
#2
Open
let's open our eyes
100% dedicated
to ophthalmology
The magazine by Théa

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let's open our eyes

let's open our eyes

LABORATOIRES-THEA.COM

Théa is a company with deeply European roots, whose independence, stability, and entrepreneurial spirit are guaranteed by the Chibret family, who have been leaving their mark on the world of ophthalmology for the last 150 years.

Being a family-owned business has allowed Théa to develop over the long-term, focusing on employees and human values to accomplish our mission of being *the* "Ophthalmology Specialist". A pioneer in preservative-free treatments, we are committed to providing healthcare professionals and patients with innovative products and a wide range of speciality items (service products, daily-use products) across all ophthalmological therapeutic categories. We are continually reinvesting in our two main areas of interest, Innovation and Internationalisation, with long-term strategy being favoured over short-term profits.

Our goal is to pursue and strengthen long-term partnerships and collaborative research, to share our expertise and address unmet medical needs to provide new methods for treating and supporting patients.
Internationalisation is in our genes: currently the top independent pharmaceutical company in Europe, Théa has set its sights on becoming a world leader by continuing to export its products and establish itself internationally, while always respecting the cultures of each country.

This vision is what makes Théa unique.

THÉA

Key figures

2020

1500
EMPLOYEES

31
SUBSIDIARIES

75 COUNTRIES

600
MILLION EUROS IN TURNOVER

15
THERAPEUTIC AREAS


let's
open
our eyes

Editorial

Jean-Frédéric Chibret
President of the Théa Group

Welcome to the second issue of our magazine "Open".

Over recent years, the world has been put to the test by the coronavirus pandemic. This crisis, which we have all experienced and commented on in real time, has thrown us. But paradoxically, it has reinforced Théa's challenging and unusual decision to keep its production and research facilities on European soil, in what is an increasingly innovative and globalised sector.

We would like to dedicate this second issue of Open magazine to all those who have been working with us for a quarter of a century, and who have devoted their skills and energy to Laboratoires Théa. That's right, our company has just celebrated its 25th birthday! It was a special moment for all of us, and in particular for the president of our holding company, my uncle Henri Chibret, who founded this company in 1994.

A birthday is an opportunity to take stock. In a quarter of a century, we have seen our company grow from fifteen employees in Clermont-Ferrand to 1,500 employees in some thirty subsidiaries and offices around the world. Théa is now distributing one of the most modern ophthalmic care ranges in 70 countries, covering all therapeutic classes. We have launched 25 innovations in 25 years! We're proud of that. And I want to thank and congratulate all of Théa's employees who have participated in the adventure since its inception and who have joined it over the years.

But as you will have guessed, even if we are a family business with a 150-year history, our first duty is to the future. We feel we can look to the future with serenity. We still have good growth margins in the countries where we are established, and great prospects in new ones. Of course, innovation will remain the priority. We can count on our R&D and Théa Open Innovation (TOI) to provide patients and practitioners with tomorrow's solutions.

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12 rue Louis Blériot, 63017 Clermont-Ferrand Cedex 2, FRANCE
Publishing Director Jean-Frédéric Chibret
Chief Editor Lorraine Kaltenbach
Project Supervision Julie Ahmed
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The return to grace of family and independent businesses

Henri Chibret, between a passion for ophthalmology and a passion for business, which of the two is the strongest in your family?

Henri Chibret: Historically, it was the first of the two that emerged. Our great-grandfather Paul Chibret (1844-1911), founder of the French Society of Ophthalmology (1883), was one of the fathers of modern eye medicine. He wasn't a businessman. It was during the next generation that my grandfather Henry (1876-1943) began marketing ophthalmological treatments. On 31 January 1902, he graduated as a pharmacist. That same year, he founded his own company and, with the help of Paul - both passionate about innovation - he developed his first ointments and oily eye drops, containing silver nitrate, atropine, adrenaline, or pilocarpine.

Was this the famous Laboratoires Chibret?

HC: Yes, it was. But even though my grandfather was offering groundbreaking remedies, his business was first and foremost a great little pharmacy. It was my father, in the 1940s, who established the artisan brand and built it to the scale of an industrial company with an international dimension.

After the sale of the family business to the US giant MSD® in 1969 and before founding Théa, did the Chibrets continue to innovate?

HC: More than ever, because the Chibrets are not born to follow but to lead! My brother Jacques launched Biophysic Medical which went on to develop the first European ophthalmic argon laser for the treatment of retinopathy and the first laser in the world, the YAG laser, for the treatment of secondary cataracts. Moreover, it went on to become leader in the field of ocular ultrasound.
As for me, I focused on pharmaceutical research, by founding Transphyto, the first French research and development start-up in the pharmaceutical field. Many start-ups disappear or are taken over. Very few go on to market their innovations. Considering that I had a number of products of primary interest, I took a risk and I set up the Théa marketing company, which was soon set to merge with Transphyto.

Has there been any change in the way family businesses are viewed?

HC: In the 1980s, family business began to be viewed as an outdated form of business, consigned to the scrapheap of history in the face of triumphant managerial and financial capitalism. I can still see one of the presidents of Allergan France telling me that our company, like another French family company, was an "anomaly" on the market, in other words, dregs that were destined to disappear. His career in ophthalmology was a long one.
Today, family and independent businesses are experiencing a return to grace. First, we realised that they remain a significant reality of the world's economies. In Western Europe, family businesses account for between 45% and 65% of GNP and employment. They have also proved to be successful in terms of growth. Overall, consumers consider them to be more closely involved in their service, more aware of their social responsibility, and quicker to make sacrifices for their business and for jobs. For me, they are above all characterised by their inclination to take more risks, and to reinvest their dividends. Finally, they are more resistant to crisis.

In your opinion, Jean-Frédéric Chibret, are family businesses better adapted to the new era?

Jean-Frédéric Chibret:

At Théa, the long-term vision has always taken precedence over short-term profits. We are committed to the long-term, constantly charting out prospects for the future, because confidence in the future is paramount, because we must give meaning to action. Our profits are reinvested primarily in R&D and development in new territories. And while our organisation allows us to have long-term vision, it also gives us the responsiveness that any business needs. Responsiveness to seize opportunities or react to the unexpected. I would add that having stable shareholders and management is an important factor, reassuring both our employees and our partners. This plays a part in their commitment to us. Finally, I would like to talk about the spirit of entrepreneurship and the family spirit that definitively distinguishes us from conventional financial capitalism or from dispersed shareholding, which is reaching its limits.

It is therefore not surprising that family capitalism is currently inspiring renewal and the search for meaning. Our approach is inclusive of all stakeholders: employees, partners, and the scientific and medical community. Let me give you two concrete examples:

We are present in all therapeutic classes, contrary to the logic of some companies that rely only on a blockbuster in one area and neglect almost all other diseases. And while innovation is essential to us, we are also committed to maintaining certain service products, which are essential products available to ophthalmologists and patients. We forget to say this but, every year, very effective products disappear from pharmacies and from the arsenal of practitioners, through lack of profitable production costs for industry.

Second example: education. Throughout the year, Théa supports young practitioners towards success while responding to the aspirations of experienced practitioners. In a world where scientific progress is changing the field of possibilities every day, Théa is here to serve all eyecare professionals, from junior doctors to experienced practitioners, who aspire to keep up regular training to maintain the quality of their practices. In 25 years – what am I saying, in 150 years! – we have created a very close relationship with the ophtalmic community around the world. I dare to believe that it sees us as partners. Partners who were there yesterday, and who will be there tomorrow.

Do these advantages of the family business also apply to innovation?

JFC: Of course, for the same reasons. And we have consistently demonstrated that. I remind you that 25 years ago, when Henri introduced us to the market, from the outset we became the pioneers and world leaders in preservative-free ophthalmological treatments. Every year since then, we have offered therapeutic innovations ophthalmic professionals and patients alike: 25 innovations in 25 years. We have innovated in many therapeutic classes and helped to open up new markets and new concepts with "preservative-free" products, eyelid hygiene, eye nutrition, antibiotic therapy and intracameral mydriasis. And Théa will continue to innovate in ophthalmology.

The recent launch of our company Théa Open Innovation illustrates our desire to be ever more open to other actors, other resources, other talents, other ideas. We are more than ever searching for innovations to shake things up. The company has a dedicated team of around a dozen staff whose objective is to diversify projects, through partnerships with universities and other companies, including start-ups.

The key to success lies in decreasing barriers to innovation.

FOCUS

100% dedicated to ophthalmology

Théa's job
is to continuously innovate without straying from its vocation as a generalist in ophthalmology.

In recent years, the pharmaceutical industry has favoured what is referred to as the "blockbuster approach", focusing on just a few molecules, a few diseases and some very lucrative drugs.

This means that, due to lack of profitability, physicians regularly see medications disappear from their therapeutic arsenal. These medications are sometimes those most appropriate and most effective for their patients.

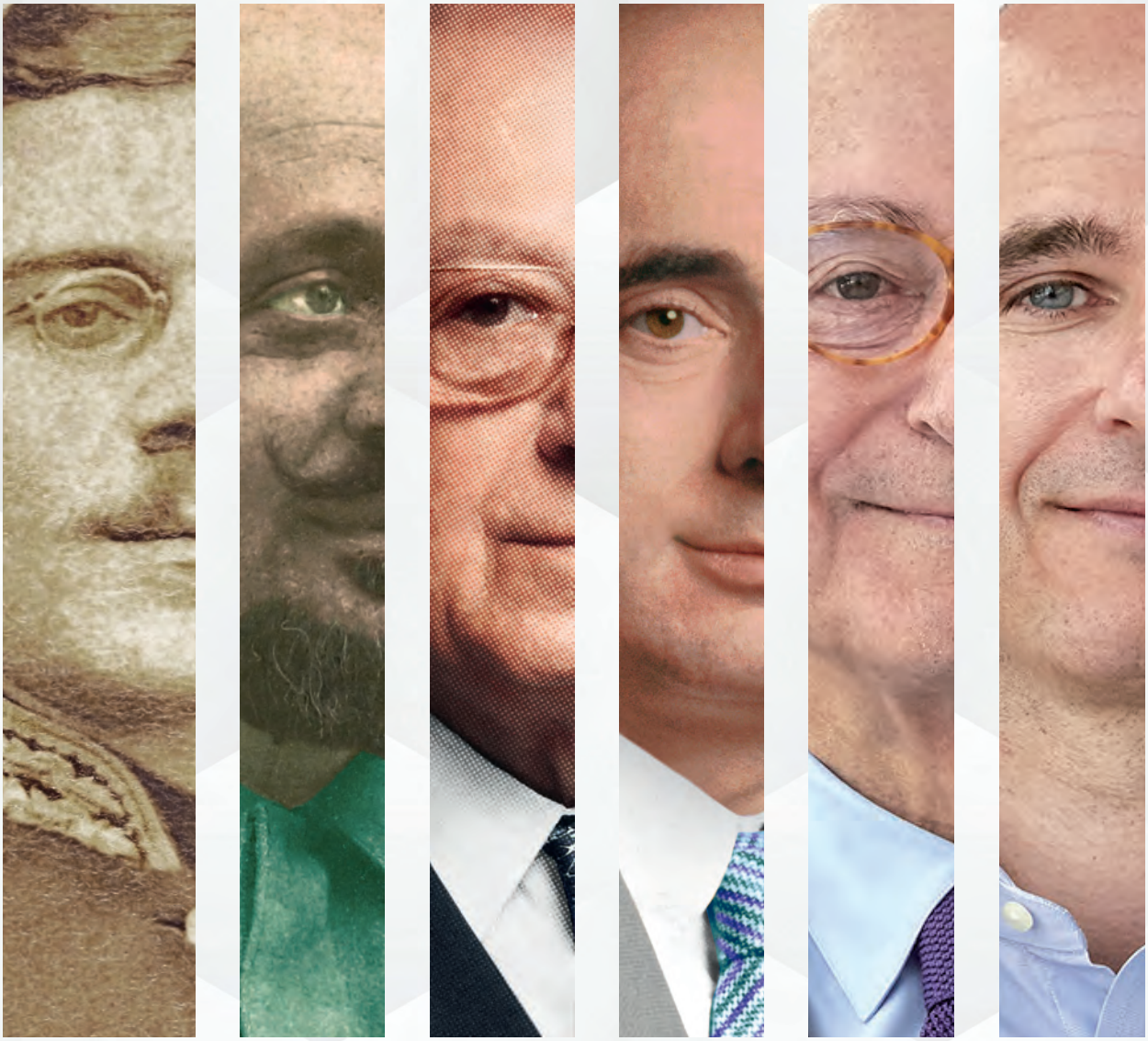
- Allergy
- Anaesthesia
- Antisepsis
- Dry eye
- Eyelid hygiene
- Glaucoma
- Herpes
- Infection
- Infection + Inflammation
- Inflammation
- Mydriasis
- Nutrition
- Diagnosis
- Antibioprophylaxis

Our therapeutic *range*

Defying this logic, Théa's job is to continuously innovate without straying from its vocation as a generalist in ophthalmology. Théa covers all therapeutic classes and ensures that "service products" are maintained. That is, traditional products popular with ophthalmologists that they do not want to see disappear. This policy is part of our commitment to practitioners.

FOCUS

The Chibret family 150 years of expertise



Destiny is a random path to which we give direction. Nothing predisposed the Chibret family to become major players in the European pharmaceutical industry. And yet they achieved this prominent status! In June 1871, Paul Chibret, a military physician under Napoleon III, was sent on an expedition in eastern Kabylia, Algeria. There, he experienced eye pain, which he attributed to the cool night air. In fact, the *aide-major* was experiencing the first symptoms of an eye disease that would render him blind for several months. He swore to himself that he would become an ophthalmologist if his sight was fully restored...
Henry, then Jean, then Henri and Jacques and finally Jean-Frédéric Chibret succeeded Paul: each contributed to this great industrial adventure in ophthalmic product research, development and marketing. At Théa Laboratories, the adventure continues: we are now Europe's leading independent ophthalmology group.

SPECIAL REPORT

Preservative-free a revolution in progress

In our consumerist societies, industrially manufactured products are now available to an increasingly wide public. This has led to the widespread use, and often abuse, of adjuvant chemical substances, such as preservatives, antioxidants, dyes, etc. This phenomenon has extended to commonly used products (e.g. food, cosmetics, cleaning products, etc.), as well as pharmaceuticals.

EASYGRIP®

STERI-FREE®

ABAK®

The use of these substances has led to undeniable progress in terms of safety and storage. Nevertheless, repeated and daily use has gradually revealed their harmful effects and prompted scientific research. Related studies have demonstrated their deleterious effects on both humans and the ecosystem. Ophthalmology has not escaped these findings.

In the 1950s, Jean Chibret (1915-1989) was the first to add preservatives to his solutions, and he also introduced a use-by date for open bottles. His eye drops were the first that could be stored for up to 15 and, in some cases, 30 days after opening, without the risk of contamination. At the time, he was imitated by all his competitors around the world.

His son, Henri Chibret, would also become a trendsetter in 1994 when he removed the preservatives first introduced by his father. It was this year that Henri created **ABAK®**, the first multi-dose bottle to dispense preservative-free eye drops. This was a world first and propelled ophthalmology into the preservative-free era. It wasn't long before millions of patients were able to benefit from an array of ophthalmology medications that preserved eye health.

Simple in appearance, **ABAK®** is the fruit of technology and innovation. It keeps a solution sterile for up to three months after opening, thanks to a 0.2 µ filter membrane. Its development required ten years of research, and it took several more years to improve its design, making it smaller, more ergonomic and more efficient while extending its shelf-life.

The preservative-free revolution is of course one that is still in progress. It continues each year, thanks to the commitment of our researchers. We should mention that the development of a dispensing technology requires rare and numerous talents and that it is just as much a scientific adventure as the search for an active ingredient.

After this initial feat, we had to develop a second bottle for drugs that were incompatible with **ABAK®.** We developed **EASYGRIP®**. This new technology is useful for many pathologies, including glaucoma.
Finally, Théa tackled the problem of gel contamination (particularly gels used for eyelid hygiene) by launching the **STERI-FREE®** tube, which dispenses sterile gels around the eye contours throughout the product's use life. And, naturally, our researchers are currently working to meet new challenges.

SPECIAL REPORT

Preservative-free Pioneering is in our DNA

For five generations, the Chibret family has been dedicated to the problem of eye drop contamination and has sought to develop treatments that preserve eye health.

1870s

Paul Chibret
(1844-1911)

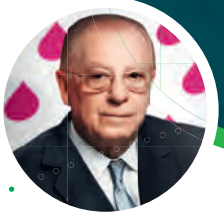
One of the first individuals in Europe to promote ointments, which are much less susceptible to contamination. These ointments are made from a new petroleum jelly called "petroline", later known as Vaseline.

1920s

Henry Chibret
(1876-1943)

He develops dry eye drops containing dacryoserum. The product is a powder to be dissolved in boiling water.

1950s



Jean Chibret
(1915-1989)

The first to add preservatives to his solutions and introduce a use-by date for open bottles. These are major innovations: Chibret eye drops are the first that can be stored for up to 15, and in some cases, 30 days after opening, without the risk of contamination. A true pioneer, Jean's competitors around the world go on to copy him.

Henri Chibret
(1940)

Numerous publications demonstrate the harmful effects of preservatives on the cornea, the conjunctiva and the tear film, leading to irritation, inflammation and dry eye. To overcome these drawbacks, "single-dose" eye drops are created. In 1994, with the ABAK® bottle, Henri Chibret (1940) puts an end to the use of preservatives first introduced by his father. Thanks to Henri Chibret and Théa, ophthalmology enters the preservative-free era.

1990s

2000s

Jean-Frédéric Chibret
(1975)

Adds to the range of "preservative-free" packaging with the EASYGRIP® and STERI-FREE® systems.


1 ABAK®
SOLD
EVERY
SECOND
WORLD-
WIDE
Abak
Collyre en solution
Eyedrops solution
5 ml
10 ml
Sans conservateur
Preservative free

FOCUS ON ABAK®

As small as a single dose
as large as 150 doses

Théa was the pioneer and remains the world leader in preservative-free ophthalmological products. ABAK® is a high-tech, high-safety bottle that delivers up to 300 drops through a filter membrane that prevents contamination.

Quickly modernised to become smaller, more ergonomic and more efficient, it offers a shelf-life and use that reaches today up to 3 months after opening against 2 to 4 weeks for a conventional bottle with preservative.

This concept, which is constantly evolving, is also a step forward for the environment. One 10 ml ABAK® bottle contains 300 drops for 150 instillations in both eyes, equivalent to 150 single doses.

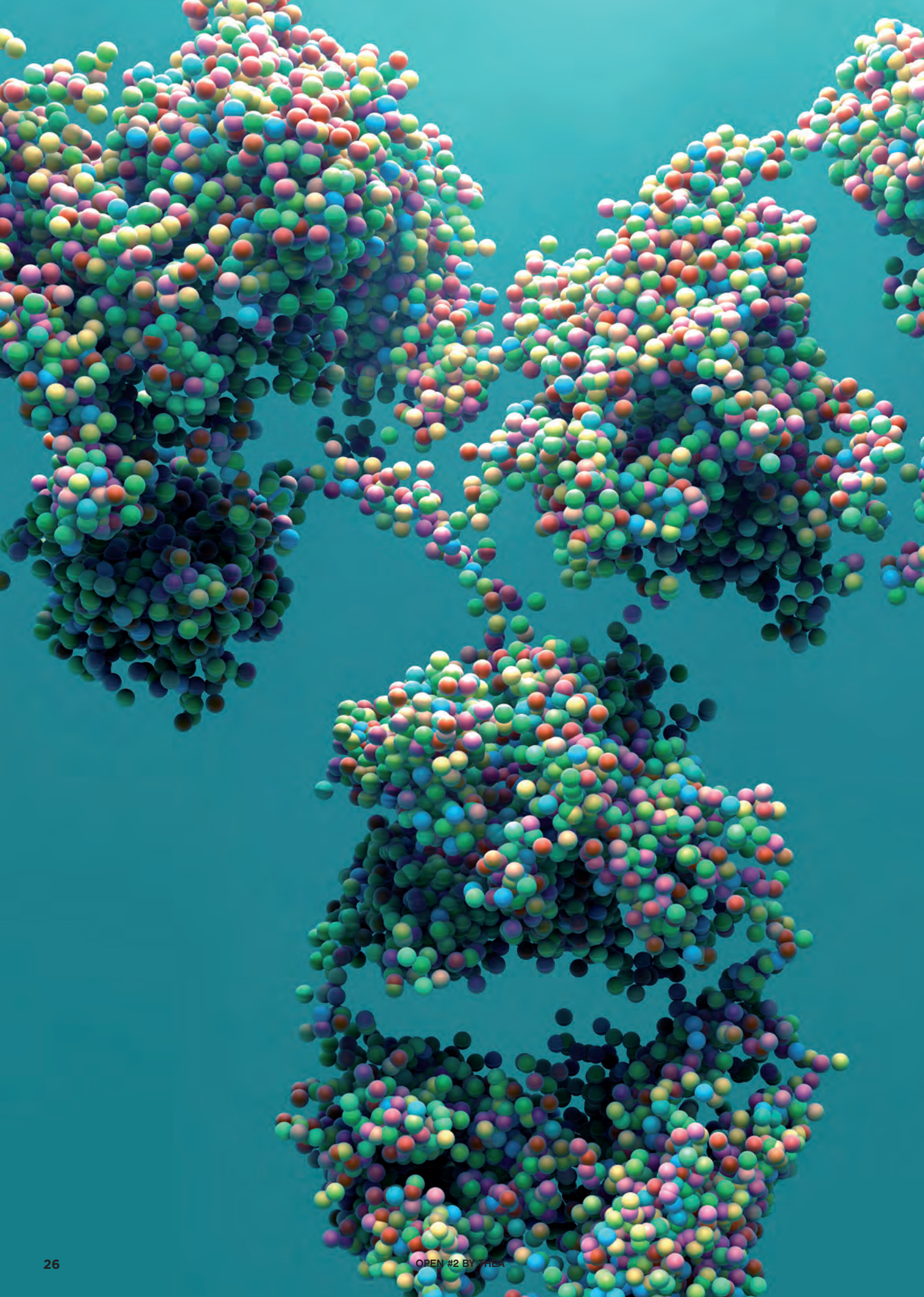
INNOVATION

Research and development (R&D)

The Théa research effort is the combination of an ambitious open innovation policy and "in-house" R&D department that has proven its worth. For a quarter of a century, in fact, we have owed our reputation to our in-house research. And it remains our spearhead. That's why we wanted to "see bigger" and increase the resources dedicated to it. As part of the work on the

In 16 months, we doubled the size of the laboratory

Clermont-Ferrand headquarters, which saw 1,450 m² of new premises emerge from the ground in 16 months, we doubled the size of the laboratory, which now covers an area of 1,000 m². The teams have a modern and suitable workspace in order to continue to innovate on our in-house developments and take over certain projects initiated with our partners.



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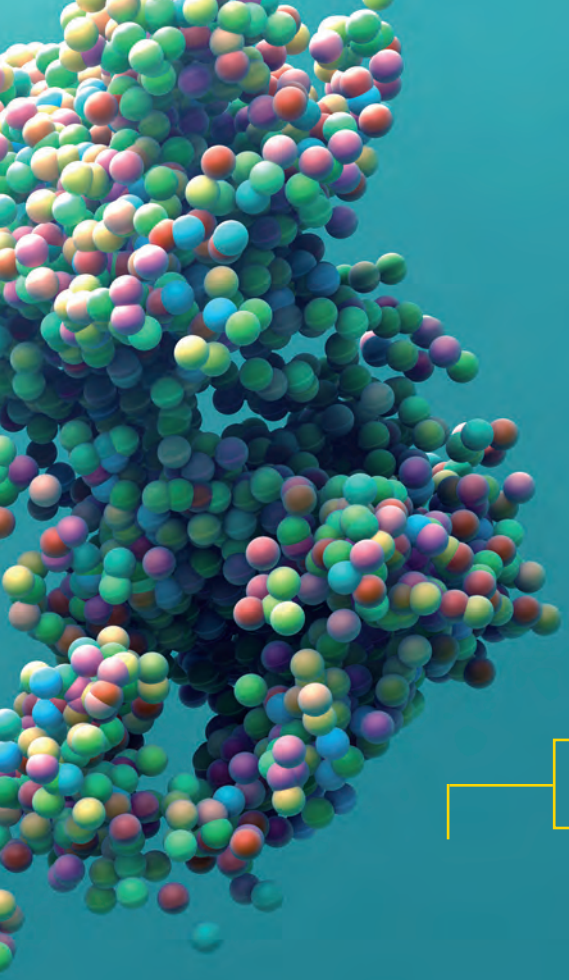


INNOVATION

Théa Open Innovation

With digital transformation and the growing pace of technological renewal, we are now in an era of intense innovation that shakes up the established models. In a world where expertise is increasingly disseminated, a single company simply cannot master it all. We must attract external innovation and strengthen our capacity for collaboration, hence the creation of a new structure, "Théa Open Innovation".

"Théa Open Innovation" aims to identify, evaluate and implement the most innovative collaborations, developed by universities, ophthalmologists, researchers and start-ups for eye health.

Théa Open Innovation

3 questions for...

Colin Francou
Théa Open Innovation
Managing Director

Colin Francou has been Head of Business Development at Laboratoires Théa since 2014. As a member of Axerovision's Management Committee, Colin is also the Managing Director of Sincler, a spin-off company of Laboratoires Théa.

When was the sister company of Théa Laboratories, Théa Open Innovation (TOI), created?

We completed the drafting of the articles of association at the very end of 2018. But formally, the company was launched in early 2019.

Who is on your team?

Today, we are a dozen people and we are expecting two more imminently, who are in the process of being recruited. They are specialists in scientific and medical evaluation, business development and alliance management.

Can you tell us about TOI's first steps?

Our mission is to bring new innovative projects to Théa's R&D pipeline, drawing on external expertise (biotechs, start-ups, ophthalmologists, universities, etc.). The harvest was good because in two years, we have been able to sign several important partnerships in new therapeutic areas.
So with the Sincler spin-off, we are working on the major problem of the storage and preservation of corneal grafts. The company in St. Etienne is developing a technological platform that makes it possible – during storage, and before transplantation – to maintain the graft under conditions similar to the physiological conditions in humans. This could save 75% of the corneas rejected today because of deterioration and, more precisely, loss of endothelial cells essential for the success of a transplant.
With another partner, Biocorp, we are trying to develop solutions to help patients with blinding diseases such as glaucoma. This project concerns a smart medical device that will help improve patient compliance.
But for Théa, the European leader in conventional therapeutic classes, the ambition today is to showcase its expertise, enthusiasm and means to propose new solutions for retinal diseases; an area where there is still a long way to go despite the considerable progress made in recent years. Théa has partnered with research companies that offer novel and promising pathways such as the Korean firm OliX, which is working on innovative treatments for dry and wet AMD based on ribonucleic acid interference (RNAi) technologies; or the Canadian company Ripple Therapeutics, with whom we hope to be able to offer a sustained release implant based on

open innovation

its "flagship" product, IBE-814IVT, and which targets diabetic macular oedema and retinal vein occlusion. The first trial in humans has begun. Advances and new treatments in this area of the retina are essential because in the years to come, given the increase in life expectancy, the incidence of these diseases will continue to increase.

Finally, Théa has decided to tackle a disease that is beginning to pose a global public health problem, especially among young people: myopia.

In Europe, young people in their twenties are twice as likely to be short-sighted as 50-year-olds. And the phenomenon has been accelerating for the past 10 years. Researchers are concerned about an epidemic linked in particular to the use of new technologies, and more generally to environmental conditions. After years of research in this area, we decided to partner with the US-based company Nevakar in New Jersey, which is developing an atropine-containing treatment that prevents the progression of myopia in children.

OPEN #2 BY THÉA

SPECIAL REPORT

Eye dryness report

Dry eyes is caused by poor quality or decreased tear production. Tears are composed of a mixture of water, lipids and mucus that lubricates the eye, cleanses it of dust and pollen, and protects it against microbes.

If lacrimal secretion is insufficient, irritation appears: itching, stinging, burning, lacrimation, and sensation of a foreign body (sand/grit) in the eyes.

This dry eye syndrome is one of the most common ophthalmic pathologies, affecting between 10 and 15% of the population, with people working long hours on their computer screens and elderly people being the most affected.

We met two leading specialists in this eye disease whose psychological impact and impact on the patient's quality of life make it a major therapeutic challenge.

SPECIAL REPORT

Eye dryness report

Prof. Maurizio Rolando
Interview

On the occasion of our 25th birthday, we asked Professor Maurizio Rolando what has changed in the approach to and treatment of dry eye syndrome over the past quarter of a century.

First of all, two observations. 25 years ago, most people with this syndrome were women over 50 years old. Secondly, we underestimated the repercussions of the condition on patients' quality of life.

Nowadays, more young people are consulting for this disorder. Many of us spend almost 8 hours a day in front of screens, whether at work or for our leisure. However, when a person looks at a screen, they tend to blink less, causing greater evaporation of tears and hence drying out of the ocular surface. Other factors that have changed include the use of contact lenses, pollution, more refractive surgeries and stress (including stress caused by exposure to ultraviolet radiation). As a result of all these factors, more young patients are seeking care for dry eye problems. In summary, a number of changes and increased awareness have led us to change our approach.

Eye dryness has long been approached rather subjectively. Several eye conditions have been grouped under the same name, although their causes, mechanisms and clinical consequences are not always clear. As a result, dry eye has for a long time been somewhat neglected in ophthalmology, both in terms of diagnosis and poorly codified treatments. We were less well equipped to relieve and treat the disease.

Fortunately, the scientific community has mobilised in recent years, partly under patient pressure. More attention has been paid to dry eye syndrome and we know more today. In addition, the definition of this disorder has evolved with the new information available to us. Since 2017, the Tear Film and Ocular Surface Society (TFOS) has described it as *"a multifactorial disease of the ocular surface characterised by a loss of homeostasis of the tear film, and accompanied by ocular symptoms, in which tear film instability and hyperosmolarity, ocular surface inflammation and damage, and neurosensory abnormalities play aetiological roles."* This academic definition means that this condition is no longer considered a simple tear problem, but a disease of the ocular surface. We now know that inflammation is at the heart of the process that leads to dry eyes. Specifically, intertwining complex mechanisms disturb the lacrimal functional unit, in other words the integrated system including the lacrimal glands, the ocular surface (i.e., the cornea, conjunctiva, and meibomian glands*), and eyelids, as well as the nerves connecting them. It is believed that this cohesive system constantly adapts to changes in and attacks from the environment to preserve the balance of the ocular surface. However, several factors can overlap and compromise this balance, thus generating chronic dryness that can still evolve independently of the causal factor, even when this factor disappears.

Knowing all this, what has changed in terms of treatment options?

Major advances have been made in the field of artificial tears, which allow the cornea to be moistened for varying periods of time. The scientific community has become aware of the toxicity of preservatives on the ocular surface and prescribing preservative-free artificial tears is now widely recommended. During the day, the aqueous part of the solution evaporates, leaving the preservative such as benzalkonium chloride in contact with the eye in increasingly high concentrations. The result is worsening dryness due to the inflammation and toxicity of the preservative.

With this in mind, artificial tears in the strictest sense do not have an effect on the causes of ocular dryness (which still need further research). However, it is essential to treat inflammation as soon as possible, even if it is subclinical, in order to better prevent damage to the ocular surface with all the associated sequelae on sight and quality of life. Remember, once a patient has severe dryness, it is difficult to turn back the clock.

What weapons do you have in your new arsenal?

There are many, and many more are still being developed.

There are new polymer-based treatments that combine multiple actions (e.g., protection, hydration and lubrication) and address multiple aspects of the disease. In severe dryness, when it is painful, local corticosteroids may be administered to break the inflammatory cycle of dryness. Cyclosporine drops can also be a good treatment for dryness that is difficult to treat, especially when there is concomitant keratitis. There are also plugging systems. These are small, relatively easy-to-install devices that fit into the lacrimal punctum and prevent tears in patients with dry eyes from escaping to the tear duct and flowing into the nose. These devices are sometimes absorbable depending on the material used. They improve the humidification of the eye. On the other hand, insofar as they reduce or even prevent the clearance of tears, the presence of active pro-inflammatory agents on the surface of the eye is to be avoided because they aggravate the inflammatory state, and therefore eye dryness. And last but not least, eyelid hygiene. This makes it possible to maintain the function of the meibomian glands which are located inside the eyelids and which are responsible for the production of the lipids constituting the tear film.

To conclude, dry eye is a multifactorial disease and its treatment actually involves a combination of several treatments. The good news is that our therapeutic arsenal has expanded dramatically, and as a result, patients are more likely to get better tailored solutions.

SPECIAL REPORT

Eye dryness report

“Dry eye can be associated with a shortage of tears, especially in severe autoimmune diseases.”

Prof. Jennifer Craig
Interview

Professor Jennifer P. Craig is an optometrist and Associate Professor of Optometry at the University of Auckland, New Zealand, where she heads the Ocular Surface Laboratory. She is also Vice-Chairwoman of the Tear Film & Ocular Surface Society (TFOS). She tells us about dry eye syndrome, and the patients who have it.

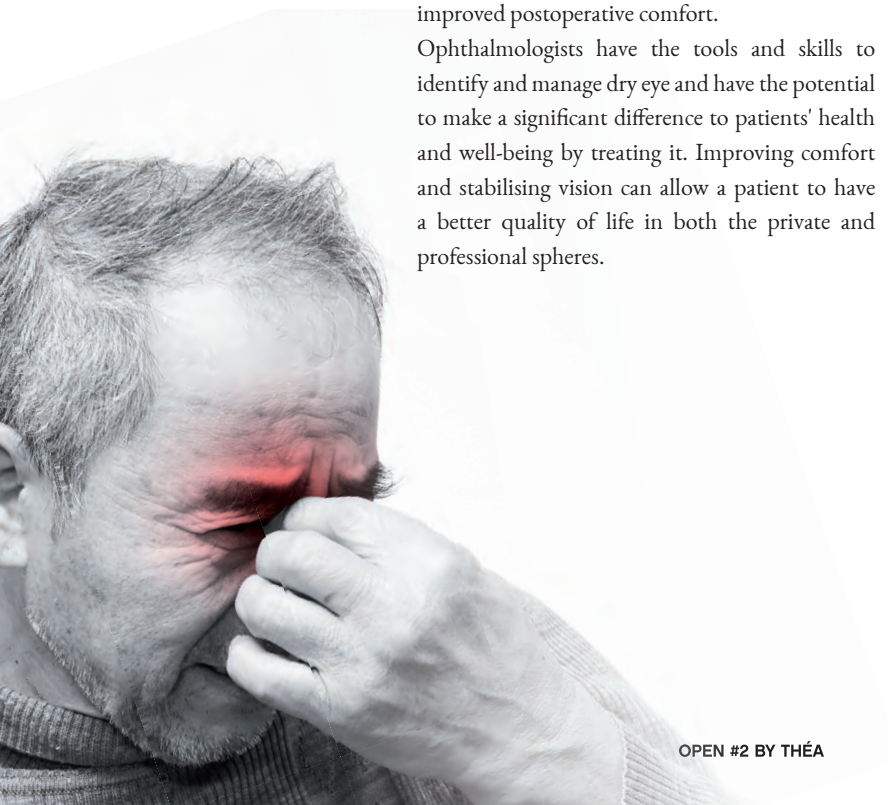
Is dry eye a common concern for ophthalmologists and optometrists?

Absolutely! Dry eye is one of the conditions for which ophthalmologists are most often consulted and it has an impact on the daily life and visual performance of patients suffering from it. This disease is multifactorial. It becomes more frequent with age and affects mainly women. There are many associated risk factors, including blepharitis, ophthalmic surgery, and topical and systemic drugs, which is why ophthalmologists pay particular attention to it.

How important are dry eye treatments in the daily practice of an ophthalmologist?

A healthy eye surface and tear film are essential for good vision. It is therefore important for ophthalmologists to identify and treat patients with dry eye, especially prior to ophthalmic surgery, which is a known risk factor. Pre-surgical management of the underlying dry eye facilitates accurate preoperative measurements and helps patients achieve optimal visual results and improved postoperative comfort.

Ophthalmologists have the tools and skills to identify and manage dry eye and have the potential to make a significant difference to patients' health and well-being by treating it. Improving comfort and stabilising vision can allow a patient to have a better quality of life in both the private and professional spheres.



What does dry eye feel like?

Dry eyes cause symptoms of chronic irritation (sensation of sand in the eyes, burning, sore eyes and often, paradoxically, lacrimation) as well as transient visual disturbances, all of which can make daily activities extremely difficult, such as using a computer or staying in an air-conditioned room. These chronic symptoms can have a huge impact on a patient's quality of life. In fact it has been shown that they are just as damaging to the quality of life as those of angina! It is also recognised that dry eye can be linked to a state of depression.

Symptoms and signs: the complexity of the diagnosis and treatment of dry eye.

Accurate diagnosis of dry eye simplifies treatment, but the process doesn't have to be complex! First, it is important to confirm dry eye. The first step is to rule out any differential diagnosis (such as allergy) that may cause symptoms very similar to those of dry eye. To confirm a diagnosis of dry eye, symptoms and signs must be present. Symptoms can be assessed through a standardised questionnaire and, if the result is positive, the signs of dry eye are then tested in the patient. These signs, such as tear film instability, hyperosmolarity or ocular surface staining (or any combination thereof), as well as symptoms, make it possible to diagnose dry eye. The presence of dry eye is thus confirmed, but this does not explain why the patient suffers from it. To determine the cause of dry eye and thus prescribe a targeted treatment, the margins of the eyelid can be examined for signs of dysfunction of the meibomian gland (main cause of dry eye by evaporation) and to examine the lacrimal meniscus (which may have an aqueous deficiency).

SPECIAL REPORT

Eye dryness report

Is dry eye due to lack of tears?

Dry eye can be associated with a shortage of tears, especially in severe autoimmune diseases, but much more often it turns out to be associated with poor quality tear film. In these cases the tears are unstable and the patient may complain of lacrimation, which is due to the rapid rupture of the tear film, inducing reflex lacrimation.

What causes dry eye?

There are many causes. Dry eye is recognised as a multifactorial disease that can result from ageing, hormonal changes, blepharitis and meibomian gland dysfunction, poor ocular surface quality, autoimmune disease or iatrogenic causes, among others.

These numerous causes can be differentiated into two main subtypes: evaporative dry eye and aqueous-deficient dry eye, although some patients may show signs of both. Once dry eye is diagnosed based on symptoms and signs, determining the predominant subtype of dry eye helps the clinician choose the most appropriate treatment.

Are there any aggravating factors?

There are many factors that lead to the risk of dry eye. Age, gender and ethnicity are recognised risk factors, as is meibomian gland dysfunction. Suboptimal environmental conditions, such as low humidity, pollution or wind, can also exacerbate dry eye. Contact lenses are also a recognised risk factor, as are a number of systemic drugs that can dry out the ocular surface. Ophthalmic surgery can also worsen pre-existing dry eyes.

How can dry eye be prevented?

More scientific evidence is needed to give clear guidance on this, but we believe that maintaining good eye health is currently our best hope of preventing the progression of dry eye disease. Encouraging patients to ensure proper eyelid hygiene by cleaning them daily helps to keep the eyelashes and glands free of debris and reduces bacteria and demodex, which can improve the quality of tears. The application of hot compresses can promote the flow of the meibum from the glands towards the surface of the tear film, and thus improve its stability and protect the ocular surface. Improving tear film integrity reduces the risk of initiating a self-sustaining cycle of tear film instability, hyperosmolarity, inflammation and ocular surface damage. Similarly, when blinking is less frequent and complete, as is often observed with the use of digital devices, blinking exercises can improve their quality, and thus reduce the risk of triggering the vicious circle of dry eye.

Is there a way to estimate its severity?

The severity of dry eye can be determined through tests. Validated questionnaires have threshold scores to determine the severity of symptoms. Similarly, clinical tests, such as non-invasive tear break-up time, osmolarity, and ocular surface staining, have threshold values that allow the clinician to assess the severity of the case. The severity of the form, as well as the dry eye subtype, can then be used to help the clinician choose the most appropriate treatment for the patient.

How can disease progression be monitored?

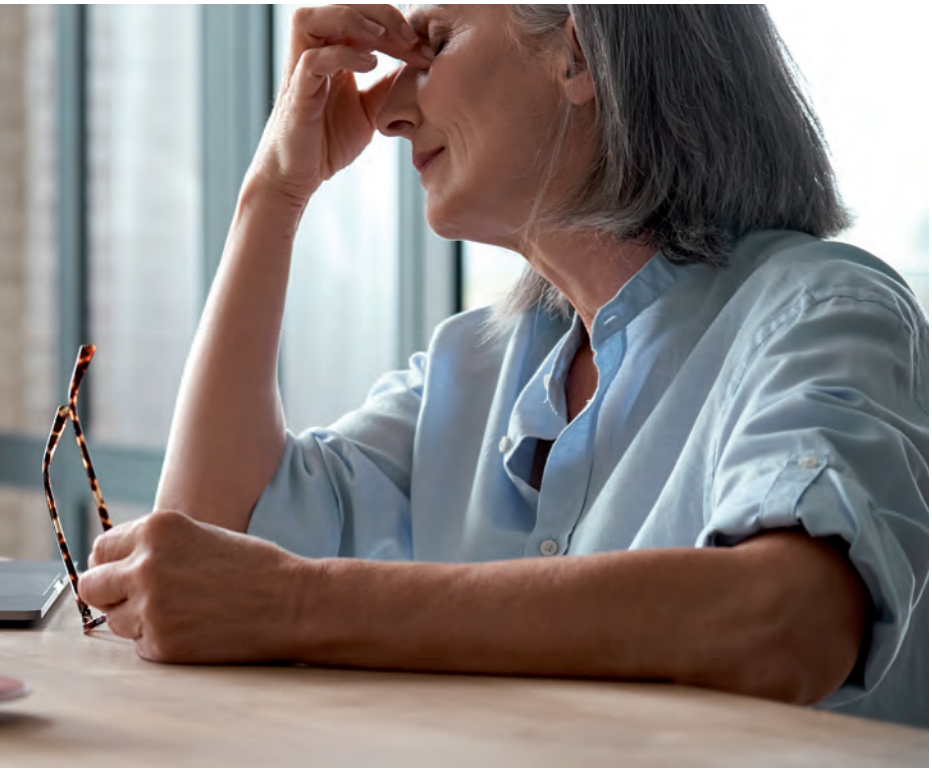
The same tests used to evaluate the tear film and ocular surface before starting treatment can be used to monitor the condition and measure the effectiveness of the treatment. The assessment of symptoms should be based on the same questionnaire, so that the results can be compared. Tests for stability, osmolarity and damage to the ocular surface remain important to detect any changes in the condition of the eye. Subtype testing is used to monitor improvements in specific aspects of the tear film or ocular surface. Regular monitoring of dry eye patients is important to inform and reassure them, to confirm that treatments are being applied appropriately, to obtain objective evidence of improvement, to encourage continued engagement in the treatment process and to decide when to change or add another treatment.

Are both eyes always affected?

Both eyes are usually dry, but there may be an asymmetry that leads patients to report that one eye is more symptomatic than the other. Unless there is a clear reason why a patient is affected only in one eye (for example after surgery), treatments are usually given in both eyes.

What are the latest innovations to improve diagnosis (role of imaging)?

Non-invasive methods for measuring tear film break-up time are increasingly common in clinical practice because it is recognised that the instillation of fluorescein destabilises the tear film and distorts the measurement. The stability of the tear film is measured non-invasively by observing the reflection of a grid in the tear film after blinking and calculating the time it takes for the first distortions to appear in the reflection. This technique can be carried out without special equipment, using an existing clinical instrument, such as a topography measuring device. Dysfunction of the meibomian gland is considered the leading cause of dry eye, and this has encouraged the development of new diagnostic tools to assess the health of the eyelid margins. Infra-red meibography allows observation of meibomiam gland dysfunction, helping to identify people at risk and to assess the severity of the disease. Interferometry is another simple clinical technique that can be used to measure the quality of the lipid layer on the surface of the tear film. If the lipid layer is too thin, and therefore unstable and allowing the tears to evaporate too quickly, it is possible to opt for a targeted treatment that will add to it.



What is the role of preservative-free products in the treatment of dry eye?

As stated by the first Dry Eye Workshop of the Tear Film & Ocular Surface Society (TFOS) published in 2007, "the single most important advance in the treatment of dry eye has been the elimination of preservatives". Since then, the importance of using preservative-free products for the treatment of dry eye disease has been recognised. When drops are instilled regularly, the absence of preservatives such as benzalkonium chloride (BAK) is important because they are toxic to the surface of the eye and irritate it more than they relieve it. Preservative-free products should therefore be used as much as possible, especially when the treatment recommends the instillation of drops more than 4 times a day.

PRODUCTION

Made in Europe

20 formulations manufactured in France and Europe

European quality exported to 75 countries

Working only with the best

Théa's treatments are produced in Europe, mainly in France, through solid partnerships with leading manufacturers or in its own factories: a winning strategy that continues to yield positive results.

Eye drops in single-doses or bottles, ABAK®, ointments, gels, wipes, injectables, ophthalmic inserts, etc. Théa offers nearly twenty different forms that require know-how, very specific skills, and the ultra-modern and sterile equipment that goes with it. Manufacturing and packaging are entrusted to the very best subcontractors, according to product type. The Théa range is manufactured on European sites, mainly in France.

We have created reliable partnerships with manufacturers, guaranteeing that each of our pharmaceutical forms are of the highest quality and allowing us to export them to 70 countries worldwide. At the same time, Théa produces some of its flagship products in-house. The ABAK® bottle (for preservative-free eye drops) and the STERI-FREE® tube (for preservative-free gels) are partly manufactured in the Farmila plant in Milan, Italy.

PRODUCTION

Made in Europe

Farmila, a factory at the cutting edge

In ancient Rome, Settimo Milanese to the west of Milan was located on the Via delle Gallie, a Roman consular road built by Augustus to connect the Po valley to Gaul, that is to say, to France. Today, this city is home to our main industrial site: Farmila Théa Farmaceutici S.p.A.

In 2002, the Théa group arrived in Italy thanks to the acquisition of the Italian pharmaceutical group Farmila. Set up in Milan in 1946, this family-run company specialising in the marketing and manufacture of ophthalmology and ear, nose and throat products sold products highly appreciated by Italian ophthalmologists. Part of the buyout deal included a manufacturing facility specialising in eye drops and ophthalmic ointments.

Ten years later, in January 2012, the business was divided into two separate companies: Théa Farma S.p.A. for the marketing of products in Italy and Farmila-Théa Farmaceutici S.p.A, the manufacturing plant for eye drops, gels and ophthalmic ointments for the whole Théa Group.

The Settimo Milanese plant was to receive considerable investment, which allowed its expansion, modernisation and the transfer of high-tech products, such as the ABAK® bottle (preservative-free eye drops) or the STERI-FREE® tube (preservative-free gels). The latest episode of this modernisation sees the launch of a new state-of-the-art production line that will provide Théa with additional capacities.

Théa has provided itself with the resources to keep pace and to support its growth.

60 million units

The ABAK® bottle (for eye drops) and the STERI-FREE® tube (for gels) are manufactured at our factory in Farmila, Milan (Italy). This site has just increased its capacity and can produce up to 60 million units of ABAK® medications per year.

INTERNATIONAL

Théa and America's call

Théa belongs to the small circle of French pharmaceutical companies which have many subsidiaries around the world.

Théa sets out to conquer the United States

In the Chibret family, we have always thought "international". In the 19th century, Paul Chibret (1844-1911), founder of the French Society of Ophthalmology (SFO), was already travelling the world of academic conventions, from Copenhagen to Saint Petersburg, passing through Barcelona or Heidelberg. He collaborated constantly with his colleagues, scientists who came from different countries but were united by a shared passion: science, and the conviction that it was the source of progress.

That is why, from the outset in 1994, we recognised that Théa had an international vocation. The Auvergne-based group immediately wanted to have its own facilities in Europe. In some cases, these new "home" bases were soon built from scratch. Sometimes, however, they involved local product or company buy-outs. In any case, in twenty years Théa had confirmed its presence on the "Old Continent", a presence that is moreover destined to be consolidated, and developed both in terms of growth and new subsidiaries. What happened next? This expansion has spread to neighbouring regions. From Europe, as we know, it is just one small step to northern Africa. Finally, for the past five years, Théa has wanted to look further afield. The company has set up on the borders of the continent, in Russia and Ukraine, but also beyond, in the Middle East, Mexico, Chile, and in Canada.

Finally, while 2019 will certainly remain Théa's 25th birthday it is also the year it took its first steps into the world's leading economic power: the United States. It must be said that, for the Chibrets, the interest in this country is not new. Jean Chibret (1915-1989) dreamed of becoming established there. He could not do so due to a lack of financial resources. Jacques Chibret (1941-1989), his son, fulfilled this dream with Biophysic Medical. In 1984, he opened a subsidiary in the US, winning 70% of the US market and becoming the world leader in ophthalmic ultrasound and the world no. 2 in laser.

Thirty years after Jacques' death, his son Jean-Frédéric Chibret opened Théa's subsidiary near Boston. Soon after, last February, he signed an agreement with Similasan, a Swiss company with a strong presence in the United States that will offer the Auvergne company a great gateway to this country. The entire Théa range is being adapted for the American market. It is a market of many specificities, where competition is very dynamic. In other words, we could not hope to get in without having first established a solid strategy.


The world of Théa
International

31 subsidiaries and offices

EUROPE

Austria, Belgium, Bulgaria, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Monaco, Netherlands, Norway, Poland, Portugal, Romania, Russia, Spain, Sweden, Switzerland, Turkey, Ukraine, United Kingdom

AMERICA

Canada, USA
Chile, Mexico

AFRICA and the MIDDLE EAST

Morocco
Kuwait, Saudi Arabia, United Arab Emirates

43 Partners

EUROPE

Albania, Croatia, Cyprus, Czech Republic, Estonia, Hungary, Iceland, Latvia, Lithuania, Serbia, Slovakia, Slovenia

AMERICA

Brazil, Colombia

ASIA and OCEANIA

Hong Kong, Malaysia, Philippines, Singapore, South Korea, Thailand

AFRICA and the MIDDLE EAST

Algeria, Benin, Burkina Faso, Burundi, Cameroon, Central African Republic, Chad, Congo, Democratic Republic of the Congo, Côte d'Ivoire, Gabon, Guinea, Lebanon, Libya, Madagascar, Mali, Mauritania, Mauritius, Niger, Rwanda, Senegal, Togo, Tunisia

INTERNATIONAL

Similasan, new partner in the USA

“Théa and Similasan, the beginning of a beautiful adventure...”

- The Théa and Similasan teams meet at Théa headquarters for a historic signature for the Group -

In February 2020, Théa signed a partnership with Similasan AG. Two family businesses, one in Clermont-Ferrand and the other in Switzerland, joined forces and forged an international strategic alliance in the field of eye treatments.

The main idea behind this agreement is to combine Théa's ophthalmological expertise with that of the Swiss company specialising in natural OTC remedies.

There are two key elements of this partnership. Since 1st January 2020, Similasan has been specialising in the distribution of Théa's OTC range (products for which medical prescription is optional) on the Swiss market, which includes "preservative-free" treatments in the field of dry eye, allergy, inflammation and eyelid hygiene.

The second part is to provide Théa with a gateway to the United States. Indeed, Similasan, based in Jonen near Zurich, is one of the few European companies to have succeeded in establishing itself on the US market. Its products have long since found their place in American medicine cabinets. This is so true that two-thirds of the Swiss group's sales are now made in Uncle Sam's pharmacies and drug stores.

Théa has invested in the capital of Similasan's local subsidiary (which is based in Denver, Colorado) to become a majority shareholder within two years. This subsidiary has a dozen employees. Susan Benton, who has just launched our "Théa US" subsidiary in Lexington, near Boston, 3,000 kilometres away, is now liaising and forming synergies with its local partners.

Théa and Similasan is the beginning of a great adventure, and the winning ticket to making Théa US a mid-sized American company over the next five to ten years, leveraging our assets in the preservative-free field, and our strength in glaucoma and dry eye.

#NeverStopLearning

EDUCATION PROGRAMME BY THEA

THÉA SUPPORTS MANY EDUCATIONAL PROJECTS AND INITIATIVES.

Education and knowledge sharing is a tradition for the Chibret family.

EDUCATION

Championing the European Diploma of Excellence

supporting tomorrow's ophthalmologists

How can we improve the training and professionalisation of young ophthalmologists? How does the younger generation of ophthalmologists see the future? What are students' aspirations and how do they envisage their careers? Théa is stepping up initiatives to support those who will be looking after our eye health in the future. The involvement of the Auvergne company alongside the EBOD organisers offers one of the oldest examples.

Théa was born 25 years ago, in 1994. The first session of the European Board of Ophthalmology (EBO) Diploma Examination was held the following year in Milan, Italy. Then, for a quarter of a century, this same examination took place, every spring, in Paris during the annual congress of the French Society of Ophthalmology (SFO). And since then, Théa has not stopped promoting it in any way it can!

This examination is open to candidates who are graduates of a faculty of medicine and who have satisfactorily undertaken a complete programme of ophthalmology training lasting for at least four years. At the end of the tests, those who have passed are authorised to add the title of member of the European Board of Ophthalmology after their name. Above all, obtaining the diploma provides complete freedom to practise right across Europe.

Why this diploma?

Almost 60 years ago, the Treaty of Rome loudly and proudly enshrined the right of free movement of persons within the European Union and, by extension, the right to work as an employed or self-employed person within the territory of the European Economic Area. Beyond this simple statement of principle, there were to be a few problems implementing it. Would a Belgian ophthalmologist be allowed to practise in France, or vice versa? Could borders be abolished at a snap in an area where countries continued to regulate certain professions independently of their neighbours, where diplomas and the organisation of health professions remained the prerogative of the Member States, and where training took different lengths of time (at least 4 years in all countries but up to 5½ years in Denmark and 4-6 years in the United Kingdom)?

How could we unify ophthalmology across Europe?

The response to this thorny issue was a raft of harmonisation directives as well as the work of a working group set up in London in 1992: the European Board of Ophthalmology (EBO). This group has been in charge of a policy of training harmonisation and quality assurance. Its main contribution? This famous diploma, the examinations for which now bring together every year hundreds of students from more than thirty countries.

Since its inception, some countries such as Switzerland, France, Belgium, Poland, Austria and Ireland have required the EBOD to be obtained as part of their national specialist examination, or have used it to replace this examination[1]. Now, the examination that traditionally takes place in Paris is to have a twin, with an extra examination session during the congress of the Deutsche Ophthalmologische Gesellschaft (DOG) in Berlin. Steps to fill European ophthalmology with vitality are today being taken. This calls for the mobilisation of all initiatives that contribute to the development of the best and most consistent European training across the continent, and facilitates the installation of new practitioners.

1- In Switzerland, Belgium and Poland, the examination is equivalent to the national qualification.

Championing the European diploma of excellence, supporting tomorrow's ophthalmologists

3 questions for...

Prof. Christina Grupcheva

Professor Christina Grupcheva, Vice-Rector of the Medical University of Varna (Bulgaria), Head of the Department of Ophthalmology and Visual Sciences, Director of the Specialised Hospital for Ophthalmic Diseases in Varna.

Christina Grupcheva has chaired the European Board of Ophthalmology. She has just handed over her position to the Croatian Renata Ivekovic, but still sits on the EBO Executive Committee.

While you were chair of the EBO, you agreed on the principle of a second session of the EBO examination to be held in Berlin. What motivated this change?

It was 2020, and we were celebrating the 25th anniversary of the EBO. A quarter of a century is both a lot and very little. During all these years, the EBO diploma rose from an examination taking place in Paris with some 30 candidates, to a genuine competitive European ophthalmology examination attracting more than 700 candidates. To celebrate our quarter-century, we decided in principle to hold a second examination in Germany, which will allow us to offer one session in the spring and the other in the autumn. This will provide applicants embarking on their career with more opportunities to participate and succeed. The Berlin session will be identical to the Parisian exam, as the tests are now structured and standardised. Only the questions will differ. In the coming years, we expect the infrastructure to easily accommodate up to 1,100 applicants.

Did the EBO wish to extend these certificates to certain subspecialties?

The main objective of the EBO is to harmonise education. Five years ago, through a group led by Wagih Aclimandos and Gordana Sanuric Magevand, we wanted to promote official recognition of the expertise of certain ophthalmologists who completed their training in a subspecialty. Our first examination was glaucoma, then cataract surgery and refraction. Then we organised exams dedicated to paediatrics and strabismus. In addition, we have quite advanced projects in the field of the retina, plastic surgery and neuro-ophthalmology. These "EBO Subspecialty" exams are of particular interest to young opinion leaders. It is very important to point out that these examinations are set up, organised and carried out in collaboration between the EBO and specific subspecialty bodies such as ESCRS, EGS, ESA, EPOS, etc.

Are there any other developments to share?

Let me mention one trend: in recent years, we have become more international. MCQs, for example, are now written exclusively in English (originally they were available in French, German or English), as is the oral test. However, EBOD remains for the moment specific to Europe in that it is only awarded to "community members" trained in the EU. If someone has been trained in the EU but is not a national of a Member State, they only get a certificate.


see
the world
let's open our eyes

E-LEARNING FOR PHARMACISTS

Raising awareness of eye health among pharmacists

e learning-pharma-thea.com, Théa's new platform for pharmacists to help them to better support patients

In France, Germany and many other countries, medical demography is a sensitive issue in the development of health policies. Poor appraisal of the numerus clausus on the one hand, mismanagement by the public authorities on the other, many practitioners are reaching retirement age and there are not enough trainees among the next generations to compensate for these departures. In some territories in particular, the lack of specialists heralds complicated times ahead. Ophthalmology, in particular, is facing the same problems as other fields of medicine, but with some specific features. The main feature being that this discipline is often ahead of schedule: ahead on the announced shortage of doctors, ahead on the increase in demand, ahead in the effects of ageing.

For patients, this translates into increasing difficulties in finding an ophthalmologist. Those who have the privilege of having one in their town are seeing longer waiting times to get an appointment.

To combat "medical deserts", many governments are considering innovative solutions to bring new flexibility in the management of the eye and visual care. Most of them no longer consider medical demographics as a separate entity. Their approach integrates all health players and the necessary cooperation between them. And these players include pharmacists.

In most countries, the official network is harmonious and extensive. A large part of the population has access to a pharmacy in their town of residence or lives less than a few minutes by car from a pharmacy. This local network allows pharmacists to extend their care offer: vaccination, medication check-ups, prevention check-ups, screening, with possibilities varying from one country to another.

#NeverStopLearning

Of course, these professionals are potentially agents of eye health. Hence the idea of the "e learning-pharma-thea.com" platform. Designed by ophthalmologists for pharmacists, it aims to help these professionals to better support and advise patients, and above all, to identify ophthalmological emergencies.
What are the first steps to take in the event of eye injury by impact? Or in response to burns? What to do in case of pain, intense photophobia, the appearance of a shadow in the visual field? They will be better equipped to detect emergencies and refer them to the hospital or an ophthalmologist.

What distinguishes bacterial conjunctivitis from conjunctivitis of allergic origin or caused by dry eye? Is the same medication used for each of these ailments? The vast majority of ophthalmological treatments are only available on prescription and their administration requires prior examination by a specialist, but several useful, well-known and listed treatments can be dispensed directly by a pharmacist who will support and reassure the patient before their consultation with the specialist if this proves necessary.

To facilitate the patient's pathway and fully invest in the necessary interprofessional communication in the field of eye health, pharmacy teams should have a tool in which to consolidate their knowledge and the quality of their support. This is now done with Théa e-learning.

Responding to the inevitable increase in vision problems?

Prof. Serge Resnikoff
article

Article by Professor Serge Resnikoff, President of the Fondation Théa, President of the International Trachoma Initiative and Eye Care Programme of the International Council of Ophthalmology

According to experts from the World Health Organization (WHO), the year 2020 was to be a victory, the culmination of twenty years of the fight against blindness. A quarter of a century ago, this institution launched the Alliance for the Global Elimination of Blinding Trachoma. In 1999, a similar initiative - Vision 2020 - aimed to eliminate the causes of preventable blindness in the world within two decades. Unfortunately, 2020 will not have brought the expected triumph. Trachoma and preventable blindness remain public health problems. Worse still, last year will be remembered as the year when a new virus paralysed the entire planet and saw billions of people go into isolation.

So, where are we at in terms of vision? What do we know about the eye health of the world's population? What are the challenges that lie ahead of us? This is what a hundred experts around the world have asked themselves. Grouped together in the "VLEG" (Vision Loss Expert Group of the Global Burden of Disease Study), funded by various sponsors, including the Fondation Théa, these ophthalmologists and optometrists experienced in epidemiology decided to input into a comprehensive and continuously updated database, making it possible to produce a vision atlas. A colossal job...
Their first publications in the *Lancet* are edifying.

More than 1 billion people live with a visual impairment, that is, one in seven people. About half of them – five hundred million – have both poor far and near vision. The other half cannot see up close... because these people do not have glasses, or are reluctant to wear them or lenses. This may be because they do not have the means, or because it is not practical or aesthetic... This shows, in any case, that a pharmacological solution, if found, would be likely to change the lives of hundreds of millions of people. When will there be a medicine for presbyopia? Strangely, this field remains the poor relation for R&D even though it could

have far-reaching repercussions on visual health on a global scale.

A second lesson is that over the last thirty years, despite the considerable efforts made by the health authorities, researchers, the medical profession and the health industries, the number of blind people has (proportionally) remained the same in the world's population. As for visual impairments, they have increased! How can we explain these poor results? By the ageing of the population. Indeed, most serious eye diseases occur with age. However, this ageing phenomenon is more or less general, and has clearly accelerated since 2015, particularly in countries such as China, where the need for eye treatments is expected to grow exponentially. This also applies, of course, to Europe or North America. In short, all the progress made by medicine, in the broad sense, has been seen as "erased" or "eroded" by demographic changes. And the trend is not likely to be reversed.

What about the causes? Much information emerges from the expert group's work on the distribution of diseases and their respective impact on blindness or visual impairment.

Let us discuss two points that must motivate us:

• With the type II diabetes pandemic, intrinsically linked to current lifestyle habits resulting from overeating and sedentary lifestyles, the prognosis is a multiplication of diabetic retinopathy.

• To this must be added another epidemic that is less talked about: myopia. It is spreading all over the world. Today, more than four out of ten young people are affected in Western countries. In less than two generations, the number of new cases has doubled. The main cause is overuse of near vision due to intensive screen use. It is estimated that, by 2050, 10% of people will suffer from very severe myopia, that is to say beyond six dioptres. However, being severely short-sighted is a very big problem from an ophthalmological point of view. It increases the risk of cataracts and glaucoma, but also of serious retinal pathology (for example: retinal detachment and macular degeneration).

So, whereas 20 or 30 years ago, international institutions thought they could put an end to avoidable blindness, it is far from overcome. There are still 15% of blind people in Europe who can no longer see because of a disease that could have been prevented or controlled. This figure rises to more than 66% in regions such as South Asia. By 2050, our experts are expecting twice as many people with visual impairments. An immense area of work is therefore opening up for us. Fortunately, the revolution is in progress Already, the 230,000 ophthalmologists, optometrists (there are probably more like 500,000), orthoptists and even nurses, pharmacists, and opticians are thinking ahead as to the organisation of the eye care sector for the benefit of the population, and the key issues of training of professionals and access to care, especially in rural areas – all in a world where data and artificial intelligence (AI) are preparing to revolutionise the diagnosis, monitoring and treatment of many eye diseases. Artificial intelligence, for example, will allow the early detection of silent diseases which, in their initial phase, do not translate into any symptoms or changes in vision. Analysing the layers of the retina, identifying macular oedema, detecting AMD... The potential of AI in ophthalmology is immense. And it can quickly become a reality.

For Théa, it is also a great opportunity to become a pharmaceutical company of the future, to pay greater attention to existing or emerging technologies, and to decipher digital technologies (smart devices), new molecules and materials (thanks to biotechnology or nanotechnology) or new fields of research (synthetic biology, artificial intelligence...) that promise to radically transform the way we approach the health of our eyes in the future.


Fondation
Théa
let's open our eyes

FOUNDATION

Training experts in ophthalmology on African soil

Article by Professor Serge Resnikoff, President of the Fondation Théa, President of the International Trachoma Initiative and Eye Care Programme of the International Council of Ophthalmology.

The goal of the Fondation Théa is to promote and support humanitarian and public interest initiatives working to combat blindness and improve eye health.

Fondation Théa

FOUNDATION

Training experts in ophthalmology on African soil

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article

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Despite progress in the health sector, Africa faces several challenges, the most recurring of which is access to a doctor. More than half of the sixty or so countries facing a critical shortage of health professionals are in Africa. In addition, many of these countries have a high rate of emigration of doctors. In a country like Cameroon, for example, there is believed to be one doctor per five thousand people.

At the same time, many health problems continue to affect the region particularly severely, especially in rural areas. In the field of eye health, this is one of the places on Earth where the fight against blindness may be an unavoidable necessity for a long time to come. Indeed, alongside the major scourges of tropical diseases such as trachoma and onchocerciasis, statistics show that chronic glaucoma and operable cataracts are reaching worrying levels. No ophthalmologist means no diagnosis, therefore no treatment. As a result, every year men, women and children become blind in cases that could have been prevented.

the Fondation Théa is committed to supporting "truly African" solutions

Human resources for health are therefore a major issue. That is why the Fondation Théa made the training of medical personnel one of its two priorities from the outset, the first being the fight against trachoma. All of this takes place in French-speaking and Portuguese-speaking African countries, which, overall, receive less aid than their English-speaking neighbours.
Since its creation in 2012, the Foundation has supported all or part of individual training. In addition, it has pursued new training tools: beyond the "Wet-Lab", there is the "Dry-Lab" (exercises on silicone eyes) or training on surgical simulators. The realistic results allow them to perfect their training in record time. Trainees can quickly master ocular microsurgery procedures without putting patients at risk.

At the same time, the Fondation Théa is working to support truly "African" solutions to this staff shortage. Africa cannot reasonably consider sending all the doctors it needs to study abroad. Today it is a continent on the move, with its own resources, a continent that legitimately aspires to become a land of training. This is why the Foundation supports regional training centres such as the IOTA in Bamako for West Africa and the MICEI in Youndé for Central Africa. Since 2013, it has also funded the French version of the International Council of Ophthalmology's (ICO) Teaching the Teachers Programme, which aims to strengthen the educational capacities of future ophthalmology teachers in Africa.

Finally, the Fondation Théa supports a distance learning tool in French that was developed by the Collège des Ophtalmologistes Universitaires de France for French students: E-Ophta. Since its launch, its success has surpassed even the most optimistic forecasts! Login requests are pouring in all the time. Each time, the Fondation Théa not only registers the candidates free of charge but also finances, when necessary, their broadband connections. Coming from Morocco, Tunisia,

Côte d'Ivoire, Senegal, Conakry in Guinea, Benin, Burkina Faso, Togo, Madagascar, Niger, Gabon, Mauritania, Comoros, Chad, Rwanda, Burundi, Congo, etc. Next year, there could be 1,200 African students wishing to train or improve in ophthalmology thanks to this on-line course.

This success has reinforced the Foundation's belief that its mission is to invest heavily in local approaches. In Togo, Mozambique, Cameroon and Senegal, it is preparing to finance new Dry-Labs as well as Wet-Labs.

By 2050, Africa will have to manage double its current population.
It wants to prepare itself today to meet the challenges that lie ahead. We can help by actively participating.

DONATIONS

513,947 boxes
donated by Théa

Benin, Burkina Faso, Cambodia, Cameroon, Gabon, Haiti, India, Madagascar, Mongolia, Senegal, Tibet, etc. Since the creation of Laboratoires Théa, more than fifteen countries have benefited from its humanitarian donations.

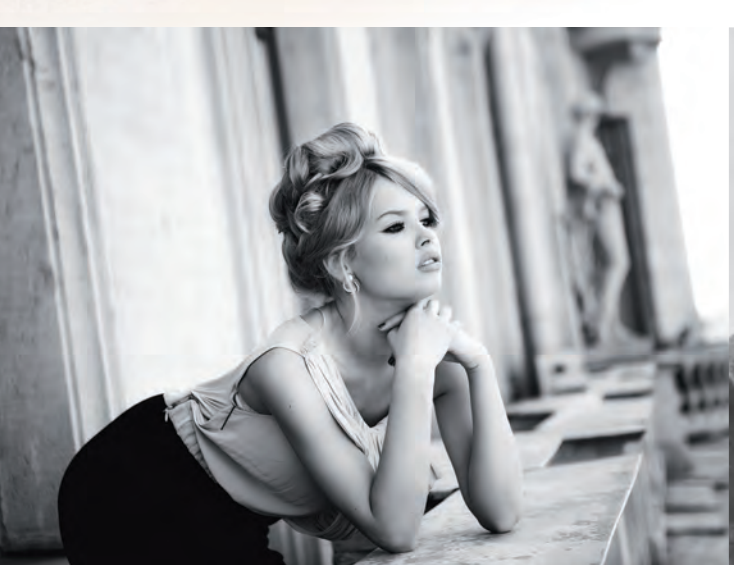
On the sidelines of its Foundation, the Auvergne group regularly donates treatments to teams of caregivers who operate in Africa, Asia or South America, in disadvantaged regions. In 25 years of existence, more than half a million boxes have been donated. Of course, a drug is not a commonplace product.

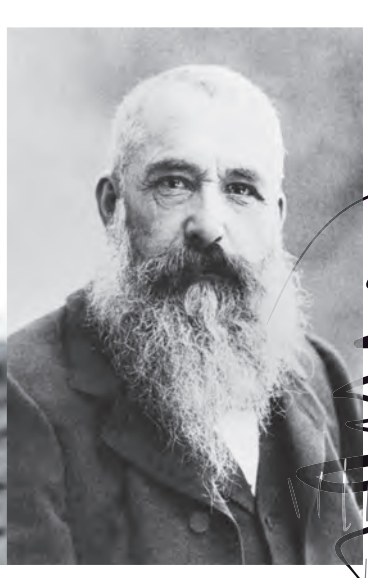
It may present health risks when not used in the right conditions. For this reason, these donations always meet several principles. They are organised through associations or organisations accustomed to field medicine and who have perfect control of the environment in which they operate. They are based on clearly expressed needs because the idea is to help on an ad hoc basis and not to disrupt local systems.

Finally, it goes without saying that these treatments offered meet the highest quality standards in every respect.

ART

Entertainers and their eye problems





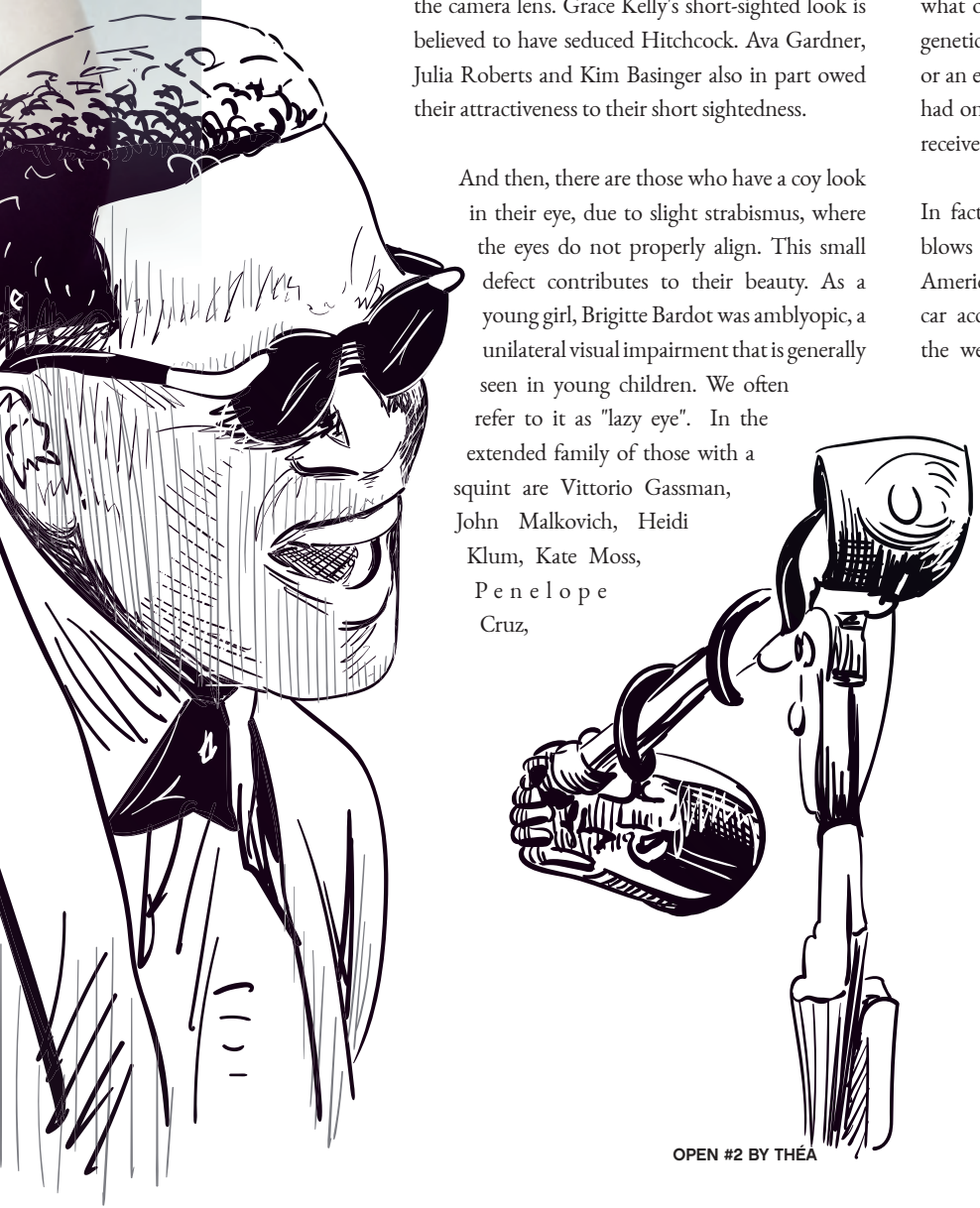
Just like us, they can also have big or small eye concerns. Some have made it their best feature. For others it has been debilitating. Read on for an ophthalmological health report on some of our favourite entertainers...

There are those that have a little extra something that makes all the difference and that brings a little more soul to their eyes. Sometimes it is a simple vision disorder, such as myopia, which makes objects at a distance appear blurred. Men and women, it seems, fall for the mysterious gaze of the short-sighted. Legend has it that the beautiful Marilyn Monroe had great presence because she couldn't see the camera lens. Grace Kelly's short-sighted look is believed to have seduced Hitchcock. Ava Gardner, Julia Roberts and Kim Basinger also in part owed their attractiveness to their short sightedness.

And then, there are those who have a coy look in their eye, due to slight strabismus, where the eyes do not properly align. This small defect contributes to their beauty. As a young girl, Brigitte Bardot was amblyopic, a unilateral visual impairment that is generally seen in young children. We often refer to it as "lazy eye". In the extended family of those with a squint are Vittorio Gassman, John Malkovich, Heidi Klum, Kate Moss, Penelope Cruz, and Barbra Streisand, not to mention the painter Rembrandt, almost all of whose self-portraits show outward turning strabismus.

Other stars, such as Demi Moore or Jane Seymour, known for her role in the show Dr. Quinn, have an atypical look thanks to their differently coloured eyes. The origin of what ophthalmologists call heterochromia is often genetic. But it can also appear because of a tumour or an eye injury as in the case of David Bowie, who had one blue and one brown eye following a blow received in his youth.

In fact many of our leading lights have received blows to the eye. Sammy Davis Jr, a celebrity of American show business, lost an eye in a serious car accident. Raoul Albert Walsh, the prince of the western in Hollywood, lost his right eye at age forty-two because a hare bounced off his windscreen, which shattered. As for John Ford, the four-time Oscar-winning director, he became blind in the left eye following an injury during The Battle of Midway.



OPEN #2 BY THÉA

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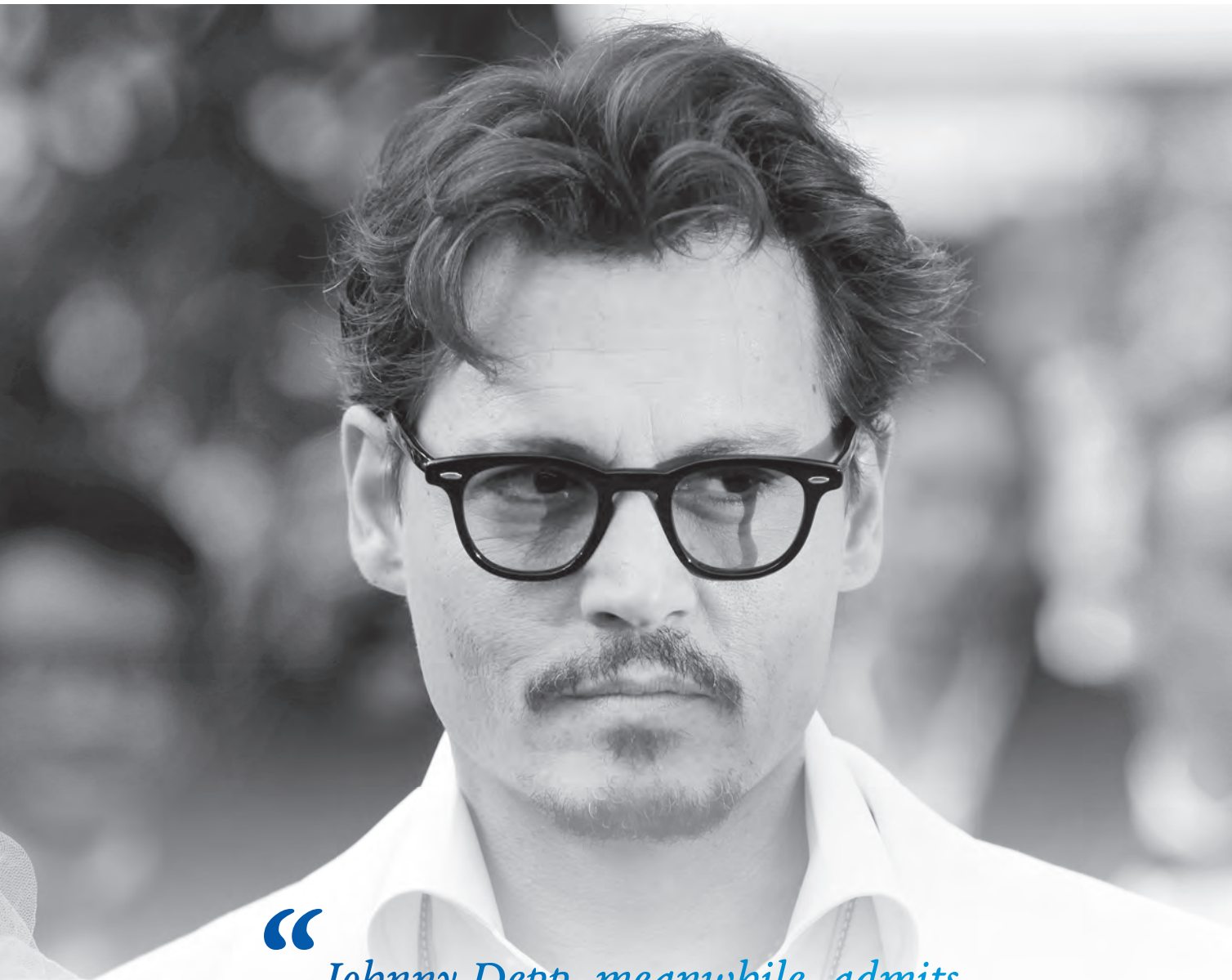

“Johnny Depp, meanwhile, admits to seeing only with his right eye and being “as blind as a bat” in the left eye.”

Sometimes disease is the cause. Peter Falk, who left his mark on several generations with his interpretation of Inspector Columbo in the cult eponymous series, suffered a retinoblastoma, a malignant tumour that affects the retina, at age 3. To treat him, his right eye was removed and replaced by a prosthetic eye. It was also a childhood illness that affected the vision of one of our most famous visually impaired celebrities. Ray Charles, nicknamed "The Genius", contracted glaucoma that left him permanently blind at the age of seven. Bono, frontman of the group U2, has been suffering from this disease for more than 20 years, which can cause an irreversible reduction in the field of vision.

We must also mention the singer Stevie Wonder who received too much oxygen in an incubator as a baby. The result was total blindness in both eyes. Or even Mandy Patinkin (from the series Homeland) who received a corneal graft to both eyes to treat keratoconus, a degenerative disease that deforms the cornea and causes vision disorders.

Johnny Depp, meanwhile, admits to seeing only with his right eye and being “as blind as a bat” in the left eye. The Pirates of the Caribbean actor, who plays Jack Sparrow, has Meares-Irlen syndrome, a relatively unknown vision disorder that causes a range of symptoms that affect reading, including distortion of printed text, eye fatigue and headaches.

Finally, like us, our entertainers age and they are sometimes affected by one of these conditions that frequently appear after a certain age. In addition to glaucoma which has already been mentioned, we must mention cataracts, which result from the opacification of the lens. Most often, it is related to the natural ageing of the main lens of the eye (or sometimes to eye or general disorders).

Among the most famous cataracts are those of Monet, the leader of the Impressionist movement, who began to lose his sight until he yielded under the pressure of his friend Georges Clémenceau to have surgery. That is how the artist was able to return to his easel. Age also brings the possibility of AMD. Actress Judi Dench, world-famous in her role as "M", the head of Her Majesty's Secret Service in seven James Bond films, suffers from age-related macular degeneration, an incurable disease that is gradually causing her to lose her sight.

HISTORY

The genius of penicillin

When Jean Chibret (1915-1989) had the idea to make the first ophthalmological antibiotic treatments...

HISTORY

The genius of penicillin

1940. A first test on humans, carried out in England, provided formal proof that penicillin could make a critical infection regress. It now only needed to be produced in bulk! The war prevented this project from going ahead in Great Britain. Researchers moved to the United States with their precious strains.

As thousands of soldiers were dying of bacterial infections, penicillin was quickly recognised as a strategic substance by the US government. They developed a federal programme to bring together biologists, physicians, chemists and engineers to push production, test the uses of the drug, and ultimately make it effective. As early as 1942, large American firms were associated with the project in order to allow a change in scale of production.
By 6th June 1944, on Sword, Juno, Gold, Utah and Omaha Beach, a miracle cure was available to all ally soldiers landing there...

During the campaign to liberate France, the military hospitals in turn received hundreds of millions of units. On 18th October 1944, in a barely liberated Paris, the French Academy of Surgery opened its first session on the "Discovery of antibiotics".

In the immediate post-war years, this revolutionary drug became rife on the black market throughout Europe, skilfully depicted in "The Third Man", a film in which Orson Welles plays a counterfeit penicillin trafficker in the ruins of occupied Vienna.

For his part, Jean Chibret, who was heading the family company, immediately had a glimpse of the fabulous future that awaited these antibiotics. It would have to be produced for all ages and in all forms, pills, injections, ointments, against all microbes (even the craftiest) and would have to treat all infected organs (even the most inaccessible). He was the first to consider the manufacture of a "new generation" of ophthalmic treatments.

Laboratoires Chibret became the leading producer of antibiotic-based eye drops and ointments in France.

And yet! How could the precious substance be obtained? Powerful French firms purchased licenses for large-scale fermentation techniques. They started their production. And while they did not plan the manufacture of ophthalmological drugs in any way, they did not intend to help any competitors to do so either. No problem, Jean decided to power play! He obtained penicillin directly from wholesalers and launched the first antibiotic eye drops without a marketing authorisation (MA).

What a scandal! Producers with a monopoly on the manufacture of penicillin were outraged. Jean was summoned on the spot by the health authorities. During the hearing, he argued that he may have transgressed some laws or regulations but that, for their part, manufacturers had transgressed the minimum rules of decency by depriving patients – for purely commercial reasons – of a drug that was set to turn medicine upside down, and save eyes that would otherwise be condemned to blindness with even the slightest infection.

Jean rallied the authorities to his cause and obtained permission to continue his production. In so doing, he pulled off his first major achievement: Laboratoires Chibret became the leading producer of antibiotic-based eye drops and ointments in France. Thanks to the special relationship he established with the American firm Merck and his trips to the United States, he very soon became the first to offer cortisone-based treatments in France, followed by hydrocortisone and dexamethasone. These are all products that went on to turn the treatment of ocular inflammation on its head.

The Chibret range was extended as discoveries were made. The Auvergne company became leader in most therapeutic classes of ophthalmology, particularly in the field of antibiotics and corticosteroids, which today represent some 60 to 70% of the market.


100% dedicated
to
ophthalmology
let's open our eyes


#2 Open
let's open our eyes
The magazine by Théa
FOR THE LAST 150 YEARS,
WE HAVE BEEN PIONEERS IN OPHTHALMOLOGY.
BY DEVELOPING TREATMENTS,
PROVIDING INFORMATION AND SHARING KNOWLEDGE
WITH SPECIALISTS AROUND THE WORLD,
WE ENABLE EVERYONE
TO KEEP THEIR EYES WIDE OPEN.
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