

Kilimanjaro-Duke HIV/AIDS Research Collaborations

Key Institutions

Key Findings to Date

The Future

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Kilimanjaro-Duke HIV/AIDS Research

KCMC

- Leadership of Professor John Shao
- Expertise with antiretrovirals
- Laboratory support
- Educational mission
- History of productive international collaborations

- Burgeoning VCT Programme
- Home-based care follow-up
- CAB and education

- Co-infected patients
- DOT x 2 months

KIWAKKUKI

Kibongoto

Key Findings from Kilimanjaro-Duke Collaboration

KCMC Inpatients

KIWAKKUKI HIV Testing Program (VCT)

Kibong'oto National Tuberculosis Hospital

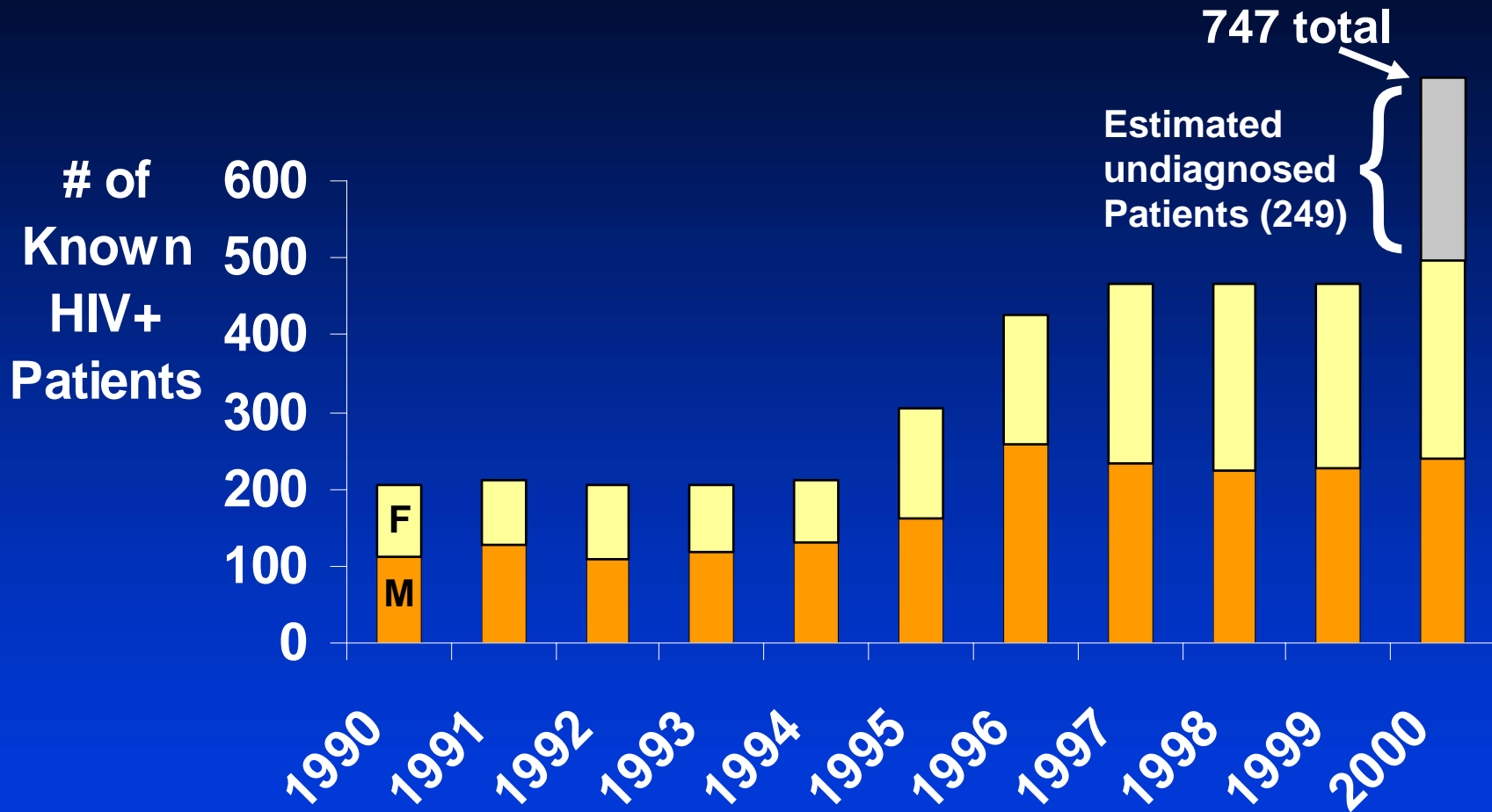
Key Findings from Kilimanjaro-Duke Collaboration

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Known HIV-infected patients at KCMC 1990-2000



- Inpatient mortality rates around 21%
- Proportion female patients increased significantly from 38-47% through 1996 to 52% 1998-2000 (X^2 trend, $p < 0.001$)

Diagnoses assigned to 1,242 HIV-infected adult inpatients 1997-2001

| Diagnostic Category | N | Prevalence | Mortality |
|---------------------|-----|------------|-----------|
| Pulmonary TB | 262 | 21% | 24% |
| Malaria | 169 | 14% | 31% |
| Gastroent./Diarrhea | 152 | 12% | 20% |
| Non-TB Pulm. Infxn | 126 | 10% | 36% |

Most lethal: meningitis (52%, OR death, 3.7), septicemia (47%, OR 2.9), renal disease (44%, OR 2.6), and non-TB pulmonary infection (OR 1.9)

Key Findings from Kilimanjaro-Duke Collaboration

KCMC Inpatients



- ↑ Mortality rates (21%)
- ↑ Women
- ↑ Fever-associated infections

[Ann. Trop Med. Parasit., 98\(2\): 171, 2004.](#)

Key Findings from Kilimanjaro-Duke Collaboration

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Ann. Trop. Med. Parasit., 98(2): 171, 2004.

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HIV Voluntary Counseling and Testing (VCT) at KIWAKKUKI



KIWAKKUKI HIV-VCT

May 2003 - Aug 2004

(N=2,684)

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graph TD; A["(N=2,684)"] --> B["1,185 Men"]; A --> C["1,499 Women"]; B --- D["9.1% HIV+"]; C --- E["24% HIV+"];
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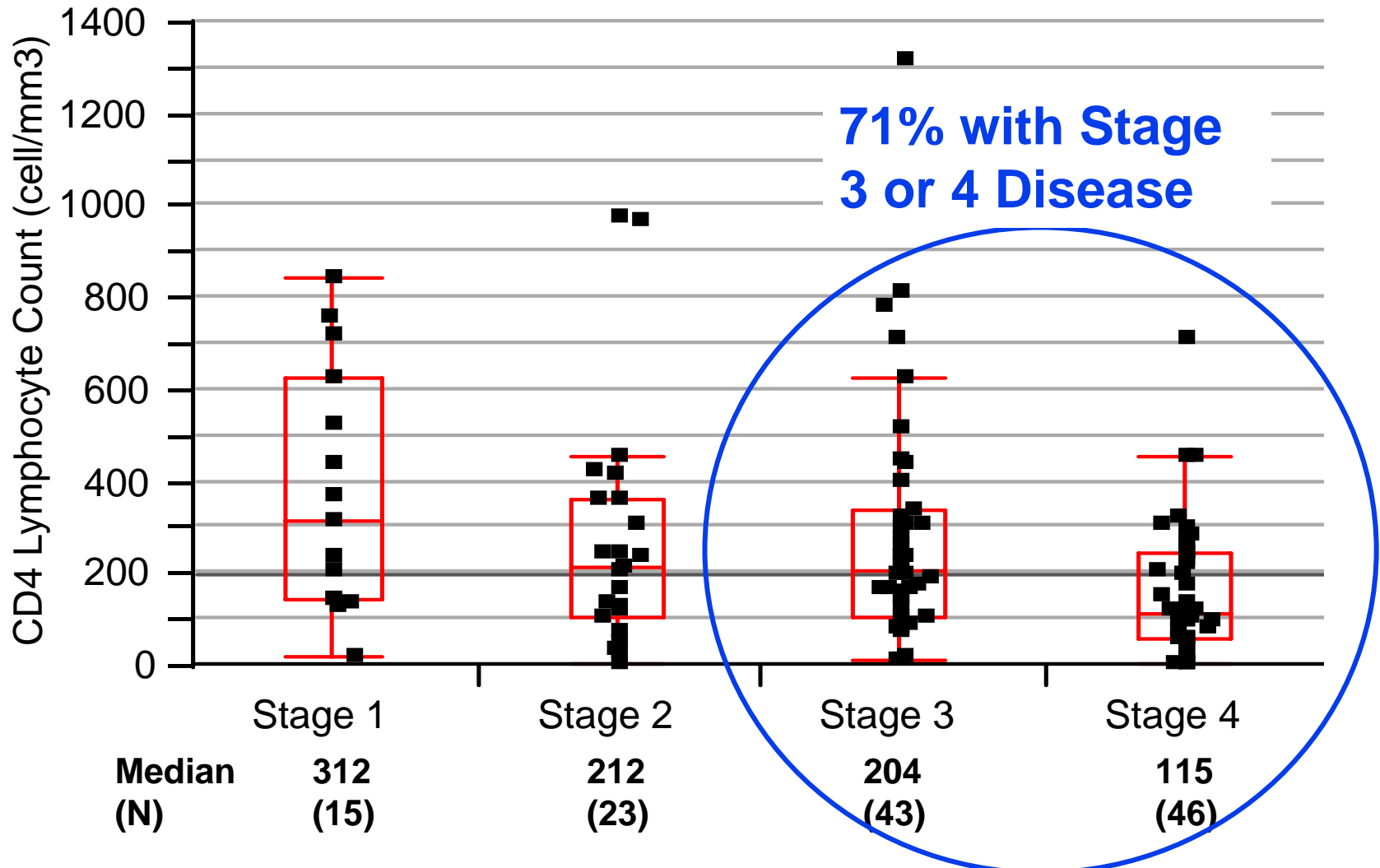
1,185 Men

9.1% HIV+

1,499 Women

24% HIV+

CD4 Lymphocyte Count by WHO Clinical Stage Among 127 Persons Recently Diagnosed at VCT Sites in Moshi



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KIWAKKUKI HIV
Testing Program (VCT)



- Women >> Men
- Advanced Disease at Diagnosis
- Free testing - ↑ Testing volumes

Int. J. STD & AIDS, in press;
Am J Pub Health, in press;
Abstract Z-131, 12th CROI Boston, 2005

Kibong'oto National Tuberculosis Hospital

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- Women >> Men
- Highly symptomatic

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Kibong'oto National Tuberculosis Hospital

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TB and HIV Immune Reconstitution Syndrome Trial (THIRST)

- Design: Open label, N=70, x 104 weeks
- Population: AFB+ / TLC <1200 / Kibongoto
- 1° Endpoint: IRS Events
- 2° Endpoints: CD4, VL



Weeks from Initiation of Anti-tuberculosis Therapy

Progress Report

- First subject enrolled June 2004
- 69 Subjects randomized to date
- Anticipate full enrollment this week

Interim Safety Analysis - April 2005:

- SAEs requiring medication changes:
 - Anemia (2): ZDV → d4T
 - Suspected ABC HSR (4): ABC → TDF
- 2 deaths (not study related)
- No subjects lost to follow-up

| Study visit | Entry (N=48) | Week 12 (N=25) | Week 24 (N=10) | Week 36 (N=6) |
|--|-----------------|-------------------|-------------------|------------------|
| Mean CD4 Lymphocyte count Cells/mm ³ (Range) | 107 (9-84) | 133 (42-446) | 154 (101-208) | 170 (138-208) |

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Abstract MoPe11.10C21, 3rd IAS Meeting, Rio de Janeiro, 2005.

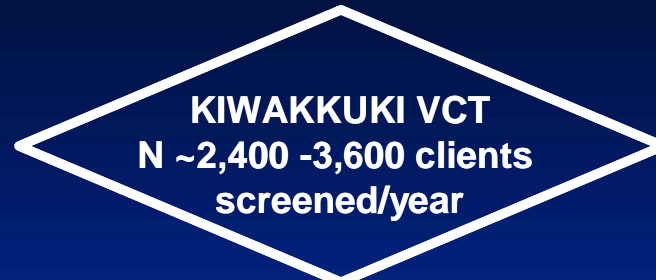
Kibong'oto National
Tuberculosis Hospital
(THIRST)



- Accessible co-infected pts
- Outstanding follow-up rates
- Growing clinical trials expertise

ISAAC Protocol 001: Community-based Longitudinal Study of HIV-associated Events among Individuals Recently Diagnosed with HIV

001-A



HIV-seronegative*

HIV-infected
(seroincident)*

Repeat test q 3 mo x 2

001-B

Scheduled Surveillance:

Baseline: sociodemographics, CD4, HIV RNA, serum

Q 3 months: symptoms/medications

Q 6 months: CD4; archive plasma, serum, cells

X 36 months

Reactive Surveillance:

Screen for sentinel symptoms for entry into other ISAAC protocols (e.g. fever, diarrhea, cough)

500 HIV-
infected
subjects

500 HIV-
seronegative
subjects

ISAAC 002

- Etiology of fever studies
 - Adults with and without HIV
 - Children with and without HIV
 - Blood culture and diagnostic techniques
 - Isolates for other ISAAC studies

KCMC-Duke University Kilimanjaro AIDS Program

A Collaborative Program between Duke University
and KCMC, KIWAKKUKI, and Kibong'oto



