Annual Report 2023

ecraid

“In 2023 Ecraid gained momentum and became fully operational”

On our own feet

2023 marked the year when Ecraid gained momentum and became fully operational. It's remarkable to witness how we achieved this with a diverse, young, yet experienced team. Moreover, we are beginning to reap the benefits of our unique pan-European collaboration. Several studies commenced enrolment, and by the year's end, two significant studies were attracted to our primary care network. The arrival of Evelina Tacconelli as Chief Scientific Officer was a welcome enrichment to the Management Board. Reflecting on 2023 I dare to say, that on the shoulders of all those that built PREPARE, COMBACTE, and ECRAID-Plan, Ecraid is now standing on its own feet.

In 2024, we will further strengthen our academic footprint. The fight against infectious diseases needs to continue and the multiple lessons learned during the pandemic need to be integrated in our pandemic preparedness approach. After the establishment of the Ecraid network, implementing, and actually testing, a response structure toward an infectious disease threat is an important goal for 2024. The threats posed by infectious diseases to human health necessitate international collaborations – among scientists in academia, among the pharmaceutical industry, and among investigators and authorities. Ecraid aims to play a central role in this, and as CEO, I am proud of the strides our organisation has already taken in such a short time.

I invite everyone to read this 2023 annual report and – as we say it – become part of the solution.

Marc Bonten
Chief Executive Officer

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An introduction to Ecraid

Ecraid is a not-for-profit organisation focused on reducing the impact of infectious diseases on individual health and on society as a whole. Started in January 2022, Ecraid builds on the legacies of major EU-funded projects that demonstrated the value of collaboration between academia and industry. Ecraid now offers services both for industry- and investigator-driven research on infectious diseases. Several academic centres of excellence across Europe collaborate through Ecraid, which is headquartered in the Netherlands.

Full breadth of clinical studies

Ecraid provides the full breadth of clinical studies on infectious diseases: observational studies and interventional studies in three* trial phases (II, III and IV). Ecraid can do this from the study design to protocol development, site selection, and finally, clinical study report (see page 15). Ecraid also aims to improve the European scientific response to an infectious outbreak or a pandemic. With its specialised warm-base network Ecraid can respond to an outbreak more quickly. Ecraid will use any resources to accelerate research in case of an emerging pandemic.

* In 2024, we expect to add services for phase I studies (see page 22).

Fast, efficient, high quality

Because of its warm-base network, Ecraid can execute trials faster and more efficiently, with a high level of quality. In a warm-base network, sites are used to work with standardised processes and procedures and are able to start up quickly with well-trained staff. A continuous flow of studies is needed to maintain the warm-base network. Ecraid has multiple studies running with sites – both hospitals and laboratories – from its own network participating (see overview page 17). Ecraid helps less-experienced sites to develop their potential for clinical research, thus expanding the number of experienced sites and augmenting the capabilities of the network to conduct more studies in parallel.

Perpetual basis

Among the studies being executed are the perpetual observational studies (POS). These are multicentre observational clinical studies that include patients on a perpetual basis. With the present set of POS, data and clinical samples are systematically collected. Partners can make use of this data or plug in their own questions. With their perpetual character, POS enable continuity in clinical research. This also applies to the even more innovative concept of adaptive platform trials (APT), with which Ecraid has experience through REMAP-CAP and ECRAID-Prime.

Ecraid is much more than an organisation aimed at carrying out clinical trials. Ecraid is a movement where knowledge of infectious diseases can be shared and new methods of clinical research can be developed together. It is a movement where young talent and experienced experts – from both academia and industry – connect to collaborate and learn.

Ecraid strives to create real Europe-wide coverage of its network, aggregating the potential European academia has to offer in research on infectious diseases. A broad European coverage also gives access to specific populations where the prevalence of a pathogen is high. We also have the detailed information where to find these populations. This targeting shortens the time needed to reach the required number of patients in a trial.

1,250

CLIN-Net (over 1,250 hospital sites)

950

LAB-Net (almost 950 laboratories)

250

Primary Care network (over 250 GPs)

Report from the Management Board – a solid foundation

2023 marked the first full year of Ecraid's existence. Over the past year, we have strengthened the resilience of the organisation, enhanced our visibility, and thereby solidified our position as a catalyst for collaboration within Europe. Additionally, we successfully concluded the year with a positive financial outcome. These achievements represent significant progress towards our goal of becoming a sustainable organisation that makes a substantial contribution to reducing the impact of infectious diseases on individuals and populations. This was only possible thanks to a dedicated team of employees and widespread support and commitment from many experts in infectious diseases in Europe.

Building a robust organisation

We take pride in the speed at which we have established the organisation while maintaining a focus on its robustness. Our aim is not only sustainability but also the delivery of high-quality, impactful studies. To this end, we have invested in developing our own quality system, which is expected to be completed by 2024. Furthermore, in 2023, we appointed a Quality & Privacy Manager dedicated to these themes. We also strengthened quality control in trials, with the further implementation of electronic case record forms (ECRFs). This approach has proven effective in reducing errors, enabling automated data quality checks, and facilitating patient inclusion.

Visibility and recognition

In 2023, we saw the results of our good and intensive collaboration with the European Commission. Our efforts to build a clinical research network were recognised and appreciated. Ecraid was mentioned several times in funding calls as a reference for a European network for clinical trials in infectious diseases. But perhaps the most significant appreciation was the recognition – following a financial assessment – of Ecraid by the European Commission as an organisation authorised to coordinate European projects. For Ecraid, this was a prerequisite for existence: we can now independently apply as the lead contractor for grants. Another recognition we received is that of non-governamental organisation (NGO) status. With this designation as a non-governmental organisation, we once again emphasise we are a not-for-profit organisation. This is essential as we want to be seen for what we are: an academic organisation, not a contract research organisation (CRO), as was initially sometimes assumed. These recognitions have been instrumental in positioning Ecraid within the clinical research landscape.

Emphasis on collaboration

Collaboration is one of Ecraid's core values, and in 2023, we invested in strengthening relationships with various stakeholders. We held regular meetings with the Directorate-General for Research and Innovation in Brussels and the European Medicines Agency (EMA) in Amsterdam. We also fostered connections with counterpart

"In 2023, we saw the results of our good and intensive collaboration with the European Commission."

networks in the United States (ARLG: Antibacterial Resistance Leadership Group) and Asia (ADVANCE-ID), formalising these contacts in the first quarter of 2024. This aids in collaborations on projects taking place across three continents. However, we consciously maintain our focus on Europe. Within Europe, we also took initiatives to build new collaborations with other research networks. For instance, we had a very pleasant and constructive meeting with European Clinical Research Infrastructure Network (ECRIN) in Paris. When it comes to collaborations within Europe, we cannot overlook our participation in the winning bid for the Coordination Mechanism for Cohorts and Trials (CoMeCT) call. This project is the European Commission's response to the desire to be better prepared for pandemics. CoMeCT is a significant step forward in boosting Europe's pandemic preparedness and response. It will build on and reinforce existing networks and infrastructure to establish a visible, well-defined coordination mechanism. CoMeCT will streamline research in the form of adaptive platform trials and cohort studies during inter-pandemic times for infectious diseases with epidemic or pandemic potential. This aligns perfectly with our vision, and it is important for Ecraid to be part of it.

Strengthening the infrastructure

Ecraid's strength lies in its infrastructure, which supports both public and private researchers and also facilitates self-initiated research. In 2023, we further expanded and integrated this infrastructure. Our network of hospitals (CLIN-Net) grew from 1,220 sites to 1,253, and the network of laboratories (LAB-Net) expanded from 925 laboratories in Europe to 940. In June, during the General Assembly of ECRAID-Base, the kick-off of the Ecraid Clinical Liaisons (ECLs) Council took place. This counsel represents all ECLs of CLIN-Net. These ECLs are carefully selected and serve as important linking pins to sites and networks in the countries where we are active. Together with these ECLs we are working on further strengthening collaboration within countries and regions. We also started the process to extend our infrastructure by establishing a new initiative, P3, where three expertise centres in Austria and the Netherlands will provide services for pharmaceutical support, pharmacology, and pharmacometrics specifically focused on research on infectious diseases (see page 22). Last year, we already witnessed increased collaboration among the various parts of our infrastructure. This includes, for example, the utilisation of the expertise of EPI-Net and STAT-Net in site selection or study design.

Progress in research

The start of Evelina Tacconelli as CSO (Chief Scientific Officer) during 2023 brought a positive momentum to Ecraid in its development towards a high-quality scientific network. We also have made significant strides in research. Our perpetual observational studies (POS) made significant progress with the inclusion of patients in 2023. These studies are strategically important to us because they support the continuity of our warm-base network. At the same time, they serve as a fantastic platform for researchers (both public and private) to quickly add their own studies to or utilise data from. By the end of 2023, we also secured two significant projects for ECRAID-Prime, collaborations with Sanofi and the Bill & Linda Gates Foundation, focusing on primary care. With its first General Assembly, ECRAID-Prime reached another important milestone last year.

Education

Ecraid aims to play an active role in knowledge sharing and education. Education is essential to increase capabilities in research. In doing so, we pay special attention to young talent. We aim to help them navigate the world of clinical research in infectious diseases and provide opportunities to build their own personal European network. Our Young Investigator Meeting at ECCMID and the Post Graduate Course in Prague are good examples (see also the interview with Anežka Gryndlerová, page 24). In 2023, we also published our first whitepaper, focused on warm-base networks.

Financially successful

Financially, we had a successful year. We achieved higher revenue with consistent costs, allowing us to grow our reserves on the short term to a sustainable and robust level. The private share of revenue increased, with the public-private ratio now at 60-40 and trending towards 50-50. This aligns with our goal of strengthening collaboration between academia and the industry. And with revenues from private contracts, we aim on the longer run to spend these additional revenues for our own research and quickly initiate research in the event of an emerging pandemic. Our first presence with an Ecraid booth at the ECCMID and a dedicated brochure for the industry certainly helped to gain attention from pharmaceutical companies.

Proud of the team

We are proud of the team of employees that is building Ecraid. In 2023, we continued to grow from 46 to 73 employees. The percentage of employees with an international background increased from 25% to 33%. The establishment of our own Works Council in 2023 was a step that aligns with the growth we have experienced. We perceive our relationship as mutually involved and constructive. Additionally, it is reassuring to see that during this dynamic growth phase, we have had minimal turnover and low absenteeism among our staff. We foster team spirit and engagement through diverse activities such as Town Hall meetings and training sessions on personal and team effectiveness.

2024

Looking ahead to 2024, we have confidence that we can build further upon the solid foundation we laid in 2023. For this purpose, we have identified four strategic pillars in which we particularly want to invest: Great People, Collaboration & Community, Academic Excellence & Communication, and Conducting High-Impact Studies (see visual on page 10). Together with our stakeholders, we will succeed in building the strong, unique, and attractive academic clinical research network-organisation with broad European support that we want to be.

Marc Bonten, CEO Ecraid
Evelina Tacconelli, CSO Ecraid
Nils Visser, COO Ecraid

Purpose, mission and strategy 2024

Purpose

Together, we strive to reduce the impact of infectious diseases on individual and population health.

Mission

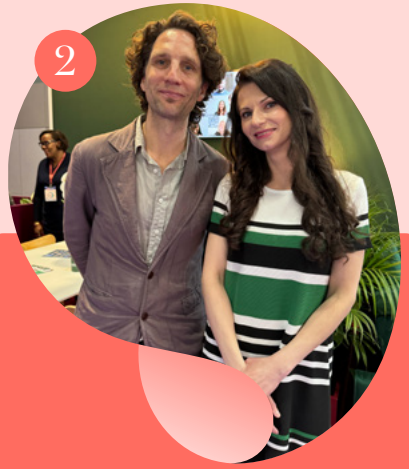
Joining forces to collaborate and efficiently deliver high-impact studies.

Our Strategy

1

Great People

We foster an inclusive, people-centred culture, built on trust, and accountability where talent flourishes. We create a great work environment.



2

Collaboration & Community Building

We work closely with our network, partners, and academic institutions to advance clinical research. We are engaged with the broader community to raise awareness on infectious diseases.

3

Academic Excellence & Education

We are dedicated to sharing knowledge, educating and, training researchers and clinical trial staff in the field of infectious diseases.

4

Conducting High-Impact Studies

We are committed to delivering high-quality research with rigorous quality assurance, high operational efficiency and, scientific integrity.

“I see a rapid growth of Ecraid, which is fantastic”

Oliver A. Cornely Professor of Translational Research
CECAD, University of Cologne, Member Ecraid Coordinating Committee

After working in COMBACTE from the beginning, I got involved in the discussions to make the results more sustainable. With all the energy of Herman Goossens, Marc Bonten, Frank Deege and representatives from other countries a business plan for Ecraid was rapidly drafted. Now Ecraid brings all together: the protagonists and the sites, the whole spectrum. With Ecraid we can increase speed in studies. But Ecraid is not only there to execute studies of other entities. Ecraid also gives the scientific and medical input for such studies and creates its own studies to answer public health questions. Ecraid is important because we need such a platform.

In Ecraid I am also the Ecraid Clinical Liaison (ECL) for Germany. A role I fulfilled before as national coordinator in COMBACTE. That role has been evaluated, expanded, and improved. For instance, more is done now to connect the ECLs. It is just one example of things that evolve in a good way. With the Coordinating Committee we recently had an impressive meeting, where I was very happy about the degree of openness. That is really an improvement we achieved together. This supports the speed of development of Ecraid. I see a rapid growth of Ecraid, which is fantastic.

I think Ecraid has proven that a platform of networks funded by EU money can come to life. And now this is proven, I wished that there is sustainable funding beyond. We cannot do this from call to call to call. We need something that is sustainable. Maybe that demands a bit more courageousness. We need agility, not micromanagement with so many reports. The freedom of science ends where reporting takes so many resources that the freedom is gone. The most successful programmes are those where you give somebody an amount of money and have trust based on a track record.

Highlights

January

Ecraid joins ECRAID-Prime consortium

February

9 February
ECRAID-Prime network training

April

1 April
Evelina Tacconelli appointed as Chief Scientific Officer

15-18 April
Ecraid's first participation at ECCMID

May

16 May
Agreement signed with SaNOtize for evaluation X in ECRAID-Prime

June

First patient enrolled in POS-ARI-ER

5 June
Ecraid Clinical Liaison kickoff meeting

ECRAID-Prime inaugural General Assembly

Ecraid's first Annual Report

5-6 June
ECRAID-Base General Assembly

September

9 September
Postgraduate course at ERS International Congress

19 September
Ecraid whitepaper 'The warm-base network'

October

24-26 October
Postgraduate course (Better Methods for Clinical Studies in ID and CM), Prague

November

First patient enrolled in SNAP trial in Europe

First patient enrolled in POS-ARI-PC

December

First patient enrolled in POS-Disease X in Europe

Business Development – significant appeal for the pharmaceutical industry

Ecraid has a unique proposition in the market. It is a not-for-profit organisation, a network of colleagues providing direct access to research-oriented infectious diseases specialists throughout Europe. Our aim is to generate as much high-quality data as possible to enhance the prevention and treatment of infectious diseases.

Acquiring new private customers is not a goal in itself. We believe that public and private partners together can drive research forward. This collaborative approach allows us to reinvest earnings into new research initiatives. Moreover, these earnings empower us to respond rapidly to emerging threats, such as pandemics.

Access to key academic opinion leaders

At Ecraid, our Business Development team takes the lead in securing new assignments and strengthening relationships with both public and private partners, aiming to both enhance existing connections and forge new ones. Our proposition holds significant appeal for the pharmaceutical industry, as Ecraid provides them with access to – and the opportunity to directly engage with – key academic opinion leaders in infectious diseases and antimicrobial resistance (AMR) research.

In 2023, the Business Development team at Ecraid focused on raising awareness about our services among (potential) private and public partners. Collaborating closely with Corporate Communications, the team developed promotional materials, such as an introductory slide deck and a corporate brochure. Additionally, we published Ecraid's first white paper, providing insights into the advantages of warm-base networks. Moreover, our Business Development team actively participated in congresses – like the European Congress of Clinical Microbiology & Infectious Diseases (ECCMID) 2023 – and symposia on infectious diseases, targeting events with high attendance from pharmaceutical companies. Which has demonstrated to be a fruitful strategy to enhance the number of requests for proposals.

Join the movement

For both academia and industry, Ecraid provides an infrastructure with cutting-edge clinical research initiatives, including perpetual observational studies and adaptive platform trial designs that collect valuable data for embedding into their studies. This information is widely disseminated via scientific papers, at congresses and symposia. Attendance at ECCMID serves as crucial tool for connecting with representatives from academia and industry. Introduction meetings at national and international level with pharmaceutical companies and clinical contract research organisations (CROs) has demonstrated to be a fruitful strategy for increasing the number of requests for proposals. Pharmaceutical companies are particularly interested in data from specific target populations to position their products effectively, while CROs are looking for the best investigators sites for the execution of their awarded studies. Small and medium-sized biotech companies regulary request advice on study design with a focus on regulatory submission.

Results

In 2023, the Business Development team explored 41 initial leads from the industry, resulting in 7 service agreements at the end of 2023. Change orders on signed contracts also contributed to the annual results in 2023. The total contract value for 2023 amounted to 26,6 million euro. A significant increase compared to the 14,8 million euro achieved in 2022. This accomplishment marks the second consecutive year in which Ecraid exceeded its annual target.

First class research infrastructure for pharmaceuticals

Pharmaceutical companies not only benefit from Ecraid's scientific background but also can rely on Ecraid's top-notch research infrastructure. This infrastructure comprises two warm-base networks ready to include patients: CLIN-Net (hospitals) and the Primary Care network (general practitioners). Additionally, we offer a warm-base laboratory network (LAB-Net). Part of the infrastructure includes the specialised P3-network, which offers pharmaceutical, pharmacology, and pharmacometrics services (page 22). Furthermore, our networks and researchers are complemented by the expertise of statisticians (STAT-Net) and epidemiologists (EPI-Net). For our partners, having access to this comprehensive suite of expertise and resources represents a significant advantage, offering a convenient one-stop solution for their research needs.

	Number	Pharma	CRO	Via Ecraid partners	Contract value
Leads	41	41%	46%	13%	
Agreements signed	7	57%	29%	14%	€23 M
Change Orders signed	5	75%	25%		€3,6 M

Actions 2024

For 2024, our primary business development focus will continue to be on disseminating Ecraid's activities, with a continued emphasis on presenting study results to attract academia and industries. This ongoing effort will help bring attention to Ecraid's unique networks and capabilities among potential new partners. To further expand our partnerships, we continue to invite global pharmaceutical companies and CROs to engage in discussions about potential collaborations in Ecraid's programmes. Furthermore, we will actively participate in ESCMID Global 2024, where we aim to meet with leading pharma companies in infectious disease research and development.

Service portfolio

Coordination and execution of trials

From the design of a trial through to the reporting of the study outcomes. Our experts advise sponsors about the best study design. And our operational team is at their side in all stages of the trial execution and can take care of all coordination tasks.

Site selection

Our CLIN-Net team uses a highly standardised process to streamline site selection and optimise the start-up of new trials. With our site selection process, we help to select those sites that will enable trials to quickly and cost-effectively include the required patients.

Laboratory research and biobanking

With LAB-Net, a network of almost 950 laboratories, Ecraid can provide state-of-the-art laboratory diagnostic and research services, closely linked with and supporting its clinical research services.

Epidemiological research

We collect and analyse patient-level and regional data on emerging infectious diseases, including antibiotic resistance. This supports smart site selection for fast patient inclusion.

Statistical analyses

Ecraid can provide both standard and innovative statistical support to improve efficiency and scientific originality of studies.

Pharmaceutical support, pharmacology and pharmacometrics

Services offered by our specialised P3-network.

“For the industry, it is reassuring to have an organisation like Ecraid”

Rienk Pypstra Vice-President Clinical Development Anti-Infectives at Pfizer*

“Since 2017, I have been involved in COMBACTE-CARE, one of the projects from which Ecraid emerged. I vividly recall a conversation with Herman Goossens in a hotel lobby, during an annual meeting for this project. We discussed how the consortium networks and the collaboration between academia and industry could evolve into a permanent organisation to fill an apparent void.

In the years that followed, plans for Ecraid were developed, and I had the opportunity to share some ideas and experiences as input. From an industry perspective, setting up and aligning tens of hundreds of study sites for each study is time consuming and expensive, but even a large R&D company like Pfizer does not have sufficient ongoing studies in the same indication to maintain a clinical trial network. On the other hand, tapping into warm-base network, with a single-point-of-contact can save a lot of time and effort. It can accelerate the start of a study by months. Obviously, I prefer working with an organisation like Ecraid, based on a single master service agreement, with experienced and aligned sites, all ready to randomise patients into a study!

Last year at ECCMID in Copenhagen, I visited the Ecraid booth and was pleased to see how it had become a fully operational and independent organisation. One of the significant advantages of Ecraid, in my opinion, is the depth of collaboration, because industry and academia can be equal partners at the table.

Although discovery and development of antibacterials and antifungals may not be very popular right now, infectious diseases complicate other therapeutic intervention, e.g. in oncology and transplantation, and remain a major cause of mortality, especially with antimicrobial resistance permanently on the rise. Therefore, it is crucial to remain one step ahead in the combat against resistance, and to continue to innovate and rapidly test new potential solutions. For the industry, it is reassuring to have an organisation like Ecraid that we can trust to quickly start and efficently deliver high quality trials. Part of that trust stems from Ecraid being a genuine academic network, conducting investigator-driven research as well. This enhances credibility and acts as a quality stamp.”

* Since April 2024 Rienk Pypstra has become Chief Medical Officer at tranScrip.

Overview studies

RECOVER | COMBACTE-CARE | COMBACTE-NET

REMAP-CAP

Adaptive platform trial evaluating multiple treatment options in patients admitted to intensive care with severe community-acquired pneumonia

Type: APT
Domain: Community-acquired pneumonia in ICU, including COVID-19
Test subject: Multiple **Pts enrolled:** Global: 13,219, EU: 7,574

HORIZON-HEALTH | First patient: 2018 | Completion date: perpetual

REVISIT

A phase III, clinical trial to determine the efficacy and safety of aztreonam-avibactam (ATM-AVI) for the treatment of serious bacterial infections caused by Gram-negative bacteria

Type: RCT, Phase III
Domain: Hospitalised patients with Gram-negative infection
Test subject: Aztreonam-avibactam **Pts enrolled:** 201

ND4BB IHI | First patient: Apr 2018 | Completion date: Oct 2023

PNEUMO

Observational study to determine incidence, seroprevalence and disease burden of pneumococcal CAP and invasive pneumococcal diseases

Type: Observational
Domain: Patients with acute respiratory infections in emergency rooms
Test subject: None **Pts enrolled:** 4,723

Merck | First patient: Feb 2020 | Completion date: 2025

SAATELLITE-2

A phase III, randomised, double-blind, placebo-controlled study evaluating safety and efficacy of suvratoxumab in prevention of pneumonia caused by *S. aureus* in mechanically-ventilated subjects in ICU

Type: RCT, Phase III
Domain: ICU patients at risk for *Staphylococcus aureus* HAP/VAP
Test subject: Suvratoxumab **Pts enrolled:** 19

ND4BB IHI | First patient: Sep 2022 | Completion date: 2024

ECRAID-BASE VACCELERATE MPX-RESPONSE

POS-VAP

Perpetual observational study to determine incidence and outcome of patients at risk for ventilator-associated pneumonia in European ICUs

Type: Observational
Domain: ICU patients at risk for HAP/VAP
Test subject: None **Pts enrolled:** 1,837

HORIZON-HEALTH | First patient: Aug 2022 | Completion date: perpetual

POS-cUTI

Perpetual observational study to determine etiology and outcome of patients with complicated urinary tract infections in European hospitals

Type: Observational
Domain: Complicated urinary tract infections
Test subject: None **Pts enrolled:** 1,468

HORIZON-HEALTH | First patient: Oct 2022 | Completion date: perpetual

CoVacc

A phase II, comparative randomised trial to evaluate the impact of reduced COVID-19 mRNA vaccination regimens on immunological responses and reactogenicity in paediatric subjects (5-12 years) with and without prior SARS-CoV-2 infection

Type: RCT, Phase II
Domain: Healthy children (5-12 yrs)
Test subject: Tozinameran **Pts enrolled:** 31

HORIZON-HEALTH | First patient: Aug 2022 | Completion date: 2024

EPOXI

A randomised, controlled, double-blinded, placebo-controlled trial evaluating safety and efficacy of tecovirimat, with adaptive design allowing future interventions

Type: RCT
Domain: Monkeypox infections
Test subject: Tecovirimat **Pts enrolled:** 0

HORIZON-HEALTH | First patient: - | Completion date: Aug 2026

ECRAID-BASE ECRAID-PRIME

POS-ARI-ER

Perpetual observational study to determine etiology and outcome of patients with acute respiratory tract infections in emergency rooms European hospitals

Type: Observational
Domain: Patients with acute respiratory infections in emergency rooms
Test subject: None **Pts enrolled:** 318

HORIZON-HEALTH | First patient: Jun 2023 | Completion date: perpetual

POS-ARI-PC

Perpetual observational study to determine etiology and outcome of patients with acute respiratory tract infections in primary care settings

Type: Observational
Domain: Patients with acute respiratory infections in primary care
Test subject: None **Pts enrolled:** 461

HORIZON-HEALTH | First patient: Nov 2023 | Completion date: perpetual

POS-disX

Perpetual observational study to determine etiology and outcome of immunocompromised patients hospitalised with unexplained febrile illness

Type: Observational
Domain: Immunocompromised hospitalised with unexplained febrile illness
Test subject: None **Pts enrolled:** 1

HORIZON-HEALTH | First patient: Dec 2023 | Completion date: perpetual

ECRAID-Prime

Adaptive platform trial comparing treatments for acute respiratory tract infections in primary care

Type: APT
Domain: Patients with acute respiratory infections in primary care
Test subject: Nitric oxide nasal spray (NONS) **Pts enrolled:** 0

HORIZON-HEALTH | First patient: - | Completion date: Nov 2024

NEOIPC ZonMW

NeoIPC

Cluster randomised controlled trial in neonatal intensive care units (NICU) to evalaute effectiveness of kangarooing in preventing infections and improving patient outcome

Type: cRCT
Domain: Neonates in ICU (neonatal intensive care)
Test subject: Kangaroo care **Pts enrolled:** 0

HORIZON-HEALTH | First patient: Apr 2024 | Completion date: Mar 2026

SNAP

Adaptive platform trial evaluating multiple treatment and diagnostic options in patients with *Staphylococcus aureus* bacteremia

Type: APT
Domain: *Staphylococcus aureus* bacteremia
Test subject: Multiple **Pts enrolled:** Global: 4,023, EU: 22

UMC Utrecht | First patient: Nov 2024 | Completion date: Dec 2026

VLA2001-307

Open-label phase II/III clinical study to investigate safety and immunogenicity of single VLA2001 booster vaccination in adult volunteers, after receipt mRNA COVID-19 vaccines and/or natural SARS-CoV-2 infection

Type: RCT, Phase II/III
Domain: Healthy adults with prior COVID-19 vaccine
Test subject: VLA2001, COVID-19 vaccine **Pts enrolled:** 67

VALNEVA | First patient: Aug 2022 | Completion date: Aug 2023

E.Mbrace

A phase III, randomised, double-blind, placebo-controlled study evaluating safety and efficacy of a 12-valent *E. coli* vaccin to prevent invasive *E. coli* disease in high-risk elderly

Type: RCT/Phase III
Domain: Patients at risk for urinary tract infections
Test subject: *E. coli* vaccin **Pts enrolled:** 279

Janssen Vaccines | First patient: May 2022 | Completion date: -

ZonMW

SUNRISE-3

A randomised, double-blind, placebo-controlled phase III trial evaluating bemnifosbuvir for the treatment of COVID-19 in non-hospitalised patients at high risk for disease progression to hospitalisation and death

Type: RCT/Phase III
Domain: COVID-19 in non-hospitalised patients
Test subject: Bemnifosbuvir (AT-527) **Pts enrolled:** 2

Atea Pharmaceuticals | First patient: Nov 2023 | Completion date: -

RECOVERY

Adaptive platform trial evaluating multiple treatment options in patients admitted to the hospital with pneumonia

Type: APT
Domain: Hosiptalised patients with acute respiratory infections
Test subject: Multiple **Pts enrolled:** 0

University of Oxford | First patient: Mar 2024 | Completion date: perpetual

RECLAIM

Adaptive platform trial evaluating the efficacy and safety of different treatments for long-term symptoms of COVID-19

Type: APT
Domain: Long COVID-19 patients
Test subject: Multiple **Pts enrolled:** 0

UMC Utrecht | First patient: 2024 | Completion date: perpetual

TREAT-HAP

Trial to determine whether rHuIL-12 and/or rHu-IFNγ can improve outcome of hospital-acquired pneumonia patients

Type: RCT/Phase IV
Domain: ICU-VAP
Test subject: rHuIL-12 , rHu-IFNγ **Pts enrolled:** 0

HORIZON2020 | First patient: 2024 | Completion date: -

Our newest asset: P3

Ecraid aims to streamline clinical research on infectious diseases in Europe. This means that whatever the question is, when an investigator seeks support, we are ready to help. With this premise we started to build Ecraid, and we are still finding new building blocks to complete our dream. The last one we found in 2023 was an innovative initiative called P3, which stands for Pharmaceutical, (early clinical) Pharmacology, and Pharmacometrics services. It provides Ecraid the opportunity to get involved with studies in a very early stage, while investigators can work with a trusted partner during the whole process of testing and developing a new anti-infective. It marks a significant advancement in our one-stop-shop philosophy.

"We provide specific knowledge about pharmacology and pharmacometrics."

Partly to underline the integration of the valuable P3 network in Ecraid, Roger Brüggemann joined the Coordinating Committee on behalf of P3. He talks enthusiastically about the opportunities that the collaboration offers. "The three founders of P3 have together created a strong concept that Ecraid can greatly benefit from. We provide specific knowledge about pharmacology and pharmacometrics. We also enrich Ecraid with a physical infra-structure, such as the laboratory in Nijmegen and a clinical phase I unit in Vienna. For us it is nice to be part of a large network, where we can, for example, gain knowledge about specific populations and make new connections with other disciplines and experts." Freshly-arrived P3, according to Roger Brüggemann, wants to first focus on further embedding P3 within Ecraid and investigate how P3 and Ecraid can best reinforce each other. "If we are properly connected to each other, we can expand further. Then, we want to build an aligned network of expert partners in Europe. As founders, we make the first steps, but we want to establish an inclusive network of equal partners."

Phase I and phase II trial unit

P3 is now actually a combination of 3 European centres of expertise in Vienna, Leiden and Nijmegen. Each with its own but clearly complementary expertise. In Vienna, for example, a sustainable and independent trial unit has been developed for phase I and phase II studies. Anti-infectives can be tested for the first time in healthy volunteers and patients. Brüggemann: "In Vienna we investigate, among other things, the best dose to achieve the best possible effect without running into toxicity. We would like to increase our capacity in the long term and thereby accelerate research. Not by expanding in Vienna, but precisely by cloning this facility at other locations in Europe to enhance recruitment for clinical pharmacology studies in specific patient groups. Then clients can count on the same procedures being followed everywhere."

Specialised pharmacology laboratory

The specialised laboratory of P3 is located in Nijmegen. With the most advanced equipment to measure the effect of anti-infectives in humans. "We can perform – existing and quick to develop new – assays on various drugs that can be measured in a variety of matrices such as in blood, tissue, and abdominal fluid. P3 and thus Ecraid can offer high-quality research facilities that cannot be found at a commercial laboratory." Roger Brüggemann says that the laboratory in Nijmegen also offers operational support

for trials. “We handle the process through the ‘Clinical Trial Support Office’. A pharmaceutical company can send us the anti-infectives in bulk. We then package and label it according to the trial specifications. We can also add placebos. Subsequently, we dispatch the shipments as a central hub to the various participating sites. This may sound easier than it is. But ensuring proper shipping registration, for instance, is crucial for reliable research. Only a limited number of centres are permitted to undertake such tasks. In our case, we possess the necessary GMP certificate, where GMP stands for good manufacturing practice.”

Pharmacometrics of anti-infectives

P3’s pharmacometrics services are facilitated by a dedicated team located in Leiden. This team can play a pivotal role in forecasting the behaviour of anti-infectives in the body. They achieve this through the utilisation of sophisticated mathematical models to describe and predict anti-infective drug exposure (pharmacokinetics, PK) and drug effects (pharmacodynamics, PD). Such predictions offer valuable insights, which are essential for selection of optimal anti-infective dosing schedules and to optimise the design of clinical trials.

Established and innovative products

Brüggemann emphasises that P3 is of value for research for both established and innovative products. Yet, he sees the greatest value in the latter category. “A lot of research has already been done with established products, especially in the field of pharmacokinetics. With innovative products we can use our full capacity and competences. These products are also very important for the development of new strategies against infectious diseases. And it is precisely here that the collaboration between industry and academia is very relevant. The experience with this kind of collaboration at Ecraid is therefore very welcome for us.” Brüggemann highlights another example where Ecraid can be enriched with unique knowledge of P3. “In the trial design stage, we can assist researchers with insights in the relationship between the study population and the anti-infective or potential side effects, or interactions with other drugs. Unique knowledge that was not yet available within Ecraid.”

In short

P3 will offer all services needed to perform clinical pharmacology studies of anti-infectives. P3 offers broad experience in early phase I and II clinical studies of anti-infectives including advanced techniques, such as tissue PK measurement and PET (positron emission tomography) studies. Pharmaceutical support will include services for trial medication distribution and pharmaceutical bioanalysis. The pharmacometrics services offered will include PK/PD (pharmacokinetics/pharmacodynamics) and PBPK (physiologically based pharmacokinetic) modelling and simulation and can support design and analysis of anti-infective clinical pharmacology studies.

Founders P3

- **Roger Brüggemann**, Associate professor of Clinical Pharmacology of anti-infectives (Radboud University Medical Center)
- **Markus Zeitlinger**, Head of Department of Clinical Pharmacology (Medical University of Vienna)
- **Coen van Hasselt**, Associate professor Quantitative Pharmacology (Leiden University)

“It’s an excellent way for advancing scientific knowledge”

Anežka Gryndlerová is a PhD student in Microbiology, trainee physician in Clinical Microbiology at University Hospital Motol (Prague), and teacher at the Faculty of Medicine at Charles University (Prague)

“I participated in Ecraid’s Post Graduate Course in October 2023 in Prague. My PhD supervisor drew my attention to it. She was a speaker at the event, and it felt like a great opportunity for me as a young researcher. The scientific world is new to me, and to be honest, I was a bit nervous when I applied for the course. I was not used to asking questions to opinion leaders. So, it initially felt a bit uncomfortable. In the course I found out that senior scientists are more approachable than I expected. Now I would recommend the course to all young researchers – you have nothing to fear. These kinds of courses really help young researchers move forward.

Ecraid’s Post Graduate Course motivated me even more to explore the field of microbiology. Young researchers don’t see all the pitfalls when designing studies. It’s good to know them in advance. For instance, it was really surprising for me to learn about the crucial role of statisticians in designing large studies. The course also touched on topics that are very close to me and are relevant to my daily work in the laboratory.

The pace at which new diagnostic tests are invented, for instance, is very high. Now I have more insights into how I can assess these tests to judge whether they are good enough for my purposes.

I also appreciated the opportunity to present my work and receive direct feedback. I even met someone who was conducting similar research to mine for my PhD. And yes, we also went to the pub in Prague together. It was nice to meet other young researchers in an informal setting. It gave me a new network of people from other specialisations and countries.

Before this course, I didn’t know much about Ecraid. To me the Post Graduate Course was a great way to learn more about Ecraid. I’m happy about this organisation in which scientists try to conduct studies more organised and efficiently, and try to learn from each other. We can do better together than doing it all separately. It’s an excellent way to advance scientific knowledge.”

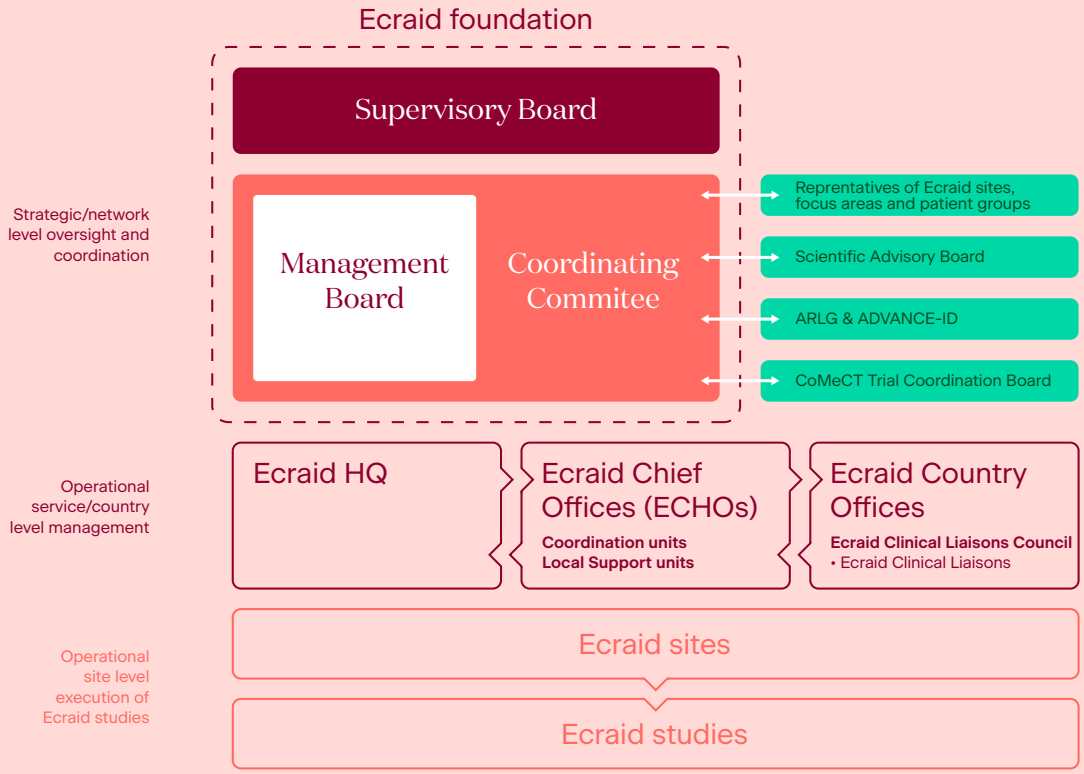
Ecraid governance

Ecraid has been established as a not-for-profit organisation under the Dutch Civil Law. The foundation employs the Management Board and central support staff of Ecraid. The Ecraid Management Board is responsible for the overall coordination and management of Ecraid. That board is supervised by the Supervisory Board.

Management Board

The Management Board is charged with the Foundation's management, including, but not limited to the general operations of the Foundation and representing the Foundation with regard to third parties.The Management Board consists of three persons Chief Executive Officer (CEO), Chief Scientific Officer (CSO), and Chief Operational Officer (COO). That board is supervised by the Supervisory Board. The Management Board meets on a weekly basis.

Marc Bonten	Chief Executive Officer
Nils Visser	Chief Operational Officer
Evelina Tacconelli	Chief Scientific Officer



Central support staff

Ecraid's central support staff was designed as a matrix structure, a work structure in which team members report to multiple leaders. Team members report to a clinical trial project manager and also to their department head. In addition, Ecraid also has central departments, such as Finance, People & Culture, Quality, Office Management, Business Development, Grant Management, and Communications & Marketing.

Supervisory Board

The Supervisory Board ensures that the Management Board manages the foundation in accordance with the mission, identity, and objectives of Ecraid and that it acts and performs adequately. The Supervisory Board consists of global scientific experts and leading representatives of European and international scientific projects, networks and organisations with activities complementary to Ecraid. Three Supervisory Board meetings were held in 2023.

Arno Hoes	Chair, Executive Board member & dean University Medical Center Utrecht, the Netherlands
John-Arne Røttingen	Director General of the Research Council, Ambassador for Global Health, Ministry of Foreign Affairs, Norway
Juan Emilio Echevarría	Laboratory Head, Instituto de Salud Carlos III, Spain
Bernard Pécoul	Former Executive Director Drugs for Neglected Diseases initiative, Switzerland
Momir Radulović	Observer, Board member EMA, Executive Director Slovenian Medicines Agency, Slovenia

Coordinating Committee

Ecraid's Coordination Committee functions as the central body in Ecraid responsible for the Europeanwide coordination of clinical studies on infectious diseases, strategy development, stakeholder management, and service and network development. Three Coordinating Committee meetings were held in 2023.

Marc Bonten	Chair, CEO Ecraid
Sybil Anthierens	Public Engagement – University of Antwerp, Belgium
Roger Brüggemann	P3 - Radboudumc, the Netherlands
Christopher Butler	POS on ARI in Primary Care, SOS-COVID, PRUDENCE, ECRAID-Prime – University of Oxford, United Kingdom
Oliver Cornely	VACCELERATE – University of Cologne, Germany
Jacques Demotes	ECRIN – Data Management, France
Lennie Derde	REMAP-CAP – University Medical Center Utrecht, the Netherlands
Bruno François	POS on VAP in ICUs – University Hospital of Limoges, France
Carlo Giaquinto	PENTA-ID, VERDI – University of Padova, Italy
Herman Goossens	LAB-Net – University of Antwerp, Belgium
Stephan Harbarth	STAT-Net – Geneva University Hospitals, Switserland
Peter Horby	POS on ARI in ER, MERMAIDS 2.0 – University of Oxford, United Kingdom
Thomas Jaenisch	RECoDid, Datasharing – Universität Heidelberg, Germany
Marion Koopmans	Outbreak Preparedness and Response Disease-X POS, VEO – Erasmus University Medical Center, the Netherlands

Jesús Rodriguez-Baño	POS on cUTI in ERs – Hospital Universitario Virgen Macarena, Spain
Evelina Tacconelli	CSO Ecraid, EPI-Net, LOTTA-Net, ORCHESTRA – University of Verona, Italy
Arjana Tambić Andrašević	Capacity building Eastern Europe – University Hospital for Infectious Diseases Zagreb, Croatia
Nils Visser	COO Ecraid
Yazdan Yazdanpanah	EU-RESPONSE – INSERM and Bichat Hospital, France

Scientific Advisory Board

Ecraid's Scientific Advisory Board provides the Coordinating Committee with expert advice and feedback on its services, network composition, innovative trial designs, technologies, ethics, etc. One Scientific Advisory Board meeting was held in 2023.

Evelina Tacconelli	Chair, CSO Ecraid
Seamus O'Brien	Global Antibiotic Research and Development Partnership (GARDP)
Antonio di Caro	Unicamillus International University of Medicine Rome
Marco Cavaleri	Observer, European Medicines Agency
Vance Fowler	Duke University Durham
Nina Gobat	University of Oxford
Xavier de Lamballerie	Aix Marseille University
Nicole Lurie	Coalition for Epidemic Preparedness Innovations (CEPI)
Marc Mendelson	University of Cape Town
Frank Møller Aarestrup	Technical University of Denmark
David Paterson	University of Queensland
Hervé Raoul	Institut national de la santé et de la recherche médicale (INSERM)
Guy Thwaites	Oxford University Clinical Research Unit
Robert Weinstein	Rush University Chicago

Financial report

Policy pursued

Ecraid implemented the Objectives, Goals, Strategies and Measures (OGSM) method in 2023. OGSM is a widely recognised framework and serves as the cornerstone for our strategic planning and execution. This method is being used as a tool for strong management routine that keeps the plan apart from the day-to-day operations. Ecraid developed three strategic objectives: (i) Ecraid develops into a robust organisation, (ii) Ecraid is seen as the European organisation to work with to execute high-quality trials for infectious diseases, and (iii) Ecraid contributes to increasing and sharing knowledge on infectious diseases.

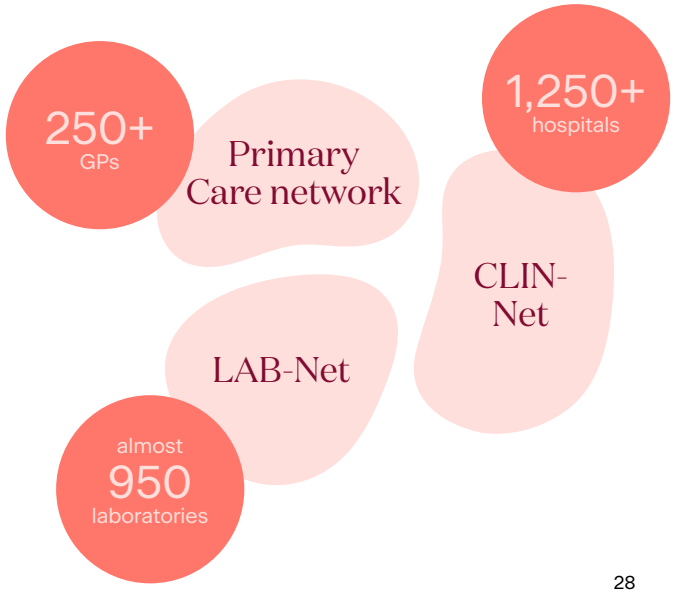
Financial position and risks

The financial statements comprehensively depict Ecraid's activities, which are primarily conducted from its headquarter. In 2023, approximately 60% of the revenue was from public national and international grants. Privately-funded projects primarily encompassed trial project management activities performed on behalf of UMC Utrecht or Ecraid acting as a site and or providing site selection services.

The foundation has been established for the sole purpose of running the activities along the lines of the objectives as mentioned above. The foundation has no objective to gain reserves, hence, the margin reached will be used to professionalise the organisation to strengthen the infrastructure, including its financial cash flow robustness, and to initiate investigator initiated studies. Financial risks are limited as Ecraid holds cash on a dedicated bank account. Ecraid does not work with 'embedded derivatives' and 'hedge accounting', and all larger programs are prefunded.

Given the nature of the organisation, risk assessment is addressed. The monitoring and managing of risks take place on the level of the foundation. Risks have been categorised and prioritised on their possibility and impact. The most significant risks and their mitigating measures identified are:

- Financial risks - continuity of sufficient cashflow; mitigated by effectuating a loan to cover late transfer of shifting funds.
- Financial risks - continuity of funding; (successfully) mitigated by business development and submitting proposals for new funding.
- Personnel risks - health and safety of staff especially when traveling; mitigated as much as possible by establishing a travel policy and by a solid healthcare insurance.
- Privacy risks - data is an important factor in our work and protecting these is a high priority. The risks are mitigated by assigning responsibilities and implementing procedures such as the appointment of an (external) Data Protection Officer.
- Project performance risks - overspending of project budgets and inefficient resourcing; successfully mitigated by implementing a project resource planning (PURE) system and an individual project (financial) performance reporting tool.



Financial Development

The year 2023 is the first full year of operation and was closed with a positive result of €442,003. This result was better than budgeted and ensued from a slightly higher revenue and lower indirect expenses. The revenue generated was based for approximately 60% on public grants and 40% commercial projects, which is in line with the foundation's expectations. The total surplus was added to the foundation's reserve, which will guarantee sufficient cashflow in the coming years. The number of personnel increased from 46 to 73 employees, excluding freelance staff.

2023

The first full year of operation.

Income statement

Unaudited

Income	
Private-funded studies and projects	€3,520,361
Publicly-funded studies and projects	€5,105,983
TOTAL INCOME FOR 2023	**€8,626,344**
Expenditures	
Direct costs of income	€1,526,497
Personnel and personnel related expenses	€5,298,955
Other staff expenses	€229,254
Office rent	€152,653
Sales expenses	€281,086
Office expenses	€16,837
Other expenses	€642,974
Interest and similar expenses	€1,473
Income tax	€34,612
TOTAL EXPENDITURES FOR 2023	**€8,184,341**
TOTAL RESULTS FOR 2023	**€442,003**

The aforementioned figures have been extracted from the 2023 financial statements with a review report provided by BDO accountants on 13 May 2024.

Abbrevations

ADVANCE-ID	Advancing Clinical Evidence in Infectious Diseases
AMR	Antimicrobial resistance
APT	Adaptive platform trials
ARI	Acute respiratory infections
ARLG	Antibacterial Resistance Leadership Group
ATM-AVI	Aztreonam-avibactam
CEO	Chief Executive Officer
CEPI	Coalition for Epidemic Preparedness Innovations
CLIN-Net	Clinical research network
COMBACTE	Combatting bacterial resistance in Europe
COMBACTE-CARE	Combatting bacterial resistance in Europe – carbapenemresistance
COMBACTE-NET	Combatting bacterial resistance in Europe – networks
CoMeCT	Coordination Mechanism for Cohorts and Trials
COO	Chief Operational Officer
CoVacc	Immune response to vaccination against COVID-19, study
COVID-19	Coronavirus disease 2019
CRO	Contract research organisation
CSO	Chief Scientific Officer
cUTI	Complicated urinary tract infections
disX	Disease X
ECCMID	European Congress of Clinical Microbiology & Infectious Diseases
ECHO	Ecraid Chief Office
ECL	Ecraid Clinical Liaison
Ecraid	European Clinical Research Alliance on Infectious Diseases
ECRF	Electronic case record form
ECRIN	European Clinical Research Infrastructure Network
EMA	European Medicines Agency
EPI-Net	Epidemiological network
EPOXI	European monkeypox randomised placebo-controlled, doubleblinded platform trial
ER	Emergency room
ERP	Enterprise resource planning
EU	European Union
GARDP	Global Antibiotic Research and Development Partnership
GMP	Good manufacturing practice
GP	General practitioner
HAP	Hospital-acquired pneumonia
HORIZON-HEALTH	Horizon Europe - Cluster 1 Health
HQ	Headquarter
ICU	Intensive care unit
IHI	Innovative Health Initiative
INSERM	Institut national de la santé et de la recherche médicale
IPC	Infection prevention and control
IT	Information technology
LAB-Net	Laboratory network

LOTTA-Net	Long-term care facilities network
MERMAIDS	Multi-centre EuRopean study of MAjor Infectious Disease Syndromes
MSD	Merck Sharp & Dohme
ND4BB	New Drugs for Bad Bugs
NGO	Non-governmental organisation
NICU	Neonatal intensive care unit
NONS	Nitric oxide nasal spray
OGSM	Objectives, goals, strategies and measures
ORCHESTRA	Connecting European Cohort to Increase Common and Effective Response to SARS-CoV-2 Pandemic Design: Population based, prospective and retrospective cohort study
P3	Pharmaceutical, pharmacology and pharmacometrics services
PBPK	Physiologically based pharmacokinetic
PD	Pharmacodynamics
PENTA-ID	Paediatric European Network for Treatment of AIDS – Infectious Diseases
PET	Positron emission tomography
PhD	Doctor of Philosophy
PK	Pharmacokinetics
PNEUMO	Pneumococcal pNeumonia Epidemiology, Urine serotyping, Mental Outcomes
POS	Perpetual observational studies
PREPARE	Platform foR European Preparedness Against (Re-)emerging Epidemics
PRUDENCE	Platform Randomised controlled trial of point of care Diagnostics for Enhancing the quality of aNtibiotic prescribing for Community acquired acute respiratory tract infection in ambulatory care in Europe
Pts	Patients
R&D	Research and development
RCT	Randomized controlled trial
ReCoDID	Reconciliation of Cohort data in Infectious Diseases
REMAP-CAP	Randomised, Embedded, Multifactorial, Adaptive Platform trial for Community-Acquired Pneumonia
rHuIL-12	Recombinant human interleukin-12
rHu-IFNγ	Recombinant human interferon gamma
SARS-CoV-2	Severe acute respiratory syndrome-coronavirus-2
SOS COVID	SARS-CoV-2 Observational Study on Coronavirus Disease 2019
STAT-Net	Statistical network
UMC Utrecht	University Medical Hospital Utrecht
VACCELERATE	European Corona Vaccine Trial Accelerator Platform
VAP	Ventilator-associated pneumonia
VEO	Versatile Emerging infectious disease Observatory
VERDI	SARS-CoV-2 variants Evaluation in pRegnancy and paeDIatrics cohorts
ZonMW	Netherlands Organisation for Health Research and Development

ecraid

More information?
Mail us at jointhemovement@ecraid.eu or visit us at www.ecraid.eu

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