

The role of market intelligence in access to anti-malarial medicines: funding, procurement, and policy

Brenda Waning

Boston University School of Medicine

November 20, 2009

American Society of Tropical Medicine & Hygiene Meeting

Washington DC, USA

Presentation Outline

1. Review history and current status of transparency in medicines procurement
 - focus on HIV/AIDS, tuberculosis, and malaria
2. List some challenges faced in global malaria treatment
3. Present Boston University (BU) analytic data set & preliminary results of analyses on anti-malarial medicine procurements
4. Discuss additional utility of market intelligence data
5. Provide summary and conclusion

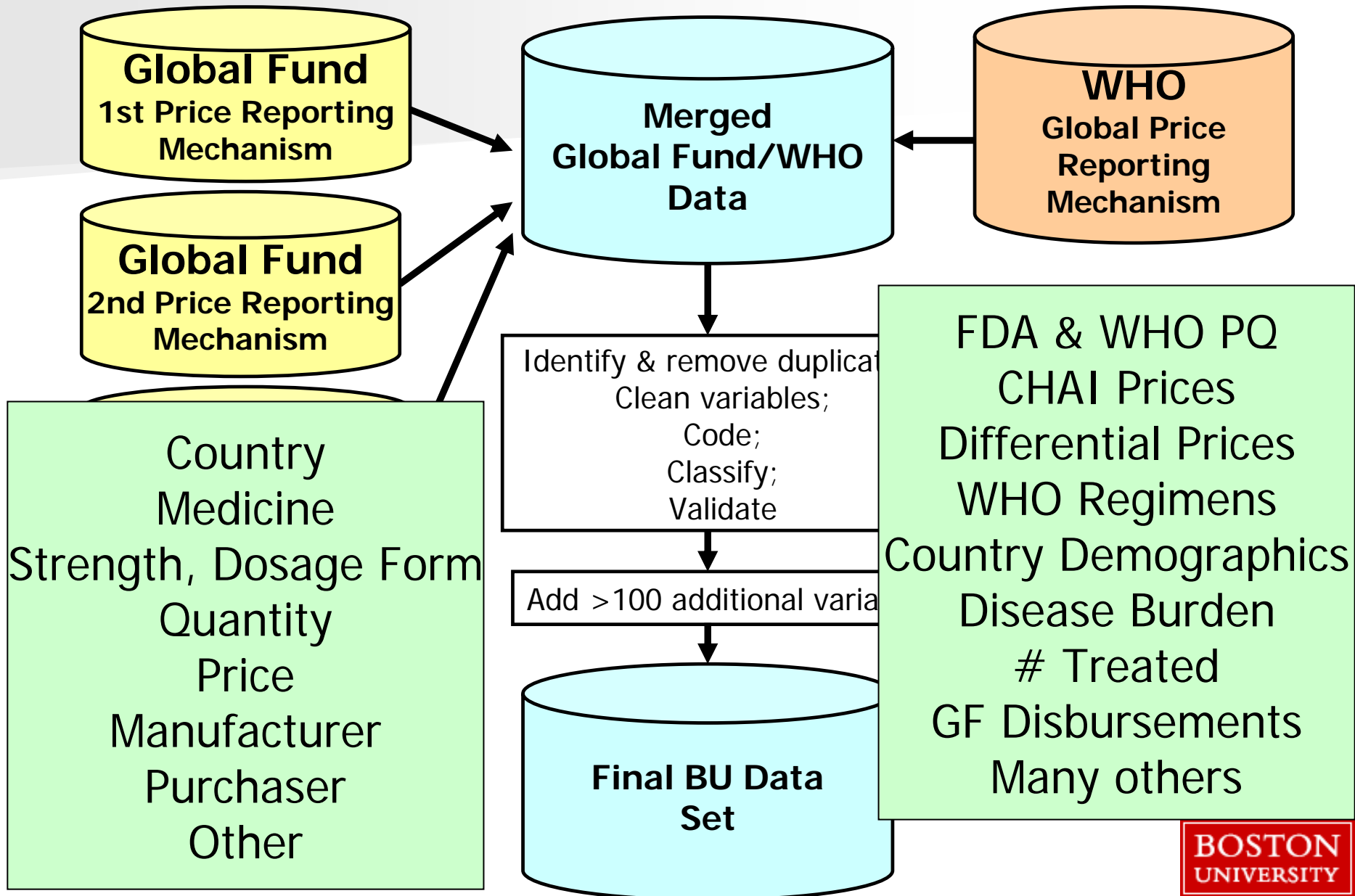
1. History & current status of transparency in medicines procurement (1)

- Until recently, information asymmetry was the norm
 - Producers and suppliers held intelligence on medicine quality & price; purchasers had very little information
- 2001 WHO Prequalification improved quality transparency
 - Web posting of medicines that passed quality testing
 - FDA followed with Tentative Approval Process and web posting
- 2002 Global Fund improved price transparency
 - Mandatory reporting and web posting of all commodity purchases
 - *Price Reporting Mechanism, Price Quality Reporting Mechanism*
 - 2005 WHO followed with *Global Price Reporting Mechanism*
 - Web posting of procurements from Global Fund and many others
- Unprecedented movement in transparency, but utilization of information not yet optimized

2. Challenges in Global Malaria Treatment

- Medicines used in malaria exist within a market framework
 - competition is a key to access to quality, affordable products
 - yet we know very little about markets and competition
- Massive investments in malaria
 - Practically no analysis of money spent on public sector procurements or global market evolution
- Desire to get more value for money
- Need to measure impact of new initiatives (AMFm), pooled procurement, etc., on market structure and access
- Programmatic design and global strategy decisions have not made use of existing market intelligence

3. Creation of BU analytic data set

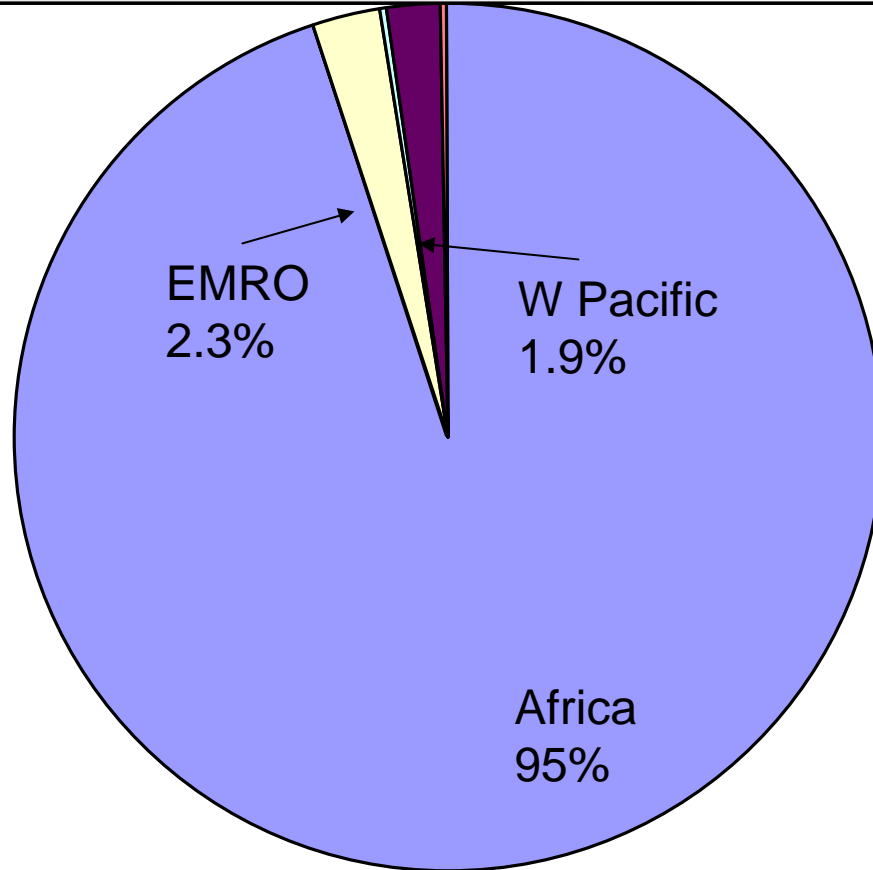


Anti-Malarial Medicines Transactional Overview

Dates	Jan 2004 – July 2009
# Transactions	1,111
Total Amount \$US	#215,065,448
# Countries	61
# Dosage Forms	67
# Manufacturers*	30

*only 8 manufacturers are WHO-Prequalified

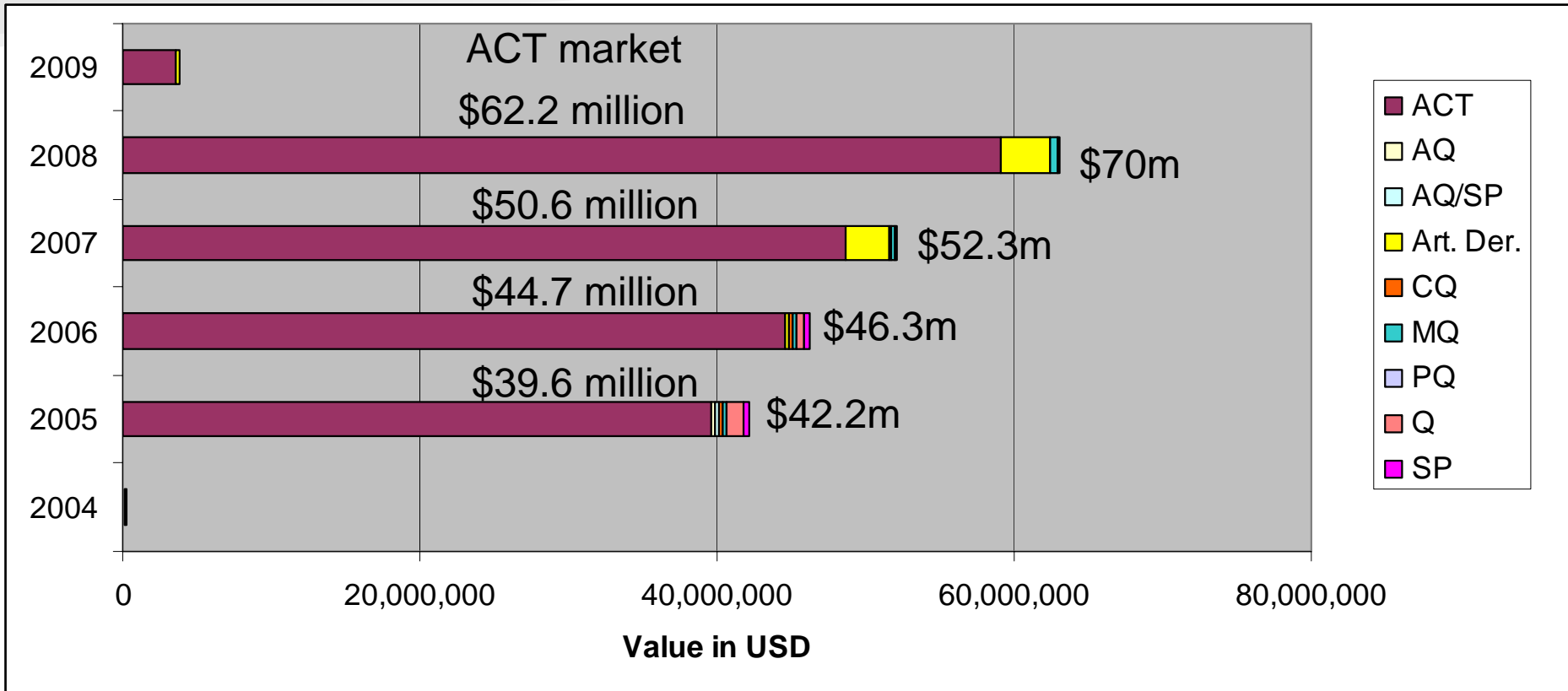
Market Share by WHO Region (value)



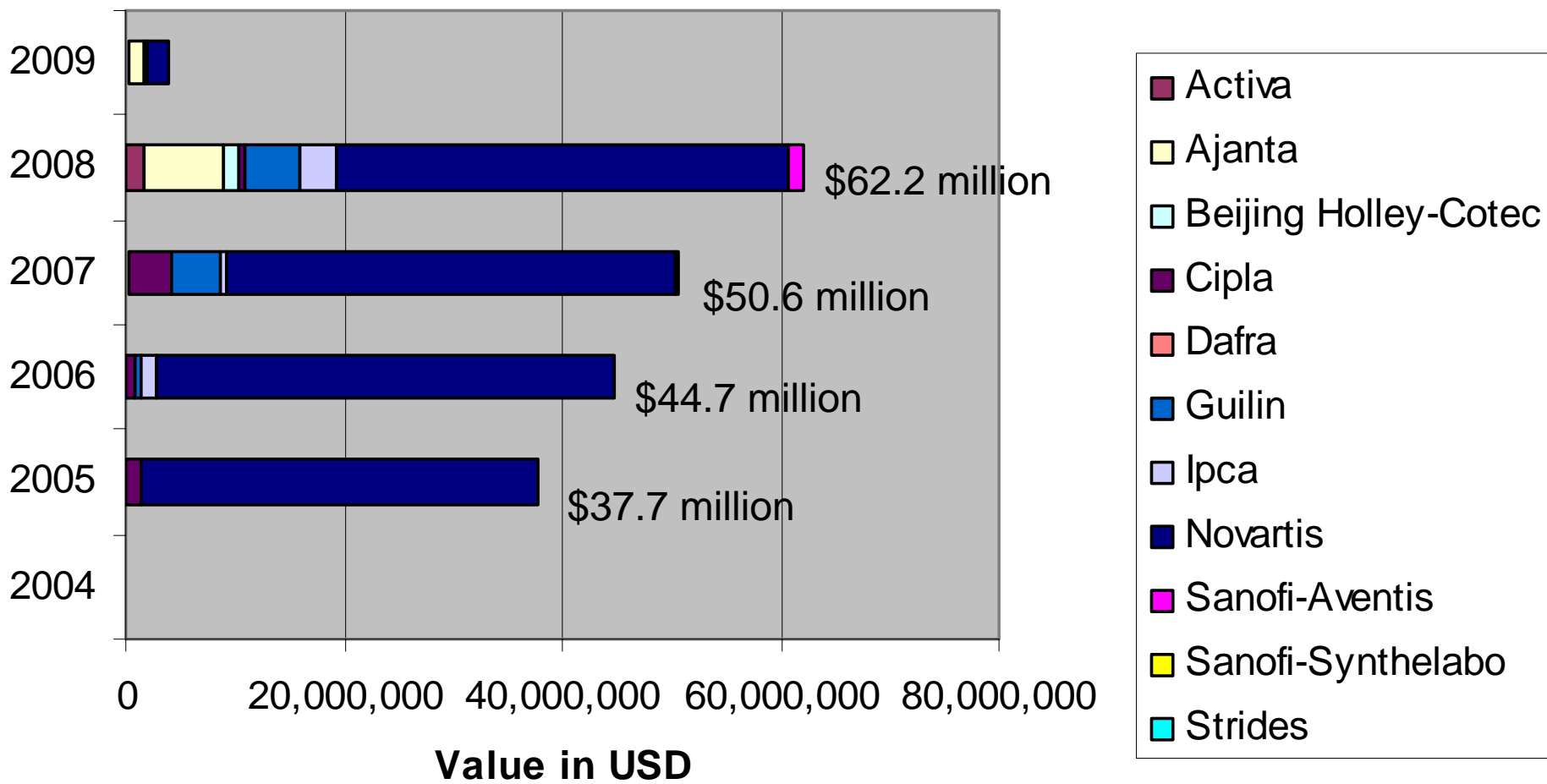
- African
- European
- Eastern Mediterranean
- Americas
- Western Pacific
- South-East Asia

Reported Market Value (USD)

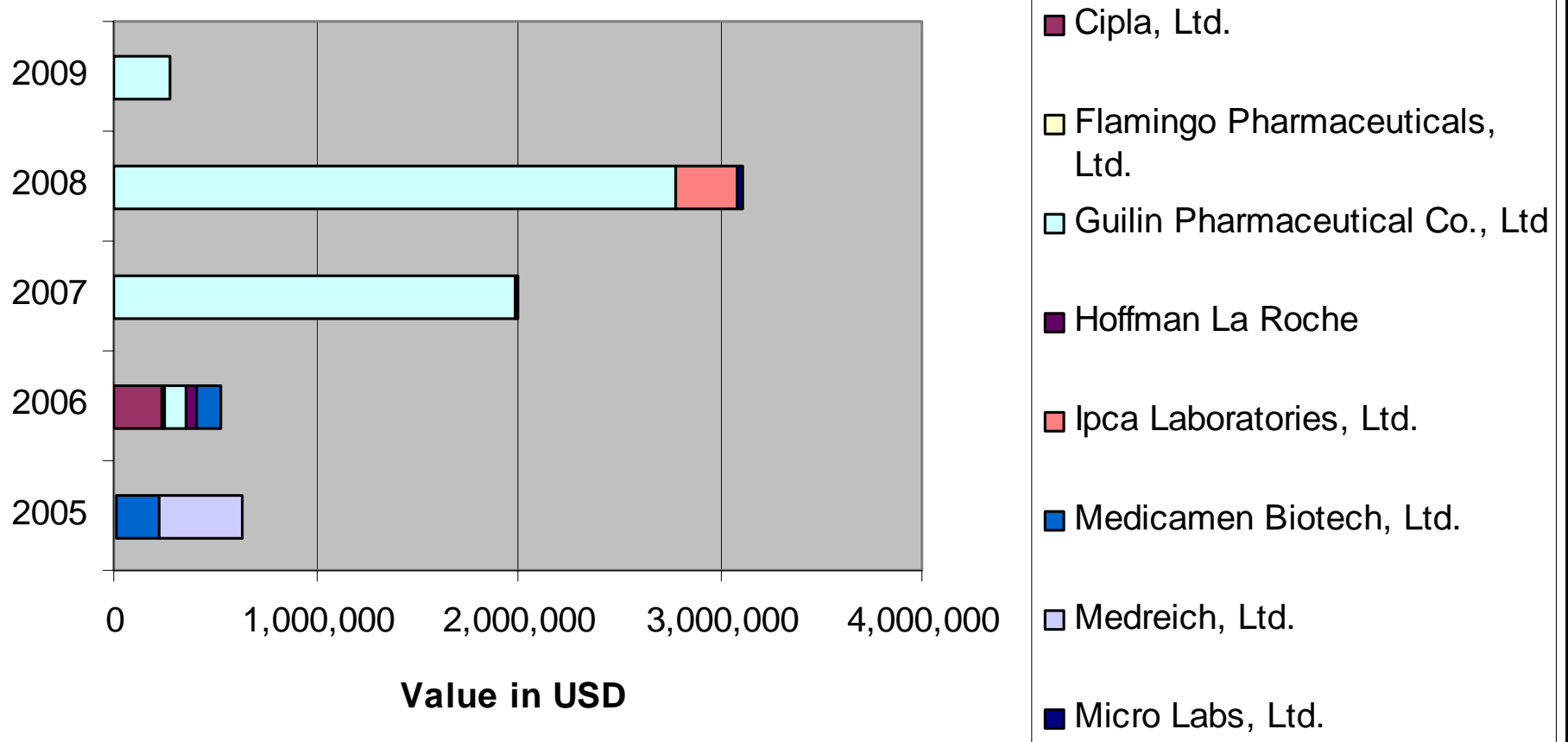
Anti-malarial medicines by drug type



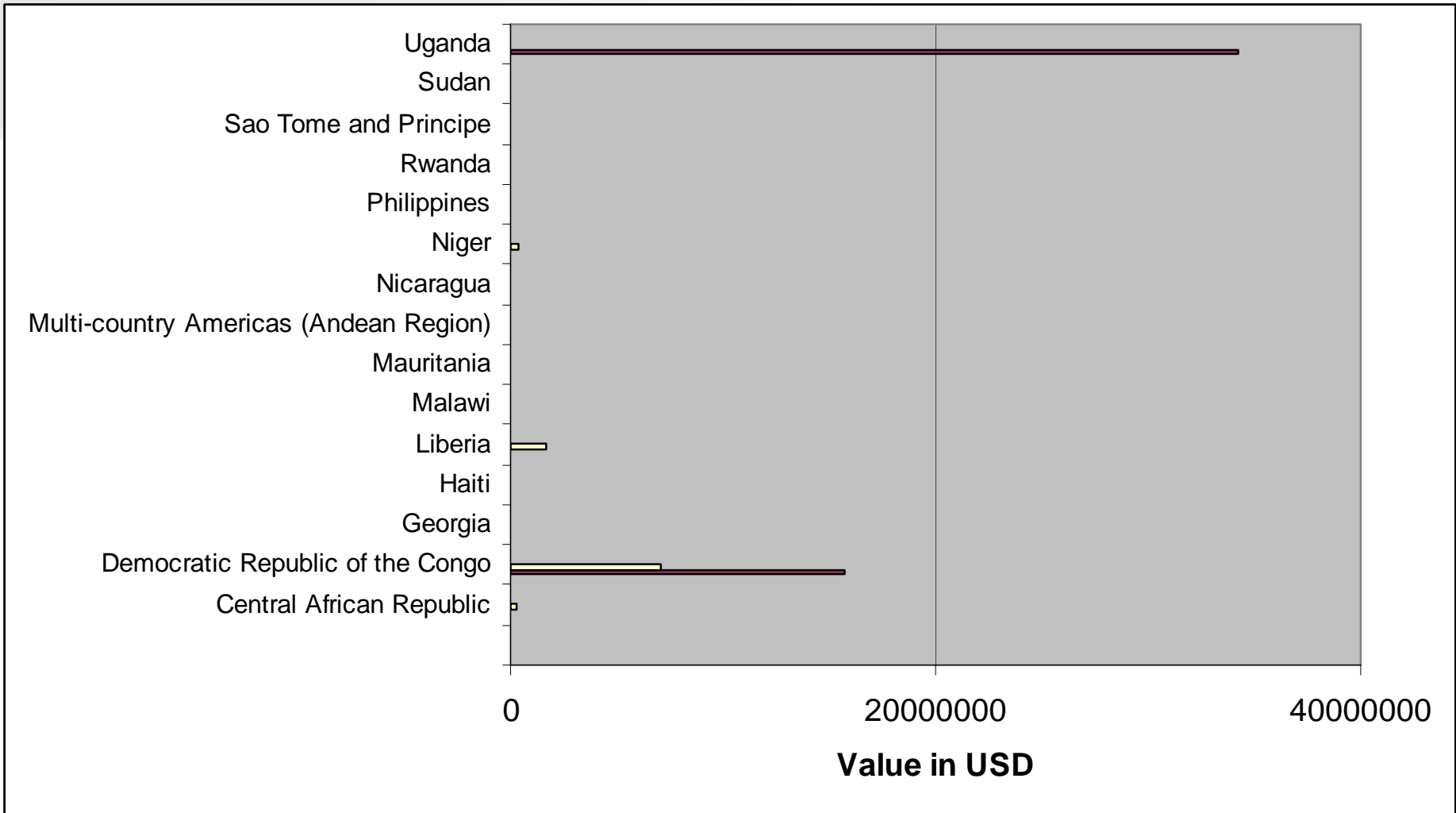
Manufacturer Market Share of ACTs (value among multiple donors)



Manufacturer Market Share of any SP-containing medicine (value)

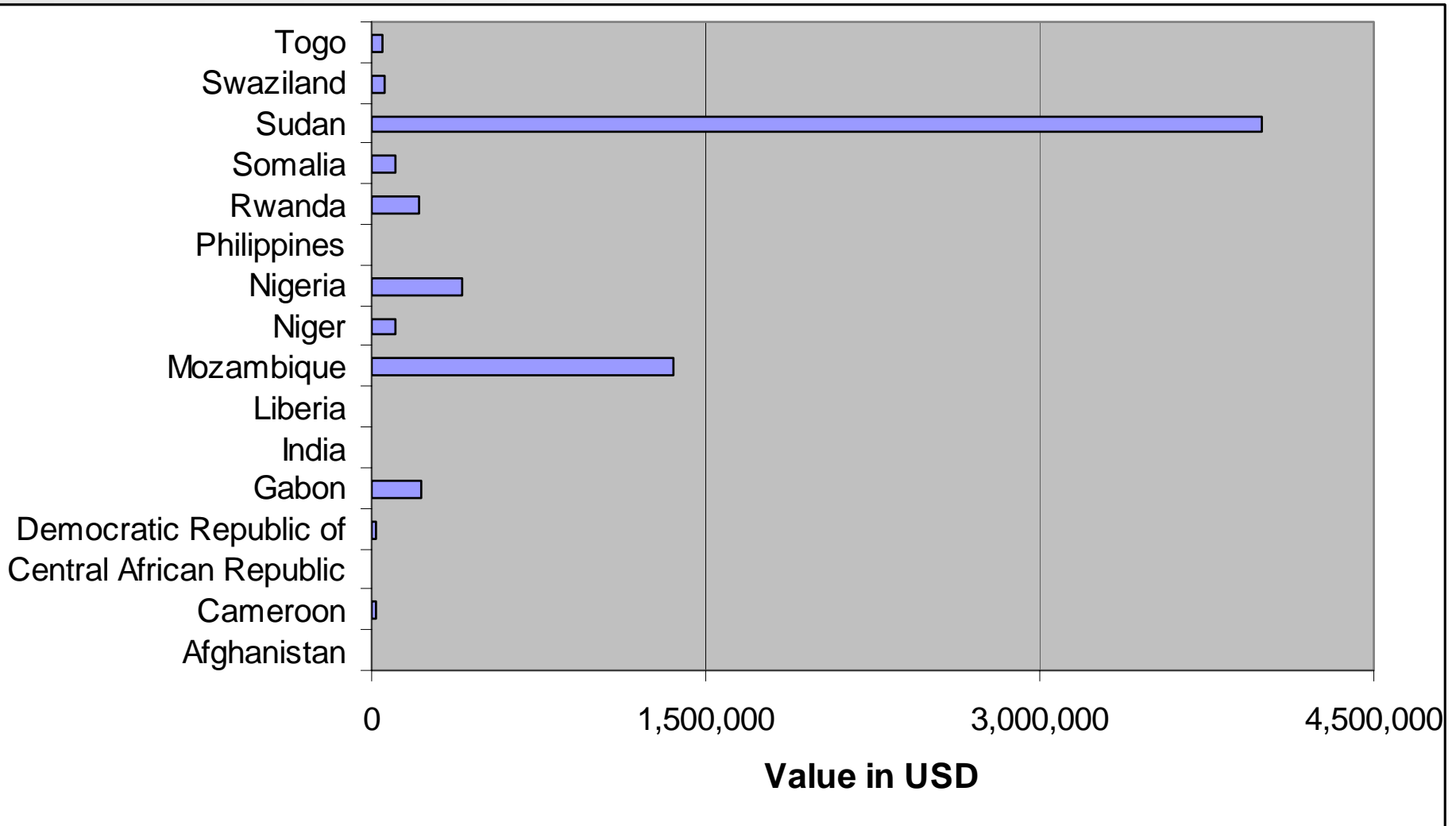


Quinine Purchases by Country



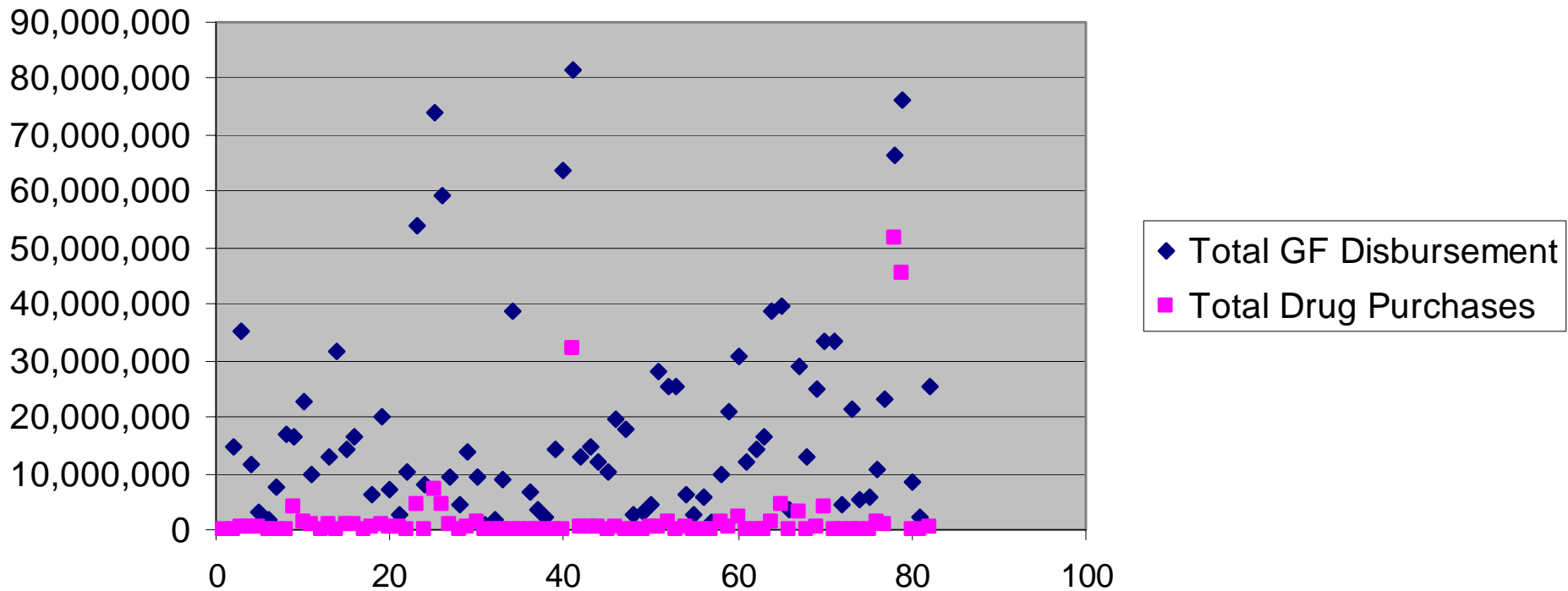
Only 14 countries and 1 multi-country region reported purchasing quinine;
Quinine is drug of choice for severe malaria

Any SP-Containing Medicine Purchases by Country



35 countries list SP for treatment in pregnancy; 16 report purchase of SP

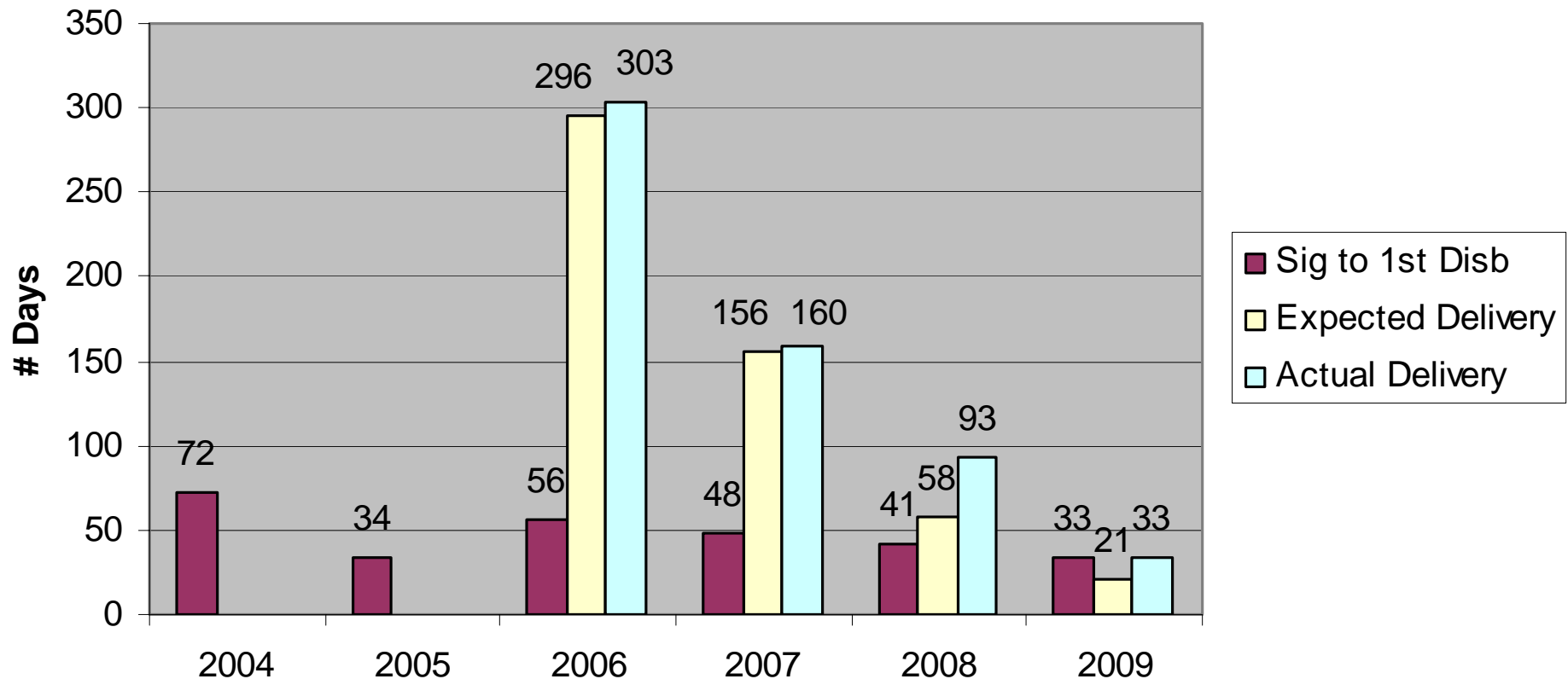
Drug Purchases are a Very Small % of GF Malaria Disbursements (plots are per country per round)



Total GF Disbursements = \$1.48 billion

Total malaria purchases = \$186.8 million

Illustrative Example of Potential Timeline Analyses*



*Date variables are PROBLEMATIC and need further cleaning

Potential Utility of Data

Analytic Potential

- Market Impact and market changes
 - Pricing strategy, quality, global policy/donor decisions
- Dispersion/Uptake of new products
- Country reaction to WHO guideline changes
- Health Outcomes
- Value for Money

Country Potential

- Procurement efficiency, capacity building
- Awareness of new products, price changes, etc.

Program Potential

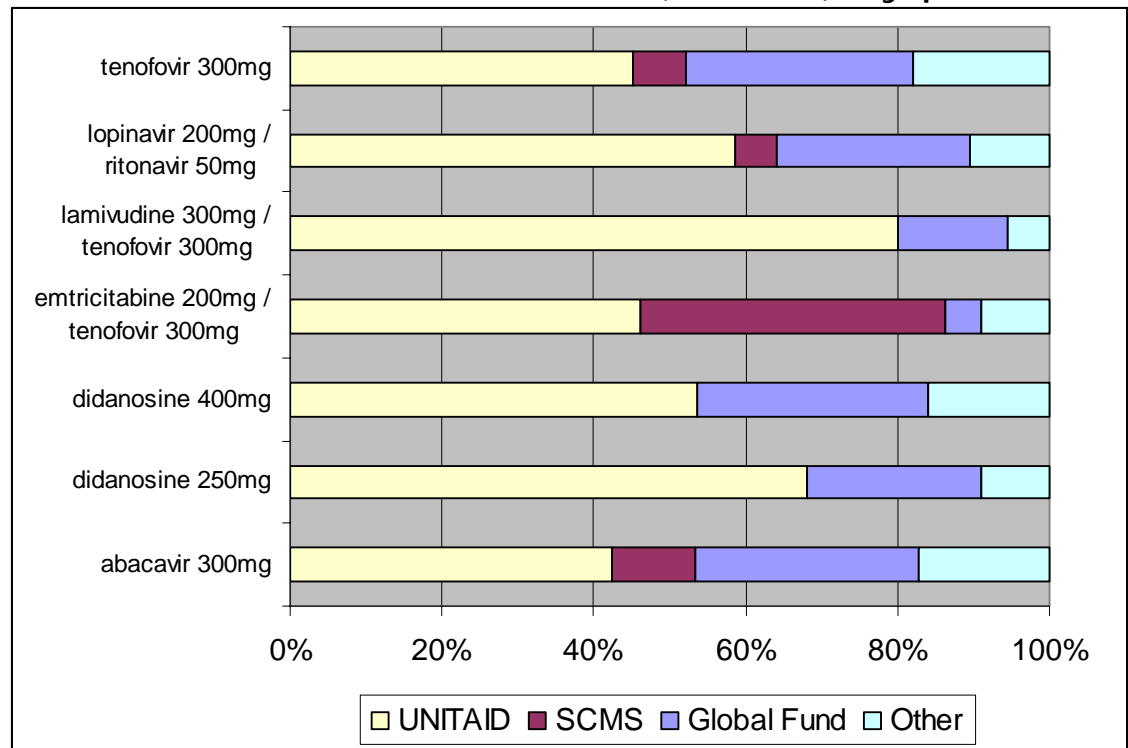
- Link data to systems: budgets, proposals, reports, m&e, purchasing

Example with Antiretroviral Medicines: Large Scale Purchase Arrangements

■ Pooled procurement, SCMS, and UNITAID will change market structure

■ Multiple regression of 7,253 ARV purchases*
-19 of 24 (79%) ARV dosage forms revealed no price-volume association*

2nd line ARV Market Share (volume) by purchaser



*Waning et al. *Analysis of Global Strategies to Reduce Prices of Antiretroviral Medicines: Evidence from a Transactional Database*. Bull World Health Organ 2009;87:520-528.

5. Summary and Conclusions

- Global Fund and WHO changed the landscape around transparency of medicine information on price and quality
- Data can be enhanced and used to:
 - Identify, describe and quantify problems; Design interventions;
 - Examine impacts of past policies & strategies to build an evidence base;
 - Predict impact of new policies & Project future costs for donors
- Data can also empower country users if provided in a more user-friendly format
 - Provide timely “market intelligence” to procurement staff;
 - Allow benchmarking of performance;
 - Guide countries in regimen selection; Facilitate demand forecasting
- Transparency has risks, too!
 - Need higher level discussion on appropriate level of transparency

Thank you

Acknowledgements

- United Kingdom Department of International Development (DFID)
- Medicines for Malaria Venture (MMV)
- Boston University research team