



Global Lifesciences Start-up Trend

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Harvard Biotechnology Club

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About Siemens Venture Capital

Siemens Venture Capital – Quick Facts

- Financially-oriented strategic VC
- Capital under management more than **€800** million; amongst the world's largest
- Investments in over **120** companies and 30 funds
- Investment focus: North America, Western Europe, China, India and Israel
- **3** in Healthcare, all located in Boston
- Offices in Boston, Silicon Valley, Munich, Beijing and Mumbai
- In operation since January **1999**

Healthcare Portfolio: 10 current investments; 2 exits

Imaging



[Ultrasound – Breast Cancer Scanning]



[Ultrasound – Handheld Device]

Healthcare IT & Services



[Image and Knowledge Management
- Imaging CRO]



[Healthcare IT – Disease Management]



[Healthcare IT – Data Mining for CVD]

Diagnostics



[Diagnostics – China Diagnostics
Medical Corporation]



[Diagnostics – Immune Function Assessment]

White Spaces



Basic Digital Pathology

[Digital Pathology – BioImage]

Exits



[Diagnostics – Tools & Test Kits]
NASDAQ: SQNM



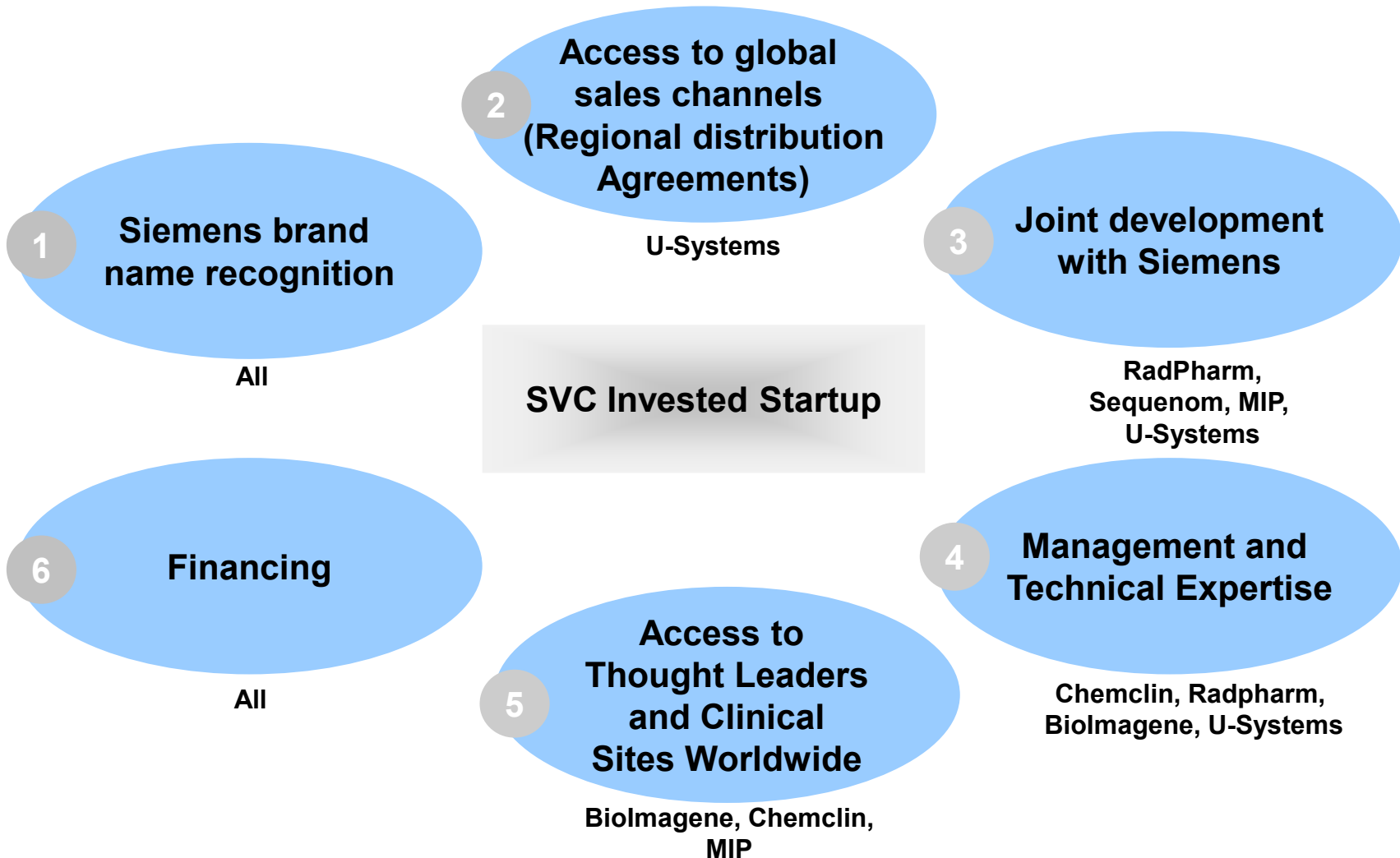
Nuclear Medicine - Radiopharmaceuticals]
IPO Feb 2, 2007 - NASD: MIPI

Healthcare – Working with us

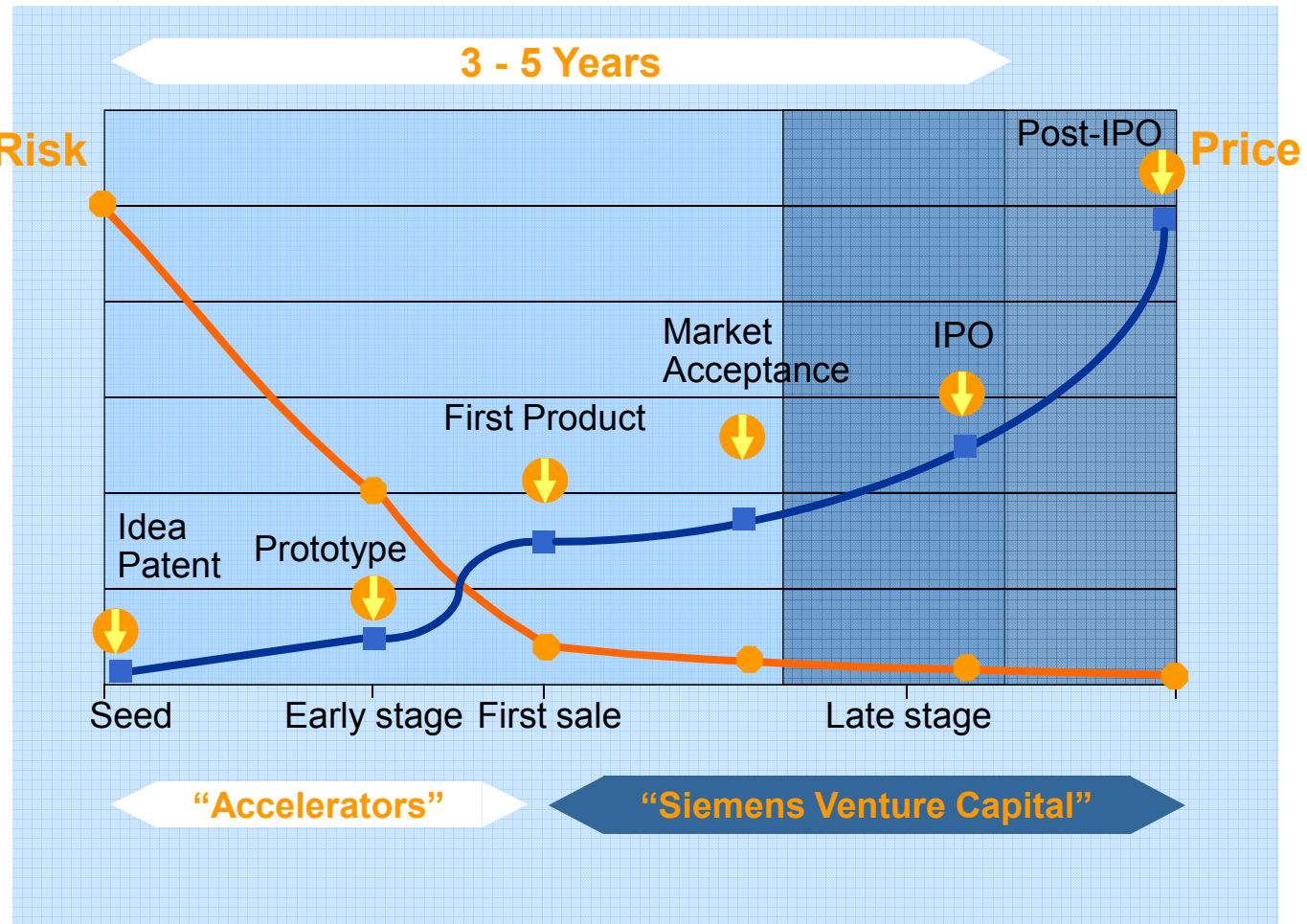
- Transactions
 - Typically require a board seat.
 - Recognize that there will be times when we must recuse ourselves from discussions.
 - If we don't take a board seat - full observer status is essential.
 - Standard information expectations.
 - Side letter to spell out interactions with the business units (e.g. Right of Information) but our investments come with no strings
 - We do not always plan on acquiring portfolio companies.

- Invest \$3-6 million initially

Siemens Venture Capital – Value-Add To Smaller Companies



Siemens Venture Capital – Helping Companies Sell Products and Grow



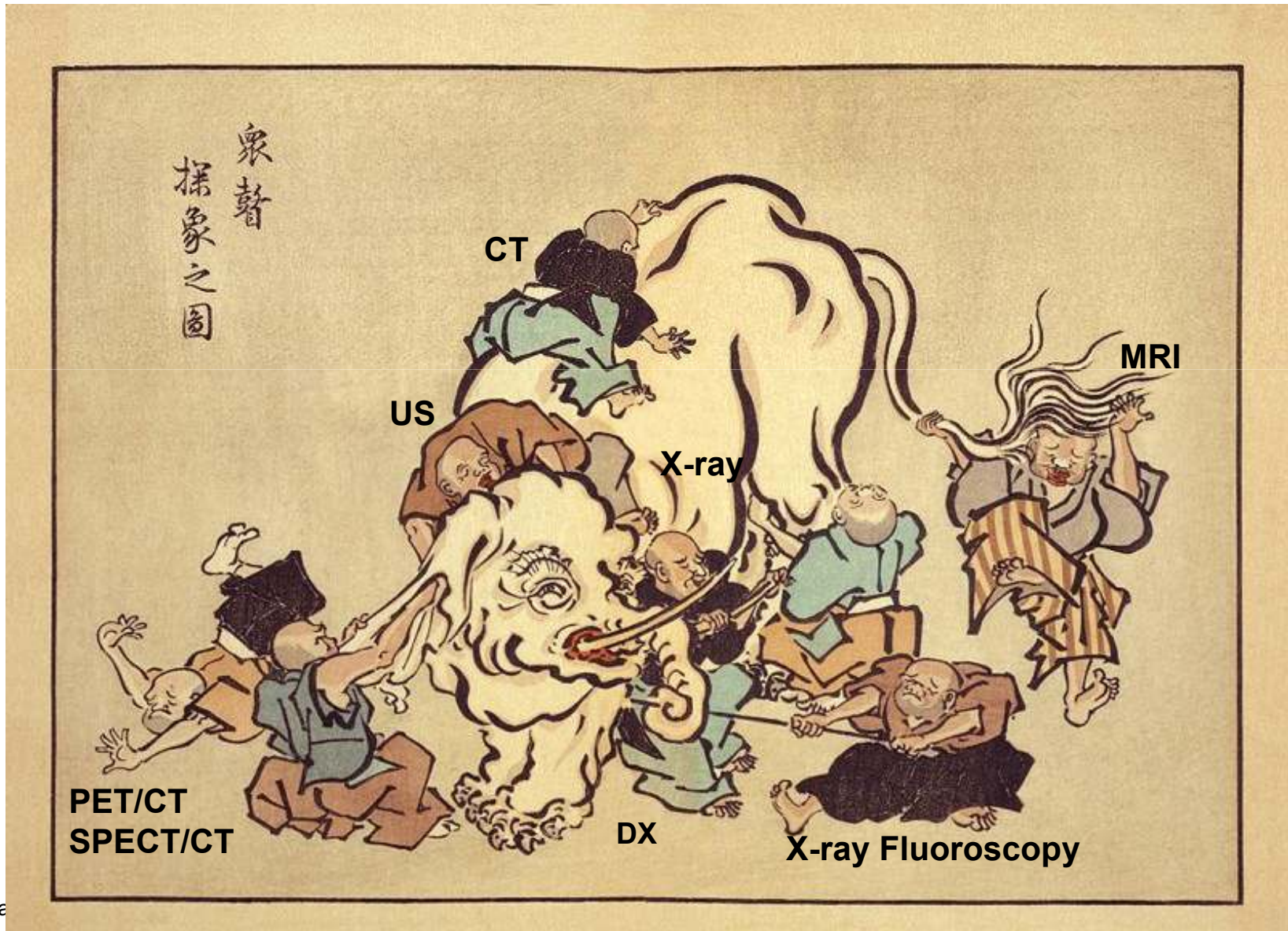
Siemens Healthcare – Products & Divisions

- One of the world’s largest Medtech & IT companies
- Headquarters in Erlangen, Germany and Malvern, PA
- €12 billion in FY2009 revenues (14% of Siemens Revenues)
- CEO: Hermann Requardt; VP of BD: Christoph Gauer

* Represents US headquarters; all others except Audiology (Switzerland) are in Germany

<p align="center">Imaging (<i>Bernd Montag</i>)</p> <p align="center">Computed Tomography (CT) Magnetic Resonance Imaging (MRI) Fluoroscopy & Angiography (AX) Molecular Imaging (PET/Biomarkers/Radiopharm)* Ultrasound* (Norbert Gauss)</p>	<p align="center">Diagnostics (<i>Donal Quinn</i>)*</p> <p align="center">Central Lab* Point of Care* Molecular</p>
<p align="center">IT (<i>Tom Miller</i>)*</p> <p align="center">Hospital Information Systems* Radiology Information Systems Picture Archiving Systems Computer Aided Detection*</p>	<p align="center">Workflow Solutions (<i>Tom Miller</i>)</p> <p align="center">Audiology (<i>Rad Ranke</i>) Oncology-Radiation Therapy (<i>Holger Schmidt</i>)* Mammography, Urology, Lithotripsy & Surgery Equipment (<i>Jochen Dick</i>)</p>

Blind Monks and an Elephant

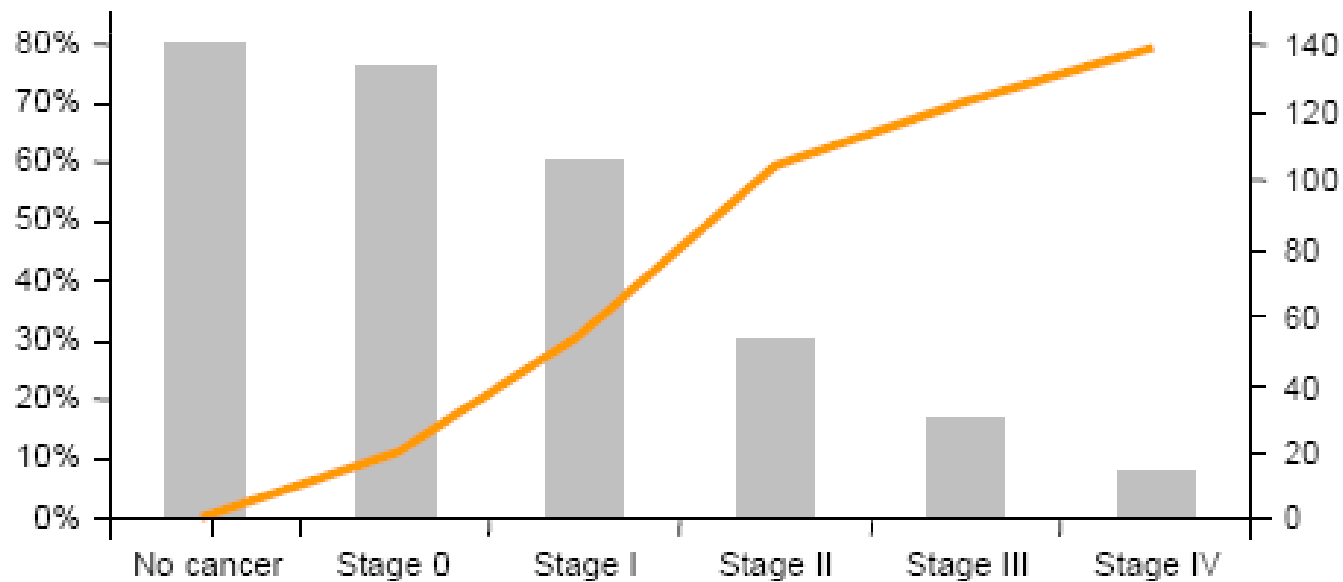


Siemens Healthcare – Prevention and Early Detection are key

Example: Breast cancer

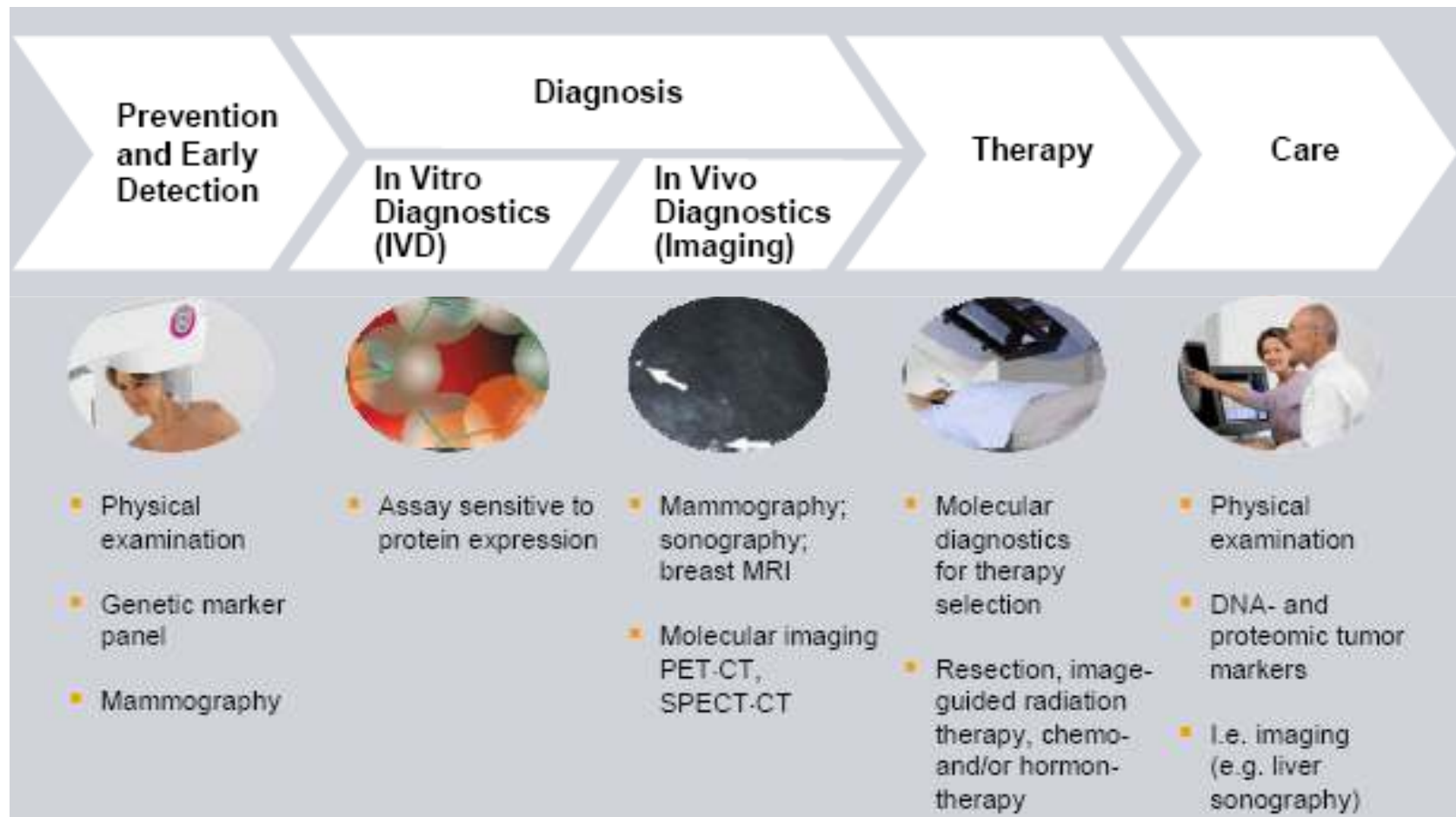
Early detection increases survival rate and reduces treatment cost

- % alive 15 years after diagnosis
- Treatment cost (\$000)



A holistically optimized continuum of care is improving quality of care

Example: Breast cancer



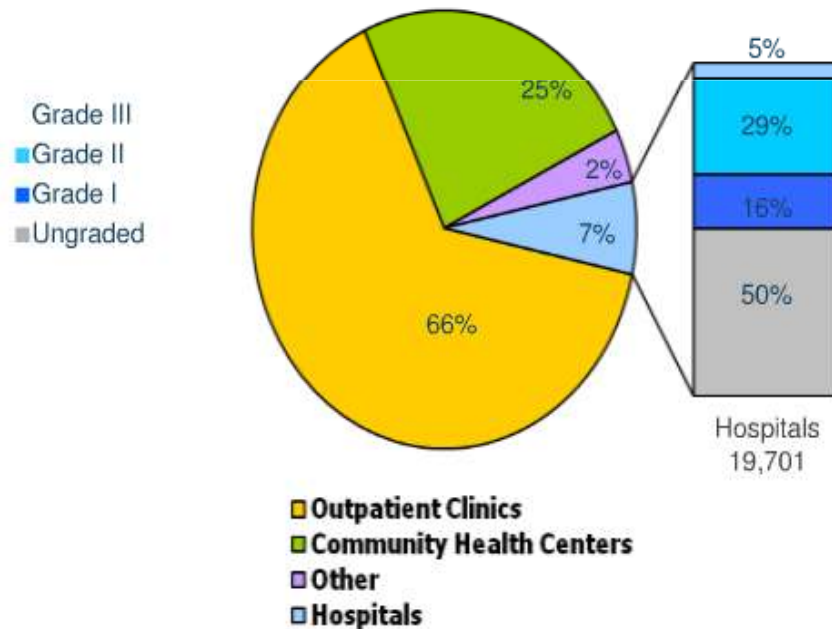


A few words on China

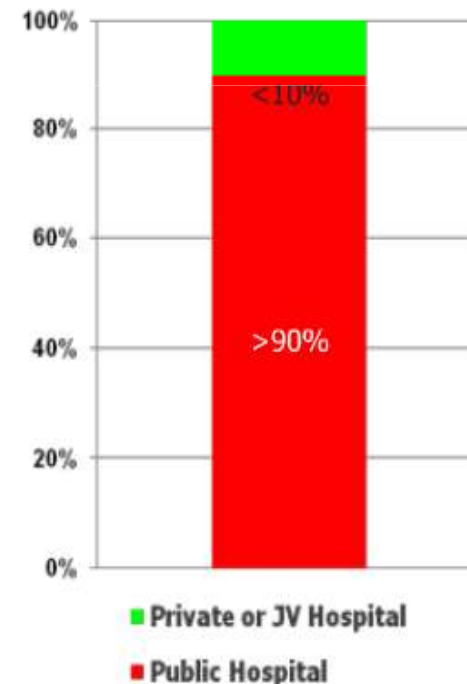
Chinese Medical Institutions

There nearly 289,000 medical institutions in China in 2008, of which 19,700 were hospitals. Clinics perform only basic outpatient services, while community health centers do limited diagnosis & testing.

Chinese Medical Institutions (2008)



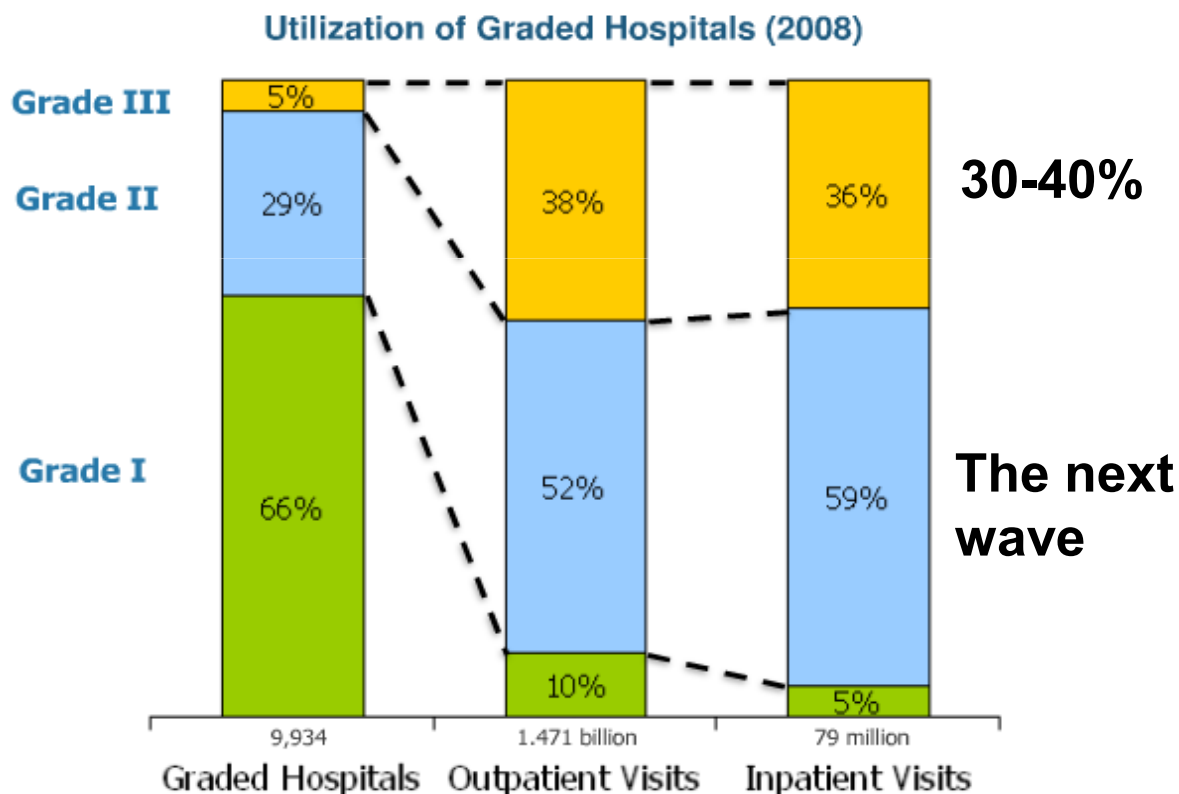
China Hospital Ownership (2008)



Hospital Utilization

China's core issue in providing healthcare services is that the top hospitals – Class III – are the fewest in number but care for a disproportionate volume of patients.

The Chinese government will be investing heavily in Class II hospitals to improve the level of service and make them more attractive places to seek treatment





China: Manufacturing

- Opportunities that are funded are around Biotech, Medtech (HIFU; also inexpensive imaging equipment (ultrasound; diagnostics equipment – Mindray is the big success), Healthcare Services, diagnostics chains, TCM, Pharma services (Wuxi is the big success).
- Better at complex manufacturing
- Mindray & Wuxi are the big successes

India:

SERVICES & SOFTWARE

- Funded stories revolve around Services (CROs, BPO, Generics (now done), offshore services around Healthcare IT/BPO), low-cost diagnostics, Providers (Hospitals, specialty centers, diagnostics chains)
- Many Generics and Hospital chain success stories



**Sustainable social ventures
are creating new models:
Eyecare, Primary Care, Diagnostics,
Insurance, Telemedicine,
Vaccinations**

Mobile Medics: What the villagers told us

“How do you expect old people to travel!!”

“Costly to go there”



“The whole day is spent waiting in the queue at the hospital”

“THE DOCTORS ARE LOOTING US”



“There is no one to tell us what's right and what's not”



“Hospitals are too far!!”

Mobile Medics – How this works



1 doctor (increasing to 2)
1 nurse
1 driver

Van goes to Hub #1



Village Chief & Midwife
Will help organize
patients and enroll
members



Medical team will
visit village every
2 weeks
Biometrics will be
used to identify
patients



100 villages

Van drives to
neighboring villages
and gathers patients
and brings to Hubs



Van moves to Hub #2



Doctors & Nurse spend
time in village
(~5 minutes / patient)



CK Prahalad:

The Fortune At the Bottom of the Pyramid

Unilever (Shakti), Reliance, Piramal (eSwasthya)

Dhristee, ICICI (insurance & Banking)



**The iPhone & the iPad will change
the practice of medicine**

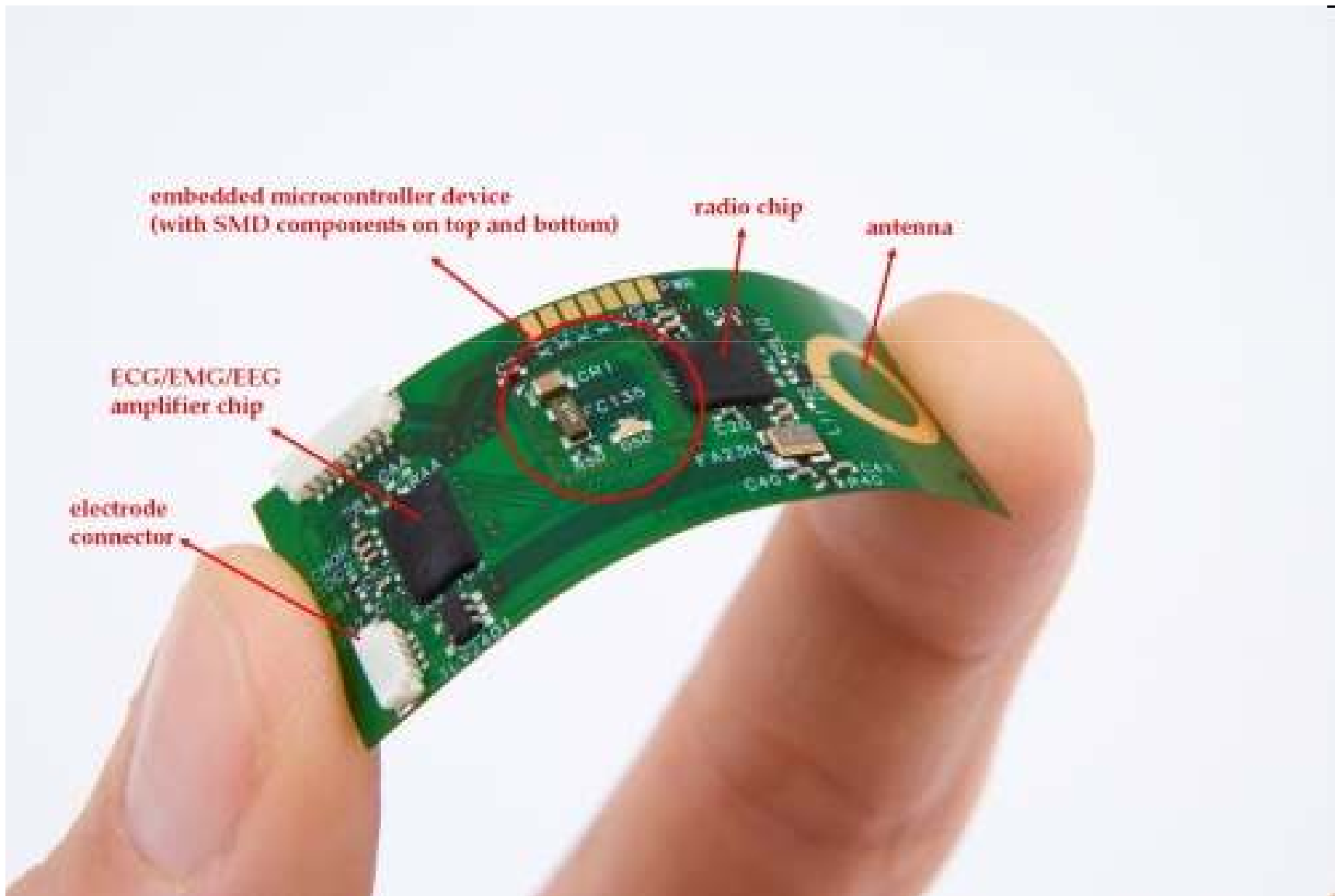


**Smart Devices are coming:
Do-it-yourself. Make it smaller**

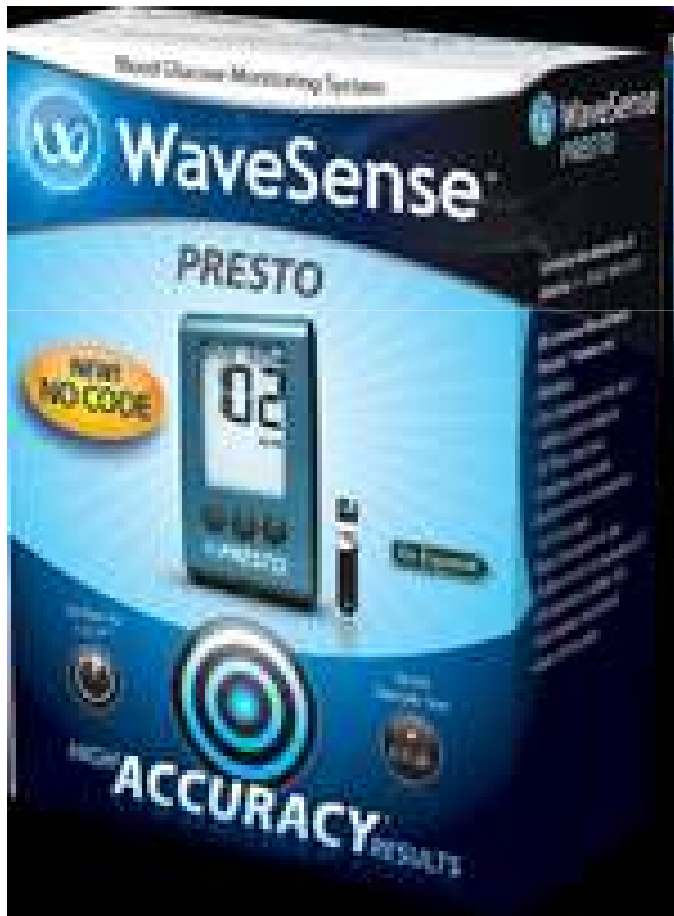
Non Invasive Sensors



ECG Monitors



Glucose Meters



Digital Stethoscopes

The Finest Stethoscope Sound
The coolest Stethoscope App!

- ◆ ds32a Digital Electronic Stethoscope
- ◆ The clearest heart and lung sounds
- ◆ Record and Display in Real Time
- ◆ Save & Recall Sound Files
- ◆ Email from the bedside
- ◆ Incredibly easy to use



Thinklabs revolutionized electronic stethoscopes over 6 years ago and has led the performance race ever since. The ds32a Digital Stethoscope is engineered from end to end as a precision instrument by perfectionist designer Clive Smith. Now, Thinklabs leads again, with Stethoscope App for iPhone / Touch. Capture and display sounds, save patient sounds, email recordings for EMR, second opinion, or educational use. From professors at Harvard and Hopkins who have a serious attitude to auscultation, to Nurse Jackie on Showtime who just has attitude, you'll see the distinctively designed Thinklabs stethoscope.

iPhone Applications



**iPad will change
all the rules**



China v India

China: MFG

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Vielen Dank

Thanks Cheers

Xie Xie Toda Doh je

Dhanyawaad

Spasibo Merci