



Call to Action

Chagas Disease in the Americas:

Improving Access and Tools for Patient Diagnosis and Treatment

Friday, October 2, 2009, 9:00 AM – 5:30 PM

UCLA Faculty Center, California Room, 480 Charles Young Drive East, Los Angeles, California, USA

On October 2, 2009 in Los Angeles, Médecins Sans Frontières/Doctors Without Borders (MSF), the Drugs for Neglected Diseases initiative (DNDi), and the UCLA Program in Global Health convened a one-day symposium on Chagas disease, bringing together clinical researchers, drug developers, health professionals, policymakers, donors, and activists. Conference participants agreed that there are urgent needs to scale up diagnosis and treatment of the disease and increase research and development (R&D) for better medical tools.

Discovered 100 years ago, Chagas disease kills an estimated 14,000 people every year and remains the leading parasitic killer in the Americas. An estimated 100 million people are at risk while 8-15 million are already infected[1]. Traditionally endemic in Latin America, Chagas now affects people in North America,[2],[3] Europe, and Asia. Unfortunately, little awareness of Chagas disease exists, even among health care professionals worldwide.

Over the last 20 years, vector control programs in the Southern Cone of the Americas have reduced vector-borne *Triatoma infestans* transmission and changed the epidemiology of Chagas infection. While important foci of transmission remain (linked to poverty, poor geographic accessibility, and varying vector habitats), non-vector borne infections such as congenital transmission, blood transfusion, and oral transmission have received increased attention.

While current therapy for Chagas disease is limited to two drugs, nifurtimox and benznidazole, treatment must be made more widely available. Nonetheless, side effects with these decades-old drugs are common and have to be closely managed, so new, safer, and more effective drugs are urgently needed.

Considering the unmet needs of millions, it is time for a variety of actors to mobilize and push urgent measures and concrete solutions. Participants of the Los Angeles symposium call on governments, intergovernmental agencies, researchers, drug and diagnostic developers, nongovernmental organizations, patient groups, and funders to take action in two key areas:

1. Scale Up Diagnosis, Treatment, and Patient Access to Care

Millions of people infected with Chagas disease are not tested and do not receive treatment. Urgent actions to increase the medical response must be taken to:

- Implement routine testing, diagnosis, and treatment in health care systems, treating all children and offering treatment to adults
- Increase access to the existing drugs, benznidazole and nifurtimox, as well as diagnostic tests
 - Obtain regulatory approval of both drugs in endemic and non-endemic countries. This will require coordination and harmonization of regional regulatory efforts and inclusion of neglected tropical diseases, specifically Chagas, in the WHO/PAHO prequalification process.
 - Reinforce diagnostics and drug procurement systems and supply chains. This will require inclusion of both drugs on countries' essential drugs lists and utilization of findings from PAHO's drugs-needs forecasting.
 - In endemic countries, implement the PAHO Strategic Fund (revolving fund) to secure long-term affordability of drugs, rather than relying on a system based on donations
 - In non-endemic countries, explore new approaches, like differential pricing
 - Ensure access and affordability of future new formulations, including pediatric benznidazole

- Formalize and promote international and regional clinical guidelines for the use of the existing drugs for all stages of the disease
- Ensure monitoring and evaluation systems to collect more and better epidemiologic data to determine prevalence and incidence
- Research models of care delivery, including community involvement, for prevention, diagnosis, and treatment integrated into health systems of endemic settings
- Develop programs to educate health care providers and affected communities about diagnosis and treatment, and support patient advocacy groups
- Increase political commitments for patient care
 - Demand governments recognize the Chagas burden in their countries and allocate financial and human resources accordingly
 - As the leading parasitic killer in the Americas, increase international funding accordingly
 - Implement the recently adopted PAHO resolution on Chagas
 - Adopt a WHA resolution on Chagas, including treatment, at the 2010 World Health Assembly
 - Include neglected diseases, including Chagas, in the future US Global Health Initiative

2. Boost Research and Development for New Tools

- Existing tools available for health staff and national programs are lacking or are inadequate, while the R&D pipeline for Chagas disease remains almost empty. A recent study showed that less than 0.5% (\$10MM) of all worldwide neglected disease R&D funds was devoted to Chagas disease in 2007, and over half was spent on basic research.[4] There is an urgent need to develop new treatments and diagnostics that will be safer, more effective, affordable, and adapted to patient needs. Actions and measures to boost and sustain innovation must be taken to:
- Foster innovation for new medical tools
 - Continue development of new treatment regimens or combinations that shorten treatment duration
 - Develop new diagnostic tools, including a definitive test for cure and a better rapid diagnostic test
 - Facilitate partnerships for access to knowledge of new classes of compounds and existing drugs marketed for other indications
- Increase capacity for clinical research (eg, platforms, partnerships, academia) to evaluate and guide the development of new tools and facilitate their use
- Support new approaches for the regulation and approval of new treatment tools, including fast-track mechanisms and use of existing biomarkers, to speed up access to new discoveries
- Increase public and private funding for Chagas-related R&D
 - Push mechanisms that include investments for all stages of R&D for new diagnostics and drugs in both the public and private sectors, including in endemic countries
 - Pull mechanisms like securing the market through the PAHO Strategic Fund (revolving fund) for endemic countries and differential pricing for developed countries, and exploring innovative incentives to catalyze R&D (eg, prize funds, FDA priority review vouchers, etc)
- Commit political leadership
 - Adopt a WHA resolution on Chagas at the 2010 World Health Assembly that addresses the need for more R&D
 - Implement the recent PAHO resolution for elimination of neglected diseases and other poverty-related infections

[1] PAHO. Estimación Cuantitativa de la Enfermedad de Chagas en las Americas. Uruguay: Montevideo, Oct.2006

[2] Schmunis G. Epidemiology of Chagas disease in non endemic countries: the role of international migration. Mem Inst Oswaldo Cruz 2007;102(Suppl I):75-85.

[3] Bern C, Montgomery SP. An estimate of the burden of Chagas disease in the United States. Clin Infect Dis 2009;49:e52-4.

[4] Moran M et al. Neglected disease research and development: how much are we really spending? PLoS Med 2009;6:e30.