

## 510k Summary

### General Information

JUL 30 2008

- 1. Applicant:**

Genadyne Biotechnologies Inc.  
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Great Neck, NY 11021  
(t) 516.487.8787  
(f) 516.487.7878  
[www.genadyne.com](http://www.genadyne.com)
  
- 2. Contact Person:**

Mr. Chien-Ming GOH (Andrew)  
Vice President  
Genadyne Biotechnologies Inc.  
65 Watermill Lane,  
Great Neck, NY 11021  
Tel: 516-487-8787  
Fax: 516-487-7878  
[andrew@genadyne.com](mailto:andrew@genadyne.com)
  
- 3. Trade/Proprietary Name Including Model Number of Device:**

Genadyne A4 Powered Suction Pump
  
- 4. Common Name or Classification Name (21 CFR Part 807.87) of Device:**

Powered Suction Pump (21 CFR 878.4780, Product Code BTA)
  
- 5. Class in which Device has been placed:**

Class II
  
- 6. Reason for Premarket Notification:**

Introduction of a new device that is substantially equivalent to a legally marketed device.
  
- 7. Identification of Legally Marketed Device Which We Claim Substantial Equivalence (Predicate Device):**

Penumbra Aspiration Pump, K051758 (Aug 16, 2005)

## **8. Compliance with Requirements of the Federal FD&C Act:**

The General and Restorative Device Panel (DGRD) has classified this device as:  
Class II  
21 CFR 878.4780

Product Code: BTA

## **9. Kit Certification and Information:**

This device does not contain a kit.

## **10. Description of the Device**

The Genadyne A4 powered suction pump is a portable suction device that is intended for general suction use in hospitals or clinics. The Genadyne A4 comes with a canister and a power adapter to charge the battery.

## **11. Intended use of the Device**

Genadyne A4 Powered Suction Pump is intended for general suction use in hospitals or clinics.

## **12. Substantial Equivalence**

In establishing substantial equivalence to the predicate device, Genadyne Biotechnologies evaluated the indications for use, material, technology, product specifications, and energy requirements of the system. Performance testing has been completed to demonstrate the safe and effective use of the Genadyne A4 Powered Suction Pump for the intended use.

## **13. Summary of Safety and Effectiveness**

Performance testing and device comparison demonstrates that the subject device is substantially equivalent to the predicate device, and is safe and effective for the intended use.

#### 14. Comparison to Predicate Device

Table of Comparison to Legally Marketed Device:

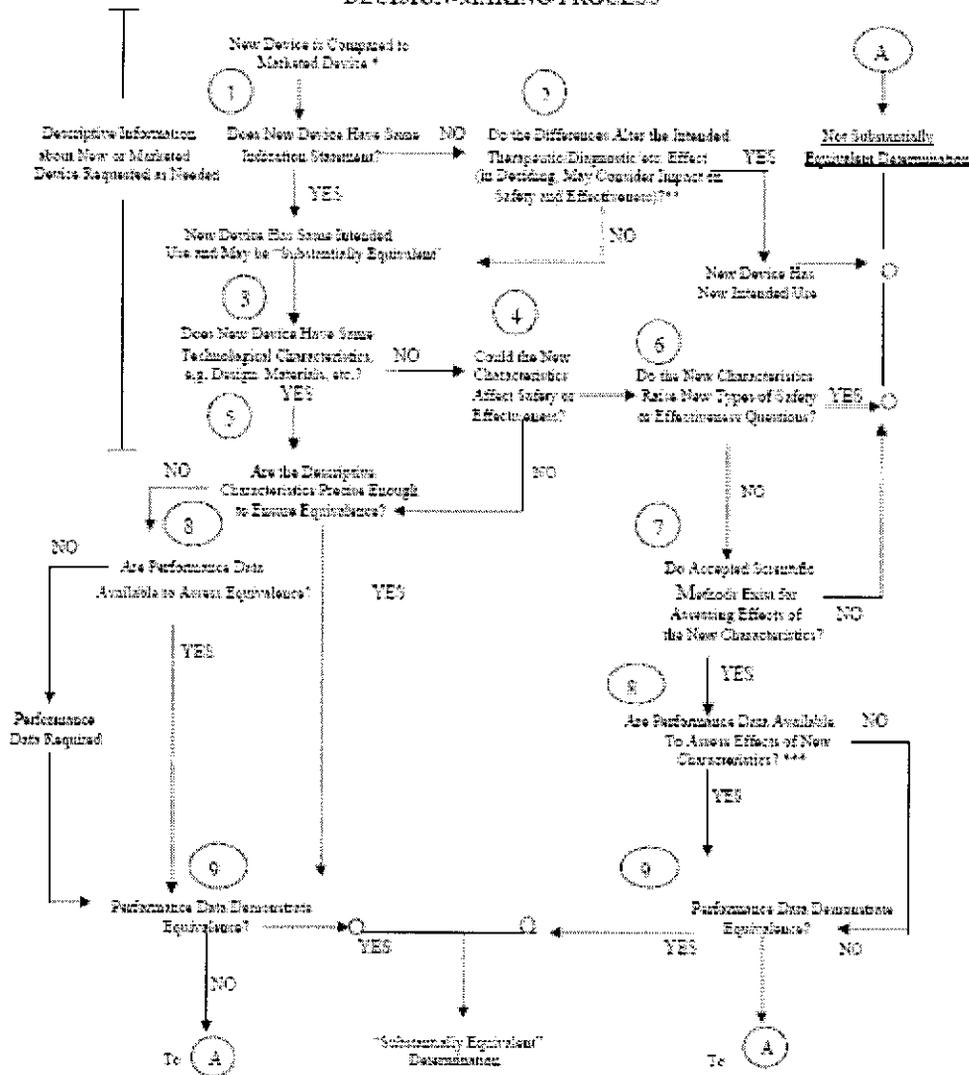
<b>Comparative Information</b>		
	<b>New Device</b>	<b>Predicate Device (As per AI Letter)</b>
Company	Genadyne Biotechnologies	Penumbra Inc.
Device Name	A4	Penumbra Aspiration Pump
510 (K) Number	K080745	K051758
<b>Technical Data</b>		
<i>Suction Capacity</i>	5 liters /minute	0-30 LPM
<i>Max Vacuum</i>	230 mmHg	635 mmHg (25 inHg)
<i>Power Requirements</i>	24 VDC, 1A	115 V AC, 60 Hz
<i>Battery Type</i>	Ni-MH	N/A
<i>Dimensions and Weight</i>	200 x 180 x 80 mm / 1.36 Kg	317.5 x 254 x 241.3 mm / 6.58 Kg
<b>Accessories</b>		
<i>Canisters</i>	800 ml disposable canister with a build-in hydrophobic shut off filter for overflow protection	1500 ml disposable canister with an external hydrophobic filter
<b>Reusable</b>	Yes	Yes
<b>Sterile</b>	Non Sterile	Non Sterile
<b>Accessory Kit</b>		
	N/A	N/A

<b>Indications for Use</b>		
	The Genadyne A4 is intended for general suction use in hospitals or clinics.	The Aspiration Pump is intended for general suction use in hospitals or clinics.
<b>Contraindications</b>		
	- N/A	N/A
<b>Certification</b>		
	UL 60601-1	CE0050
	CAN/CSA C22.2 No. 601-1-M90	-
<b>Storage / Transport</b>		
	-18°C to +43°C (0°F to 110°F)	-
	Relative Humidity 10% to 95 %	-
	700 - 1060 mbar Atmospheric pressure	-
<b>Operation</b>		
	18°C to 34°C (65°F to 94°F)	-
	Relative Humidity 10% to 95 %	-
	700 - 1060 mbar Atmospheric pressure	-
<b>Testing</b>		
	IEC 60601-1-2	-
	FCC part 15 Class B	-
	EN 55011	-
	IEC 61000-4-2	-
	IEC 61000-4-3	-

**15. Comparative Performance Evaluation:**

The FDA Decision Tree for substantial equivalence was followed and the steps involved have been considered. The rationale for each step is discussed below. For reviewer convenience, the numbering system used by FDA on the decision tree has been followed by Genadyne in their process for the substantial equivalence determination rationale.

510(k) "SUBSTANTIAL EQUIVALENCE"  
DECISION-MAKING PROCESS



\* 510(k) Submissions compare new devices to marketed devices. FDA requests additional information if the relationship between marketed and "predicate" (pre-Amendments or reclassified post-Amendments) device is unclear.

\*\* This decision is normally based on descriptive information alone, but limited testing information is sometimes required.

\*\*\* Data may be in the 510(k), other 510(k)s, the Center's classification file, or the literature.

## 16. Discussion of Substantial Equivalence:

*Note 1: Does new device have same indication statement as the predicate device(s)?*

Yes. The Genadyne A4 Powered Suction Pump and the Penumbra Aspiration Pump are both intended for general suction use in hospitals or clinics.

*Note 3: Does the device have the same technological characteristics, e.g., design, materials, etc.?*

Yes. The Genadyne A4 Powered Suction Pump is design with a suction pump, can be externally and internally powered and has a collection canister, same as the Penumbra Aspiration pump, which also features a suction pump, a collection canister and can be powered externally.

*Note 5: Are the descriptive characteristics precise enough to ensure equivalence?*

Yes. The characteristics of the Genadyne A4 Powered Suction Pump and the Penumbra Aspiration pump are precise enough to ensure equivalence, based on the table in item 14 in the 510K Summary.

## 17. Discussion of Similarities and Differences

### Device Similarities

#### *Indication for use*

The indication for use is identical for the Genadyne A4 Powered Suction Pump and the predicate device.

#### *Configuration*

All devices are sold non-sterile and are intended to be reusable. Devices are compatible with off-the-shelf accessories, such as disposable 1200ml or 1500 ml canisters.

#### *Basic Product Function*

The Genadyne A4 Powered Suction Pump and the predicate device have the same product function of generating a vacuum to provide general use suction and collection of liquids into an off-the-shelf canister reservoir.

### **Device Differences**

In comparison to the predicate devices, the Genadyne A4 Powered Suction Pump has several differences which do not affect the device safety and effectiveness of the Genadyne A4 Powered Suction Pump. These differences between the Genadyne A4 Powered Suction Pump and the predicate device are described in further detail below.

#### *Penumbra Aspiration Pump*

The only differences between the Genadyne A4 Powered Suction Pump and the Penumbra Aspiration Pump are Genadyne A4 Powered Suction Pump is powered from an adapter and can be battery powered, where as the predicate device can only be powered by plugging into an AC power source. In all other aspects, the Genadyne A4 powered suction pump and the predicate device is substantially equivalent.

### **18. Conclusions:**

Genadyne believes the Genadyne A4 Powered Suction Pump is substantially equivalent to the predicate device.



Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

Genadync Biotechnologies, Inc.  
% mdi Consultants, Inc.  
Mr. John Pappan, M.S.  
55 Northern Boulevard, Suit 200  
Great Neck, New York 11021

JUL 30 2008

Re: K080745

Trade/Device Name: Genadyne A4 Powered Suction Pump  
Regulation Number: 21 CFR 878.4780  
Regulation Name: Powered suction pump  
Regulatory Class: II  
Product Code: BTA  
Dated: July 25, 2008  
Received: July 28, 2008

Dear Mr. Pappan:

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.

Page 2 -- Mr. John Pappan, M.S.

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) 276-0115. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR 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): K080745

Device Name: Genadyne A4 Powered Suction Pump

#### Indications for Use:

The Genadyne A4 Powered Suction Pump is intended for general suction use in hospitals or clinics.

Prescription Use  X   
(Part 21 CFR 801 Subpart D)

AND/OR

Over-The-Counter Use  
(21 CFR 807 Subpart C)

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

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Concurrence of CDRH, Office of Device Evaluation (ODE)



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

510(k) Number K080745