# 510(k) SUMMARY

**V.A.C.Ulta™ Negative Pressure Wound Therapy System**

<table>
<thead>
<tr>
<th>Date prepared</th>
<th>July 26, 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>510(k) owner</td>
<td>KCI USA, Inc.</td>
</tr>
<tr>
<td>Name</td>
<td>KCI USA, Inc. (Kinetic Concepts, Inc.)</td>
</tr>
<tr>
<td>Address</td>
<td>6203 Farinon Drive; San Antonio, Texas 78249</td>
</tr>
<tr>
<td>Fax number</td>
<td>210 255-6727</td>
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<tr>
<td>Name of contact person</td>
<td>Margaret Marsh</td>
</tr>
<tr>
<td>Contact telephone number</td>
<td>1 800 275-4524; Request Regulatory Affairs.</td>
</tr>
</tbody>
</table>

**Name of the device**

<table>
<thead>
<tr>
<th>Trade or proprietary name</th>
<th>V.A.C.Ulta™ Negative Pressure Wound Therapy System (V.A.C.Ulta™ Therapy System)</th>
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</thead>
<tbody>
<tr>
<td>Common or usual name</td>
<td>Instillation and negative pressure wound therapy system</td>
</tr>
<tr>
<td>Classification name</td>
<td>Negative Pressure Wound Therapy Powered Suction Pump (and components)</td>
</tr>
<tr>
<td>Legally marketed device(s) to which equivalence is claimed</td>
<td>V.A.C. Instillamat Device (K021501 and K091595)</td>
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</table>

**Device description**

A negative pressure wound therapy system with an instillation feature which allows controlled delivery and drainage of topical wound treatment solutions and suspensions

**Device design**

Negative pressure wound therapy system, in which instillation of topical wound treatment solutions and suspensions and negative pressure wound therapy is provided via software controlled pumps. Instillation solutions and negative pressure are delivered through tubing to foam dressings in the wound covered by an occlusive drape. Software monitors both negative pressure during negative pressure wound therapy as well as positive pressure during instillation of fluids to the wound bed. Software also provides controls for help and alarm functions.
The V.A.C.Ulta Negative Pressure Wound Therapy System is an integrated wound management system that provides Negative Pressure Wound Therapy with an instillation option.

Negative Pressure Wound Therapy in the absence of instillation is intended to create an environment that promotes wound healing by secondary or tertiary (delayed primary) intention by preparing the wound bed for closure, reducing edema, promoting granulation tissue formation and perfusion, and by removing exudate and infectious material.

The instillation option is indicated for patients who would benefit from vacuum assisted drainage and controlled delivery of topical wound treatment solutions and suspensions over the wound bed.

The V.A.C.Ulta™ Negative Pressure Wound Therapy System with and without instillation is indicated for patients with chronic, acute, traumatic, sub-acute and dehisced wounds, partial-thickness burns, ulcers (such as diabetic, pressure and venous insufficiency), flaps and grafts.

<table>
<thead>
<tr>
<th>Feature</th>
<th>V.A.C. Ulta Therapy System</th>
<th>V.A.C. Instill Therapy System</th>
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</thead>
<tbody>
<tr>
<td>Dressing system</td>
<td>Same as predicate</td>
<td>Foam based dressing with occlusive drape</td>
</tr>
<tr>
<td>Pressure sensing</td>
<td>Same as predicate</td>
<td>Via sensing pad in tubing line</td>
</tr>
<tr>
<td>Therapy unit</td>
<td>Same as predicate</td>
<td>Software controlled pumps for delivery of negative pressure wound therapy and controlled delivery of instillation fluids</td>
</tr>
</tbody>
</table>

The V.A.C.Ulta Therapy System and components were evaluated under a number of design verification and validation tests that assure conformance to design specifications.

The following bench tests were conducted on the V.A.C.Ulta Therapy System:

- Ability of the V.A.C.Ulta System to deliver NPWT in a comparable manner to currently marketed V.A.C. NPWT Systems was assessed at -50, -125 and -200 mmHg. Testing demonstrated that the V.A.C.Ulta System delivers equivalent negative pressure wound therapy.

- The ability of the V.A.C.Ulta System to deliver both NPWT and intermittent fluid instillation within specification was assessed over a continuous 96 hours period. Testing demonstrated the system met performance specifications.

- Testing was conducted to confirm the ability of the therapy unit to instill fluids within specified ranges and volumes, to provide alarms and controls during negative pressure and instillation therapy, and to provide a maximum flow rate that is equivalent to that provided by the predicate. Testing demonstrated that all requirements were met.

- Mechanical properties testing of the new foam dressing (under wet and dry conditions) indicate that the dressing has the...
| Conclusions drawn | Testing demonstrates that the V.A.C.Ultra™ Therapy System is substantially equivalent in terms of both indications for use and technology to the predicate product. |
KCI USA, Inc.
Ms. Margaret Marsh
Regulatory Affairs Technical Director
6203 Farinon Drive
San Antonio, Texas 78249

Re: K100657
Trade/Device Name: V.A.C. Ultra Negative Pressure Wound Therapy System
Regulation Number: 21 CFR 878.4780
Regulation Name: Powered suction pump
Regulatory Class: II
Product Code: OMP
Dated: July 26, 2010
Received: July 28, 2010

Dear Ms. Marsh:

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. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you, however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to 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); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); 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.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please go to http://www.fda.gov/AboutFDA/CentersOffices/CDRHI/CDRHOFFICES/ucm115809.htm for the Center for Devices and Radiological Health’s (CDRH’s) Office of Compliance. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm for the CDRH’s Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

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 (301) 796-7100 or at its Internet address http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm.

Sincerely yours,

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

Enclosure
INDICATIONS FOR USE

510(k) Number (if known): K100657
Device Name: V.A.C. Ultra Negative Pressure Wound Therapy System

Indications for Use:

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