

VL Surveyor Methodology

The visceral leishmaniasis (VL) Surveyor maps all the relevant registered and published VL clinical trials looking at efficacy of pharmaceuticals, conducted globally to date.

Created in 2016, the Surveyor includes data derived from a systematic review¹ conducted in the same year. In addition to the data from this systematic review, the Surveyor is regularly updated with details of newly-registered and published trials, obtained from frequently-updated systematic searches scheduled every 6 months. The latest update search was conducted on 17 Nov 2021 and the Surveyor currently contains summary data from 182 clinical trials registered and/or published since 1983 (over 35,000 patients).

The methodology used in the review and for the regular updates of the Surveyor is elaborated below.

Literature search:

The following clinical trials registries and publication repositories were queried for all registered VL trials to date:

- clinicaltrials.gov
- WHO International Clinical Trials Registry Platform (ICTRP)
- The Cochrane Library and PubMed
- PubMed

To conform to current systematic review best practice, all update searches from January 2016 forward were expanded to include results from these additional repositories.

- Embase
- Scopus
- Global Index Medicus
- IMEMR
- IMSEAR
- LILACS
- Web of Science

Details of the search strategy used by the database can be found [below](#).

Eligibility screening:

- Publications and trials describing studies on cutaneous leishmaniasis, post kala-azar dermal leishmaniasis (PKDL), canine VL, vector control, nets, prevalence estimation, diagnostic tests, vaccines or prophylaxis were excluded.
- Non-intervention studies, case reports, retrospective studies and individual studies enrolling fewer than six patients were also excluded.
- No restriction was placed on the date or language.
- Screening was performed using Covidence systematic review software.²

¹ Bush JT, Wasunna M, Alves F, Alvar J, Olliaro PL, Otieno M, et al. (2017) Systematic review of clinical trials assessing the therapeutic efficacy of visceral leishmaniasis treatments: A first step to assess the feasibility of establishing an individual patient data sharing platform. PLoS Negl Trop Dis 11(9): e0005781

² Veritas Health Innovation, Melbourne, Australia. Available at www.covidence.org

Visualisation details:

- Each trial is represented by a pin on the map corresponding to the study site. Each pin can be clicked to produce a pop-up box, which presents more information about the trial. Within the pop-up boxes there are links to the publications which link directly to PubMed. The pins are coloured according to the status of the trial (e.g. **published**, **completed**, **active**, **withdrawn**, **unknown** and **terminated**).

The information for the unpublished trials has been obtained from the respective clinical trial registries.

- The filters on the left-hand side can be enabled to restrict the trials according to their status, the drugs used, the country they were conducted in, the diagnostic method used, the inclusion of participants with HIV co-infection and the trial design.
- Below the map, there are further filters that allow the user to explore the trials performed at specific time periods and restrict according to the number of patients enrolled in trials.
- The "Get the data" button downloads a spreadsheet containing all the data presented on the VL Surveyor along with an open database license agreement.
- This is a fast-evolving field of research and therefore the rules and filters will be adapted to reflect new information as it is received.

If you have any comments or suggestions in regards to the VL Surveyor, please let us know at vl@iddo.org.

- 17 parallel group\$.ti,ab. (23261)
- 18 (crossover or cross over).ti,ab. (97631)
- 19 ((assign\$ or match or matched or allocation) adj5 (alternate or group\$1 or intervention\$1 or patient\$1 or subject\$1 or participant\$1)).ti,ab. (302405)
- 20 (assigned or allocated).ti,ab. (355650)
- 21 (controlled adj7 (study or design or trial)).ti,ab. (316500)
- 22 (volunteer or volunteers).ti,ab. (233422)
- 23 trial.ti. (267888)
- 24 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23 (4285150)
- 25 5 and 24 (1387)
- 26 (pentamidine or ambisome or amphotericin or paromomycin or miltefosine or pentavalent or sodium or sitamaquine or azole* or allopurinol or atovaquone or ketoconazole or fluconazole or metronidazole).mp. (957377)
- 27 5 and 26 (3490)
- 28 25 or 27 (4481)
- 29 (exp animal/ or animal.hw. or nonhuman/) not (exp human/ or human cell/ or (human or humans).ti.) (6108726)
- 30 28 not 29 (3496)

- This search strategy uses the Cochrane RCT filter for Embase.
<https://www.cochranelibrary.com/central/central-creation>

Scopus

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(( TITLE-ABS-KEY ( "visceral leishmaniasis" OR "kala azar" OR "black fever" )) AND (( TITLE-ABS-KEY ( random* OR rct OR placebo OR allocat* OR crossover* OR "cross over" OR trial OR ( doubl* W/1 blind* ) OR ( singl* W/1 blind* ) ) ) OR ( TITLE-ABS-KEY ( control* W/1 trial* ) ) OR ( TITLE-ABS-KEY ( cohort* ) ) ) ) OR (( TITLE-ABS-KEY ( "visceral leishmaniasis" OR "kala azar" OR "black fever" )) AND ( TITLE-ABS-KEY ( pentamidine OR ambisome OR amphotericin OR paromomycin OR miltefosine OR pentavalent OR sodium OR sitamaquine OR azole* OR allopurinol OR atovaquone OR ketoconazole OR fluconazole OR metronidazole ) ) ) AND ( EXCLUDE ( EXACTKEYWORD , "Animals" ) OR EXCLUDE ( EXACTKEYWORD , "Animal" ) OR EXCLUDE ( EXACTKEYWORD , "Animal Experiment" ) OR EXCLUDE ( EXACTKEYWORD , "Mouse" ) OR EXCLUDE ( EXACTKEYWORD , "Mice" ) OR EXCLUDE ( EXACTKEYWORD , "Dogs" ) ) )
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Web of Science Core Collection

1. TOPIC: ("visceral leishmaniasis" OR "kala azar" OR "black fever")
2. TOPIC: (random* OR rct OR placebo OR allocat* OR crossover* OR "cross over" OR trial OR (doubl* near/1 blind*) OR (singl* near/1 blind*))
3. TOPIC: (control* near/1 trial*)
4. TOPIC: (cohort*)
5. #4 OR #3 OR #2
6. #5 AND #1
7. TOPIC: (pentamidine OR ambisome OR amphotericin OR paromomycin OR miltefosine OR pentavalent OR sodium OR sitamaquine OR azole* OR allopurinol OR atovaquone OR ketoconazole OR fluconazole OR metronidazole)
8. #7 AND #1

9. #8 OR #6
10. #8 OR #6

Cochrane Central Register of Controlled Trials

Issue 5 of 12, May 2019

#1	MeSH descriptor: [Leishmaniasis, Visceral] explode all trees	144
#2	"visceral leishmaniasis"	230
#3	"kala azar"	113
#4	"black fever"	1
#5	#1 or #2 or #3 or #4	276

World Health Organization Global Index Medicus <http://www.globalhealthlibrary.net/php/index.php?lang=en>

tw:(tw:(("visceral leishmaniasis" OR "kala azar" OR "black fever")) AND (instance:"ghl"))

ClinicalTrials.gov Advanced Search <https://clinicaltrials.gov/ct2/search/advanced?>

Condition or disease: visceral leishmaniasis OR kala azar OR black fever

WHO International Clinical Trials Registry Platform <http://apps.who.int/trialsearch/>

visceral leishmaniasis OR kala azar OR black fever – Trials at ALL stages

Search Strategy 2016

The searches were divided into four stages:

1. Clinical trial registries clinicaltrials.gov and ICTRP were queried with the search terms '*visceral leishmaniasis*' and '*kala azar*'.
2. PubMed was searched using the search term '*Visceral Leishmaniasis*' and applying the '*article type*' filter '*clinical trial*'.
3. A broader search of PubMed (for the updates, Embase, Scopus, and Web of Science were also searched) was conducted using the query '*((kala AND azar) OR (visceral AND leishmaniasis)) AND (pentamidine OR ambisome OR amphotericin OR paromomycin OR miltefosine OR pentavalent OR sodium)*'.
4. The Cochrane library was searched using the search term '*Visceral Leishmaniasis*' and applying the '*article type*' filter '*clinical trial*'.

Refer to Bush et al., 2017 for further details:

Bush JT, Wasunna M, Alves F, Alvar J, Olliaro PL, Otieno M, et al. (2017) Systematic review of clinical trials assessing the therapeutic efficacy of visceral leishmaniasis treatments: A first step to assess the feasibility of establishing an individual patient data sharing platform. PLoS Negl Trop Dis 11(9): e0005781