

January 11, 2010

## **MannKind Wins Two Facility of the Year 2010 Category Awards**

### **MannKind's Commercial Manufacturing Facility Earns Accolades for Process Innovation and Equipment Innovation from Worldwide Representatives of the Pharmaceutical and Engineering Communities**

DANBURY, Conn., Jan 11, 2010 (BUSINESS WIRE) -- MannKind Corporation (Nasdaq: MNKD) today announced that its commercial manufacturing facility, custom-built for the production of its proprietary insulin therapy, has been awarded two Facility of the Year 2010 category awards for process innovation and equipment innovation.

The Facility of the Year Awards, sponsored by the International Society for Pharmaceutical Engineering (ISPE), INTERPHEX, and *Pharmaceutical Processing Magazine*, were created six years ago to showcase the best of each year's new, state-of-the-art pharmaceutical manufacturing facilities across seven categories: equipment innovation, facility integration, operational excellence, process innovation, project execution, regional excellence, and sustainability. For 2010, twenty-one companies from twelve countries were considered. MannKind's facility was the first in the history of the awards ever to win in two categories.

Begun in early 2007 and completed in mid-2008, MannKind's \$163 million, 23,400 square meter facility was part renovation and part new construction. Roughly 20 percent of the facility is earmarked for future expansion, which MannKind can use to increase production of its insulin therapy or begin production on new Technosphere-based therapies.

While the facility itself is a striking merger of form, function, and efficiency, the Facility of the Year Award judges were most impressed with the custom process line that the facility houses. MannKind engineered an innovative manufacturing process line from start to finish. It begins with the creation of the Technosphere® particle. The particle is then combined with insulin in a specialty mixer, and the resultant slurry is freeze dried to isolate the powder. Once dried, the powder is transported to the fillers, and then filled into capsules and packaged for distribution. At every point in this process, MannKind designed new technology or applied innovative adaptations to existing technology to meet their needs.

Another distinguishing feature of the facility is a first-ever solid-dosage pharmaceutical adaptation of a cryopelletizer. MannKind, together with Cryogenic Equipment Services, modified the cryopelletizer to create uniform pellets from the slurry so that the water could be removed quickly and consistently during the bulk lyophilization (freeze drying) process. This revolutionary adaptation dramatically improved the quality of the drug and the efficiency of its production.

In addition to the new lyophilization technique, MannKind also made unique adaptations to the specialty mixer where the Technosphere particle and the insulin are combined; designed a highly cost-effective method to move bulk powder from the lyophilizer to the filler; and designed a filling system that could work at high speed while remaining safe for the operators and supremely precise in the metering of the bulk powder.

For these reasons, MannKind received special recognition for the new facility. Marni Schribman, ISPE Communications Manager, said of MannKind's project, "This is the first time in the program's history that the judges have named one project to two categories. However, the judges felt very strongly that MannKind Corporation excelled in each of these categories during the construction of its facility. Congratulations on this tremendous accomplishment."

Juergen Martens, Chief Technology Officer of MannKind, stated, "Our adaptations of cross-sector technologies for novel applications in the pharmaceutical industry not only made possible the commercial production of the innovative Technosphere® particle, but it also made possible multiple new drug therapies for the future. Our cryopelletization technology can improve the quality and lower the cost of countless drugs worldwide that require bulk lyophilization in their manufacture, and our innovative, non-invasive drug delivery system can transport a potentially endless variety of macromolecules into the systemic circulation via the pulmonary route."

### **About MannKind Corporation**

MannKind Corporation (Nasdaq: MNKD) focuses on the discovery, development and commercialization of therapeutic products for patients with diseases such as diabetes and cancer. Its diabetes pipeline includes AFREZZA™ (formerly AFRESA®) and MKC253. MannKind has submitted an NDA to the FDA requesting approval of AFREZZA for the treatment of adults with type 1 or type 2 diabetes for the control of hyperglycemia. MKC253 is currently in phase 1 clinical trials. MannKind maintains a website at <http://www.mannkindcorp.com> to which MannKind regularly posts copies of its press releases as well as additional

information about MannKind. Interested persons can subscribe on the MannKind website to e-mail alerts that are sent automatically when MannKind issues press releases, files its reports with the Securities and Exchange Commission or posts certain other information to the website.

SOURCE: MannKind Corporation

MannKind Corporation  
Matthew Pfeffer  
Chief Financial Officer  
661-775-5300  
[mpfeffer@mannkindcorp.com](mailto:mpfeffer@mannkindcorp.com)