

# ITS y otras enfermedades infecciosas

2025

# AEDV Highlights

34ª edición  
17-20 sep  
**PARÍS**

Brilla el futuro de *la dermatología*,  
donde nace *la luz*

**Alba Català Gonzalo, MD PhD**  
*Servicio de Dermatología & Programa de  
Salud Sexual*

**Hospital Clínic de Barcelona**



Patrocina:



2025

# AEDV Highlights

34ª edición  
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Brilla el futuro de *la dermatología*,  
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**NO TENGO CONFLICTOS  
DE INTERÉS**



Patrocina:





ACADEMIA ESPAÑOLA  
DE DERMATOLOGÍA  
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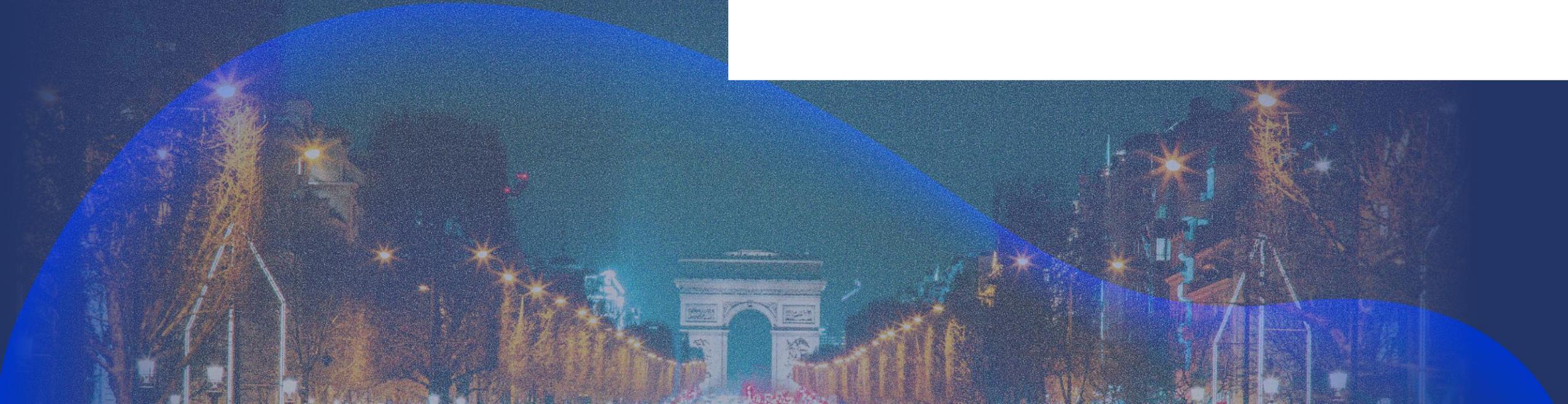


ACADEMIA ESPAÑOLA  
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Y VENEREOLOGÍA

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# INFECCIONES VIRALES EMERGENTES



# CLASIFICACIÓN



- **Arboviruses**

Family	Virus
<i>Togaviridae</i>	<b>Chikungunya</b> <b>Mayaro</b> Mucambo Sindbis
<i>Flaviridae</i>	Banzi <b><u>Dengue 1, 2, 3 e 4</u></b> <b><u>Febre amarela</u></b> Encefalite japonesa Rócio Sao Luis <b>Zika</b> <b><u>Febre do Oeste do Nilo</u></b>
<i>Bunyaviridae</i>	Apeu, Caraparu Nepuyo <b>Oropouche</b> Alenquer, Candiru Febre do Vale Rift Febre hemorrágica da Crimeia
<i>Reoviridae</i>	Changuinola Kemerovo
<i>Rhabdoviridae</i>	VSV Chandipura

# EPIDEMIOLOGÍA

SCIENCEINSIDER | EUROPEAN NEWS

## Mosquito-borne viruses surge in a warming Europe

Chikungunya cases break records in France; West Nile virus appears near Rome

3 SEP 2025 · 1:35 PM ET · BY MEREDITH WADMAN

2025 AEDV

39<sup>e</sup> édition  
17-20 sep  
PARIS

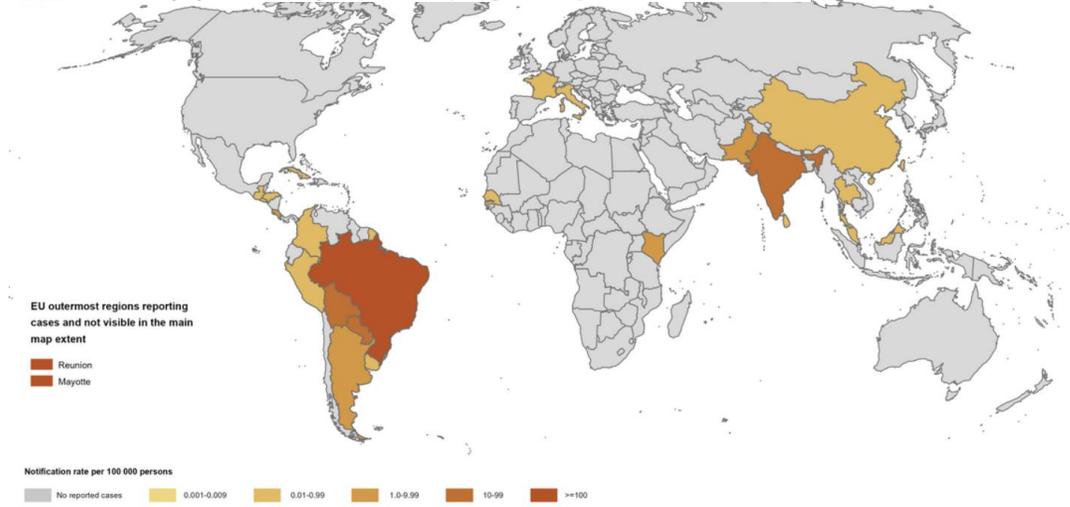
### West Nile Virus



### Countries and territories with current or previous Zika virus transmission (as of 27/05/2024)

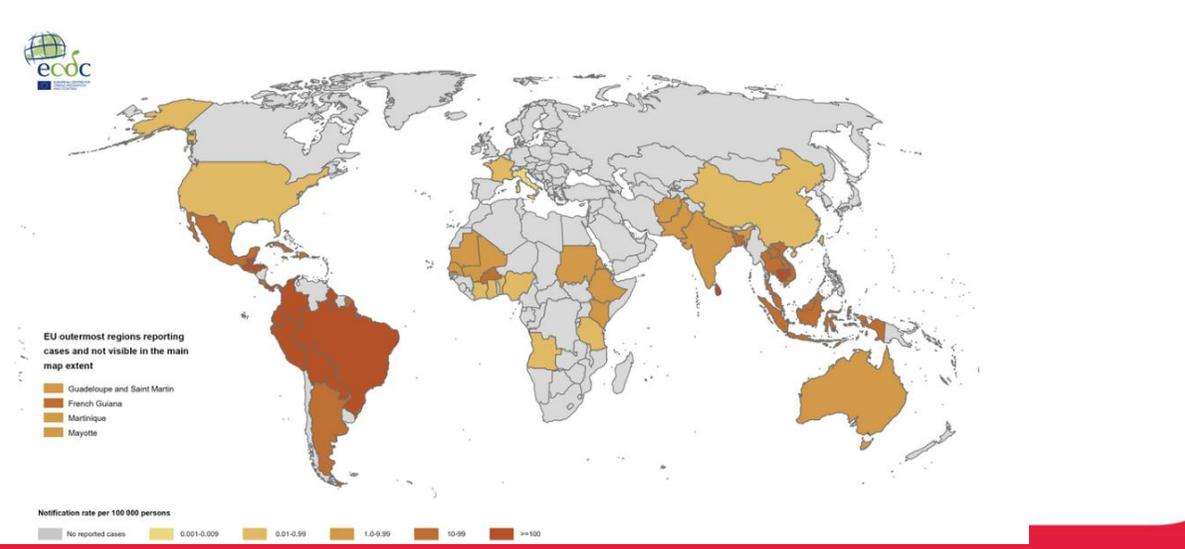


### 12-month Chikungunya virus disease case notification rate per 100 000 population, September 2024-August 2025

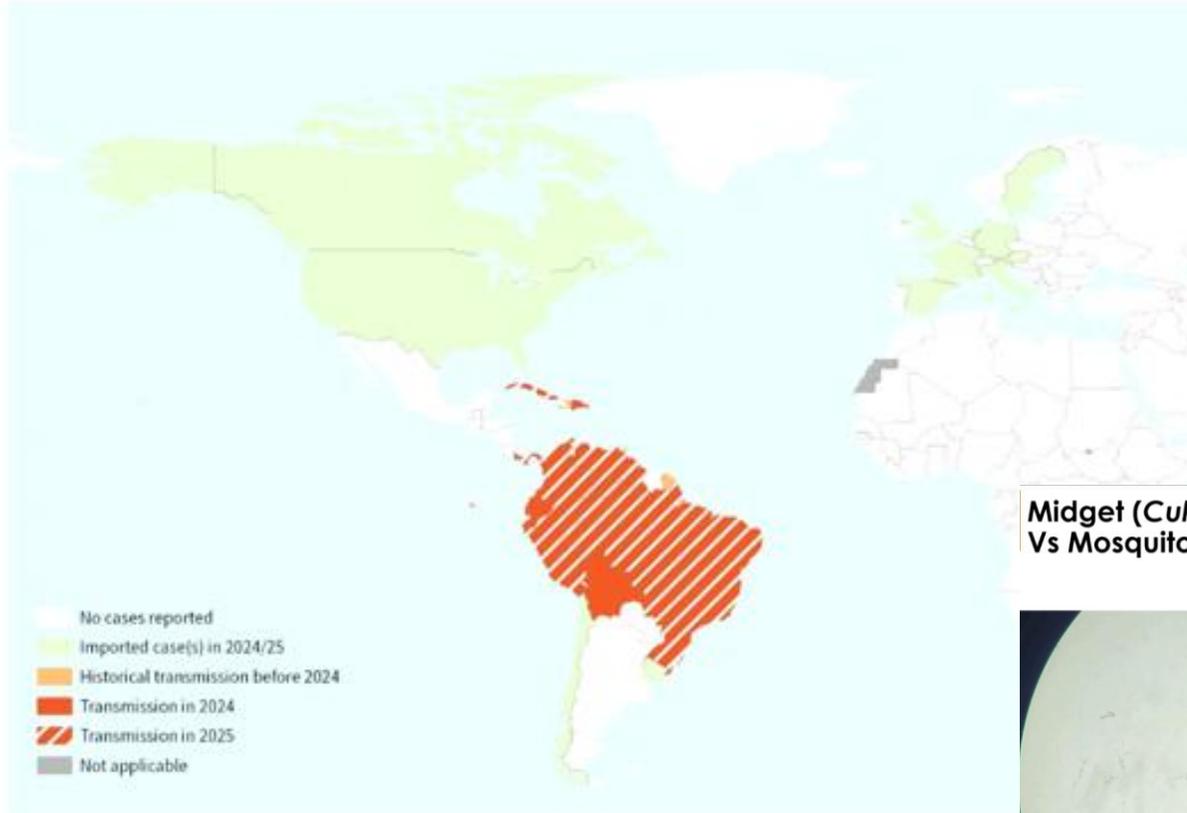


Note: Data refer to Chikungunya virus disease cases reported in the last 12 months (September 2024-August 2025) [Data collection: August 2025]. Case numbers are collected from both official public health authorities and non-official sources, such as news media, and depending on the source, autochthonous and non-autochthonous cases may be included. Administrative boundaries: © EuroGeographics. The boundaries and names shown on this map do not imply official endorsement or acceptance by the European Union. ECDC. Map produced on 22 August 2025

### Three-month dengue virus disease case notification rate per 100 000 population, June-August 2025



## Countries with reported Oropouche transmission (as of 17 September 2025)



The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: WHO  
Map Production: WHO  
Map Date: 17 September 2025

### Imported cases

Country	Cases 2024	Cases 2025
United States of America	108	1
Spain	23	0
Italy	8	0
France	7	4
Germany	3	1
Canada	2	1
Cayman Islands	1	0
Austria	1	1
Netherlands	1	0
Sweden	1	0
Chile	0	2
Uruguay	0	3
United Kingdom	0	3
<b>Total</b>	<b>155</b>	<b>16</b>



### Midget (*Culicoides paraensis*) Vs Mosquito and Aedes



#### *Aedes aegypti*



**HÁBITO**  
PREFERE PICAR NO PERÍODO DIURNO, PRINCIPALMENTE AO AMANHECER OU NO FINAL DA TARDE



**ZUMBIDO**  
O SOM EMITIDO PELO MOSQUITO DA DENGUE É TÃO BAIXO QUE DIFICILMENTE PODE SER PERCEBIDO PELO OUVIDO HUMANO

**OVOS**  
SÃO COLCOADOS INDIVIDUALMENTE E ENFERMEIROS CRIADOUROS

**PRETO, COM LISTRAS BRANCAS NO TÓRAX E NAS PATAS**

**CRIAIDOUROS**  
ÁGUA LIMPA E PARADA. ENCONTRADA EM RESEPIVATÓRIOS ARTIFICIAIS, COMO BALDES DE ÁGUA

**Culex**  
(mosquito comum)

**O MOSQUITO CULEX É MARROM, FAZ UM ZUMBIDO E KAÇA PRINCIPALMENTE À NOITE**

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ÁGUA LIMPA E PARADA. ENCONTRADA EM RESEPIVATÓRIOS ARTIFICIAIS, COMO BALDES DE ÁGUA

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# CLÍNICA



West Nile Virus



Chikungunya virus

Faber W, de Vries H and Tyring S, 2010. With permission of Anke Heitkamp



A Exanthem on trunk

B Exanthem on foot

Zika virus



A Hard palate

B Injected sclera



dengue virus



Grade 2

# DIAGNÓSTICO DIFERENCIAL

Symptoms	Dengue	CHIKV	Zika
Fever	++++	+++	+++
Myalgia/artralgia	+++	++++	++
Rash máculopapular	++	++	+++
Dor retroorbitária	++	+	++
Conjuntivitis	0	+	+++
Linfadenopatia	++	++	+
Hepatomegalia	0	+++	0
Leukopenia / thrombocytopenia Haemorrhage	+++	+++	0
Leukopenia / thrombocytopenia Haemorrhage	+	0	0

Adaptado de Halstead, et al. Am J Trop Med, e do Dep de Saúde de Yap



d Oropouche



- Symptoms: acute fever up to 5 days associated with intense headache and malaise, retroorbital pain, myalgia, arthralgia, chills, nausea, vomiting, dizziness and photophobia.
- Skin lesions, mainly exanthema (20%-40%) and petechiae or other hemorrhagic manifestations (5%). Conjunctival injection has been reported in 20%-40% of cases. The rash may disappear and reappear 15-28 days after the acute febrile phase

## Review

# West Nile Virus A Review

Carolyn V. Gould, MD, MSCR<sup>1</sup>; J. Erin Staples

JAMA

Published Online: July 7, 2025

2025;334;(7):618-628. doi:10.1001/jama.2025.8737

### REVIEW ARTICLE

## Zika Virus

**Authors:** Lyle R. Petersen, M.D., M.P.H., Denise J. Jamieson, M.D., M.P.H., Ann M. Powers, Ph.D., and Margaret A. Honein, Ph.D., M.P.H. [Author Info & Affiliations](#)

Published April 21, 2016 | N Engl J Med 2016;374:1552-1563 | DOI: 10.1056/NEJMra1602113 | **VOL. 374 NO. 16**

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### RESEARCH ARTICLE

## Clinical presentation of Oropouche virus infection: A systematic review and meta-analysis

Zhilin Wang<sup>1,2\*</sup>, Linzhu Huang<sup>1\*</sup>, Xinyu Zhang<sup>1</sup>, Xinyue Zhang<sup>1</sup>, Liwei Huang<sup>1</sup>, Xiaoying Zhu<sup>1,3,4</sup>, Xidai Long<sup>1,3,4\*</sup>, Demin Cao<sup>1,3,4\*</sup>, Yulei Li<sup>1,3,4\*</sup>

### OPEN ACCESS

**Citation:** Wang Z, Huang L, Zhang X, Zhang X, Huang L, Zhu X, et al. (2025) Clinical presentation of Oropouche virus infection: A systematic review and meta-analysis. PLoS Negl Trop Dis 19(4): e0012962. <https://doi.org/10.1371/journal.pntd.0012962>

39<sup>e</sup> edició  
17-20 sep  
PARIS

SKIN AND SOFT TISSUE INFECTIONS: EDITED BY MATTEO BASSETTI

## Dermatological manifestations during Dengue, Chikungunya, and Zika infections

Sonego, Benedetta<sup>a</sup>; Schettini, Antonio<sup>b</sup>; Talhari, Sinesio<sup>b</sup>; Maciel, Luiz<sup>b</sup>; Massone, Cesare<sup>c</sup>

[Author Information](#)

*Current Opinion in Infectious Diseases* 38(2):p 92-98, April 2025. | DOI: 10.1097/QCO.0000000000001077

International Journal  
of Dermatology

INTERNATIONAL  
SOCIETY OF  
DERMATOLOGY

Review

## Dengue: updates for dermatologists on the world's fastest-growing vector-borne disease

Mitchell Braun BS, Louise K. Andersen MD, Scott A. Norton MD, MPH, MSc, Sarah J. Coates MD

First published: 12 June 2023 | <https://doi.org/10.1111/ijd.16739>



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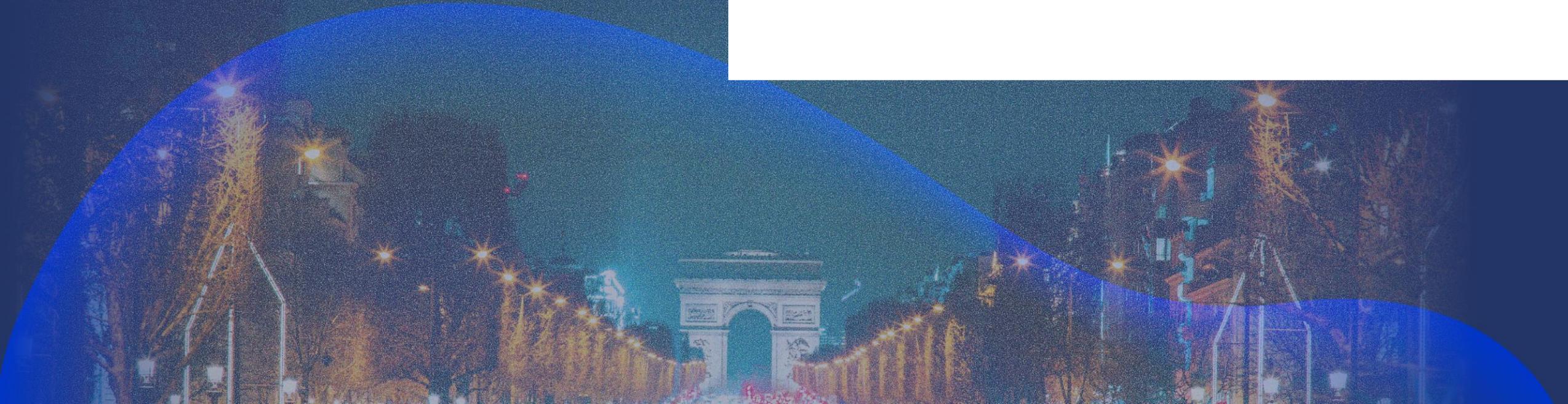


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DE DERMATOLOGÍA  
Y VENEREOLOGÍA

Patrocina:



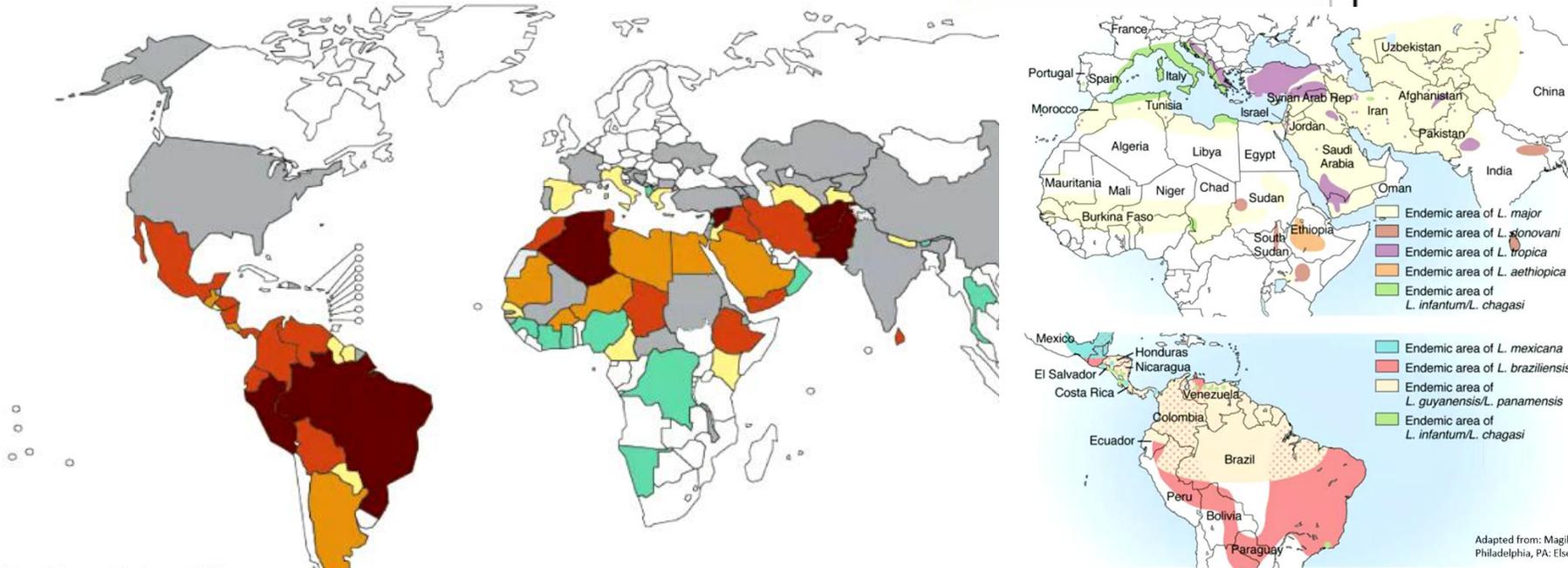
# INFESTACIONES E INFECCIONES PARASITARIAS



# Leishmaniasis cutánea

Map 1 Status of endemicity of cutaneous leishmaniasis (CL) worldwide, 2023 (as reported by November 2024)  
Carte 1 Endémicité de la leishmaniose cutanée (LC) dans le monde, 2023 (selon les données collectées jusqu'en novembre 2024)

272 098 new CL cases



**Countries reporting imported CL cases, 2023 – Pays signalant des cas importés de LC, 2023**

Lebanon – Liban: 134	Venezuela (Bolivarian Republic of) – Venezuela (République bolivarienne du): 14	Spain – Espagne: 9
Belgium – Belgique: 33	Bolivia – Bolivie: 13	Kuwait – Koweït: 9
Switzerland – Suisse: 33	Germany – Allemagne: 12	Mexico – Mexique: 6
Egypte – Egypte: 27	State of Libya – Etat de Libye: 10	Netherlands – Pays-Bas: 6
Colombia – Colombie: 23	Argentina – Argentine: 9	Oman: 2
Sweden – Suède: 19	Italy – Italie: 9	El Salvador: 1
United Arab Emirates – Émirats arabes unis: 15	Qatar: 9	Greece – Grèce: 1
		Thailand – Thaïlande: 1

**Number of new CL cases reported in 2023 – Nombre de nouveaux cas de LC notifiés en 2023**

0 cases reported – 0 cas notifiés	No autochthonous cases reported (never endemic) – Pas de cas autochtone notifié (jamais endémique)
<100	No data – Aucune donnée
100–999	Not applicable – Sans objet
1000–4999	
≥5000	

Maps of the geographic distribution of cutaneous leishmaniasis (CL).



Adapted from: Magill A. Leishmania species. Chapter 277. In: Principles and practice of infectious diseases. 8th ed. Philadelphia, PA: Elsevier, 2015:3091–107. | <https://www.cdc.gov/dpdx/leishmaniasis/index.html>

The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement. © World Health Organization (WHO), 2024. All rights reserved. – Les limites et appellations figurant sur cette carte ou les désignations employées n'impliquent de la part de l'Organisation mondiale de la Santé aucune prise de position quant au statut juridique des pays, territoires, villes ou zones, ou de leurs autorités, ni quant au tracé de leurs frontières ou limites. Les lignes en pointillés sur les cartes représentent des frontières approximatives dont le tracé peut ne pas avoir fait l'objet d'un accord définitif. © Organisation mondiale de la Santé (OMS), 2024. Tous droits réservés.

Data source: World Health Organization. – Source des données: Organisation mondiale de la santé

Map production: Control of Neglected Tropical Diseases (NTD), World Health Organization. – Production de la carte: Lutte contre les maladies tropicales négligées (NTD), Organisation mondiale de la santé

Method	Sensitivity	Specificity
Direct microscopy, histopathology, and culture	30–70%	Not reported
qPCR	90–100%	98%
Loop-mediated isothermal amplification (LAMP)	80–100%	94–100%
ELISA (recombinant <i>Leishmania (Viannia) braziliensis</i> -derived Lb6H)	100%	98%
ELISA ( <i>L. major</i> -like and <i>L. braziliensis</i> antigens)	78–95%	82–100%
Western blot	76–90%	94–100%
Leishmanin/Montenegro skin test (LST/MST): based on a delay-type hypersensitivity response	80-90% CL 100% MCL	> 90%
Flow cytometry	Ongoing research	

### Molecular Diagnosis

#### Highly sensitive and specific.

CDC diagnostic algorithm includes:

**PCR amplification** of the internal transcribed spacer 2 (**ITS2**) region of rRNA.

Followed by **DNA sequencing** for species identification.

Can differentiate among:

**Viannia subgenus:** *L. braziliensis*, *L. guyanensis*, *L. panamensis*

**Leishmania subgenus:** *L. aethiopica*, *L. amazonensis*, *L. donovani*, *L. infantum/chagasi*, *L. major*, *L. mexicana*, *L. tropica*

# Leishmaniasis cutánea

## Photodynamic Therapy for Cutaneous Leishmaniasis

Federica Li Pomi <sup>1</sup>, Serafinella Patrizia Cannavò <sup>2</sup>, Valeria Papaiani <sup>2</sup>, Florenzia Marielli <sup>2</sup>, Mario Vaccaro <sup>2</sup>, Francesco Borgia <sup>2</sup>

<sup>1</sup> University of Palermo, Department of Precision Medicine in Medical, Surgical and Critical Care (Me.Pre.C.C.), Palermo, Italy

<sup>2</sup> University of Messina, Department of Clinical and Experimental Medicine, Messina, Italy

### INTRODUCTION

Cutaneous leishmaniasis (CL) is a parasitic skin infection transmitted by phlebotomine sandflies, with children being particularly vulnerable due to greater exposure and immature immune responses. Clinical manifestations are variable, depending on the *Leishmania* species and host immunity, typically involving exposed skin areas. Current treatments lack standardization and are often limited by toxicity, adverse effects, and antimicrobial resistance. Photodynamic therapy (PDT), including both conventional (C-PDT) and daylight modalities (DL-PDT), has emerged as a non-invasive and well-tolerated alternative. We report a series of six CL cases—three pediatric and three adult patients—successfully treated with 10% 5-aminolevulinic acid (ALA) PDT at the Dermatology Unit of the University of Messina, Italy.

### METHODS

Six patients with polymerase chain reaction (PCR)-confirmed CL (three children and three adults) were treated with either C-PDT or DL-PDT using 10% ALA in polyethylene glycol ointment. In the C-PDT protocol, ALA was applied under occlusion for three hours, followed by illumination with a 630 nm red diode light source (160 mW/cm<sup>2</sup>, 50 mm distance) for eight minutes, corresponding to a total light dose of 75 J/cm<sup>2</sup>. In the DL-PDT protocol, an SPF 30 sunscreen was applied 15 minutes before ALA application; a 1-mm layer of ALA was then applied to the lesion and left uncovered for 30 minutes indoors, after which patients were exposed to continuous daylight for two hours in a hospital garden. Residual ALA was subsequently removed, a soothing cream applied, and the lesions were covered for 24 hours to prevent further activation. Both treatment regimens were administered in three sessions at one-month intervals, and all patients received home care instructions including the use of a bland emollient cream and a non-alcoholic local disinfectant.

### RESULTS

After the third treatment session, all patients demonstrated complete clinical resolution of the treated lesions. At six-month follow-up, complete resolution of the lesions was observed in all cases, with only minimal residual scarring in two patients (Table 1, Figure 1-2).

Age	Sex	Lesion Location	PDT type	Leishmania Species	Outcome	Adverse Events
6	M	face	Daylight	<i>L. infantum</i>	Complete resolution	Mild scarring
7	F	face	Daylight	<i>L. infantum</i>	Complete resolution	None
9	F	face	Daylight	<i>L. infantum</i>	Complete resolution	None
39	M	leg	Conventional	<i>L. major</i>	Complete resolution	None
39	F	dorsum	Conventional	<i>L. major</i>	Complete resolution	None
72	M	leg	Conventional	<i>L. major</i>	Complete resolution	Mild scarring

Table 1: patients' characteristics.



Figure 1: CL in the dorsum in a 39 year-old female; complete resolution, with minimal residual scarring, after 3 sessions of C-PDT



Figure 2: CL in the nose of a 9 year-old female; complete resolution after 3 sessions of DL-PDT

# LARVA MIGRANS

## Fisiopathology

- Hyaluronidase allows the parasite to move through epidermis
- Lacks collagenase
  - Does not trespass beyond the basal layer



\*Carrada BT. Larva migrans cutanea. Med Int Mex 2006; 22:143-8



## Papular – follicular CLM

- Urticariiform
- Coexistence of mild serpiginous lesions
- Eosinophiles
- Highly symptomatic
- Misdiagnosed



# MIASIS CUTÁNEA



	Larvae	Common name	Geographic location	Presentation	Time of year	Treatment
Travel related	<i>Dermatobia hominis</i>	Human bot fly, <i>torsalo</i>	Central and South America	Furuncular	Year-round	Occlusion, squeezing out the larva; possible excision
	<i>Cordylobia anthropophaga</i>	Tumbu fly, skin maggot fly, putzi fly mango fly, <i>ver du Cayor</i>	Tropical Africa	Furuncular	Year-round	Occlusion, squeezing out the larva; possible excision
	<i>Cordylobia rodhaini</i>		Africa	Furuncular	Year-round	Occlusion, squeezing out the larva; possible excision
	<i>Cochliomyia hominivorax</i>	New World screwworm	Central and South America	Wound	Year-round	Occlusion, tissue irrigation, manual removal; ± larvicides
Non-travel related	<i>Cuterebra</i> species	Rabbit bot fly, rodent bot fly	Eastern US, Ontario, Pacific Northwest	Furuncular	August–October	Occlusion, squeezing out the larva; possible excision
	<i>Wohlfahrtia vigil</i>	None	Eastern and central North America, central and southern Europe, Russia, Pakistan	Furuncular	June–September	Occlusion, squeezing out the larva; possible excision
	<i>Wohlfahrtia opaca</i>	None	Western and southwestern North America	Furuncular	June-September	Occlusion, squeezing out the larva; possible excision
	<i>Gasterophilus intestinalis</i>	Horse bot fly	Worldwide	Migratory	Year-round	Needle extraction
	<i>Hypoderma bovis</i> , <i>Hypoderma lineatum</i>	Heel fly, gad fly, cattle grubs	Northern hemisphere	Migratory/furuncular	Winter months	Occlusion, squeezing out the larva; possible excision
	<i>Chrysomya bezziana</i>	Old World screwworm	Africa, India, Southeast Asia	Wound	Year-round	Occlusion, tissue irrigation, manual removal; ± larvicides
	<i>Wohlfahrtia magnifica</i>	Wohlfahrt's wound myiasis fly	Southeastern Europe, southern and Asiatic Russia, North Africa, Middle East	Wound	Year-round	Occlusion, tissue irrigation, manual removal; ± larvicides

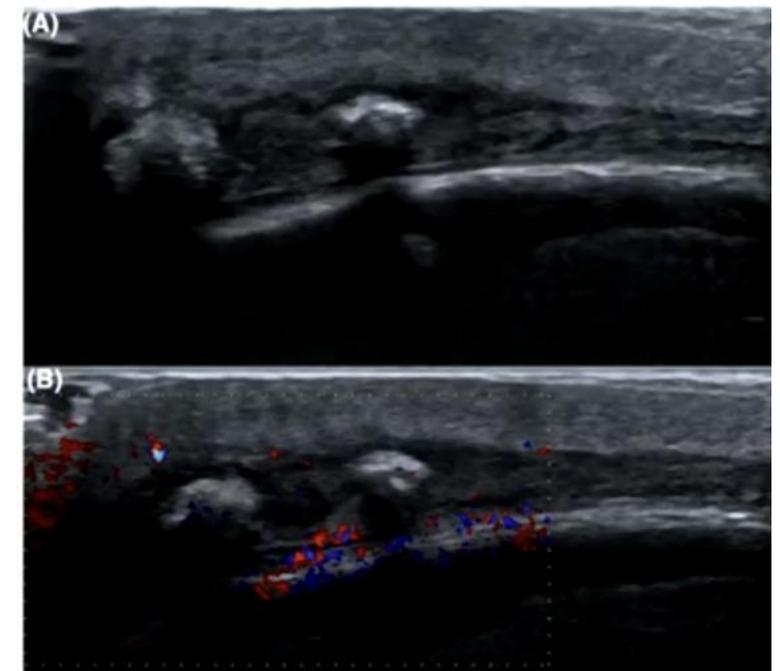
## Cutaneous myiasis: diagnosis

Diagnosis relies on a relevant travel history and identification of the typical lesion—a furuncular lesion with a central pore that releases serous/bloody discharge but not pus

**Dermoscopy** may be helpful in diagnosis as it can identify the posterior parts of *D. hominis*

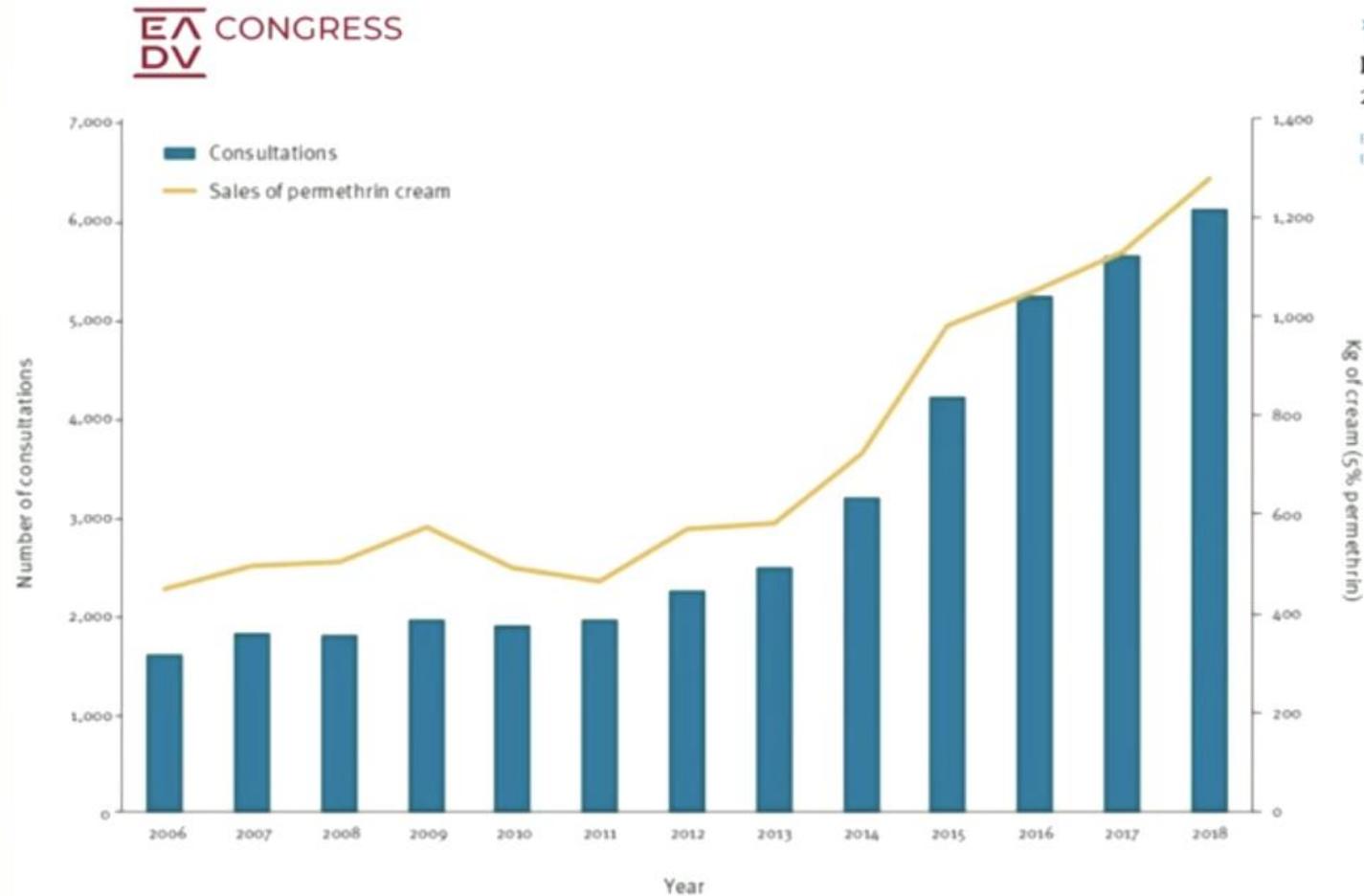
**Ultrasound** for the diagnosis of myiasis was first used in 1994

Ultrasound is a simple, rapid, non-invasive procedure. It can be helpful for the identification of the larvae, **differentiating myiasis from cysts and abscess**. Ultrasound can also be helpful to **guide the extraction** and to ensure that it has been completely removed.



Nazzaro G. The role of high-frequency ultrasound in diagnosing myiasis: Report of a case and review of the literature. *Skin Res Technol*. 2019

- ¿Están aumentando los casos?



► Euro Surveill. 2019 Jun;24(23):190020. doi: 10.2807/1560-7917.ES.2019.24.23.190020

### Increase of scabies infestations, Norway, 2006 to 2018

I Amato<sup>1,2</sup>, L S Dånstø<sup>3</sup>, G M Graneng<sup>4</sup>, H S Blix<sup>3</sup>, H Berntsen<sup>3</sup>, L Veneti<sup>5</sup>, P Stefanoff<sup>6</sup>,  
I MacDonald<sup>6</sup>, H H Blystad<sup>7</sup>, A Soleng<sup>8</sup>

Why is it becoming more prevalent?

## In vitro survival of scabies mites

K. Pallesen,<sup>1</sup> J. A. Lassen,<sup>1</sup> N. T. Munk,<sup>1</sup> G. N. Hartmeyer,<sup>2</sup> L. Hvid<sup>1</sup> and A. Bygum<sup>1</sup>

Departments of <sup>1</sup>Dermatology and <sup>2</sup>Clinical Microbiology, Odense University Hospital, Odense, Denmark

doi:10.1111/ced.14209

### Summary

**Background.** The correct treatment and management of scabies is expensive and time-consuming, and may have a negative impact on patients and their families.

**Aim.** To investigate the effects of permethrin 5% cream on scabies mites, and explore mite survival times outside the human body.

**Methods.** We performed a nonrandomized controlled study. In total, 20 petri dishes were coated with permethrin 5% cream (treatment group) and 20 plain petri dishes (control group) each had one scabies mite placed in them, and were then observed at baseline and 3, 4, 5, 6, 7, 8 and 12 h from baseline. In the second part of our study, 30 scabies mites from infested patients were investigated in an observational experiment in 30 plain petri dishes at days 0, 3 and 4.

**Results.** Our data showed that 65% of scabies mites survived after 8 h in the treatment group compared with 75% of mites in the control group. After 12 h, 25% of mites in the treatment group and 60% in the control group were still alive. Data from the observational survival study showed that one mite was alive on day 3, but all mites were dead by day 4.

**Conclusions.** This study showed no significant effects of mite survival times with 5% topical permethrin after 8 h, while its efficacy was stronger and significant after 12 h. We recommend the isolation of all mite-infested items for at least 4 days.

Clin Exp Dermatol. 2020 Aug;45(6):712-715. doi: 10.1111/ced.14209

Is there a really **resistance** to scabies treatment with **permethrin**? In vitro killing activity of **permethrin** on *Sarcoptes scabiei* from patients with **resistant** scabies.

Yürekli A.

Dermatol Ther. 2022 Mar;35(3):e15260. doi: 10.1111/dth.15260. Epub 2021 Dec 17.

PMID: 34897912

Permethrin significantly slowed down movements of the mite

All mites in the treatment groups were dead after 6 hours

Non-compliance rather than permethrin resistance

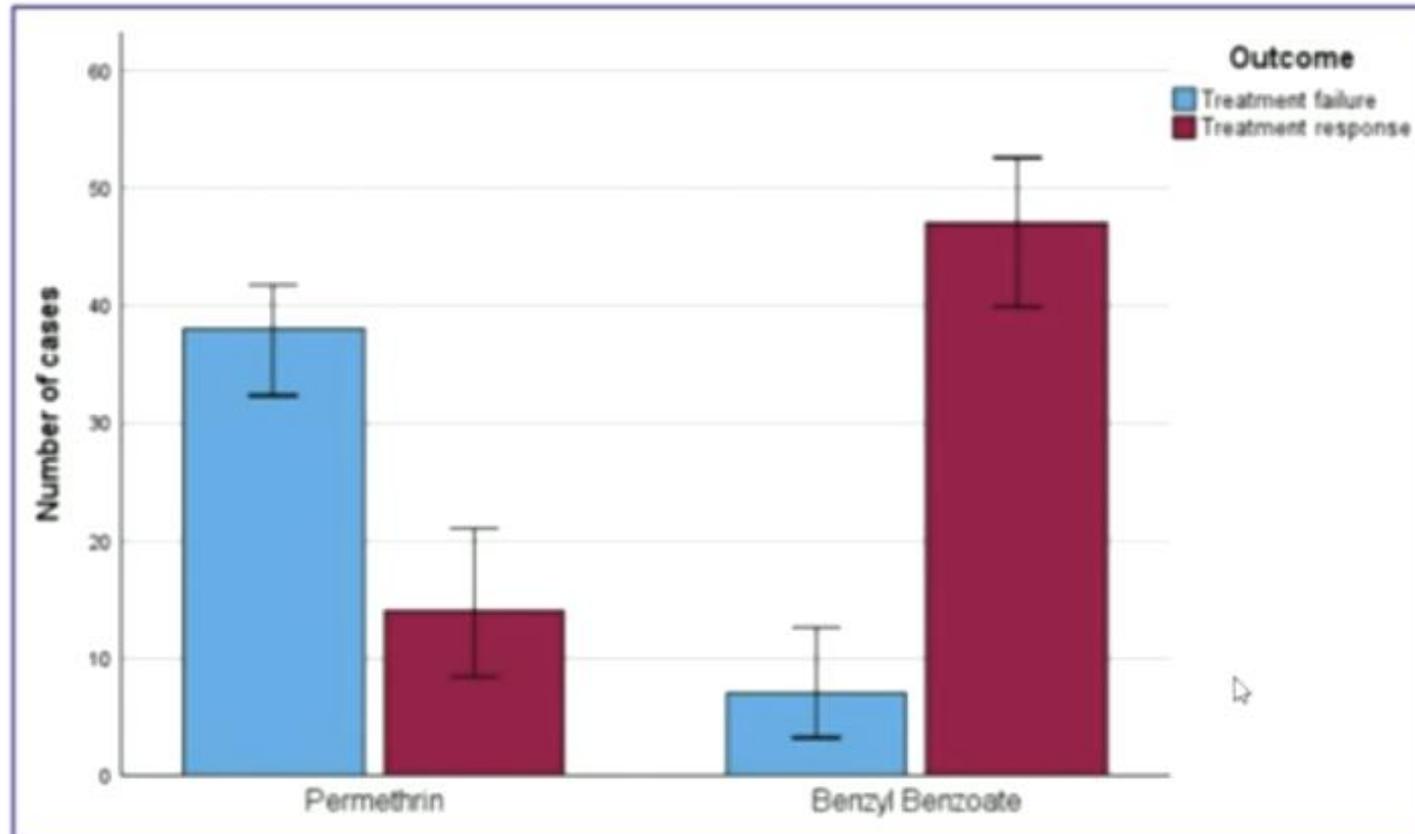
2023  
AEDV  
Highlights

39<sup>th</sup> edition  
17-20 sep  
PARIS



## Comparison of topical permethrin 5% vs. benzyl benzoate 25% treatment in scabies: a double-blinded randomized controlled trial

Damian Meyersburg<sup>1</sup>, Magdalena Hoellwerth<sup>1</sup>, Matthias Brandlmaier,<sup>1</sup> Allesandra Handisurya,<sup>2</sup> Andreas Kaiser,<sup>3</sup> Christine Prodinger<sup>1</sup> and Johann W. Bauer<sup>1</sup>



**Scabies: An updated review** from epidemiology to current controversies and future perspectives.

Tavoletti G, Avallone G, Sechi A, Cinotti E, Veraldi S, Micali G, Lacarrubba F, Marzano AV, Nazzaro G. *Travel Med Infect Dis.* 2025 Aug 3;67:102878. doi: 10.1016/j.tmaid.2025.102878. Online ahead of print. PMID: 40754226 [Free article.](#) [Review.](#)

**Table 2**  
Current therapeutic options for scabies [59–85].

Therapy	Mechanism of Action	Standard Regimen	Advantages	Limitations	Clinical Considerations
<b>Permethrin 5 % Cream</b>	Neurotoxic to mites via sodium channel disruption; ovicidal.	Apply to the entire body for 8–12 h; repeat after 7–14 days.	Well tolerated; kills mites and eggs; widely recommended.	Resistance reported; adherence-dependent; requires treatment of contacts.	First-line therapy in most guidelines.
<b>Benzyl Benzoate 10–25 % Lotion</b>	Neurotoxic acaricide.	Apply for two consecutive days; repeat after 1 week.	Low cost; widely available.	Skin irritation may reduce adherence.	Preferred in settings with permethrin resistance.
<b>Malathion 0.5 % Lotion</b>	Cholinesterase inhibitor disrupting neuromuscular transmission.	Single application; repeat after 7 days if needed.	Alternative for permethrin-intolerant patients.	Less effective; local irritation; not first-line.	Reserved for specific cases.
<b>Sulfur-based preparations (6–33 %)</b>	Keratolytic, facilitating mite removal.	Apply daily for 3–7 days.	Low cost; safe in pregnancy, neonates, and contraindicated patients.	Odor, staining, prolonged treatment reduces adherence.	Useful in vulnerable populations.
<b>Crotamiton 10 % Cream</b>	Mechanism unclear; possible interference with mite metabolism.	Multiple daily applications for 5 days.	Option for patients intolerant to other agents.	Requires frequent application; variable effectiveness.	Limited use when alternatives are contraindicated.
<b>Lindane 1 % Lotion</b>	Neurotoxic via GABA receptor inhibition.	Single or multiple applications.	None	Neurotoxicity; contraindicated in children, pregnant/lactating women	Strongly discouraged due to safety concerns.
<b>Ivermectin 1 % Lotion</b>	Binds to glutamate-gated chloride channels, leading to mite paralysis.	Not standardized; applied to affected areas.	Non-irritating; suitable for sensitive skin.	Comparative efficacy vs. oral ivermectin unclear; limited large-scale data.	Considered in select cases requiring topical therapy.
<b>Spinosad 0.9 % Topical Suspension</b>	Binds to nicotinic acetylcholine receptors, causing neuronal hyperexcitation and mite death; ovicidal.	Apply once to entire body; rinse after 6–8 h.	FDA-approved for patients ≥4 years; effective after single dose; well tolerated.	Limited availability outside the U.S.; higher cost.	Consider in patients with resistance or intolerance to permethrin and ivermectin.
<b>Ivermectin (Oral)</b>	Binds to glutamate-gated chloride channels, leading to mite paralysis.	200 µg/kg, two doses one week apart; severe cases require extended regimens.	Easy to administer; avoids topical adherence issues; suitable for mass treatment.	Contraindicated in pregnancy, breastfeeding, and children <15 kg; limited ovicidal activity.	Often combined with topicals in refractory or extensive cases.

# Spinosad 0,9% suspension

FDA-approved for patients  $\geq 4$  years  
Limited availability outside the U.S.



Journal of the American Academy of  
Dermatology

Volume 86, Issue 1, January 2022, Pages 97-103



Original article

## Spinosad at 0.9% in the treatment of scabies: Efficacy results from 2 multicenter, randomized, double-blind, vehicle- controlled studies

Jeffrey C. Seiler MD<sup>a</sup>, Richard C. Keech MD<sup>b</sup>, Julie L. Aker MT(ASCP)<sup>c</sup>, William Miller MD<sup>c</sup>,  
Christopher Belcher MD<sup>d</sup>, Kerry W. Mettert MBA, MT(ASCP)<sup>e</sup>  

Chairs: Patricia Deps, Gianluca Nazzaro

# Skin-related neglected tropical diseases: WHO launches new version of the WHO Skin NTDs mobile application

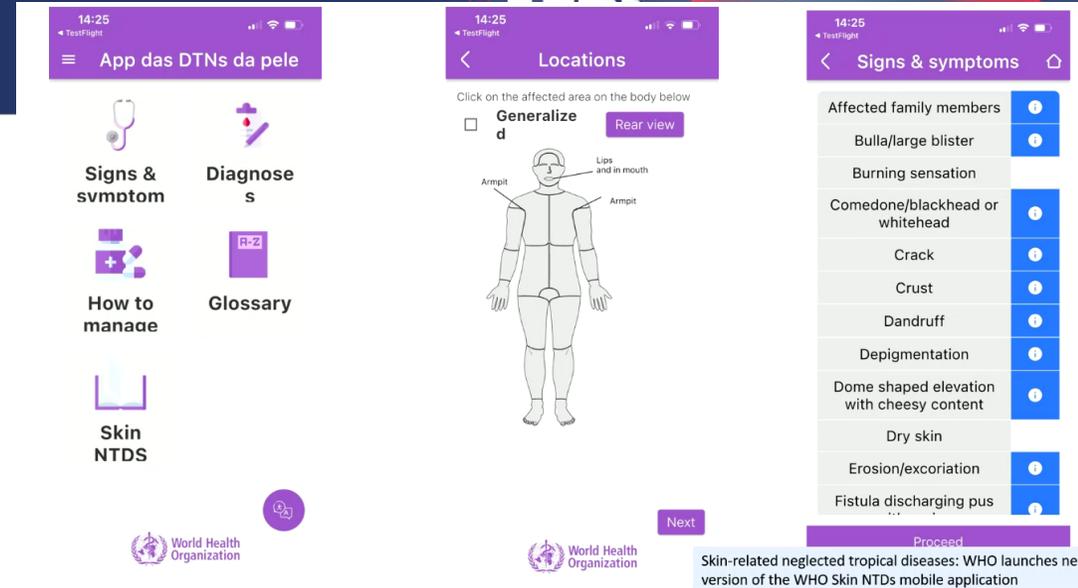
9 October 2023 | Departmental update | Geneva | Reading time: 2 min (522 words)

The World Health Organization (WHO) is pleased to announce the release of an enhanced version of its Skin NTDs App, a valuable tool designed to assist front-line health workers in diagnosing and managing skin-related neglected tropical diseases (skin NTDs). The updated App is now available free of charge on both Android ([here](#)) and iOS ([here](#)) devices.

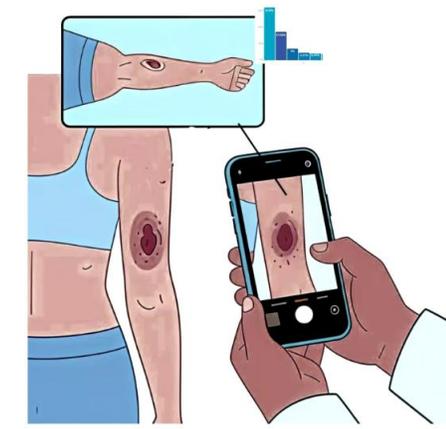
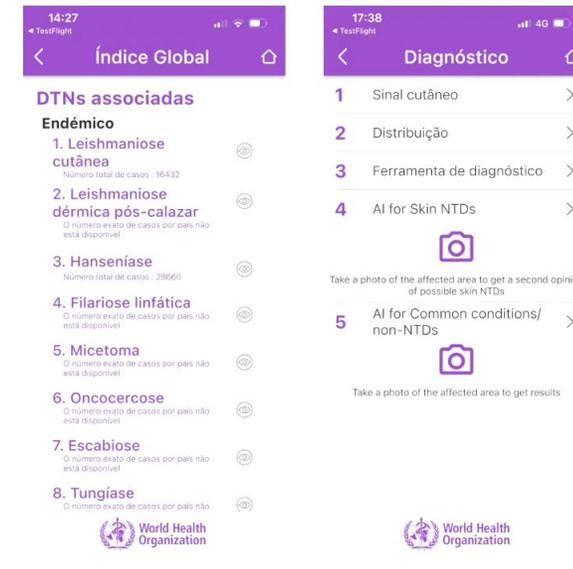
To ensure a smooth installation, users may need to delete the previous version from their devices.

Key features of the updated App include:

1. Logical, offline algorithm
2. Multilingual support
3. Learning resources
4. Cutting-edge AI integration (Beta)



Skin-related neglected tropical diseases: WHO launches new version of the WHO Skin NTDs mobile application



Skin-related neglected tropical diseases: WHO launches new version of the WHO Skin NTDs mobile application

Skin-related neglected tropical diseases: WHO launches new version of the WHO Skin NTDs mobile application



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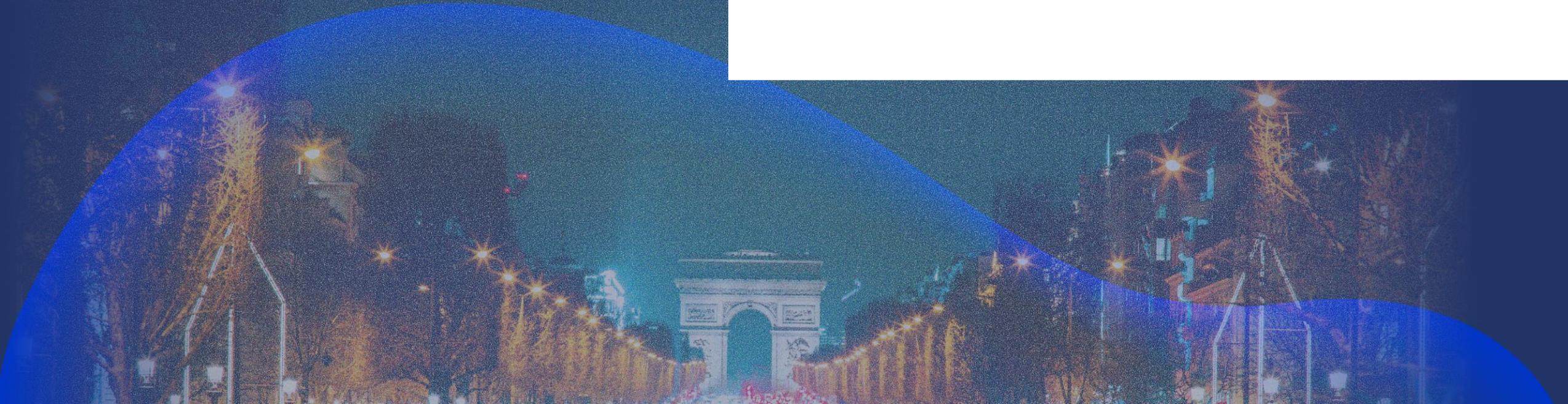


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Patrocina:



# INFECCIONES BACTERIANAS



# MICOBACTERIAS ATÍPICAS

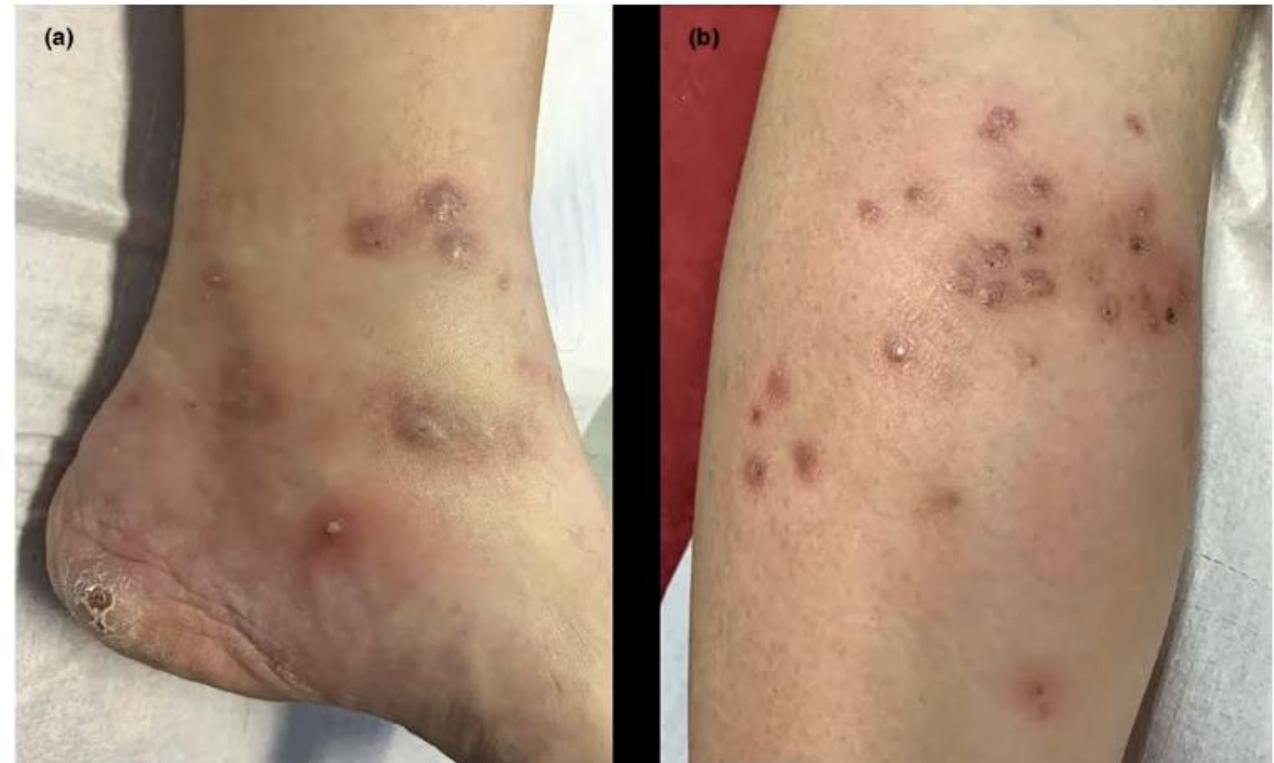
- **M. atípicas**

- Histopatología puede no ser útil
- A demás de cultivo + PCR & espectrometría de masas

- **M. Chelonae**

- 38 pacientes de 25 hospitales en Francia
- No trauma previo
- 28 inmunocomprometidos (iatrogenia)
- 66% mujeres
- Edad media 72 años
- Lesiones pápulo-pustulosas
- Granulomas solamente 36%
- Tto: Claritro, linezolid, doxiciclina, tobramicina, azitromicina, imipenem +/- cirugía
- Cura 64%

***Mycobacterium chelonae* cutaneous infections unrelated to invasive procedures: A multicentre retrospective case series**



- 65 de 79 casos en Europa (incluido España) no autóctonos
- 14 casos autóctonos: Francia, Turquía y Uzbekistan
- Novedades en tratamiento:

## Bedaquiline

### PLOS NEGLECTED TROPICAL DISEASES

#### RESEARCH ARTICLE

A retrospective cohort study of monthly rifampicin, ofloxacin and minocycline in the management of leprosy at the Hospital for Tropical Diseases, London, United Kingdom

Priyanka Sivakumaran<sup>1\*</sup>, Barbara de Barros<sup>2,3</sup>, Vivianne Lopes Antonio Dias<sup>4</sup>, Diana N. Lockwood<sup>3</sup>, Stephen L. Walker<sup>2,3,5</sup>


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RESEARCH ARTICLE

## Unprecedented *in vivo* activity of telacebec against *Mycobacterium leprae*

Aurélie Chauffour, Emmanuelle Cambau, Kevin Pethe, Nicolas Veziris, Alexandra Aubry 

Published: May 8, 2025 • <https://doi.org/10.1371/journal.pntd.0013076>

7 Save	0 Citation
864 View	1 Share

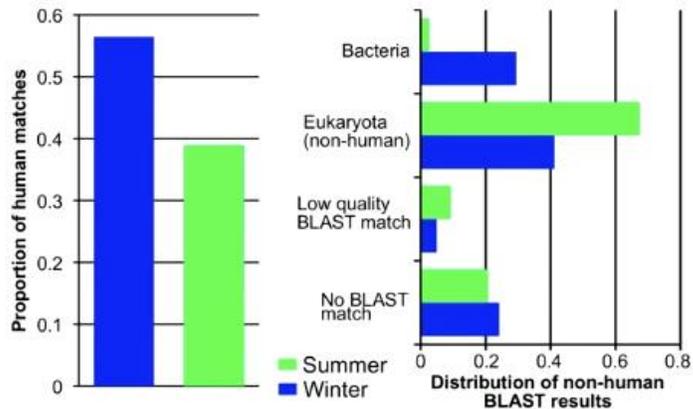
## Real-life reservoirs

RESEARCH ARTICLE

Filthy lucre: A metagenomic pilot study of microbes found on circulating currency in New York City

Julia M. Maritz<sup>1</sup>, Steven A. Sullivan<sup>1</sup>, Robert J. Prill<sup>2</sup>, Emre Aksoy<sup>1\*</sup>, Paul Scheid<sup>1</sup>, Jane M. Carlton<sup>1\*</sup>

Money amalgamates DNA from sources inhabiting the human microbiome, food, and other environmental inputs, some of which can be recovered as viable organisms.



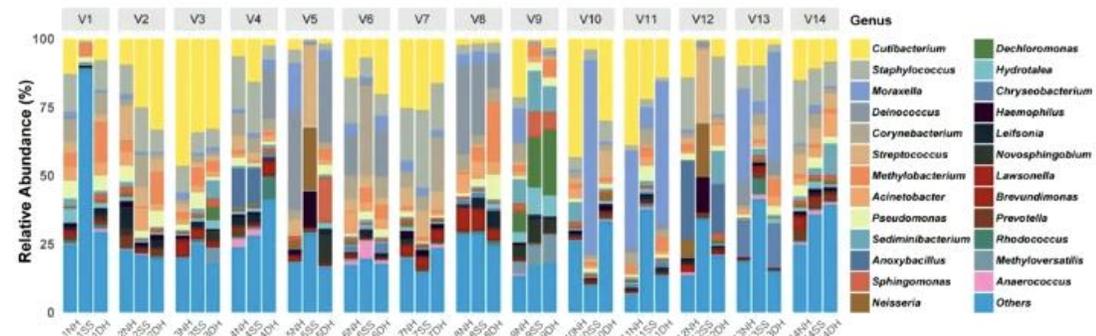
## Smartphones as an Ecological Niche of Microorganisms: Microbial Activities, Assembly, and Opportunistic Pathogens

Jintao He,<sup>a</sup> Xiaoqiang Shen,<sup>a</sup> Nan Zhang,<sup>a</sup> Chao Sun,<sup>b</sup> Yongqi Shao<sup>a,c</sup>



Smartphone preserve the biological fingerprint of the owner

Environment amplifying bacterial resistance

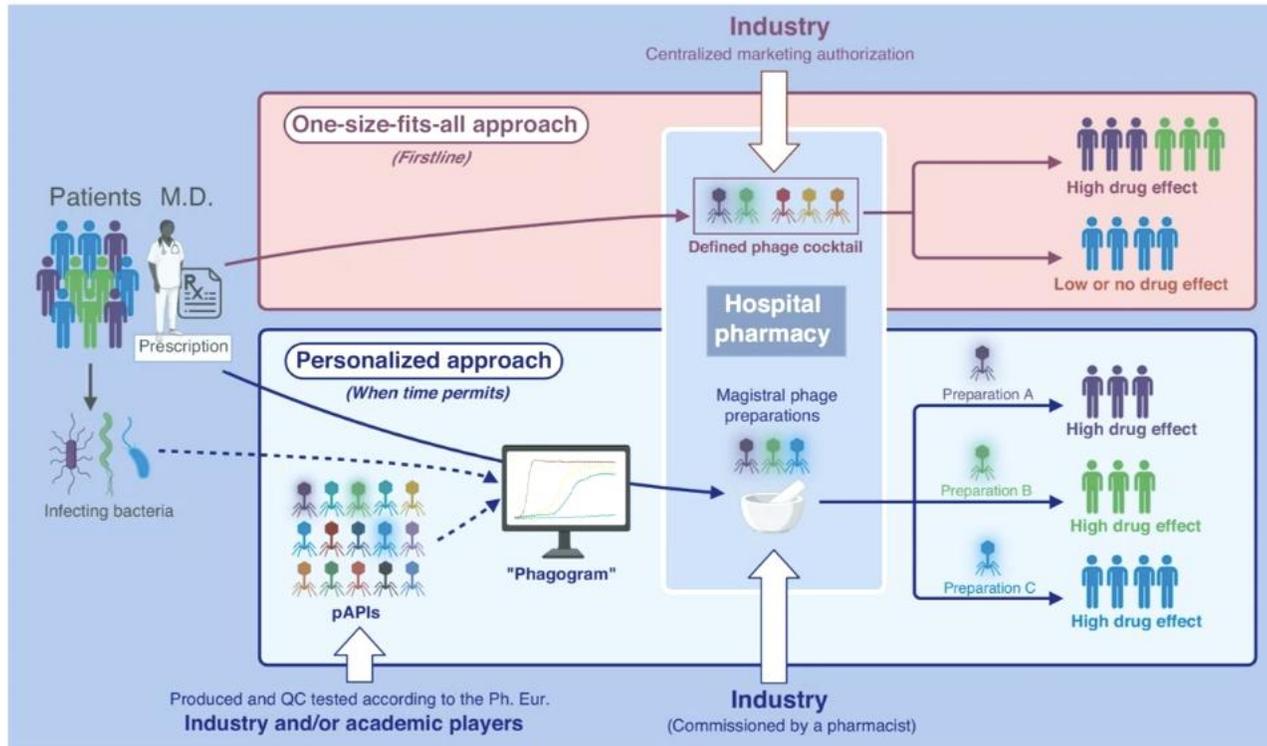


# TERAPIA CON BACTERIÓFAGOS

## Regulatory hurdles



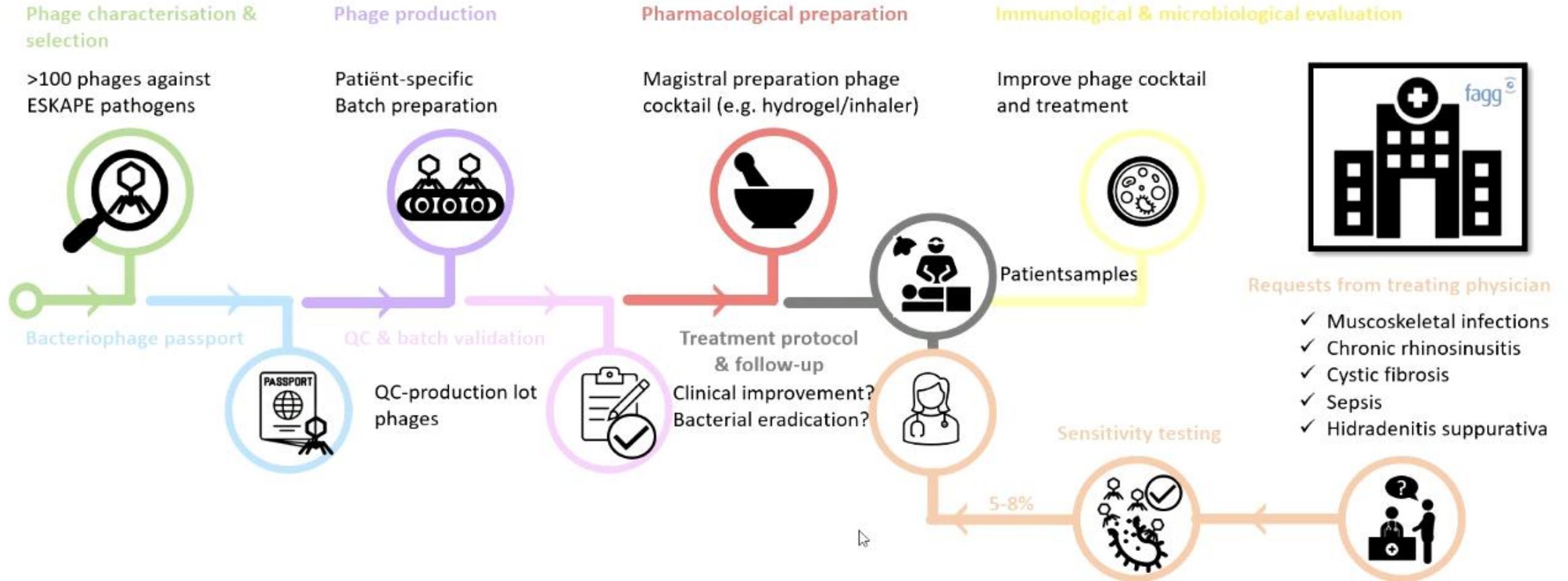
Bacteriophage  
=  
medicinal product



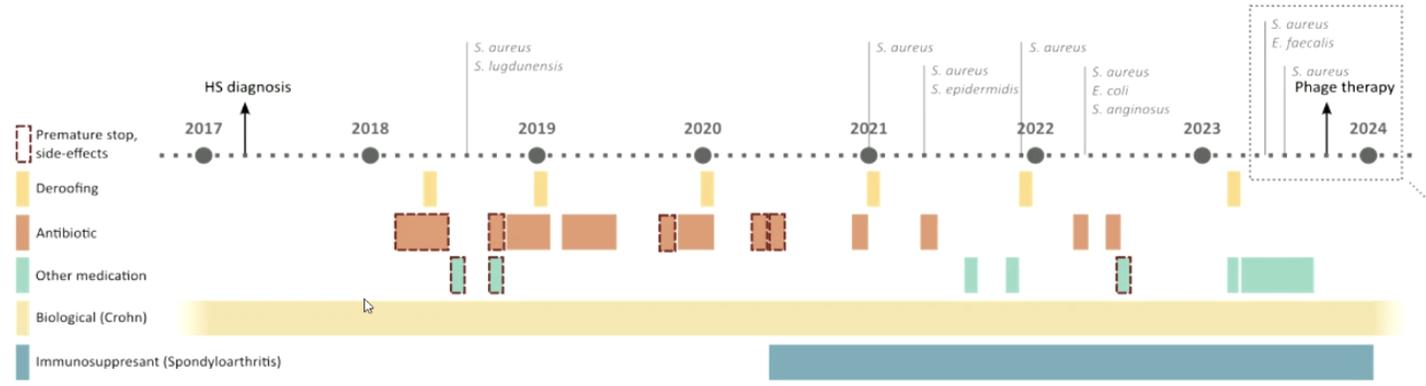
**Approved medicinal product**  
High cost  
Low flexibility  
GMP

**Magistral preparation**  
Low cost  
High flexibility

# A Multidisciplinary Phage Task Force



# Pilot case

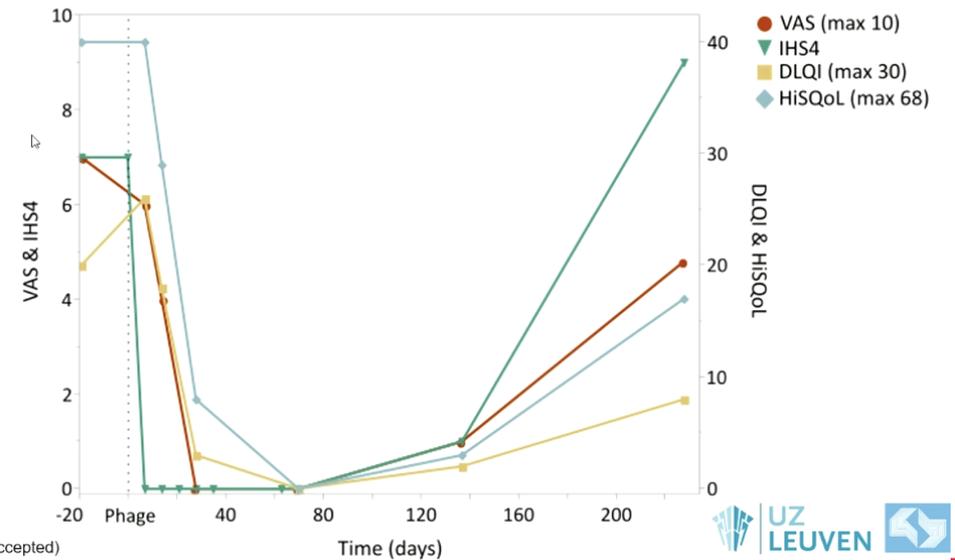


21 Bens L., et al. Prolonged Disease Remission of the Chronic Immunological Skin Disorder Hidradenitis Suppurativa with Adjunctive Bacteriophage Therapy. Nature Communications (Accepted)

# Pilot case



- After 1 week: no inflammation
- After 2 weeks: no noduli palpable
- 6 month remission



24 Bens L., et al. Nature Communications (Accepted)



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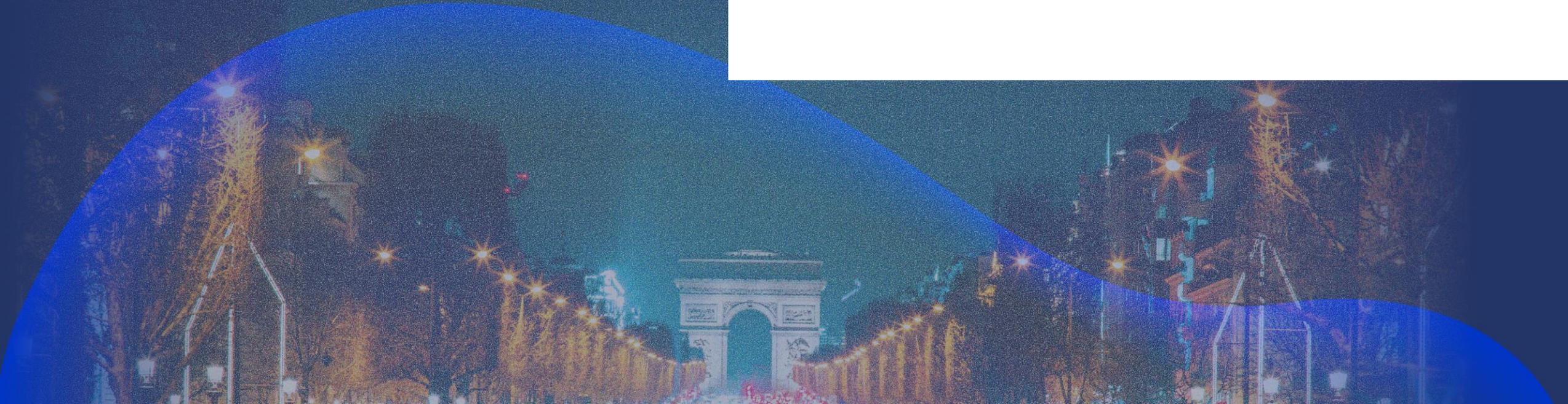


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Patrocina:

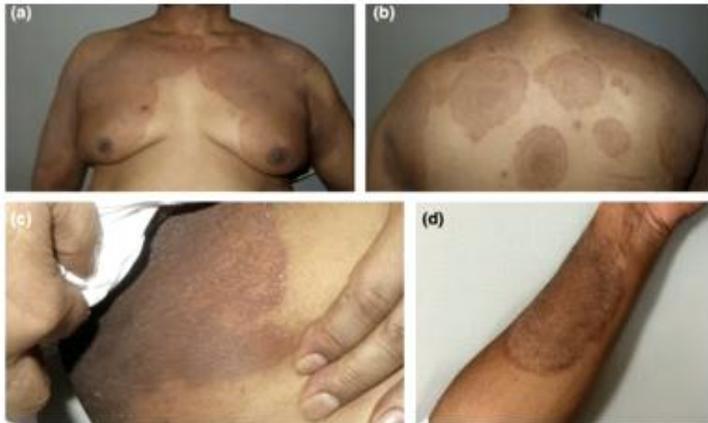


# INFECCIONES FÚNGICAS





Dermatophytosis caused by *T. indotineae* may be severe, covering large regions of the body and can be difficult to treat.



40% body surface  
area



20% body surface  
area

Pablo Fernandez-Gonzalez et al. *Trichophyton indotineae* extensive tinea: successful posaconazole treatment in four cases from Spain. Clin Exp Dermatol 2025, 50(2):431-434

- **T. pubogenitalis**

- *T. mentagrophytes* genotype VII
- ITS-dermatofitosis (HSH, ciudades EU)
- Considerar si afectación: genital, ingles, nalgas, cara + FR ITS
- Sensible a terbinafina
- Requiere terapia sistémica larga

Jabet et. al 2023  
CDC MMWR 2024;  
Gupta AK. *J Fungi* 2024.



## Cases of sexually transmitted ringworm have been confirmed in the U.S.\*

**Patients typically present with itchy, scaly, ring-shaped lesions on:**

- Trunk
- Buttocks
- Genitals
- Face
- Extremities



**Treatment:**

- Oral terbinafine (250mg daily)
- Treat until lesions resolve
- May require up to 3 months

**Counsel patients to avoid skin-to-skin contact and sharing personal items**

 [bit.ly/mm7343a5](https://bit.ly/mm7343a5) 

\* *Trichophyton mentagrophytes* genotype VII (TMVII) infection reported in New York City in June 2024

OCTOBER 31, 2024

# DIAGNÓSTICO

- KOH
- CULTIVO MICOLÓGICO
- PCR
  - EUROArray Dermatomycosis detecta 23 dermatofitos y 6 especies de levaduras/mohos
- Secuenciación
  - Para detectar genotipo VII y VIII de *T. mentagrophytes*
- Espectrometría de masas

**Sensitivity** ↑

Mass spectrometry  
Proteomics

**Specificity** ↑

PCR  
Sequencing

**Others**

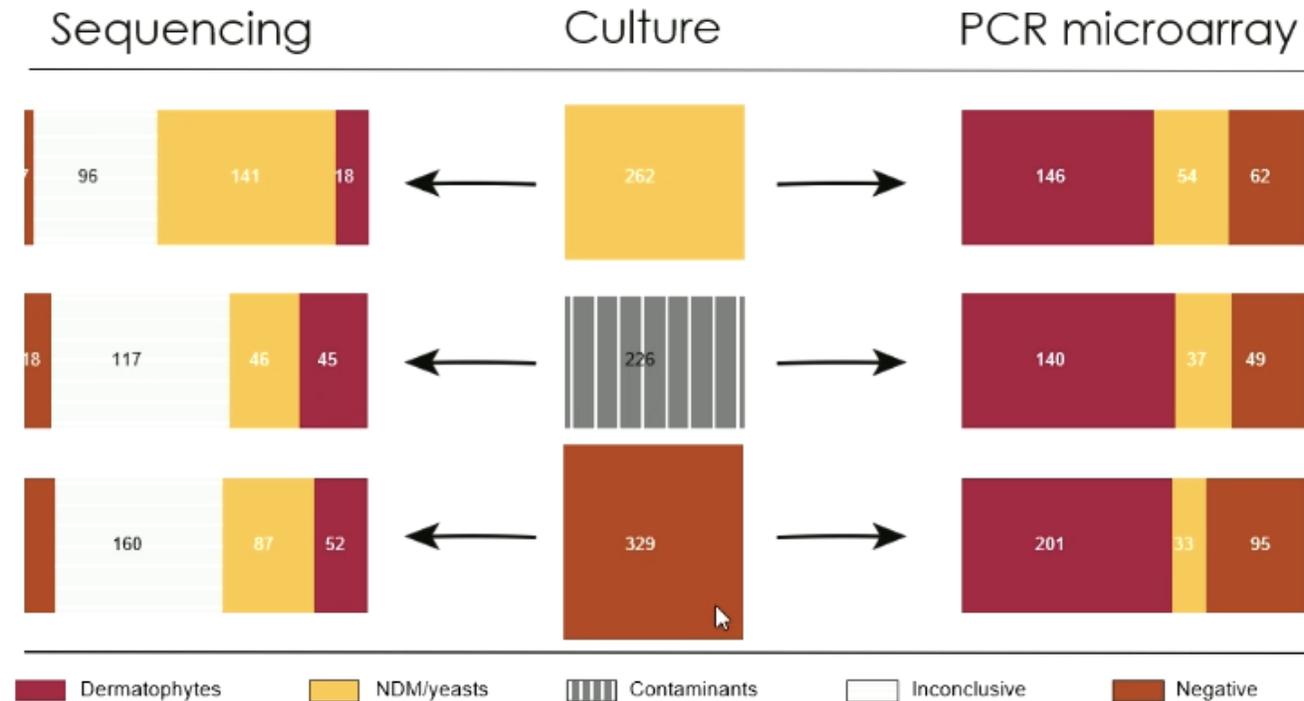
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Highlights

3ª edición  
17-20 sep  
PARIS



# MOLECULAR PRESENCE OF NON-CULTURED DERMATOPHYTES

in microscopy-positive but culture-negative nail samples [n=817]



# RESISTENCIA A TERBINAFINA

2003: First communication of terbinafin resistance in *T. rubrum*



1. Mukherjee PK et al. *Antimicrob Agents Chemother.* 2003. | 2. Bishnoi A et al. *Lancet Infect Dis.* 2018.

## Terbinafin resistance on the rise



1. Mukherjee PK et al. *Antimicrob Agents Chemother.* 2003. | 2. Bishnoi A et al. *Lancet Infect Dis.* 2018. | 3. Saunte D et al. *J Eur Acad Dermatol Venereol.* 2021. | 4. Shen JJ et al. *Dermatology.* 2022. | 5. Muhaj FF et al. *J Am Acad Dermatol.* 2022. | 6. Monod M, Blanchard G, Guenova E. *J Invest Dermatol* 2023

Terbinafine  
Squalen-  
epoxidase

Antifungal resistance:  
increasing challenge

Europa<sup>1,2</sup>

USA<sup>3</sup>

Indien<sup>4</sup>

## Antifungal susceptibility testing

EUCAST | agar medium containing terbinafine

Others

■ SENSITIV ■ RESISTENT

1. Monod M, Blanchard G, Guenova E. *J Invest Dermatol* 2023 | 2. Blanchard G, ....  
Guenova E. *J Eur Acad Dermatol Venereol* 2023 | 3. Gupta AK et al. *J Invest  
Dermatol* 2023 | 4. Gupta AK et al. *J Eur Acad Dermatol Venereol* 2023.

Emmanuella Guenova, MD, PhD

JKU | KUK

- Antifungigrama ( EUCAST)
- Mutaciones detectadas mediante estudio molecular (*Mutations in the squalene epoxidase*)



2023  
AEDV  
Highlights

3ª edición  
17-20 sep  
PARIS



TEXAS A&M UNIVERSITY  
Naresh K. Vashisht  
College of Medicine

## The Potential of Luliconazole as Adjuvant Therapy for Terbinafine-Resistant *Trichophyton* Species

Holly Hodge, BS<sup>1</sup>  
<sup>1</sup>Texas A&M University Naresh K. Vashisht  
College of Medicine, Dallas, TX

## Voriconazole is effective in totally drug resistant cases of dermatophytosis

**Sunil Dattatraya Ghatе**

Dr Ghatе's Skin & LASER centre, Mumbai, India

Mail- [sdghate\\_2000@yahoo.com](mailto:sdghate_2000@yahoo.com)



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Patrocina:



### H. Clínic STI Team:

JL Blanco, G. A  
Català, I. Fuertes, D.  
García, A. González,  
V. Guilera, J. Riera,  
E. Solbes

[alcatala@clinic.cat](mailto:alcatala@clinic.cat)



2023

# AEDV Highlights

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Brilla el futuro de *la dermatología*,  
donde nace *la luz*

# GRACIAS



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2025

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34ª edición  
17-20 sep  
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Brilla el futuro de *la dermatología*,  
donde nace *la luz*

La Academia Española de Dermatología y Venereología expresa su agradecimiento al patrocinador UCB, por su especial apoyo y contribución con la actividad formativa Highlights 2025.