A. Impacts already occurring
   • Targeted therapy
   • Implants
   • Collaborative research and new collab btw large and SME
   • Open space to grow new business in SME, + academia
   • Conservatism of the customer groups,
   • Opportunity to rescue drugs that have been abandoned
   • For NT to interact with parts of the treatment paths not currently
   • Growth in academic fields and technology entities and IP
   • Nanotechnology diversity and the valley of death
      – Industry is not ready to pick up

B. Next 5 years
   • Growth of already occurring
   • Expect something in trials will be on market (therapeutics, Dx, lab on chip, etc)
   • More funding and acceptance by pharma
   • Standardization of metrics and therefore accelerated regulatory recognition and approval
   • Personalized medicine and ability to etter identifies susceptible patients
2 - How do you expect metrics for economic impacts to shift as NT in this sector evolves

• Indirect impacts: improved patient outcomes
  – Quality of life
  – Productivity
  – Lowered HC costs
• Redistribution of values
• Move from econ-oriented to socially-oriented
  – Maintenance of health years and productivity
• Multi-dimensional
• Manufacturability

• Impact on developing economies- centralize healthcare infrastructure (increased efficiency and distribution)
3

- More qualitative methodologies
  - Departure from counting
4 – unique challenges

• Dealing with humans
• Population effects of improved cancer survival
• Regulatory approval
• Horizontal character of applications