Current Panorama of Cutaneous Leishmaniasis Treatment Options

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Drugs for Neglected Diseases initiative (DNDi)

Developing medicines for the world’s poorest.
Spectrum of CL lesions and Tx. Options

Diseases Severity

No Tx  Local topical  Systemic oral  Syst. Parenteral  Combinations
## Limitations of CL Treatment Options

| Systemic | Pentavalent antimonials | 20 day IV/IM treatment, painful injections  
High toxicity: pancreatitis, hepatitis and cardiotoxicity (arrhythmias) |
|----------|-------------------------|---------------------------------------------------------------------|
|          | Miltefosine             | The only approved oral treatment for CL  
28 days treatment, low compliance, prompt to develop resistance  
Teratogenic, GI toxicity, hepatof-renal toxicity  
Cost, availability |
|          | Pentamidine             | Painful injections  
Renal and cardiac toxicity, hyperglycemia, B/P alterations  
MAINLY for *L. guyanensis* |
| Topical  | PMM + MBCI              | Not available anymore  
Variable efficacy, local AEs G-III |
|          | Intrallesional antimonials (Mainly OW) | Painful injections, 1-2 per week for up 5-12 weeks  
Usually used in combination with liquid nitrogen  
Only for patients with 1-2 lesions |
|          | Liquid Nitrogen (Mainly OW) | Only available at few facilities due to storage problems  
1-2 applications per week for up 5-12 weeks  
Usually used in combination with liquid nitrogen  
Only for patients with 1-2 lesions, potential cosmetic problems |
|          | Thermotherapy           | 1-2 Applications  
2nd G burns, Only for patients with 1-4 lesions  
Local anaesthesia, potential cosmetic problems |
## CL Landscape / DNDi Activities 2016

### Research
- **Screen**
  - Oxabaroles
  - Nitroimidazoles
  - Aminopyrazoles
- **Hit to Lead**
  - Pre-clinical
    - Repurposing Oral drugs
    - DNDi 0690
    - DNDi 6148
    - CpG-D35
- **Lead Opt.**

### Translation
- **Phase I**
  - D-121
  - Anfoleish
  - TT + Milte
  - Top Lip Amp B
  - NU- Shiunko

### Development
- **Phase IIb/III**
  - DNDi
  - Other
  - DNDi in collaboration
- **Registration**
  - WRAIR PMM
- **Implementation**
  - Access
DNDi’s CL Objective

To achieve short, safe, non-invasive, efficacious, affordable and field-friendly treatments for CL or at least for lesions caused by *L. tropica* and *L. braziliensis*.