For Use:

The T-PLATE ANTERIOR PLATE FIXATION SYSTEM is indicated for use as an anteriorly placed supplemental fixation device for the lumbosacral level below the bifurcation of the vascular structures. When properly used this system will help provide stabilization until a solid spinal fusion develops. Specific indications include:

1) Degenerative disc disease (as defined by back pain of discogenic origin with degeneration of the disc confirmed by history and radiographic studies); 2) Pseudoarthrosis; 3) Spondylolysis; 4) Spondylolisthesis; 5) Fracture; 6) Neoplastic disease; 7) Unsuccessful previous fusion surgery; 8) Lordotic deformities of the spine; 9) Idiopathic thoracolumbar or lumbar scoliosis; 10) Deformity (i.e., scoliosis, lordosis, and/or kyphosis) associated with deficient posterior elements such as that resulting from laminectomy, spina bifida, or myelomeningocele; and/or 11) Neuromuscular deformity (i.e., scoliosis, lordosis, and/or kyphosis) associated with pelvic obliquity.

Prescription Use X AND/OR Over-The-Counter Use _____
(Part 21 CFR 801 Subpart D) (21 CFR 807 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of Device Evaluation (ODE)

Barbara Bruehl
(Division Sign-Off)
Division of General, Restorative, and Neurological Devices

Page 1 of 1
August 2007

510(k) Number K072231