



The Race Against Drug Resistance

A Report of the Center for Global Development's
Drug Resistance Working Group

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When Medicines Fail
A GLOBAL PUSH TO FIGHT DRUG RESISTANCE



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THE PROBLEM

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THE CONSEQUENCES

Lethal

Expensive

Accelerating

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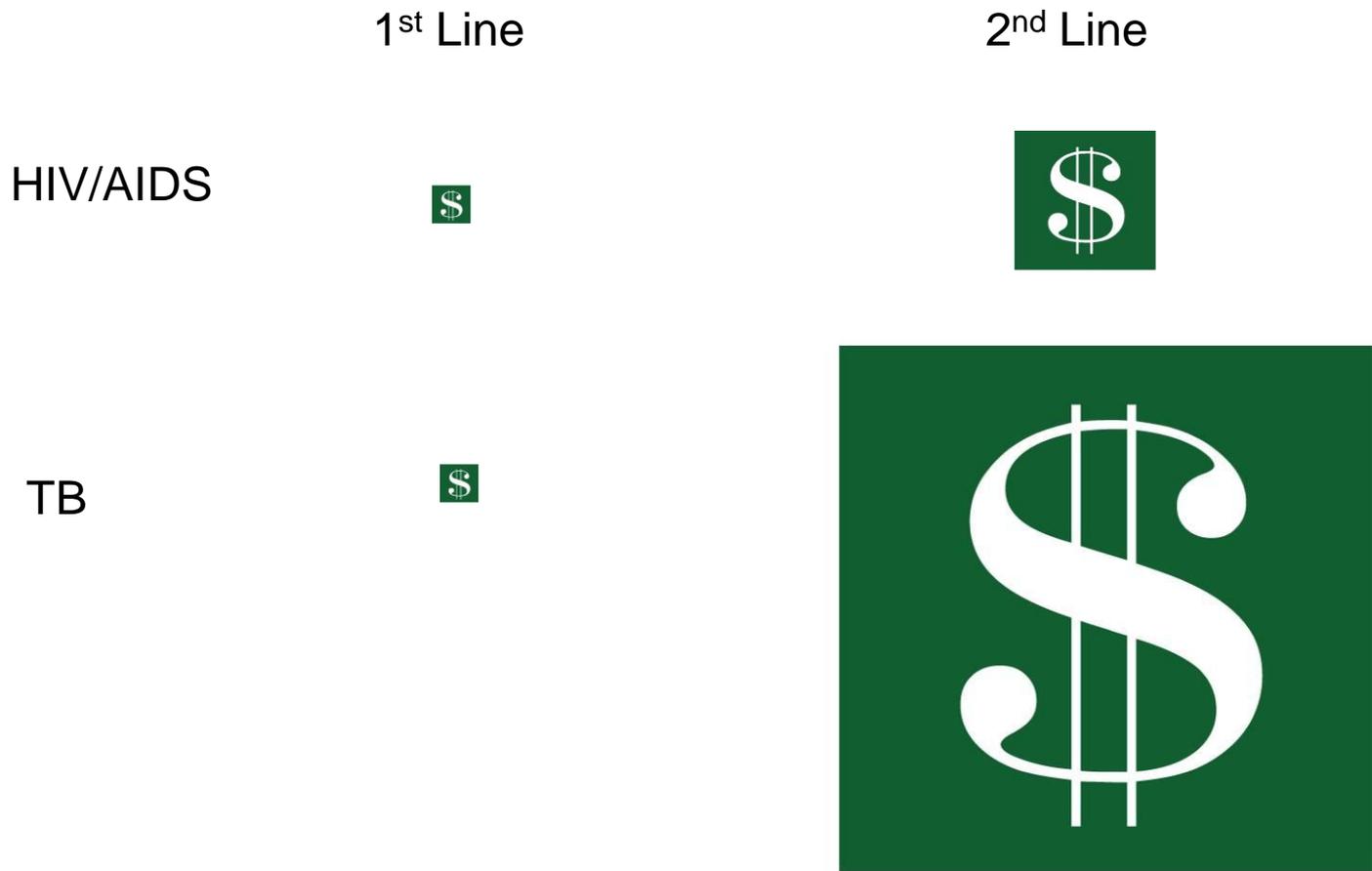
A GLOBAL PUSH TO FIGHT DRUG RESISTANCE

A Public Health Time Bomb

- *S. Pneumonia*: up to 50% of cases are resistant to penicillin
- *Shigella*: in Africa, widespread resistance to first-line antibiotics; in Latin America, 80% of tested isolates are multi-drug resistant
- Malaria: one remaining effective drug
- TB: 460,000 resistant cases a year



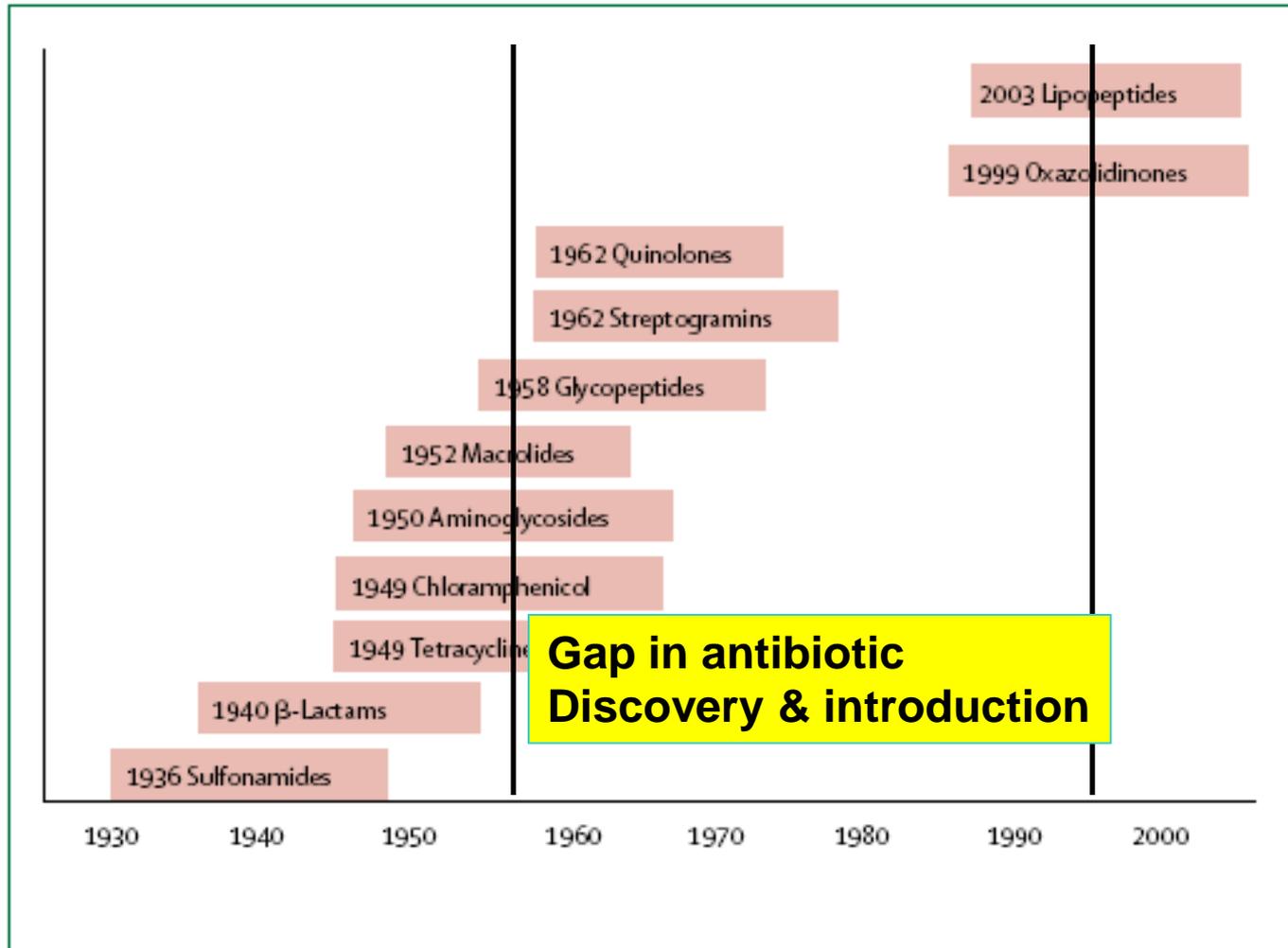
Drug Resistance Costs Dollars



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Introduction of Novel Classes of Antibiotics (1936-2003)





WHAT IS NEEDED

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The Drug Resistance Working Group

- Health care providers
- Academic researchers
- Pharmaceutical industry
- Government
- Donors
- Global health institutions
- Advocacy groups

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Recommendation #1

Improve surveillance by collecting and sharing resistance information across networks of laboratories



Photo © Back to Earth Films

Recommendation #2

**Secure the supply chain,
from pharmaceutical manufacturers to patients**



Recommendation #3

Strengthen national drug regulatory authorities through regional networks



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Recommendation #4

Develop web-based R&D marketplace to catalyze the development of resistance-fighting technologies

The screenshot displays the iBridge website interface. At the top left is the iBridge logo with the tagline 'LINKING IDEAS + INNOVATION'. A blue banner across the top shows '4,258 members', '12,591 innovations', and '109 organizations'. Navigation links for 'home', 'blog', 'about us', and 'contact us' are visible. On the left sidebar, there are sections for 'BROWSE' (with a 'browse by tags' dropdown) and 'PROFILE' (with 'RELATED TAGS' including Subjects like Biology, Biomedical, Chemicals, Medical, Therapeutic, and Organizations like University Health Network). The main content area features a quote from Alan Thomas, Director at UChicagoTech, about the network's benefits. Below this is the 'INNOVATION' section for 'Malaria Drug Resistance Reversal Agent', including its description, date (01/26/2010), and options to 'request more info', 'ShareThis', and 'LICENSE ONLINE'. On the right, there is a 'SEARCH' bar, a 'Capture as PDF' button, a 'PEOPLE' section listing 'Case Manager: THOMAS PARSONS Innovations (15)', and an 'ATTACHMENTS' section with a 'Download Technology Brief (PDF)' link.



“... we are potentially headed for a post-antibiotic world in which we will have few or no clinical interventions for some infections.”

Dr. Thomas Frieden, Director, CDC

Hearing of House Energy and Commerce Health Subcommittee

April 28, 2010

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Center for Global Development
www.cgdev.org

Visit www.WhenMedicinesFail.org to learn more and sign up for the monthly e-newsletter

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