Partnership in research for Human African Trypanosomiasis

Onchocerciasis research network meeting, 3-4 October 2018
HAT Platform members

Founded: 2005 in Kinshasa, Democratic Republic of the Congo

HAT National Control Programs (MoH) and Research Institutions / Universities of the most affected endemic countries

- International Research Groups in non endemic countries:
  - DNDi
  - FIND
  - Swiss TPH
  - ITM Antwerpen
  - IRD (France)
  - Edinburgh University

- International NGO: (MSF)

- Observer: WHO / OMS

Networks: EANETT
Challenges to overcome

- Low sensitivity and specificity of screening and diagnostic tests

- Toxicity of medicines (Melarsoprol: 5-10% among stage 2 HAT patients with serious adverse effects (Arsenical encephalopathy ++++) for which 50-100% of death
What are challenges to overcome in onchocerciasis control?

Therapeutic tools

- Ivermectin: safe and effective drug (Nobel prize 2015 for its creators)
- But only kills juvenile worms living adult worm alive in the body (for many years)
- MDA programmes need to be repeated for the entire lifespan of adult worms (may be more than 10 years)
- Would it be possible and necessary a compound with macrofilaricidal activity (that kills adult worm) to be used as a safe and adapted drug in individual patients and later as MDA if needed

Diagnostic tools ???

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HAT platform: Objectives

Specific Objectives

- Strengthen research capacity
- Improve research landscape
- Develop operational research
- Support ethics committees
- Mobilize internal and external resources
- Develop partnership with other research networks
- Ensure internal and external communication

Expected results

- Effective (stage 1&2), better, tolerated and preferably oral medicines usable at remote areas
- Sensitive, simple thermostable screening tests, easy to use at remote areas

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**Contribution to the development of and access to a new treatment combination and screening tests**

- **History of treatment**
  - 13 years ago: Melarsoprol: Toxic, resistance
  - Eflornithine: Unavailable
  - Depuis 2009: NECT traitement amélioré
  - 2018?: Fexinidazole Traitement oral (10 jours)
  - Future objective: Acoziborole Single-dose, oral treatment

- **Towards better-tolerated, oral and usable medicines at the village level**

- **Towards the elimination of HAT**

- **History of screening & diagnostic tools**

- **Strategies alternatives, transboundary project, DiTec HAT**

- **Towards easy to use, sensitive, thermo-stable screening tests for use in remote areas**

DNDi
Drugs for Neglected Diseases Initiative

Onchocerciasis research network meeting
## 1st Challenge: Strengthen research Capacity

OVER 400 PEOPLE TRAINED IN 22 TRAINING SESSIONS

<table>
<thead>
<tr>
<th>TRAININGS CONDUCTED AND NUMBER OF PEOPLE TRAINED</th>
<th>VENUE AND YEAR</th>
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</thead>
<tbody>
<tr>
<td>Training of physicians on clinical examination of the patient (25)</td>
<td>Kinshasa 2012</td>
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<tr>
<td>Training of clinical research monitors (13)</td>
<td>Kampala 2008</td>
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<tr>
<td>Participation to ICAT (29)</td>
<td>Kinshasa 2014, Tunis 2005, Kampala 2017</td>
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<tr>
<td>HAT training in Dinamadjı health district (30)</td>
<td>Dinamadjı 2015</td>
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<tr>
<td>HAT Clinical training in South Sudan (41)</td>
<td>Juba 2015</td>
</tr>
<tr>
<td>Training of Guinean physician in DRC (1)</td>
<td>Kinshasa 2014</td>
</tr>
<tr>
<td>Training of laboratory technicians from South Sudan in DRC (3)</td>
<td>Kinshasa 2016</td>
</tr>
<tr>
<td>Training of Mobile team technicians on HAT diagnostic in DRC (36)</td>
<td>Kinshasa 2016</td>
</tr>
<tr>
<td>Waste management training in clinical trial sites in DRC (182)</td>
<td>Mushie, Vanga, Bagata and Masi 2016</td>
</tr>
</tbody>
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Other trainings

Monitors training, Kampala

Training of Dr Mubarak on health ethics, Amsterdam, 2017

South Sudan lab technicians training, DRC 2016

HAT mobile team lab training, Jan 2016, DRC
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- Training of Guinean laboratory technician, Dubreka site, 24th January 2018, Kinshasa

- ICAT 7, Kampala, August 2017
2nd challenge: Improve research landscape

- Infrastructures (patients rooms, toilet, incinerators etc)
- Equipment of facilities involved in clinical trials
3rd challenge: support ethics committees

Ethic committe workshop, Kinshasa, DRC, 2010

Bioethic guidelines Review, CNERS, Conakry, Guinea, April 2018
4th challenge  communication

- Participation to international meeting
  - 4 scientific meetings jointly organized with EANETT

Next  5th joint HAT platform –EANETT  scientific meeting, October 2018, Kampala, Uganda

- Steering committee meetings are held annually
- Participation to the International Scientific Council on Research and Control of Trypanosomiasis and others scientific meetings

- Contact with regulatory authorities and ethics committees
- 19 HAT platform newsletters published
Participation to international meetings

ISCTRC, Zambia, Sept 2017

CIPIP, Kinshasa, Dec 2016

HAT platform steering committee meeting, Conakry, Sept 2016

4th joint international meeting HAT platform-EANETT, Conakry, 20-22 Sept 2017
Other activities
Support other operational research project on the field

Luanda, May 2018, Angola

Transboundary project of HAT elimination between DRC, Congo, Angola (FIND)

Kinshasa, July 2017, DRC
Support strategic review of HAT program (DRC, Guinea, Congo, Chad)

Conakry, Guinea, Dec 2017

Brazzaville, Congo, May 2013
Experience exchange between member countries

Visit of Dr Camara, PNLTHA Guinea in DRC, June 2018  Masimanimba & Kikwit

Clinical trial site, Dubreca, 2018  Guinea

Public health laboratory, Brazzaville 2017
Field visits to sensitize or encourage health workers ongoing research projects

HAT centre, Bodo, 2018, Chad

Mobile team, 2018, Chad

HAT centre, umugo, 2017 Uganda

Uige province, Angola 2016

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Revitalize national HAT platform meetings

Brazzaville, Congo, Sept 2017
Kampala, Uganda, Aug 2017
Luanda, Angola, Jan 2017
Kinshasa, DRC, Sept 2017

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National HAT platform meetings

Conakry, Guinea, Dec 2017

Luanda, Angola, May 2018

Moundou, CHAD, May 2018

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HAT platform experience can contribute to other NTD studies as filariasis clinical trials

- Implementation of clinical trial sites
- Development of networking
Phase 1b pre-study visit in Ghana, May 2017

Workshop Onchocerciasis in Ghana 21-22 Sept 2017,
Conclusion

- HAT Platform works in countries needing to upgrade research capacities and international networking on NTDs
- It remains much to do to promote clinical research in Central and West Africa
Merçi
Thank you