



MEMORANDUM

STMicroelectronics and Debiotech to debut disposable insulin "Jewel Pump" at ADA - June 25, 2010 "Take Two"

Executive Highlights

- Debiotech and STMicroelectronics will debut their insulin "Jewel Pump" at this year's ADA; the pump will use Debiotech's MEMS technology.
- The "Jewel Pump" is currently under FDA review. The pump will weigh about 0.78 oz with dimensions of 60 x 40 x 13 mm and a space volume of 24 ml.

Debiotech and STMicroelectronics announced yesterday that they will present their insulin "Jewel Pump" at the Debiotech exhibit at the ADA's 70th Scientific Sessions this year. The two-part patch pump will use Debiotech's MEMS (Micro-Electro-Mechanical Systems) technology, which as we understand it reduces the size of the pumping mechanism, allowing for a larger insulin reservoir (MEMS technology allows the construction of microscopic pump mechanics from silicon). The pump will also employ microfluidic technology (governs the control of fluids at the sub-millimeter level), which the company indicated facilitates the control and delivery of very low-volumes of insulin - 0.02 U dosing and reproducibility <5%. The company is introducing a 450 U size, although it suggests multiple reservoir sizes are under development for future products. The pump will only weigh about 0.78 oz with dimensions of 60 x 40 x 13 mm and a space volume of 24 ml (Insulet's OmniPod can hold 200 units and is heavier at 1.2 oz and slightly larger at 62 x 41 x 17 mm and 34 ml - overall, since it can hold much more than Debiotech, it'). Debiotech indicated that being a single disposable unit, the reservoir and pump will need to be changed about once every six days (assuming use of about 75 units or less per day); however, the auto-inserted infusion cannula must be changed every three days. The device is currently under FDA review.

While FDA approval is obviously a significant hurdle for any device company in this newly hard-core regulatory era for devices, we look forward to seeing a demonstration of the pump and gaining more hands-on experience (particularly with the feel of the filled device, given the larger reservoir) here at ADA - this is the first time Debiotech has had a booth on the exhibit floor. As a reminder, Animas acquired licensing and intellectual property rights from Debiotech in 2004 in exchange for \$12m and 400,000 shares of Animas stock - very good negotiating by former Animas CEO Kathy Crothall, to be sure and helpful for the IPO. Animas dropped the license rights post IPO and prior to J&J's acquisition of Animas. Currently, company management at Debiotech indicated that the plan is for the Jewel Pump to be manufactured in a partnership with STMicroelectronics and sold under license by a major healthcare company - there is no agreement yet, but talks are in advanced stages according to the company. Assuming approval, the Jewel Pump will join an increasingly competitive disposable pump market - see our March 12th, 2010 Closer Look for an in-depth examination of emerging pump companies and the competitive landscape. The ADA exhibition is open 10am-4pm on Saturday, Sunday, and Monday in Orlando.

-- by Adam Brown, Eric Chang, and Kelly Close