NEWS

NASS 2009 trip report

—J. McCormick

For us, North American Spine Society annual meeting remains the best forum to gauge broad scientific and commercial trends in spine surgery technologies. Our trip report this year highlights the findings of our team and the key themes garnered from plenty of soak-time with surgeons, company executives, headhunters and analysts.

THEMES:

Motion preservation: a shadow of its former self

In prior NASS meetings, there was always a hot new motion preservation topic. In 2005, disc arthroplasty was the rage with the FDA approval of J&J's Charite. In 2007 it was all about facet replacement.

This year, the liquidation of Archus and lesser presence of stand-alone disc nucleus companies supported the notion that it continues to be difficult to catch up to 100,000 years of hominid evolution with crude mechanical devices. Fusion remains the gold standard of care and it looks like it is going to stay that way for years to come.

Reports of small company deaths are (somewhat) exaggerated

With the dissolution of IST, Vertebtron, et al. and visible pruning trends by venture capitalists, we were the first to tell our readers that the end is nigh for smaller spine companies. While we still believe it to be true, the great reckoning may take longer than we had originally anticipated. Mike Matson, Wells Fargo's astute equity analyst, went through the arduous task of physically counting the number of implant and biologic companies exhibiting at NASS over time and found that the number of companies officially registered at the meeting increased this year. 109 in 2009, versus 92 in 2008 to be exact.

Polling CEOs of some of these smaller companies, we found that some have scaled back hyper-growth, rationed capital and are using profitability (however marginal) to sustain their businesses.

Some caveats apply. First, the higher number of companies this year may not be indicative of new company formation. Many "new" exhibitors this year came to the show unregistered in prior years. Second, smaller companies ratcheting back growth means losing share in this rapidly growing market. Losing share in any market ultimately spells trouble – even death of the business – in the long run.

Stem Cells

With fusion here to stay, increasing attention has been placed on biologic enhancements of the fusion construct. Notably, surgeons are eager to find ways to harness the power of stem cells as an alternative to super-expensive and often misused bone morphogenic proteins and non-osteo-inductive features of bone graft substitutes. There was an atmosphere of high surgeon interest regarding the use of a variety of stem cell technologies this year. We expect this to continue.

Minimally invasive surgery

With neighbors comparing spine surgery scars, more surgeons are seeking to get on the minimally invasive bandwagon to build their practices. The high interest is understandable especially when one considers the aging spine patient. After all, minimally invasive means less tissue morbidity, blood loss and recovery time for patients.

Although there is a learning curve in the O.R. and statistically significant long-term outcomes versus a randomized control are yet to be published, the benefits are intuitively obvious to surgeons and patients. It was exciting to see companies demonstrating new retractors, percutaneous technologies and, in some cases, novel lateral approaches.

The NEJM articles on vertebroplasty haven't persuaded surgeons to sit around and do nothing

Although this spring's New England Journal of Medicine (NEJM) articles on

vertebroplasty sent shock waves through the spine community, surgeons are not standing down. At the meeting, results of the international, randomized controlled, multi-centered Fracture Reduction Evaluation (FREE) trial comparing kyphoplasty to nonsurgical treatment were presented. At 1 month, the SF-36 physical component scores had improved 5.1 points more than the scores for the nonsurgical group. At 2-year follow-up, the kyphoplasty patients baseline SF-36 physical component scores were improved by 3 points. The scores were statistically significant.

Other presenters heavily critiqued the NEJM studies as poorly designed noting high crossover problems, a low "n", a control that wasn't a true "sham" but a treated group, etc.

We aren't surprised at all by these findings and that surgeons aren't looking to relent on finding solutions to the vexing problem of osteoporosis-induced spinal fractures in elderly patients.

The ultimate takeaway

We see the scientific and commercial trends in spine surgery technologies as unambiguously focused on refining fusion and vertebral compression fracture strategies to generate superior clinical outcomes.

Such trends are continuing to support the implant industry's double-digit growth even in a recession year. Nevertheless, implant companies can't count on having the wind at their backs. Companies need to achieve scale while simultaneously innovating or end up being relegated to a share-losing purgatory or worse. •

This report is reproduced by kind permission of the author and of our partner, HealthpointCapital. It was previously published in November 2009 on the website: www.healthpointcapital.com