Partnering along the path to deliver better treatments for visceral leishmaniasis

Ongoing Studies on Improved Treatments
Tuesday, February 3, 2009 - Auditorium 1: 11.30-13.30

DNDi
Drugs for Neglected Diseases initiative

LEAP
Leishmaniasis East Africa Platform
Leishmaniasis East Africa Platform (LEAP)

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4th World Congress on Leishmaniasis
February 3-7, 2009
Lucknow, INDIA
LEAP – Where We Started

• Formed in August 2003 in Khartoum, Sudan
• Facilitated by DNDi office based in KEMRI
• First task was to determine regional needs for VL
• Funded by DNDi
The LEAP Team

(Photo courtesy of Dr M Wasunna)
A group of scientists and institutions working on developing clinical trial capacity to bring new treatments to patients

SUDAN: 3 sites (Kassab, Dooka, Um El Kher)
IED, Univ. of Khartoum
Federal Ministry of Health

ETHIOPIA: 2 sites (Gondar, Arba Minch)
Addis Ababa Univ.
Gondar Univ.
DACA
Ministry of Health

UGANDA: 1 site (Amudat)
• Makerere Univ.
• Ministry of Health

KENYA: 2 sites (Nairobi, Kimalel)
KEMRI
Ministry of Health

MSF
IOWH -India
IDA
TDR
Industry partners

Leishmaniasis East Africa Platform (LEAP)
LEAP Objectives

- Evaluate, validate and register improved treatment options for VL in East African region
  - Ethiopia, Kenya, Sudan and Uganda
- Strengthen capacity for treatment, evaluation and clinical research in the region
VL in East Africa

• Sudan
  – estimated annual incidence: 15 000 – 20 000 cases
  – PKDL occurs in up to 50% of VL patients
• Ethiopia
  – estimated annual incidence: 4 000 cases
  – VL is prevalent mostly in arid lowland areas
  – up to 40% of cases reported in Ethiopia are HIV co-infected
• Kenya
  – estimated annual incidence of 4 000 cases
  – prevalent in semi-arid, poor and remote districts where termite hills are colonized by the sandfly vector
• Uganda
  – up to 200 cases treated/yr. Some cases from Kenya
Impact of VL in Eastern Africa

- Mainly disease of children (over 60%)
- Malnutrition common
- Prevalent among the poor
- Population displacements have exacerbated the spread of the disease
- Population mortality of VL can be up to 36%
- Low economic and agricultural activity = poor social economic activity
- Scarce or non-existent treatment options

(Photo courtesy of Prof. A Hailu)
Determining Regional Needs - Leishmaniasis

- Current treatment concerns – safety, resistance, inconvenience
- VL varies by region and therefore may need more than one approach?
Opportunities: Leishmaniasis

- Pursue regional approach: Clinical trial network involving health and regulatory authorities
- Consensus to prioritise needs e.g. focused clinical trials
- Complete evaluation of SSG/PM/combination
- Need to evaluate combination therapy with AmBisome®
- Develop joint proposals
LEAP’s Activities

• Determining unmet treatment needs
  o Safe
  o Efficacious
  o Short course
  o Affordable
  o Registered
  o Field adapted

• Testing new treatments for VL in East Africa
  o Paromomycin clinical trial for registration

• Capacity strengthening
  o Training
  o Infrastructure
Achievements of LEAP

- LEAP 0104 Paromomycin multi-centre clinical trial & AmBisome® combination trial for Africa
- Strengthening clinical trial capacity in Ethiopia, Kenya, Sudan and Uganda
  - Personnel, e.g.
    - GCP/GLP training for investigators, nursing staff and laboratory technologists
    - Establishment and training of DSMB
    - Training of clinical trial monitors
  - Communications, e.g.
    - Regular communications – biannual meetings
  - Infrastructure, e.g.
    - Arba Minch in February 2006; Gondar in May 2008
    - Building of 2 research and treatment centres in Ethiopia
Gondar, Ethiopia – old ward

(Photo courtesy of S Ellis)
Gondar, Ethiopia – new ward inaugurated May 2008
Arba Minch, Ethiopia
Kassab, Sudan
Amudat, Uganda
Kimalel, Kenya
Advantages of LEAP Platform

• Strengthened clinical research capacities
• No duplication of effort – time taken to get meaningful results minimised
• Registration of much needed, newer VL drugs in all member countries
• Sourcing of research funds easier
• Owned by members (hence, trusted by community)
  – Governments will readily give support because they are members of LEAP
• Translating research results into policy
Challenges

- Communication
- Different languages
- Poor infrastructure
- Different regulatory environments
- Importation of trial equipment and drugs
- Climate & logistics
- Funding
Moving Forward...

- Complete ongoing study in 2009
- Begin dose-finding study to determine optimal single dose of AmBisome® for use in combination
- Begin Phase II study evaluating combinations
  - SSG plus single dose AmBisome®
  - Miltefosine plus single-dose AmBisome®
  - Miltefosine alone
Concluding Remarks

- Solid gains have been made
- Clinical research capacity strengthened
- Regional partnership: LEAP a success story
- Many patient needs still unmet
Acknowledgements

• LEAP members
• Patients and communities
• Research teams
• Ministries of Health, regulatory authorities, cooperating institutes
• Donors
• DNDi
Asante Sana
What’s Next?

• Paromomycin
  – Complete ongoing study in 2009
    • recruiting: Ethiopia, Kenya, Sudan, Uganda
  – What’s the proper use?

• Continue research for new treatment combinations across region
  – AmBisome® dose-finding
  – Phase II combo: AmBisome®, SSG, miltefosine
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