

Table 1: Summary of relevant trials of Benznidazole and/or Nifurtimox in children

Author/Reference	Patient Population	Study Design	Dosing Regimen	Patients	Therapeutic Effect	Safety
Moscattelli et al. 2019 ¹⁰⁹	IP* of CD <20 years of age Argentina	Prospective cohort study,	BZN: 5-8 mg/kg/day (mean 6.4 mg/kg/day) bid (n= 76) or tid (n = 31) Mean length 60 days	107 enrolled 91 completed	After 3 year follow-up, PCR turned negative on 99% of patients. Out of 66 patients with initial positive F2/3-ELISA that completed: 72.7% became negative. (33.3% at end of treatment, 13.3% at 6 months, 11.1% at 9 months, 8.9% at 26 months, 20% at 36 months and 13.4% at 42 months)	Benznidazole was well tolerated and ADRs were mild, not requiring treatment suspension
Robello et al. 2019 ¹⁵³	IP* of CD 5-14 years old Bolivia	Clinical trial	BZN: 5 mg/kg per day for 60 days	55 total (20 enrolled/35 completed)	Infected children had higher fecal Firmicutes (Streptococcus, Roseburia, Butyrivibrio, and Blautia), and lower Bacteroides and also showed some skin -but not oral- microbiota differences. Treatment eliminated the fecal microbiota differences from control children, increasing Dialister (class Clostridia) and members of the Enterobacteriaceae, and decreasing Prevotella and Coprococcus, with minor effects on the oral and skin bacterial diversity	
Albareda et al. 2018 ⁴⁷	IP* of CD 5-16 years old Argentina	Clinical trial	BZN: 5 mg/kg per day for 60 days NF: 10 mg/kg per day of for 60 days (drug source not stated)	Total 52 BZN: 45 NF: 7	Treatment with BZN or NF induced a decline in T. cruzi-specific IFN-g- and IL-2 Posttreatment changes in several of these markers distinguished children with a declining serologic response suggestive of successful treatment from those with sustained serological responses in a 5-year follow-up study.	Mild ADRs were observed in 8 out of 40 (20%) subjects under treatment with BZN, while 5 subjects (12.5%) showed severe ADRs that resulted in treatment suspension. Cutaneous rash and dermatitis were the main ADRs with BZN treatment, whereas NF was well tolerated. The five children who received incomplete BZN dosing were then treated with NF
Altcheh et al. 2014 ⁸	IP* of CD* 2-12 years of age (mean 7.3 years) Argentina 55% Male	Prospective population pharmacokinetic (PK) cohort	BZN: 5-8 mg/kg/day b.i.d. for 60 days (mean dose = 6.4) (Radanil®)	38 enrolled 37 completed	All patients had negative T. cruzi PCR at Day 60 and at 1.5 year follow-up with decreased (compared to pre-treatment) T. cruzi antibody titers.	Four (10%) patients had ADRs: 1 mild rash, 1 moderate prurigo, 1 generalized rash without systemic involvement, and 1 moderate eosinophilia. All ADRs subsided with symptomatic treatment and temporary drug discontinuation, and all patients recovered eventually.
Rumi et al. 2013 ¹⁵⁴	IP* of CD* <16 years of age (range 3-15 years) Argentina	Clinical Trial	BZN: 5 mg/kg/day b.i.d. for 60 days (drug source not stated, assumed Roche product).	57 treated 45 followed-up	At 2-year follow-up (subset at 5-year follow-up) almost no patient demonstrated ELISA seroconversion (however, approximately half with reduced titers) and almost all patients was PCR negative.	Safety reported from 1 of 2 sites with 32 patients. ADRs in 30% of patients. Dermatological, gastrointestinal and neurological most frequent.
Chippaux et al. 2013 ¹⁵⁵	Newborn children with cCD Bolivia	Randomized, placebo-unblinded controlled trial	BZN: 5 mg/kg/day b.i.d. for 60 days versus 7.5 mg/kg/day once daily for 30 days (Radanil®) Tablets ground up and 8, 10, 13, and 15 mg of powder filled into capsules.	63 BZN 5 mg/kg/day 60 days 61: BZN 7.5 mg/kg/day 30 days	Microhematocrit method used for diagnosis (all positive pre-treatment) for 1 and 2 month post-treatment follow-up (all negative). ELISA serology used at age 8-9 months follow-up (all but 1 patient negative).	5 mg/kg/day: 38% of patients with ADRs. Primarily gastrointestinal and dermatological (5%-10% frequency). 7.5 mg/kg/day: 31% of patients with ADRs. Primarily gastrointestinal and dermatological (5%-11% frequency) Tolerability similar for both treatment groups. Treatment temporarily stopped for most ADRs (<3 days) in both treatment groups.
Altcheh et al. 2011	IP* of CD 10 days to 19 years of age	Prospective	BZN: 5-8 mg/kg/day b.i.d. or t.i.d. for 60 days (mean dose = 6.4) (Radanil®)	107 enrolled	Treatment response was high and persistent, with over 90% of children who completed 60 days of treatment presenting a steady decrease or	No serious ADRs. 80.6% mild, 16% moderate, 3.2% severe (generalized rash). 7 patients (mostly older) discontinued due to ADRs. 41% had ADRs related to treatment: Dermatological = 21% CNS = 9%

References Table 1:

*IP: Indeterminate phase