

Introduction & Overview – by Robin R. Young, CFA



In the 12 months since we wrote the first analysis and forecast of stem cells as commercial products, approximately 5,000 more patients have received stem cells as part of their conventional treatment.

Patients with wrist fractures, patients requiring spinal fusion, and patients requiring cranial maxillofacial reconstruction have all received either a matrix of material containing several tens of millions of donated, minimally manipulated yet viable and non-inflammatory mesenchymal stem cells or stem cells derived from their own fat or bone marrow.

In clinical trials this past year, patients have had the number of myocytes (the cells that grow heart muscle) increased in their damaged hearts, had the insulin-producing ability of their pancreas improved with new Islet cells, had cartilage in their knees regenerate, and all of these patients became willing and, we suspect, grateful pioneers in a rapidly evolving industry.

In 2006, early adopting surgeons gingerly dipped their toes into the often choppy waters of stem cell therapy. As patient experience grew physician confidence also grew. So that, instead of \$7.7 million in stem cell products for 2006, surgeons and their hospitals in the U.S. ordered over \$16 million of these new therapies and pushed suppliers beyond their ability to supply.

As we surveyed the progress this past year we have had to adjust our annual revenue and procedure forecasts upward for 2007 and beyond. Demand for stem cell products that can augment the body's own ability to grow tissues can easily support, we estimate, \$35 million in shipments in 2007 in the U.S. alone.

An emerging commercial market for stem cell products promises to change the rules of the game for stem cell companies and has begun to establish the structure for a future industry.

Increased physician experience with patients expands investors' ability as forecasters to make reasoned judgments with regard to market penetration rates, average selling prices, and the range of indications that might require such cellular therapies. The capital markets, which increased the capitalization of the public stem cell companies by an aggregate \$446 million in 2006, are taking notice.

To order the complete *Stem Cell Analysis and Market Forecast 2006-2016*, [click here](#).
