

Moving from Market Based Problems to Solutions

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What We'll Discuss

- Three ways to find opportunities
- Why market?
- Examples of several companies
- How to know if something is worth it
- How to get started
- Economic Realities

Three Ways to Find Opportunity

- People-centric
- Technology-centric
- Market-centric

Why Market?

- Big markets rarely disappear
- Big markets can be created from big ideas
- Big markets are big targets
- Big markets are more predictable than technology or people
- Tech and people are manageable

Examples of Several Companies

- Intuitive Surgical
- Hansen Medical
- NorthStar Neuroscience
- VNUS Medical Technology
- Asthmatx

Intuitive Surgical



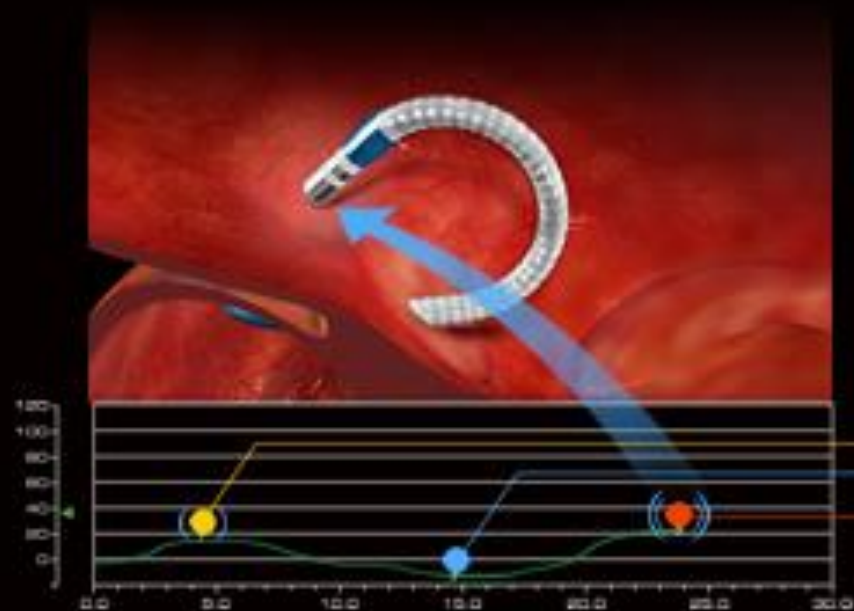
Intuitive Surgical

- Robotics technology from SRI
 - Technology patented 1978
 - In-Licensed 1990
 - Public in 1999
 - Out-Licensed 2002 (Hansen Medical)
- Attempted cardiac
- Attempted general surgery
- Found urology

Intuitive-Issues

- Never took hold with cardiac bypass
- Hard to justify to administration
- Sexy-good for ads/headlines
- Urology now a hit but data say otherwise
- Nice visualization technology may save

Hansen Medical



NEW Tactile Vibration

Delivers Real-Time Feedback.

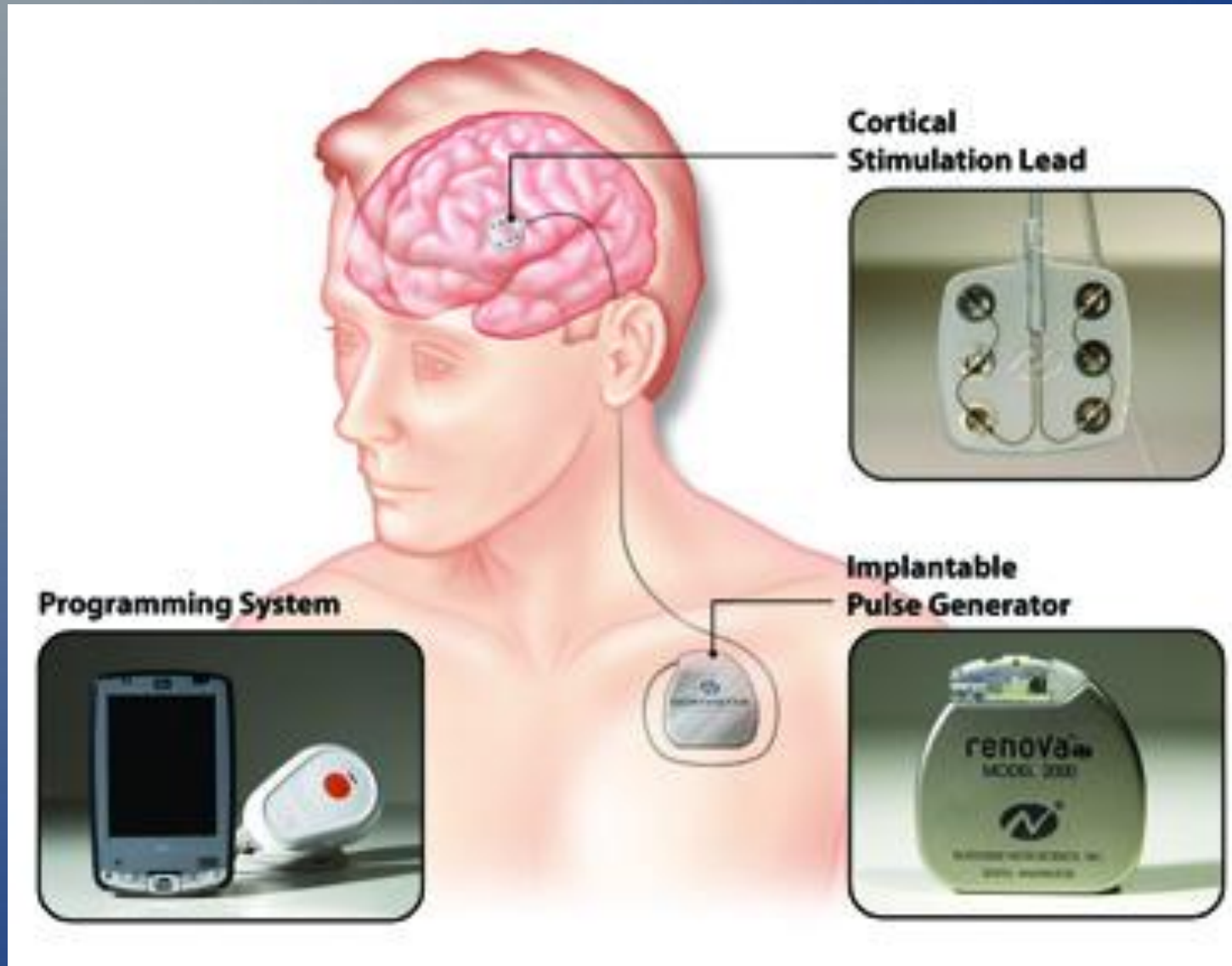
Hansen Medical

- Founded 2002
- Raised \$62.3MM @ avg. \$4.36/share
- Public @ \$12/share (\$250MM) in 2006
- Raised about \$85MM
- Now at \$2/share
 - Acquired and shut down Aortx
 - Raised 35MM in 6/2009
 - Burning \$2.5MM/Q with \$23MM left

Hansen-Issues

- Able to do procedures without robot
- Tough to justify to hospital admin.
- Doesn't enable unique/better procedures

Northstar



NorthStar Neuroscience

- Exploring cortical stimulation for stroke
- Founded 1999
- Chrmn: Alan Levy (Heartstream, Heart Tech, Ethicon Endo)
- Public 2006, \$379MM
- Shut down 2009, IP sold to St. Jude for \$2MM

Northstar-Issues

- Technology didn't work in trial
- Required major surgery in non-surgical illness
- Had acquisition opportunity-missed

VNUS Medical



Disposable
catheter inserted
into vein



Vein heats
and
collapses



Catheter
withdrawn,
closing vein

VNUS Medical Technology

- Treatment devices for vein disease
- Patents filed 1993
- Founded 1994
 - Hired GM
 - Built team
 - Additional funding-total \$2MM
- R&D until 1997
 - FDA clearance 1997
 - Sales \$50MM 2001
- Public 2002, \$220MM
- Bought 2009, \$500MM

VNUS-Issues

- Laser companies leveraged work
- Required patent litigation
 - Distracting
 - Expensive
- Missed chance to capture cosmetic opportunity
- Acquired for 4x PE

Asthmatx



Asthmatx

- Started 1997 as part of Broncus, Inc.
- Market: Pulmonary disease (COPD/Asthma)
- Hired management team
- Raised \$2MM
- 2008 IPO pulled for \$50MM Olympus Inv.
- Valuation \$450MM

Asthmatx-Issues

- Pioneer in new market
 - Any acquirer must invest to sell
 - May want proof market exist
- Took long time and lots of \$
- Tough FDA path

How to Know if Something is Worth Pursuing

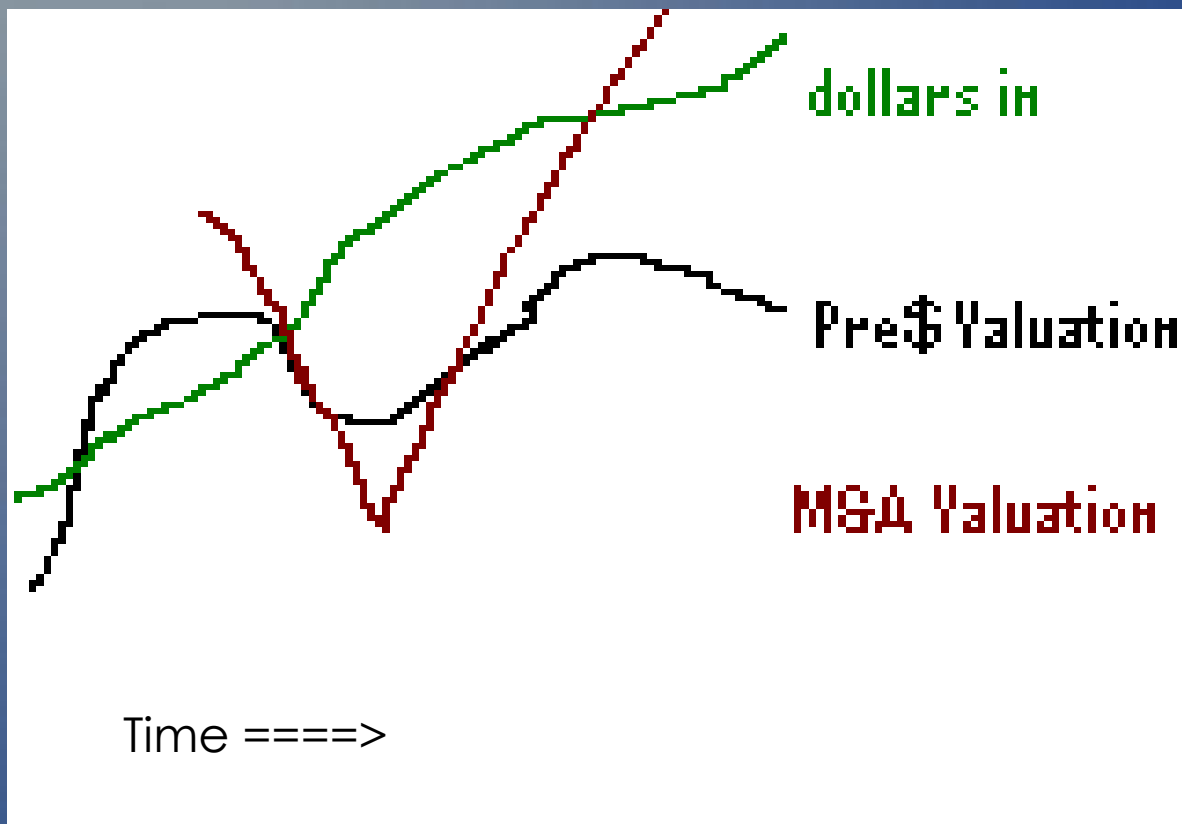
- Large market
 - \$1B for new, open-field opportunity
 - Purchase opportunities of \$10+MM
- Dollars and time = dollars raised
- Market must justify investment
- Risk
 - Technology
 - Time/competition
 - IP

Getting Started

- Define market
- Top-level business plan
- Gut-check
- Get something to test/demonstrate feasibility
- Sell/raise \$ for pre-clinical studies
- Build clinical device
- Demonstrate clinical success

Value creation

M
o
n
e
y



Specifics of medical companies

- 83% of medical cos. exits are M&A
- Average acquisition price ~\$80MM
 - 0.3-20x revenue, Avg. 4.2x
 - 4-60x EBITDA, Avg. 24x
- Private Co. Range 3MM-350MM
- Median \$18MM
- Average invested: \$55MM
- Average time 8 years
- Number of acquirers has tripled in last 2 yrs

Economics of today's opportunities

- Average return:
 - early 12x
 - mid 3.3x
 - late 2.5x
- Interim valuations meaningless
- Co. failure occurs mid-stage >80%
 - Most often due to funding/valuation
 - Fail to do trial, not in trial
 - Most biotech/pharma fail trial

What is future?

- Require more \$ reserves to get over hump
- Large co. make choice
 - Grow bottom line and take risk earlier
 - Wait to acquire to reduce risk with pipeline drying
- Must invest earlier as later deals dry up
 - Drives up competition/prices
 - Reduces returns
 - Increases risk
- Big Co's compete with IPO and Private Equity for late stage
 - First half 2007 valuations all time high
 - 24x EBITDA Average
 - 20-30% premium if public

Summary

- ◉ Market-based opportunities best
- ◉ Many ways to fail, few to succeed
- ◉ Value creation is bimodal
- ◉ Professional management important
- ◉ Most companies are bought