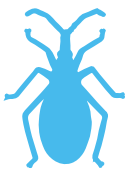




“ Since there's now a treatment, it's time for those who haven't taken the test to take it. I tell this to everyone, because health is so important. ”

José Fermín Pérez Barbosa, a farmer in Tamuría, Casanare district, Colombia.



# CHAGAS DISEASE

## IN SEARCH OF SHORTER, BETTER TREATMENTS TO STOP A SILENT KILLER

Chagas disease is endemic in Latin America but present also in North America, Europe, Japan, and Australia. Caused by a parasite transmitted by biting insects known as 'kissing bugs', it can also be transmitted from an infected woman to her child during pregnancy. As most people typically show no symptoms, most are unaware they are sick. Up to a third of people infected will suffer cardiac damage that becomes evident only many years and even decades later and can lead to progressive heart failure or sudden death.



**6-7** MILLION people infected by the *T. cruzi* parasite that causes Chagas



FEWER THAN **10%** diagnosed – and only a small number receive the treatment they need



**70** MILLION people are at risk

## THE TREATMENT CHALLENGE

There are only two drugs available to treat Chagas disease, both discovered half a century ago. The most common, benznidazole, is effective, but treatment lasts eight weeks, and two out of 10 people who start the treatment can't complete it due to the side effects.

**DNDi aims to deliver new, safer, more affordable and effective treatments for people affected by Chagas disease.** DNDi is also focused on improving access to diagnosis and treatment using existing tools.

### A shorter and safer treatment regimen for Chagas disease?

Treatment with benznidazole is effective but long, with sometimes serious side effects. To explore whether the side effects were related to dose or treatment duration, DNDi decided to test regimens with less exposure to benznidazole, either due to shorter treatment, lower doses, or both in a study called 'BENDITA'.

The interim results of the study, which was conducted in Bolivia from 2016 to 2018, are now available. A two-week course of treatment with benznidazole seems particularly promising: significantly shorter than the standard eight-week treatment, it showed 83% efficacy, and none of the patients assigned to this group had to discontinue treatment due to side effects.

A shorter, safer regimen could improve patients' adherence to treatment and would be cheaper and make it more acceptable to physicians. DNDi will now continue to work with national programmes, partners, and health ministries to confirm these results and encourage the necessary steps to register the new regimen. DNDi also continues to work on pre-clinical and clinical research to discover, develop, and test new drugs and drug combinations to treat Chagas.

### Breaking down the barriers: improving access to treatment

The gap between the number of people with Chagas disease and those on treatment is abysmal. To address this, DNDi is developing models to enable treatment scale-up, in close collaboration with health ministries and affected communities.

This approach was first implemented in Colombia with the Ministry of Health and Social Protection. Despite the

estimated five million people at risk of Chagas in Colombia, only 1% had been screened for the disease. In five affected communities, DNDi provided technical and organizational support for a patient-centred roadmap, which greatly simplifies the diagnostic process and makes treatment more accessible in primary healthcare facilities.

Preliminary results show a ten-fold increase in the number of people screened, with wait times for confirmatory test results reduced from over one year to less than two weeks. In 2018, new pilot projects were also launched in Guatemala and planned for Brazil.

### Santa Cruz letter calls for urgent action against Chagas disease

After too many years of neglect, researchers and patients had had enough. In November 2018, members of the DNDi-supported Chagas Clinical Research Platform and the Global Chagas Coalition sent a letter to 21 endemic countries calling for action:

1. Expand access to diagnosis and treatment within public health systems wherever needed;
2. Increase investment in research for new, safer, and more effective treatments;
3. Improve disease surveillance for better data and conduct a long-term patient cohort study to inform and guide research priorities;
4. Establish an International Day of People Affected by Chagas Disease on April 14<sup>th</sup>.

At the World Health Assembly in Geneva in 2019, April 14<sup>th</sup> was named World Chagas Day.