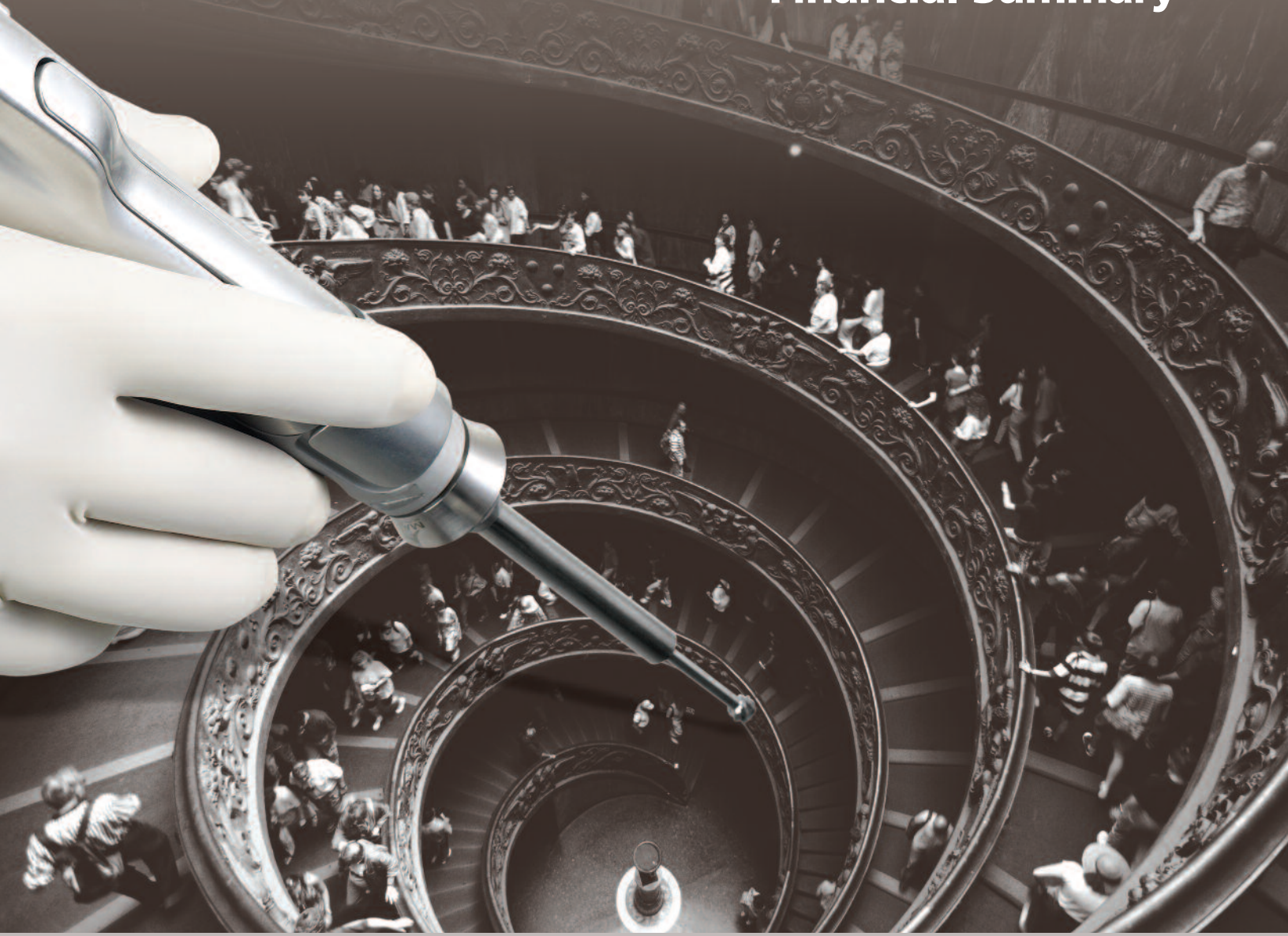


MAKOplasty®  
**Financial Summary**



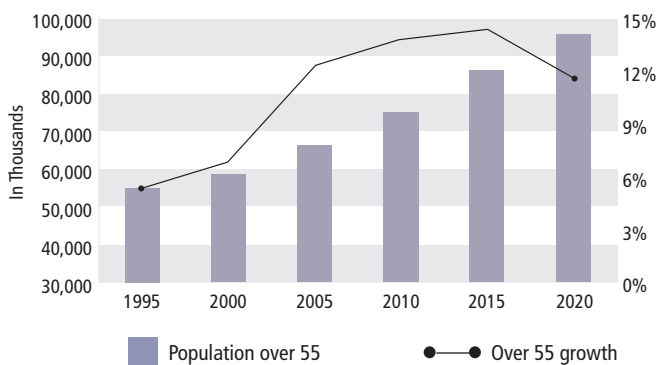
# Defining the Market

Knee pain resulting from osteoarthritis (OA) is a vast and rapidly growing disease expected to create considerable demand for knee arthroplasty in the near-term as the US population ages and obesity rates rise.

- 15 Million Americans suffer with OA of the knee<sup>1</sup>
- OA is the most common form of arthritis
- OA is a leading cause of disability worldwide

## The Population is Aging

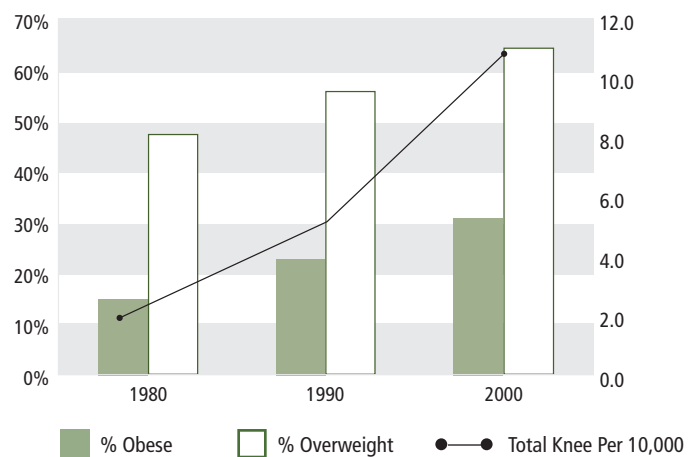
- As the population ages, the number of people aged 55+ (peak pain candidates) will grow three times the average rate of the U.S. population reaching 96 Million by 2020.



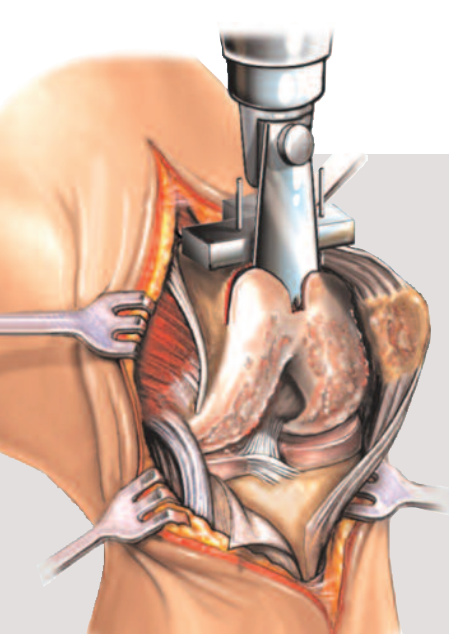
Source: U.S. Census Bureau

## Obesity Rates are Rising

- Knee arthroplasty procedures doubled each decade and obesity rates continue to rise. In 2000, 31% of the adult U.S. population had a Body Mass Index (BMI) of 30. This is estimated to rise to 40% by 2010.



Source: CDC, Orthopedic Network News, RBC Capital Market estimates



## Limitations of Total Knee Arthroplasty

OA patients have historically been treated with total knee arthroplasty (TKA), which is considered the Gold Standard for late-stage, painful knee OA. However, patients treated with TKA may need to modify their lifestyle due to the aggressive removal of healthy bone, tissue and ligaments.

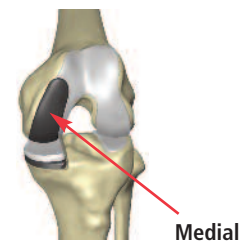
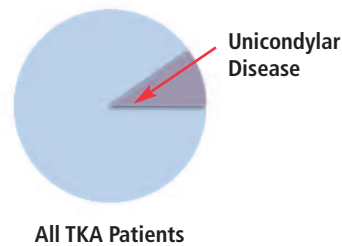
# The MAKOplasty® Opportunity

MAKOplasty® brings new capabilities and more treatment options to serve the unmet needs of patients suffering from early to mid-stage knee OA. The revolutionary robotic arm technology and innovative tissue-sparing, multicompartamental implants are designed together to result in a more natural feeling knee, a less invasive surgical option, and to promote a quicker recovery.

## Unicondylar MAKOplasty®

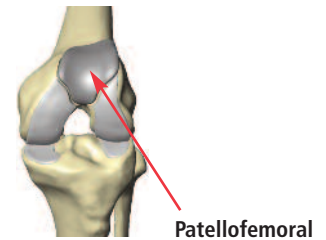
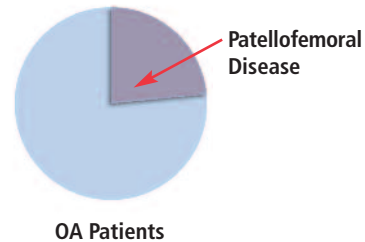
10% of all TKA patients are estimated with tibiofemoral OA<sup>2</sup>

*[90% of TKA patient candidates choose not to have a TKA<sup>3</sup>]*



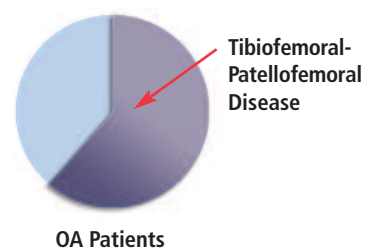
## Patellofemoral MAKOplasty®

24% of OA patients may present with isolated patellofemoral disease<sup>2,4</sup>



## Bicompartmental MAKOplasty®

40-65% of OA patients present with tibiofemoral-patellofemoral disease<sup>2,4,5</sup>



## TKA is Not the Total Solution

TKA is not poised to treat the growing patient population suffering with early to mid-stage knee OA whom expect, and even demand, less invasive procedures, earlier restored lifestyle, and the latest, new technology.

- Survey studies demonstrate that patients actively decline total implant replacement while the growth of partial knee arthroplasty exceeds TKA growth.
  - **92% of men and 88% of women decline implant replacement surgery when offered despite safety and long-term positive outcomes according to a Duke University Center survey<sup>3</sup>.**
  - **Unicompartmental knee arthroplasty grew at triple the rate of TKA – 32.5% versus 9.4% - from 1998 through 2005<sup>6</sup>.**

# Overview of MAKO Surgical Corp.

## MAKOplasty® - Consistently Reproducible Precision

MAKOplasty® provides the amazing precision of the RIO® Robotic Arm Interactive Orthopedic System and the innovative and enabling designs of the RESTORIS® MCK MultiCompartmental Knee System. Together focused purely on restoring the natural knee, freed from the confines of conventional instrumentation.

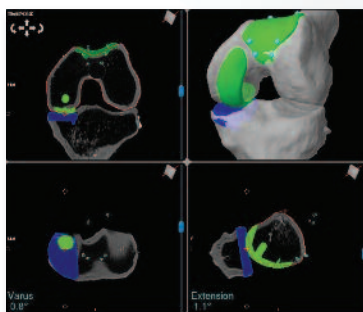
- Planning specific to patient anatomy for ideal placement to restore natural knee kinematics
- Tactile technology with 3-D visualization for controlled resurfacing within the pre-defined planned resection volume
- Multicompartmental resurfacing implants that offer an alternative for the 40% to 65% of osteoarthritis patients who present with tibiofemoral/patellofemoral disease



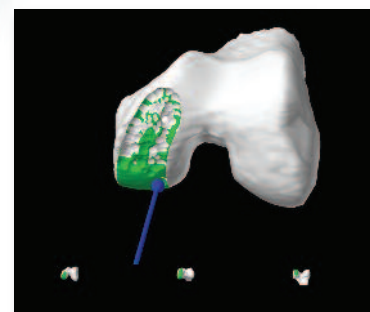
RESTORIS® MCK  
MultiCompartmental Knee System



RIO® Robotic Arm Interactive  
Orthopedic System



Patient-specific Planning



Intra-operative Guidance

Clinical research at  
MAKO Surgical Corp.  
is multi-faceted.

Whether it is improving surgical accuracy, operating room efficiency, or patient outcomes, MAKO Surgical Corp. is committed to improving orthopedic surgery. MAKO has developed a joint registry with a goal of tracking the outcomes of MAKO prosthesis implanted.

In addition, we have focused studies aimed at quantifying the improvement in accuracy of implant placement, return to functional activities, preservation of bone stock and in vivo knee kinematics measured fluoroscopically. All studies compare their results to the alternative treatment options that are currently available.

Our comprehensive research program provides evidence of the clinical and functional value of our robotic arm system and corresponding implants as well as laying a scientific foundation for the support and development of future products and applications.

## Corporate Overview

MAKO Surgical Corp. is an innovative orthopedic medical device company that markets both its RIO® System and proprietary RESTORIS® Family of Knee Implants for a minimally invasive procedure called MAKOplasty®

### The Evolution of MAKO Surgical Corp.

#### **MAKO Surgical Corp. founded**

November 2004

#### **FDA clearance of the TGS™ robotic arm system**

November 2005

#### **First MAKOplasty® procedure performed**

June 2006

#### **Initial public offering**

February 2008

#### **FDA clearance of RESTORIS® UniCompartmental Knee System**

June 2008

#### **500<sup>th</sup> MAKOplasty® performed**

August 2008

#### **Private placement financing**

October 2008

#### **FDA clearance of RIO® Robotic Arm Interactive Orthopedic System and RESTORIS® MCK MultiCompartmental Knee System**

December 2008

#### **Peer-reviewed clinical publication**

##### **Journal of Arthroplasty**

December 2008

#### **RIO® and RESTORIS® MCK introduction**

February 2009

#### **1,500<sup>th</sup> MAKOplasty® performed**

July 2009

# MAKOplasty® Shaping Economic Success

## Capturing Knee Markets with Robotic Arm Technology

Surgeons are attracted to RIO® for its ability to expand treatment options and surgical patient volumes. Hospitals seek new technologies to develop centers of excellence and expand market reach. The MAKOplasty® solution provides benefits to all stakeholders and enables competitive and market advantages while demonstrating positive financial returns.

## Assessing the MAKOplasty® Local Opportunity

### MAKOplasty® Local Market Example: Santa Barbara, CA

	Market #	% Females	% Males
Total Primary Knee Arthroplasty <sup>7</sup>	1,810		
Estimated UKA in Local Market	181		
<b>Potential Underserved Market</b>			
% TKA Procedure Acceptance (Duke Survey Study)		12%	8%
Total Potential Arthroplasty Procedures in Local Market	17,056		
<b>MAKOplasty® Driven Opportunity</b>	<b>1,706</b>		

Bicompartmental offers incremental potential

## Economic Case Profile - Two Year Review\*

### Holy Cross Hospital, Fort Lauderdale, FL

#### Challenge:

- Build an Orthopedic Center of Excellence
- Incorporate cutting edge technologies to provide the highest level of patient care
- Create a concrete competitive advantage

#### Solution:

- MAKOplasty® program as cornerstone of Orthopedic Center of Excellence

#### Result:

- MAKOplasty® year over year growth, 22% growth in year two
- Unicompartmental Knee Arthroplasties (UKA) more than tripled
- Total Knee Arthroplasties (TKA) benefit from "Halo Effect" with 14% growth

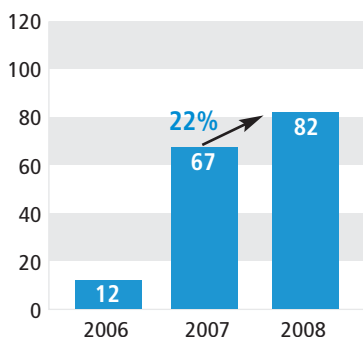
Primary Knee Arthroplasty growth:

**33%**

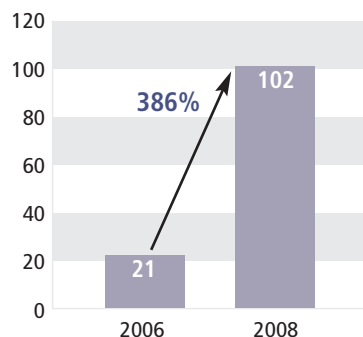
138 incremental cases  
2008 versus 2006

\*Data on file.

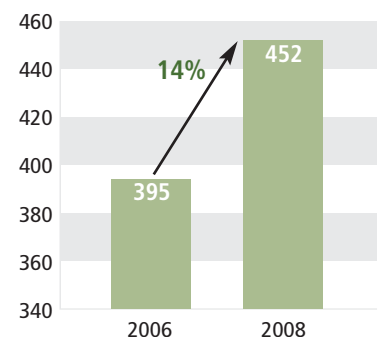
#### MAKOplasty® Procedures



#### UKA Procedures



#### "Halo Effect" TKA



Note: First MAKOplasty® procedure was performed in June 2006.

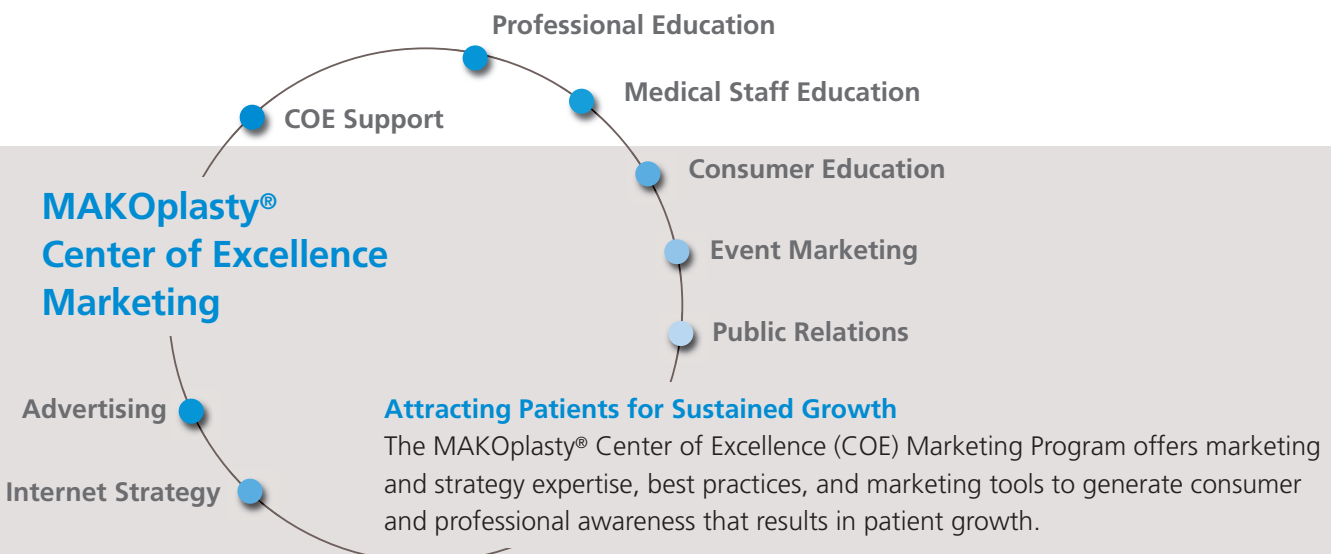
*"Holy Cross Hospital is always looking for new technologies that improve the service to our patients, and clearly the MAKO guidance system was such a technology. If you want to become a center of orthopedic excellence, you have to have this technology."*

**John C. Johnson**  
**President & CEO**  
**Holy Cross Hospital, Fort Lauderdale, FL**

## Strong Market Growth. Positive Financial Return. MAKOplasty® Profitability Example

		Year 1	Year 2	Year 3	Year 4	Year 5
UKA	Total MAKOplasty® UKA Procedures, Net Contribution Profit: \$5,451	72	86	104	124	149
	<b>Total Annual Incremental Profit From MAKOplasty® UKA</b>	<b>\$392,486</b>	<b>\$470,984</b>	<b>\$565,180</b>	<b>\$678,216</b>	<b>\$813,860</b>
BiComp	Total MAKOplasty® BiCompartmental Procedures, Net Contribution Profit: \$4,960	18	20	22	24	26
	<b>Total Annual Incremental Profit From MAKOplasty® BiCompartmental</b>	<b>\$89,283</b>	<b>\$98,211</b>	<b>\$108,032</b>	<b>\$118,835</b>	<b>\$130,719</b>
TKA	Projected Halo Effect of MAKOplasty® on TKA Volume, Net Contribution Profit: \$4,175	36	40	44	48	53
	<b>Total Annual Incremental Profit From New TKA Procedures</b>	<b>\$150,300</b>	<b>\$165,330</b>	<b>\$181,863</b>	<b>\$200,049</b>	<b>\$220,054</b>
<b>Total Annual Incremented Profits</b>		<b>\$632,069</b>	<b>\$734,525</b>	<b>\$855,075</b>	<b>\$997,101</b>	<b>\$1,164,633</b>
Cost	Operating Lease (44 months, graduated program)	(\$167,880)	(\$287,568)	(\$287,568)	(\$191,712)	–
	Annual Service Contract	–	(\$85,000)	(\$85,000)	(\$85,000)	(\$85,000)
	<b>Total Cost</b>	<b>(\$167,880)</b>	<b>(\$372,568)</b>	<b>(\$372,568)</b>	<b>(\$276,712)</b>	<b>(\$85,000)</b>
<b>Net Annual Incremental Profits</b>		<b>\$464,189</b>	<b>\$361,957</b>	<b>\$482,507</b>	<b>\$720,389</b>	<b>\$1,079,633</b>
<b>Cumulative Incremental Profits</b>		<b>\$464,189</b>	<b>\$826,146</b>	<b>\$1,308,653</b>	<b>\$2,029,042</b>	<b>\$3,108,672</b>
<b>Break Even Number of UKA Procedures</b>		<b>31</b>	<b>68</b>	<b>68</b>	<b>51</b>	<b>16</b>

This chart is intended to provide an understanding of MAKOplasty® potential financial results. Individual data and results will vary.



MAKO Surgical Corp. is dedicated to advancing orthopedics through the discovery and development of quality innovative robotic and implantable surgical solutions that consistently, reproducibly and precisely restore patient quality of life.

**References:**

- 1 American Association of Orthopaedic Surgeons (2008). AAOS.org.
- 2 Duncan R, Hay E, Saklatvala J, Croft P. (2006). Prevalence of radiographic osteoarthritis: it all depends on your point of view. *Rheumatology (45)*, 757-60.
- 3 Duke University Center for Demographic Studies (January, 2006). Assessing the impact of medical technology innovations on human capital. Phase I Final Report (Part C): Effects of Advanced Medical Technologies – Musculoskeletal Diseases Medical Technology Assessment Working Group: Prepared for the Institute for Medical Technology Innovation.
- 4 Ledingham J., Regan M., Jones A., & Doherty M. (1993). Radiographic patterns and associations of osteoarthritis of the knee in patients referred to hospital. *Annals of the Rheumatic Diseases (52)*, 520-526.
- 5 Rolston L., Sprague J., Tsai S., & Salehi A. (2006). A novel bone/ligament sparing prosthesis for the treatment of patellofemoral and medial compartment osteoarthritis. AAOS 2006 Annual Meeting, Poster #P181.
- 6 Riddle, D.L., Jiranek, W.A., & McGlynn, F.J. (2008). Yearly incidence of unicompartmental knee arthroplasty in the United States. *The Journal of Arthroplasty (23)*3, 408-412.
- 7 SDI Health LLC (2009). sdihealth.com.



*Restoring Quality of Life Through Innovation®*