MENKES INTERNATIONAL ASSOCIATION

2025 Annual Report

Making Menkes Disease History.

"Health is not everything, but without it, everything else is nothing." — paraphrase by Arthur Schopenhauer, *The Wisdom of Life* (1851)

A LETTER FROM THE FOUNDER

Foreword

When I read this year's quote, I think of our children. I think of Marco, learning to run. I think of the families who write to us from Brazil, from Kazakhstan, from Scotland — places we never imagined we would reach — telling us that they no longer feel alone. Health is not everything, but for a child with Menkes disease, it is the beginning of everything.

2025 has been, without doubt, the most significant year in the history of Menkes International Association. Four new children began treatment with elesclomol-copper, bringing the total in our Named-Patient Program from 5 to 9.

Each of them represents a family that dared to hope, and a team of clinicians and scientists that refused to give up. The results we are seeing — modest in the language of medicine, but extraordinary in the language of a parent — continue to inspire everything we do.

Beyond the clinic, we have worked tirelessly to build the foundations that will sustain this mission long into the future. Our Registry now holds data on 142 children from 31 countries, making it the largest of its kind in the world. We presented our work at the World Orphan Drug Congress. We published in the Journal of Clinical Investigation. We advocated before the Junta de Andalucía. We protected our patients' data with hospital-grade security. We began the process of becoming a Foundation. None of this happened by accident — it happened because of you.

To our families, our scientists, our donors, our volunteers, and everyone who has believed in this cause: thank you. You are the reason we keep going.

Once again with gratitude for your support,

Aurora Mateos

Founder and Director, Menkes International Association

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01

Named-Patient Program of Menkes International (NPP-Menkes)

In 2025, the NPP-Menkes grew from 5 to 9 children receiving elesclomol-copper treatment — an 80% increase that reflects both the trust placed in MIa by families and clinicians worldwide, and the extraordinary logistical effort required to make each new treatment possible.

Each child enrolled represents months of medical coordination, regulatory navigation, family support, and scientific rigour. The clinical results observed across all nine patients are deeply encouraging.

Elesclomol-copper: subcutaneous treatment prepared at the hospital pharmacy

9
active patients

+80%
growth

01 · NPP-MENKES

Eleven visits, two countries, one shared commitment

One of the defining features of the NPP-Menkes is that no child is left to navigate treatment alone. While each patient receives elesclomol-copper at their own hospital of reference, the pharmaco-clinical team known as The Core maintains weekly follow-up of every case.

In 2025, The Core conducted eleven on-site visits across Spain and Switzerland. In March, the team travelled to La Línea de la Concepción to see MNK4 (17th) and to Sevilla for MNK3 (30th–31st). April brought a visit to Valencia for MNK6, followed in May by a four-day visit to Lanzarote for MNK5 (10th–13th). In June, the team travelled to León for MNK2 (8th–9th), and in July to Ávila for MNK8 (6th–7th) and to Switzerland for both MNK7 and MNK9. The autumn brought three further visits to Málaga: MNK6 on 23rd October, MNK4 on 31st October, and MNK5 on 17th November.

2025 was also a year of significant expansion, with four new patients beginning treatment. MNK6 started in April at 17 months of age, MNK7 in May at 9 months, MNK8 in July at 14 months, and MNK9 in December at 4 years — each joining at a different stage of the disease, each requiring a tailored approach.

Nine Copper Warriors

Behind every patient code is a child, a family, and a story of resilience. The profiles that follow describe each child's journey since beginning treatment with elesclomol-copper.

MNK1

Patient 1 · A Beacon of Hope

Diagnosed in 2020, Marco began treatment in 2022. Today he runs, jumps and communicates with independence — a public testament to the power of treatment.

MNK2

Patient 2 · Making Strides

Diagnosed prenatally, he started treatment at 4 months of age in 2023. At age 3 he moves independently and has started school.

MNK3

Patient 3 · Overcoming Seizures

Diagnosed late-stage, he began treatment at 15 months. After two and a half years, he shows a reduction in seizure frequency.

Copper Warriors, continued

MNK4

Patient 4 · A Brighter Future

He began treatment in 2023 at age 3. After two years, he shows improved muscle tone and greater interaction with his environment.

MNK5

Patient 5 · Our Older Copper Warrior

In treatment since November 2024, at 22 he is one of the longest-surviving patients with Menkes disease in the world.

MNK6

Patient 6 · Our Courageous Baby

He began treatment in April 2025 at 17 months, in fragile health. He shows a considerable reduction in spasms and seizures.

MNK7

Patient 7 · Resilience Over All

He began treatment in May 2025 at 9 months. After the first few months, a slight cognitive and communicative improvement was observed.

MNK8

Patient 8 · Baby Pale

He began treatment in July 2025 at 14 months. He has begun showing attempts at head control and visual tracking.

MNK9

Patient 9 · Always Smiling

He began treatment in December 2025 at age 4. He shows an adequate response to basic environmental stimuli — a hopeful starting point.

Clinical Conclusions

- A reduction in the frequency and severity of epileptic seizures in patients with epilepsy.
- The emergence or gradual recovery of basic motor and communication skills.
- An increase in engagement with the environment and in the ability to interact.
- Progress is largely determined by the severity of the initial condition and age at treatment onset.

02

A Landmark Partnership with the U.S. FDA

In March 2025, MIa signed a formal Network of Experts Agreement with the U.S. Food and Drug Administration (FDA), through the Center for Drug Evaluation and Research (CDER) — a distinction held by very few rare disease patient organisations in the world.

This legally binding, five-year partnership grants FDA staff direct access to MIa's international network of scientific and clinical experts in Menkes disease and rare copper disorders, embedding the Association at the very centre of the regulatory process.

The Copper(less) Committee will serve as the mechanism for identifying and recommending experts in response to FDA requests. An extraordinary achievement for a small, family-driven organisation working on an ultra-rare disease.

U.S. Food and Drug Administration — Center for Drug Evaluation and Research (CDER)

03

Menkes Registry: 142 Children, 31 Countries

142
children registered

31
countries

5
continents

The Menkes Registry is one of MIa's most quietly powerful achievements — a living database that grows with every family who finds us, and with every clinician who chooses to report a case. In a disease as rare as Menkes, data is not merely useful; it is lifesaving.

Built and maintained at no cost to families or institutions, its purpose is threefold: to map the true global burden of Menkes disease; to serve as a scientific resource; and to identify potential candidates for the NPP-Menkes treatment programme.

Families gathered at the MIa community meeting — the human network behind the Registry

Distribution by country

Brazil	32	United States	17
Argentina	15	Spain	14
Colombia	8	France	7
Mexico	6	United Kingdom	6
India	5	Italy	5
Germany	4	Poland	4
Turkey	3	Canada	2
Chile	2	Saudi Arabia	2
Switzerland	2		

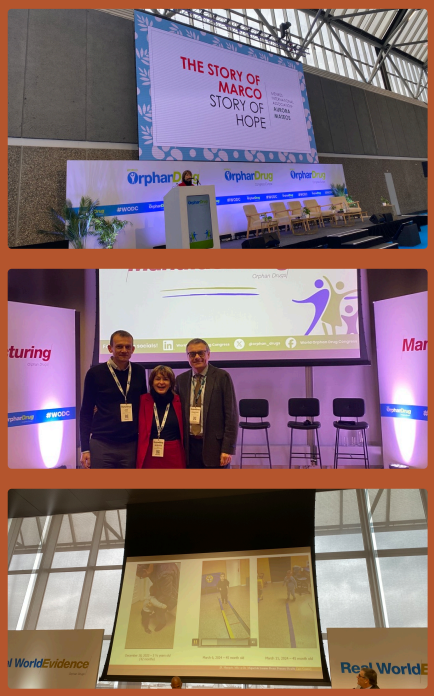
Countries with one patient each: Belgium, Costa Rica, Croatia, Ecuador, Indonesia, Israel, Kazakhstan, Lithuania, Montenegro, Nepal, North Macedonia, Norway, Romania, and Scotland.

04

Scientific Conferences: Taking the Science to the World Stage

MIa's presence at the World Orphan Drug Congress (WODC) in October 2025 marked a milestone in the organisation's scientific credibility, securing a platform at one of the most prestigious gatherings in the rare disease ecosystem.

Three presentations were delivered: Dr. Francesc Palau presented the clinical framework of the NPP-Menkes; Dr. Joseph Standing addressed the pharmacometrics of the treatment; and Aurora Mateos shared Marco's journey — a first-hand account of what this therapy means beyond the data.



MIa at the World Orphan Drug Congress, October 2025

05

Advocacy: Opening Institutional Doors

Changing the healthcare system is slow, difficult work — but it is essential. For the vast majority of families affected by Menkes disease, access to care depends on whether a treatment is recognised and funded within the public health system they rely on.

In 2025, MIa engaged directly with the Junta de Andalucía and the Hospital Regional de Málaga to advance institutional recognition of Menkes disease. When a public health institution formally recognises a rare disease, it creates a durable infrastructure that benefits every child diagnosed in that region going forward.

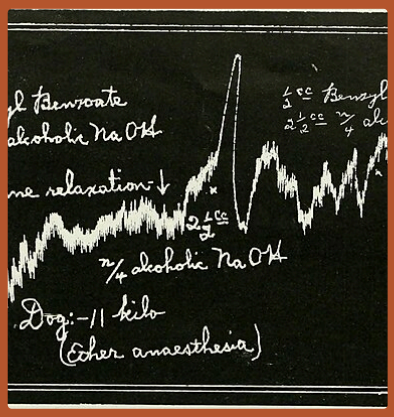
Institutional meeting as part of MIa's dialogue with the health administration

06

Publications: Making Menkes Disease Visible in the Literature

The Copperless Committee Brochure on Early Diagnosis. MIa's Scientific Advisory Board produced a practical clinical brochure focused on the early diagnosis of Menkes disease, designed for paediatricians and neonatologists who may encounter a case within the critical intervention window.

Peer-Reviewed Article in the Journal of Clinical Investigation. An article documenting neurodevelopmental improvements in two children treated with elesclomol-copper was published in one of the most rigorously reviewed medical journals in the world — a clear signal that MIa's science is of the highest calibre.



Historic research records on copper metabolism disorders

07

Menkes Patients' Repository: Protecting Data, Enabling Research

In 2025, MIa established a secure clinical data repository for NPP-Menkes patients, built by Edahula S.L. and structured in full compliance with the GDPR and the LOPDGDD. This repository centralises the clinical information of treated patients and potential candidates, enabling longitudinal follow-up.

Data is pseudonymised and access is role-restricted. In a field where every patient counts and every data point matters, this repository is not merely an administrative tool — it is a scientific asset.

08

Christmas Fundraising: A Community That Gives Back

Every year, MIa reaches out to its community during the Christmas season — and every year, that community responds. The 2025 campaign, centred around the lottery tradition, raised essential funds for MIa's operational capacity. Each ticket sold for €25: €20 the ticket price and €5 a direct donation to MIa.

The two previous years had brought the joy of a prize, but 2025 was not so fortunate. Even so, we keep playing — because anyone who knows these children will tell you they bring luck wherever they go.

The MIa community gathered at the annual charity gala

09

Family Support: No Family Faces This Alone

For a family receiving a diagnosis of Menkes disease, the medical system can feel overwhelming. In 2025, MIa continued to serve as that map for families navigating this reality — sometimes a phone call after diagnosis, sometimes a connection to a specialist in another country.

This work requires deep knowledge of the disease and healthcare systems across multiple countries, and the patience to accompany processes that can unfold over months or years. In several cases in 2025, this intervention made a concrete difference in a child's treatment pathway.

MIa families, gathered together with Marco

10

Building for the Future: Towards a Menkes Foundation

In 2025, MIa took the formal first steps to transform from an association into a Foundation — a significant institutional milestone that will expand its legal capacity, strengthen its governance, and enhance its ability to raise funds and establish partnerships internationally.

Trust is the currency of a non-profit organisation, and transparency is how it is earned. In 2025, MIa continued its commitment to full accountability, publishing a detailed statement of income and expenditure.

Marco — the child whose journey began it all

MICU · MENKES INTERNATIONAL ASSOCIATION

Statement of Income and Expenditure

Financial Summary by Activity · FY 2025 · 1 January – 31 December 2025

Total income FY2025

+126,152 €

Engrail advance FY2026 (received Dec. 2025)

+79,975 €

Total received in 2025 (incl. advance)

+206,127 €

Total expenses FY2025

–99,165 €

Net balance FY2025 (excl. advance)

+26,987 €

Net balance incl. FY2026 advance

+106,962 €

Summary by Activity

Activity	Income €	Expenses €	Net €
Income	126,152.00	—	+126,152.00
NPP — National Patient Programme	—	52,308.97	−52,308.97
Scientific Conferences	115.00	1,040.46	−925.46
Advocacy	—	750.74	−750.74
Publications	—	822.00	−822.00
Repository	—	1,223.35	−1,223.35
Xmas Fundraising — Income	10,827.10	—	+10,827.10
Xmas Fundraising — Ticket purchases	—	8,040.00	−8,040.00
Family Support	—	1,809.43	−1,809.43
Foundation — Cooper-Rare	—	30,622.45	−30,622.45
Administration	259.66	3,169.51	−2,909.85

FINANCES 2025

Expense Detail by Activity

Activity / Description	Inc. €	Exp. €	%
NPP — medical team fees, missions, travel, treatment intensification (Engrail D25028: 30,000 €)	—	52,308.97	52.4%
Scientific Conferences — Amsterdam congress hotels, flights (KLM, Vueling, Renfe), scientist fees	115.00	1,040.46	1.0%
Advocacy — patient advocacy memberships and mission reimbursements	—	750.74	0.8%
Publications — design and typesetting (MIA 2024), DILVE registration, author fees	—	822.00	0.8%
Repository — web hosting (Bluehost), digital repository maintenance, bank fees	—	1,223.35	1.2%
Xmas Fundraising — Income (donations, cash deposits, transfers)	10,827.10	—	—
Xmas Fundraising — Ticket purchases (pago lotería navideña)	—	8,040.00	8.1%
Family Support — medical visits, hotel accommodation, direct family reimbursements	—	1,809.43	1.8%
Foundation — Cooper-Rare incorporation: 30,000 € endowment (08/08) + legal/admin	—	30,622.45	30.7%
Administration — Gestoría Lualje, AEAT/TGSS taxes, bank fees, GSuite, MásMóvil, TPV, Zoom	259.66	3,169.51	3.2%

NPP (largest category): includes monthly medical team fees and the 30,000 € treatment intensification grant (Engrail D25028, 06/05/2025).

Foundation: incorporation process of the Cooper-Rare Foundation, including the 30,000 € endowment (08/08/2025).

Engrail advance FY2026: the 79,975 € wire transfer received 29/12/2025 corresponds to FY 2026.

Making Menkes disease history.

MICu · Menkes International Association · President: Aurora Mateos Rodríguez