



2020 *in review*

life *beyond* allergy

STALLERGENES  GREER™

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Stefan Meister



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chairman's message

Stefan Meister *Chairman of the Board of Directors*

2020 was a truly unique year for populations across the globe and I start this report by expressing my immense respect and sincere gratitude to all those whose relentless efforts to treat patients since the beginning of the pandemic crisis are an inspiration for all of us. On behalf of the Board of Directors, I would also like to recognise and thank Stallergenes Greer's employees for their unrelenting engagement and commitment to serving patients throughout this extraordinary time.

During this challenging period, the maturity of our organisation and our robust fundamentals, in combination with the entrepreneurial spirit and dedication of our teams, have proven to be valuable assets. Our high-performance and agile business model showed its resilience and Stallergenes Greer posted strong performance across its portfolio and continued to regain its position as a trusted world leader in allergen immunotherapy.

The situation also led us successfully to accelerate our digital transformation and further embrace technological innovation for the benefit of patients and the medical community. Throughout the year, Stallergenes Greer further enhanced its allergen portfolio and demonstrated its unwavering commitment to patient care by continuing to deliver unparalleled support and precise personalised treatments.

Stallergenes Greer is fully focused on the discovery and delivery of innovative therapeutic solutions tailored to the individual needs of each single patient. Moving forward, with the support of Waypoint Capital, its sole shareholder, the company will continue to build on its precision medicine and personalised healthcare expertise while leveraging external innovation opportunities to further address unmet medical needs and provide patients with the treatment solutions they deserve. The company will also look to expand its presence in adjacent therapeutic areas, in particular food allergies which continue to affect an increasing number of people across the globe.

Stallergenes Greer's extensive allergen portfolio, scientific and technological expertise and commitment to taking allergy personally are the cornerstone of its continued success. I am confident in Stallergenes Greer's ability to continue to adapt to a changing environment while delivering on its strategy in 2021 and beyond.

Sincerely,

Stefan Meister

interview with *our CEO*

Michele Antonelli *Chief Executive Officer*

Last year was a challenging year for companies across the globe. How did the pandemic affect Stallergenes Greer?

The COVID-19 pandemic gave rise to significant healthcare and economic challenges for all of us. At the outbreak of the pandemic, Stallergenes Greer rapidly implemented the necessary measures to protect the health and safety of its employees and maintain supply continuity for patients. I am proud of the dedication of our people who, in spite of the circumstances, continued to deliver on our purpose of enabling precision medicine to improve life for people with allergies.

In Europe and the U.S., 2020 was a trying year. With many countries in lockdown, a number of physicians postponed consultations due to the uncertainty of the situation and patients were informed of how to protect themselves. While patients undergoing allergen immunotherapy treatments were able to renew their prescriptions, the number of new patients decreased, in particular during the second quarter.

Stallergenes Greer remained focused on its strategic priorities and accelerated its digital transformation to continue to engage with employees, healthcare professionals and patients. The pandemic taught us how to work differently by simplifying our processes and decision-making. Our robust fundamentals, our commitment to operational excellence combined with the agility, dedication and solidarity of our people contributed to help us in this storm.

What were the significant milestones for the company in 2020?

As a result of sustained investments in our global manufacturing capabilities and quality systems that meet the highest product quality standards required by the health authorities, the company restarted the production of subcutaneous products for the Europe and International region. Stallergenes Greer has since been able to fully concentrate on the resumption of the production of subcutaneous products, the relaunch of prick tests and a variety of injectable allergen references. And, I am delighted to say that we have regained our leadership positions, in particular in the French market where Stallergenes Greer is currently the only company to produce injectable formulations for the AIT field.

The year was also marked by the acceleration of Stallergenes Greer's digital transformation. We rapidly adapted to the new environment by launching a series of digital initiatives for patients and healthcare professionals, participating in digital congresses while continuing to develop our people.

And, in April, we submitted a marketing authorisation application in Europe for STAGR320, our sublingual allergen immunotherapy tablet for the treatment of house dust mite-induced allergic rhinitis. 2020 was a busy year for Stallergenes Greer!

How is precision medicine shaping the future of allergen immunotherapy?

At Stallergenes Greer, we believe that one size doesn't fit all and are committed to fostering unique solutions which are tailored to the individual needs and profile of patients. By combining the potential of precision medicine with personalised healthcare, we aim to significantly improve patient disease outcomes.

The concept of precision medicine stems from the idea that individuals vary in their response to the treatment they receive. Each patient has his or her own genotypic and phenotypic profile, with his or her own immunogenic response. The individual characteristics, the etiology and mechanism of the disease of each patient can impact the response to the treatment, and so should be taken into account. By better understanding allergens and the profile of patients, we will understand which profile may or may not respond to the products we develop. We also engage with healthcare practitioners to address unmet needs and continue to broaden our range of allergens for people with rare and specific respiratory allergies.

A very long road has been travelled by our scientists and we are now charting the way to collaborate with external partners to further develop this approach.

Looking ahead what are the greatest challenges for Stallergenes Greer?

One of our main challenges remains raising awareness regarding the burden of allergies on our society. Allergies have been rising, both in industrialised and non-industrialised countries, for decades due to a variety of factors ranging from modern hygiene, to pollution and climate change. Allergies can also lead to other diseases, such as asthma, a chronic inflammatory disease which continues to pose many public health challenges. It is estimated that one in two people will be affected by allergies 30 years from now. The burden of allergies on society must be recognised in order to create a virtuous circle between R&D, patient treatment and the recognition of payers.

Stallergenes Greer is well positioned on the road to success. We have a unique and historical knowledge of allergen immunotherapy and develop best-in-class treatments adapted to the needs and profile of each patient. We benefit from the support of Waypoint Capital, our shareholder, whose legacy in biotechnology and innovation inspires our business and all our people with an immense strength and confidence. And our people are committed to finding innovative allergen immunotherapy solutions to improve life for people with allergies.



Our purpose

Enabling precision medicine *to improve life* for people with allergies.

Our extensive portfolio of allergens and drug delivery modes provides physicians with the flexibility to adapt treatments to the individual characteristics and mechanism of disease of each patient.

Our ambition

Becoming the world's leading allergen immunotherapy company.

By:

Realising the potential of precision medicine combined with personalised healthcare to improve the quality of life of people with allergies.

Changing the course of allergic disease through the largest portfolio of best-in class allergen immunotherapy (AIT) treatments.

Being a trusted partner in allergy management and making a lasting and positive contribution to society.

Nurturing scientific innovation and collaborating for long-term growth, creating value for all of our stakeholders.

Continuous improvement in operations ensures we can provide the right product to the right patient on time, every time.



Our strategy

At Stallergenes Greer, we operate to sustain growth and create value for society as a whole.

The company's strategy is based on three pillars:

Precision medicine for better patient care

Stallergenes Greer is committed to furthering precision medicine and personalised AIT treatments to improve life for people with allergies.

We develop diagnostic tools and AIT treatments which allow to both identify the patients most likely to benefit significantly from AIT and to choose the appropriate treatment for them.

Our extensive product portfolio covering all administration routes (subcutaneous and sublingual) and personalised treatment solutions provide unparalleled patient care which meets the needs of both individual patient profiles and the medical community.

Investing in our people

Stallergenes Greer is driven by an entrepreneurial mindset.

We believe there are no limits to what we can do as a team. We invest in our people and create a learning culture so we can all reach our potential, together.

Our patients are at the heart of every decision we make and inspire us to always go further.

We are committed to building world-class competencies in science, supply and quality. Our employees are empowered to effect positive change.

A high-performance agile business model

Stallergenes Greer is a resource-efficient organisation. Our lean operating model focuses on quality and robust operations.

We build on the company's strong foundations to seize profitable growth opportunities by developing new business in additional geographies and markets, and through external growth by seeking to add new expertise and innovation both in our core business and in related therapeutic areas.



Allergies:
**our market
environment**

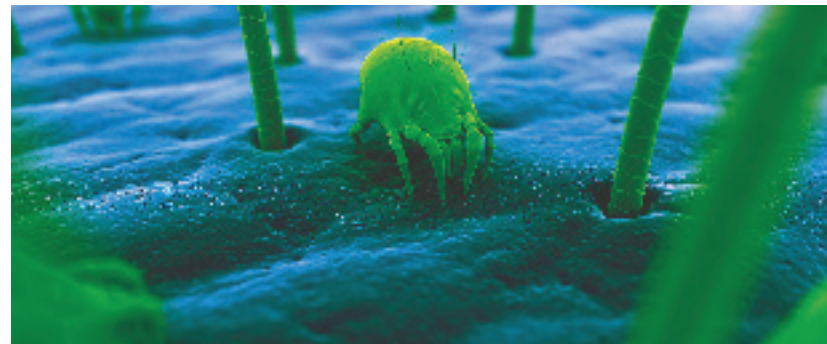
Allergens

An allergic reaction is an inappropriate response by the body's immune system to foreign substances, or allergens, such as house dust mites, pollen, food, mould or pet dander. Allergies are a common, chronic, often debilitating condition and can sometimes cause a fatal reaction.



Human allergies

SYMPTOMS. Respiratory allergy symptoms include: allergic conjunctivitis with itchy, red and watery eyes; allergic rhinitis with sneezing and a blocked or runny nose; swelling and itching in the oral area; a dry cough, shortness of breath or bronchitis which can lead to asthma. Allergies can also have a psychological impact with symptoms such as fatigue, irritability, poor sleep and a negative effect on concentration and performance.



House dust mites

House dust mites belong to the Arachnida class, which includes spiders and ticks. They measure between 0.2-0.4mm and are present in all households where they tend to be more numerous in bedding, upholstery, carpets, etc.

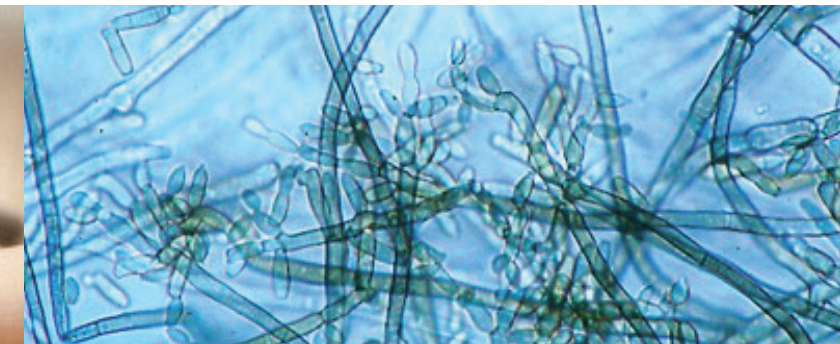
The body reacts to the faeces and dead cells of the mites. House dust mites are one of the major causes of allergic rhinitis with symptoms such as congestion, sneezing, a dry cough or bronchitis which can lead to asthma. House dust mite allergies are perennial.



Pets

Allergies to cats are the most common type of allergy to dander and represent two thirds of allergies to pets. Contrary to common belief, what triggers an allergic reaction isn't pet hair but a substance found on the pet's fur. This protein (or allergen) is produced by the skin of felines and is also present in their saliva, urine, tears and dander. The allergen can be found throughout homes, in bedding, upholstery, rugs and is suspended in the air. Cat hair can also be transported by clothes and shoes. The allergen can be found in significant quantities even in a home with no cat, in class rooms for example.

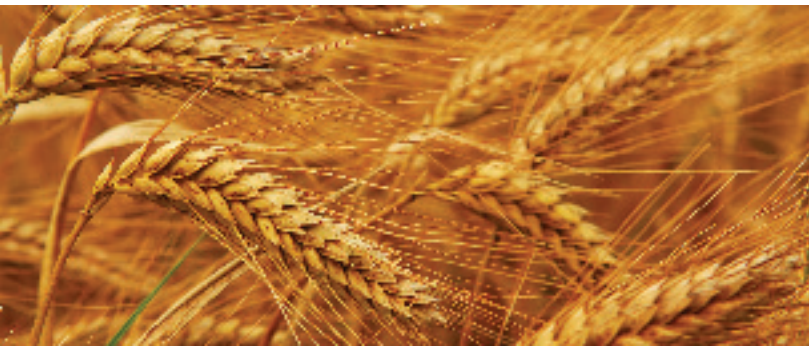
Sensitisation to dogs is less common than cat allergies. Other pets, such as rodents, exotic pets, birds and farm animals, can also trigger allergic reactions.



Mould

Mould is composed of microscopic fungi that are present in the environment. Fungi can be found both indoors in damp areas (bathroom, kitchen, etc.) and outdoors (fallen leaves, compost, grasses, etc.). The spores released by the fungi can be carried by wind and dew. Mould can also develop on foods (bread, cheese, fruit and vegetables).

The microscopic size of fungi spores, which ranges from 3 to 10µm, enables them to easily penetrate the respiratory tract.



Pollen

Pollens are suspended in the air on sunny and warm days, they can be carried by the wind over several kilometers. The amount of pollen in the atmosphere is lower on rainy days as well as on cold and humid days. The pollination period is spread over several months (from March to September in the Northern hemisphere) and varies from one species to another.

Pollens responsible for respiratory allergies come from three categories:

- trees: in particular the Betulaceae family (birch), Fagaceum family (beech, oak), the Oleaceae family (ash, olive tree), the Cupressaceae family (cypress, juniper, cedar);
- grasses: in particular the Poaceae (grass) family which includes more than 12,000 different species; fodder and cereal grasses notably dactylic (cocksfoot or orchard grass), timothy, sweet vernal, ryegrass and bluegrass;
- weeds: species from the herbaceous family have soft and supple stems. Their pollens, which are small and light, can remain suspended in the atmosphere for a long period of time and can be carried over long distances. Herbaceous weeds which can trigger an allergic reaction include: mugwort, nettle, lamb's quarters, ragweed, sage, Russian thistle.

Venom

SYMPTOMS. *While many people experience a local reaction (itching, redness), insect stings can be life-threatening for others by causing respiratory or circulatory difficulties, nausea, vomiting or a loss of consciousness. The risk of a severe reaction increases with the frequency of the stings and conditions such as allergic asthma, cardiovascular disease and mastocytosis are believed to increase the severity of the allergic reaction. According to data from Anaphylaxie (<https://www.anaphylaxie.net/en/>), the global anaphylaxis registry, insect stings are one of the main triggers of anaphylactic shock in adults.*

It is estimated that 10% of the population will develop an allergic reaction to venom released by a stinging insect. Venoms responsible for allergic reactions include a variety of species from the Hymenoptera order including honey bees, hornets, wasps and yellowjackets.



Other human allergens

SYMPTOMS. *Latex can cause allergic reactions with symptoms ranging from skin irritation, itching, wheezing and respiratory difficulties to anaphylaxis. Food allergies can trigger symptoms such as digestive problems, hives and respiratory difficulties. In some people, food allergies can be life-threatening and cause anaphylaxis.*

Latex

Natural rubber latex, the protein in the sap of the Brazilian rubber tree, found in many consumer goods (balloons, rubber bands, condoms, etc.).

Food

The most common food allergies are triggered by milk, egg, peanut, tree nut, soy, wheat, fish and shellfish.

Cross-reactivity

Cross-reactivity occurs when the immune system does not differentiate between the allergy-provoking substances in one food, in pollen or in latex and the protein in another food.

For example, people who are allergic to birch pollen may also be allergic to apples, while people who are allergic to ragweed may also react to melon, and those with latex allergies may also be allergic to bananas.

Veterinary allergies

SYMPTOMS. *The most common symptom of an allergic reaction in animals is pruritus (itching of the skin) of the face, nose and paws which can cause self-inflicted wounds and lead to both infections of the skin and loss of fur. Other allergic reactions can include respiratory symptoms (coughing, wheezing and sneezing) or a runny nose and eye irritation. In addition, animals with allergies can also suffer from vomiting and diarrhea.*

Animals can suffer from the same ailments as humans, including allergies. Cats, dogs and horses can have allergic reactions to a variety of environmental substances or allergens. If an animal has allergies, it means it has a hypersensitivity to a substance that would otherwise be harmless.

Most allergies in animals fall into three categories:

- atopic dermatitis (skin irritation): whether seasonal or year-round, atopic dermatitis can be caused by pollen, mould, dander, dust, flea bites, or other irritants in the environment;
- respiratory allergies: animals can develop a sensitivity to particles in the air. Both cats and horses are particularly susceptible to this type of allergy;
- food allergies: meat, dairy and eggs are common causes of food allergies in pets. Food allergy is sometimes the source of allergy symptoms in animals younger than one year of age.

Market *environment*

The number of people with allergies has risen continuously over the past 60 years, with higher incidence rates among children. Today, more than one billion people worldwide are affected by allergies and it is expected that by 2050, 1 in 2 people will suffer from allergies¹.

Rapidly increasing prevalence

The increasing prevalence and intensity of allergies is a trend that has continued in the industrialised world for more than 60 years. Allergies currently affect over 13% of the world's population, and an estimated 20% to 30% of the developed world².

Allergies impact quality of life and can trigger asthma

The limitations resulting from the body's reaction to allergens are multifaceted but share one common theme: the patient's quality of life is no longer what it used to be. People who are sensitised

to aeroallergens develop allergic rhinitis with symptoms such as a runny nose, itching, watery eyes, respiratory congestion and fatigue. A possibly less well-known and often underestimated consequence is that allergies put people at a greater risk of developing asthma.

People with allergic rhinitis are three times more likely to develop asthma than other people, and the risk for patients with house dust mite-induced allergic rhinitis is about six times higher than those whose allergic rhinitis is caused by grass pollen².

1. World Health Organisation. Ambient Air Pollution: Health Impacts
2. World Allergy Organization. "White Book on Allergy: Update 2013"



Tonya Winders

President and Chief Executive Officer, Allergy & Asthma Network
–
President, Global Allergy & Airways Patient Platform

What is the relationship between allergies and asthma?

The level of awareness in the general population regarding the link between allergies and asthma is extremely low and connecting the dots between allergies and asthma is not always part of patient recognition. Understanding of the relationship between the two conditions is even less in low to middle income countries, but even in developed countries treatment pathways and guidelines – diagnostic testing for asthma and allergens, allergen immunotherapy and environmental control – are inconsistent.

Though many people only experience one condition, allergies can worsen or trigger asthma and it can be more difficult to manage asthma if allergies are not managed. Raising awareness and understanding for patients, caregivers and healthcare professionals is essential to improve patient outcomes.

What can be done to prevent the development of asthma?

Unfortunately, there is no cure for asthma and prevention plays an important part in controlling symptoms. It is not always possible but reducing exposure to allergy and asthma triggers

– smoke, air pollution, house dust mites, pollen, etc. – can make symptoms easier to manage. Many people ignore the link between allergies and asthma and do not know that allergies are triggering their asthma.

Because they can no longer control their symptoms, many patients start searching for greater understanding of their condition online, which connects them with patient associations. A major challenge is ensuring that patients obtain evidence-based reliable information.

What is the socio-economic burden of uncontrolled asthma and allergies?

In many countries, diseases such as asthma are not considered a priority. And, for policy makers, allergies are often even further down the line and downplayed to a runny nose, sneezing and something that only happens a couple of months a year.

The social and economic impacts of allergy and asthma are very significant. The quality of life of patients can be heavily affected. On top of the physical and psychological discomfort,

allergy and asthma symptoms also lead to a vast amount of lost school and workdays every year and daily activities such as hobbies, chores, and sports can also be impacted.

Allergies left untreated can lead to asthma – a chronic and debilitating condition when left unmanaged. In the U.S. alone, it is estimated that asthma costs \$81.9 billion annually¹.

1. "The Economic Burden of Asthma in the United States, 2008 – 2013" <https://www.thoracic.org/about/newsroom/press-releases/resources/asthma-costs-in-us.pdf>

Too many patients are not treated

Allergic rhinitis affects approximately 10% to 30% of adults and 40% of children¹. Only approximately 12% of people suffering from allergic rhinitis are treated with allergen immunotherapy (AIT) products due to low awareness among primary care prescribers, a complex treatment pathway and a market that is dominated by lower cost symptomatic treatments. AIT is the only treatment that addresses the underlying cause of allergy and may provide both rapid (within a few weeks) and long-lasting improvement of all symptoms, whereas symptomatic treatments (such as antihistamines and corticosteroids) temporarily relieve some allergy symptoms.

With a modest proposal rate, the AIT market is still underdeveloped, representing approximately €1bn or 12% of the global allergic rhinitis market and is expected to grow by 2% annually in the coming years².

Market growth is expected to result from an increased awareness of respiratory allergies, easier access to allergists, the expanded range of administration modes as well as a growing middle class in developing countries that will gain access to medical treatment.



Innovation in science and technology is creating new medical opportunities

Biologics, gene therapies and other new molecularly targeted compositions are starting to deliver on their promise to enable more precise diagnostics and more tailored treatments. The development of more patient-friendly treatments (shorter treatment lengths, ease of use) should improve AIT penetration in the allergic rhinitis patient population and their adherence.

In addition, advances in the areas of genetics and informatics are driving a transformation in our understanding of the disease. Innovations in technology also present opportunities to address the growing volume of regulatory requirements more efficiently and more effectively.

Rise in allergies gaining attention from payers, providers and regulators

As more patients seek treatment for their allergies, the AIT industry has gained greater attention from the healthcare community. Healthcare providers are seeking more clinical evidence related to the safety and efficacy of AIT; payers are tightly controlling access and increasingly requiring data about the economic benefit to maintain coverage for treatment; and regulatory bodies are intensifying their scrutiny and enacting more stringent requirements of biologics manufacturers.

1. World Allergy Organization. "White Book on Allergy: Update 2013"
2. Market size (€1bn) and expected growth (2%): global data and internal estimates share of AIT market in the global allergic rhinitis market (12%): Visiongain report 2018.



Professor Marek Jutel

President,
European
Academy of
Allergy and
Clinical
Immunology
(EAACI)

Allergies have been rising across the globe for several decades. What explains this trend?

The increase in allergies can be explained by multiple factors. The first is the "hygiene hypothesis" which suggests that the immune system must be "educated" to function correctly. Better sanitation, clean water supplies, modern lifestyle, decreased exposure to microbes have impaired the immune system's ability to defend itself against foreign substances. Environmental exposure to pollutants

is also an important factor, as small particles of pollutants can change the molecular structure of pollens which can enter the body more easily. And climate change is also affecting allergen patterns. It is believed that lifestyle and obesity, which affect the microbiome composition, are also making us more susceptible to developing allergies and asthma.

Can allergies be prevented?

Increasing awareness of allergies is a priority for the EAACI and a lot of work is being carried out to explain the links

between environmental factors and allergies.

To better understand allergies, we must embrace a holistic view of how the complex interactions between human health, animal health and environmental health affect the overall health of our society.

EAACI Working Groups involving a variety of players are fully engaged in raising awareness about the link between allergies and asthma and our ecosystem.

This "one health" approach is fundamental to better understand and prevent disease.

Allergies have become a public health concern.

Today, half of the world's population suffers from allergic diseases—a staggering figure!

Treating people with allergies represents a significant financial strain on health systems across the globe.

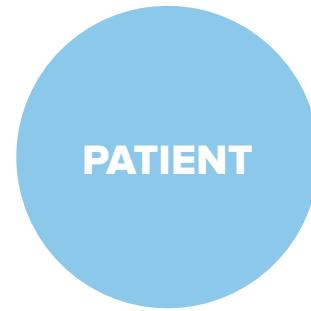
We need to make payers and regulators more aware of the importance of

allergic diseases and their impact on the quality of life on patients. We must also increase awareness regarding the link between allergies and environmental factors.

To help prevent the exponential development of allergies, policy makers have to go one step further and implement environmental regulations.

Patient journey

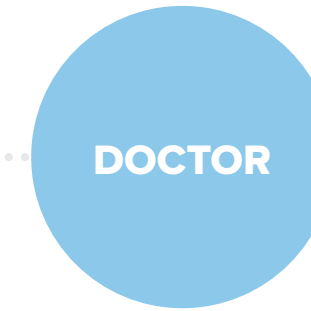
Respiratory allergies follow a chronic and progressing disease course, especially when left untreated¹. Allergic rhinitis is often under-diagnosed and from onset of symptoms, a patient may have waited eight years to see a specialist².



Seeks online support, uses avoidance measures and home-care products to help with allergy



Symptomatic treatment and nasal sprays/ dermatological products^{1,2}



Prescription of symptomatic treatments^{1,2}



Allergy specialist considers use of SLIT or SCIT^{1,3}



Isabelle Bossé, MD

Allergy Specialist, President of SYFAL (French Association of Allergy Specialists) and ARCAA (Clinical Research Association in Allergology and Asthmology)

“In France, there is sometimes a degree of reluctance to refer patients to allergy specialists. This is probably due to the fact that allergology is scarcely covered during medical studies, resulting in a lack of understanding of allergen immunotherapy, and occasionally, to a certain mistrust since it is a long-term treatment that some consider burdensome. Even patients who have suffered anaphylactic shock can be misinformed and fail to consult an allergy specialist. Fortunately, anaphylactic shock and asthma are now subject to rigorous protocols in accident and emergency departments.

General practitioners do not systematically refer patients to an allergy specialist and allergy sufferers have often wandered from one doctor to another before arriving in my practice. Several scenarios can occur: patients do not complain and are therefore not seen by a doctor; they take symptomatic treatments and their allergies still aren't sorted out; patients are not referred to an allergy specialist despite persistent symptoms and the progression of their condition into respiratory pathologies such as asthma; and on occasion, some

assume that an allergy assessment is not useful and that identifying the cause of the allergy is not a priority.

Patients arrive saying, “Give me some hope, I can't take it anymore”. Others have done some research, and arrive saying, “I've just found out about desensitisation”.

I always take time to explain that allergen immunotherapy is the only therapeutic solution capable of treating the root cause of the allergy, that the treatment takes a long time, and that it must be strictly adhered to. Certain patients stop mid-treatment because they find it too burdensome. Being able to provide personalised treatments that best meet the lifestyle, profile and needs of each individual is key for successful patient outcomes.

Allergy specialists play an important role in monitoring treatment. It is also our role to explain the benefits of desensitisation and of personalised treatment, which include an improved day-to-day quality of life and the prevention of the onset of more severe respiratory pathologies and other comorbidities.”



Alicia Nambot

Patient undergoing allergen immunotherapy treatment

“I suffered from allergic rhinitis for a long time without knowing what was causing it. My eyes in particular were extremely swollen and I also had eczema. I saw numerous doctors who prescribed symptomatic treatments. The treatments helped, but my symptoms continued to worsen over time...

When I became pregnant, I contacted an allergist. After months waiting for an appointment, thanks to the allergy specialist we were able to identify the source of the condition I had been suffering from; I was allergic to house dust mites and mould, which explains why I had symptoms year round.

After having given me some advice on how to avoid the identified allergens, the allergist presented me with the different possible treatments: symptomatic treatments and sublingual or subcutaneous allergen immunotherapy.

It was with great relief that I realised that the causes of my allergies could be treated and that I could envisage a different treatment option. »

Globally, over **400 million people** suffer from allergic rhinitis³.

Asthma and allergic rhinitis are estimated to result in more than **100 million lost workdays** and missed school days every year⁴.

Patients can experience more than **15 days of symptoms** in one month².

Allergy immunotherapy is used in **less than 10%** of eligible patients⁵.

1. Bousquet J, et al. Allergy 2008;63(S86):8-160 - Canonica GW, et al. World Allergy Organ J 2008;1:138-44 - Valovirta E. EFA Book on Respiratory Allergies - Raise Awareness, Relieve the Burden. www.efanet.org - 2. Valero A. Et al. Am J Rhinol Allergy 2011 - 3. Canonica GW. Etb al. Allergy 2007;62 (suppl. 85) - 4. The European Academy of Allergy and Clinical Immunology Advocacy Manifest - 5. Jutel M, et al. J Allergy Clin Immunol 2015;136:556-68

Precision medicine

Our ambition is to advance the practice of allergology. We work and collaborate with physicians to better understand how to identify the right treatment for each patient to maximise the overall impact of our allergen immunotherapy solutions.



Tailored treatment options for patients

Precision medicine is the focus of Stallergenes Greer's research and development strategy. We base our research process on the clinical and molecular biology of disease and develop tailored treatments that aim to improve the quality of life for people with allergies.

Precision medicine focuses on the patient's individual characteristics and their individual mechanism of disease to identify their 'treatable traits' – how likely they are to respond to their personalised treatment.

Precision medicine: treating the right patient with the right treatment

The concept of precision medicine has evolved from the idea that individuals vary in their response to the treatment they receive; two patients with the same diagnosis may have different responses to the same treatment. The individual characteristics, the etiology and mechanism of the disease of each patient can impact the response to the treatment, and so should be taken into account.

When considering allergies, a patient's phenotype, genotype, their environment and other relevant clinical features may factor into how they respond to allergen immunotherapy treatment.

Demand for personalised allergen immunotherapy treatment options is growing

As the prevalence of allergic diseases increases, so does its complexity. Each patient presents a unique immunologic profile. Patients show symptoms ranging from mild to severe and are often allergic to multiple allergens simultaneously. In addition,

a patient's lifestyle and habits can impact the likelihood of adhering to treatment.

As a result, physicians need diagnostic solutions and treatment methods that allow them to create a tailored approach that best addresses the individual patient's treatment needs, including type and severity of allergy, as well as the patient's preferred method of administration.

The rise of collaborative and participatory medicine, with a well-informed patient who takes an active part in the diagnosis and treatment journey, will further strengthen the efficacy of personalised medicine.



Professor Giorgio Walter Canonica

Professor Respiratory Medicine, Humanitas University

Head Personalised Medicine Asthma & Allergy Clinic-Humanitas Research Hospital Milan, Italy

How does precision medicine help diagnose and treat allergies?

Nowadays, the clinical use of molecular allergy diagnostics* is crucial to identify the "genuine" allergy.

This approach prevents to evaluate a positive reaction which is not clinically related to the clinical pattern of the individual patient. Precision medicine is very valuable in this respect.

Insofar as precision medicine is defined by the identification of the mechanism(s) of the patient's diseases, this is a modern way to circumscribe both the real

sensitisation and the consequent cascade of immunological events inducing clinical symptoms.

Why is it important for patients to receive personalised allergen immunotherapy solutions?

The "one-size-fits-all" approach is part of the last century in medicine, where diagnostic procedures and therapeutic tools were not designed for an individual patient.

Research and technology have made new options and tools available to properly

target treatments, thus, for instance, avoiding the useless administration of pharmaceutical or immunological compounds.

What are the socio-economic benefits of allergen immunotherapy?

Avoiding the administration of pharmaceutical or immunological compounds which are useless creates significant savings with regard to treatment strategy. In addition, we

should keep in mind that targeted therapy – such as personalised allergen immunotherapy – is a major step towards improved clinical outcomes, as well as towards better adherence to treatment.

The long-term effect of allergen immunotherapy compared to conventional pharmacological treatments, namely nasal and inhaled steroids, antihistamines or bronchodilators, is also a consideration which should be taken into account.

* Molecular-based allergy (MA) diagnostics is an approach used to map the allergen sensitisation of a patient at a molecular level, using purified natural or recombinant allergenic molecules (allergen components) instead of allergen extracts (Caponica G.W. et al. A WAO - ARIA - GA2LEN consensus document on molecular-based allergy diagnostics. WAO Journal 2013).

Our solutions

Spanning source materials, routes of administration, cutting-edge delivery mechanisms and finished products, ours is an innovative portfolio of therapeutic solutions designed to improve ease of access and treatment outcomes.



Diagnosis

The diagnosis of respiratory allergies is based on clinical history, physical examination, allergy tests and specific questions. One of the diagnostic methods used by medical practitioners to identify the triggering allergens in patients is a skin prick test.

Via a prick to the skin, the patient is exposed to the suspected allergen and is monitored. After approximately 20 minutes, the skin is observed for any signs of reaction to one or several of the allergens: redness, swelling, itching.

Stallergenes Greer offers a broad portfolio of testing extracts which allow to test for a wide range of allergies. The company also offers testing devices.

Allergen immunotherapy

Allergen Immunotherapy (AIT) is an allergy treatment designed to treat the underlying cause of the disease as well as have a long-lasting effect on all symptoms. After an accurate diagnosis of the type of allergy and responsible allergens, patients receive a targeted treatment, available in sublingual (tablet or drop) or subcutaneous (injections) form, based on geographic territories.

Because it treats the root cause, AIT results in immunologic tolerance; i.e. a decrease in the body's reaction to an allergen. Through the repeated administration of specific allergens to patients, the immune system builds resistance by changing the types and proportions of antibodies (immunoglobulins) and proteins (interleukins) it produces when it is exposed to the allergen, thus reducing symptoms when patients are exposed to the allergen in their environment – even after treatment ends. AIT usually requires 3 to 5 years of treatment.

Named patient products

Stallergenes Greer believes one solution does not fit all patients, hence we provide patients with personalised treatment options which are tailored to their individual needs. We aim to offer a comprehensive portfolio of AIT treatments globally which allows patients and their physicians to determine the administration method that best meets the disease and lifestyle needs of the patient.

The company's allergen extracts cover a vast array of allergens. They can be produced in standardised form and can also be tailored to the specific needs of patients in terms of composition, concentration and dosage.

These personalised solutions, known as Named Patient Products (NPPs), are prepared according to the allergist's prescription and the patient profile using a stock solution obtained via the extraction of allergens (pollen, house dust mites, mould...). Each NPP has its own biological activity and is prepared for the unique needs of an individual patient.

OUR PRODUCTS

Whatever the options, all of our diagnostics and allergen immunotherapy treatments meet stringent clinical criteria as well as health authorities' regulatory requirements. From diagnosis to treatment our portfolio is designed to ensure the consistency of our products in terms of reactivity index, source of raw materials and high quality standards. Our full allergen and product portfolio is available on pages 48 to 49 of this report.

Sublingual

(oral drops), for the treatment of allergy involving rhinitis, conjunctivitis, rhinoconjunctivitis or asthma (mild to moderate) of a seasonal or perennial nature, in adults and children (from the age of 5).

Actair® (tablet), for the treatment of house dust mite allergies involving rhinitis, with or without conjunctivitis (itchy and watery eyes), in adults and adolescents over 12 years (and under 12 in certain territories).

Oralair® (tablet) contains a five-grass (sweet vernal, orchard, perennial rye, timothy, Kentucky blue grass) mixture, which represents many of the natural exposure and sensitisation conditions of grass pollen allergic patients.

Stallergenes Greer's solutions are tailored to each geographic market.

Subcutaneous



Alustal® and **Phostal®**, for the treatment of allergic rhinitis, allergic rhinoconjunctivitis or mild to moderate asthma in adults and children.

Albey® venom, for the treatment of allergy to wasp, honeybee and yellowjacket venom.

Extracts and supplies

Stallergenes Greer manufactures a broad portfolio of allergen extracts and diagnostic tests.

- Bulk extracts
- Testing supplies: Alyostal Prick®, Stallerpoint®, Prick Lancet®, the Greer® Pick® system, Greer® Pick®, Greer® Pick® Well™, Greer® Pick® Tray™, Greer® Pick® Tray™ lid, 40-Well Greer® Pick® evaluation package, 60-Well Greer® Pick® evaluation package, Skintestor Omni™ system, Skintestor Omni™, Skintestor Omni™ Trays, 40-Well Skin Omni™ evaluation package, 60-Well Skin Omni™ evaluation package
- Source materials and other supplies (sterile diluents, vials)



SUPPORTING PATIENTS AND HEALTHCARE PROFESSIONALS THROUGHOUT THE COVID-19 PANDEMIC

Stallergenes Greer has maintained supply continuity of its treatments and the availability of its customer service teams since the outbreak of the pandemic. With the enforcement of work-from-home and isolation measures across many countries, Stallergenes Greer developed a range of digital services to continue to engage with allergy patients and healthcare professionals and support them in these trying times.

As patient consultations dropped,

both at hospitals and private practices, throughout the year, Stallergenes Greer launched a series of online conferences to provide guidance to the allergist community on telemedicine solutions. Online training sessions, hosted by key opinion leaders, were also organised for allergy specialists on topics such as “Care for allergy patients during the pandemic” or “Security and hygiene measures”.

With the circulation of misinformation during the isolation periods many

patients with chronic diseases interrupted their treatment – including allergen immunotherapy. Because this break in the continuum of care is a public health concern, Stallergenes Greer created opportunities for patients to have access to the right information by developing web conferences aimed at informing, reassuring and fostering dialogue between experts in allergology and the general public.

Veterinary use

In the U.S., Stallergenes Greer offers a comprehensive range of allergen extracts and supplies for veterinary dermatologists to support the needs of their clients and pet patients.

Veterinary dermatologists are veterinarians that have specialised training in the management of allergic disease. They may use products from companies like Stallergenes Greer to compound named patient allergy prescriptions for dogs, cats, horses, and more.

From allergen testing to making precision treatment medicines, Stallergenes Greer is committed to providing veterinary specialists with products that can help treat animal allergies.

Stallergenes Greer produces extracts of different strengths and formulations specifically for veterinary specialists.

Veterinary allergen testing and treatment products for pets

- GREER® Extracts™: extracts are USDA approved for both subcutaneous and sublingual administration. Stallergenes Greer offers a wide selection of extracts and formulations.
- GREER® Sterile Diluents™: various sizes, formulations, and fill volumes available.
- GREER® Sterile Empty Vials™: a range of industry-relevant sizes for extract mixing and storage.



Year
in review

Stallergenes Greer *Americas*



“I applaud Stallergenes Greer Americas for showing true leadership during a challenging time and uninterrupted service to our medical professionals that treat allergy in both human and veterinary environments.”

Tibor Nemes, Executive Vice President, Head of Americas

The unprecedented nature of 2020 did not derail the Americas region from focusing on its priorities and continuing a multi-year strategy to position the region for sustainable, long-term success.

Commitment to strategy yields strength amid uncertainty

The onset of the COVID-19 pandemic and nationwide shutdowns in the U.S. and Canada impacted Stallergenes Greer Americas more acutely compared to the rest of the global economy. As medical offices closed and patients stayed at home, sales declined alongside patient visits. The region quickly adjusted to the new environment and focused on being nimble, solutions-oriented and united to solve the challenges ahead. As a result, the Americas region was able to maintain product supply without interruption throughout 2020, support its customers, and finish the year in a strong position.

Stallergenes Greer remained steadfast in its commitment to long-term operational improvements. The U.S. organisation is in the midst of a multi-year operational strategy designed to ensure that the company has state-of-the-art technology and

processes. Investments in the core infrastructure continued in 2020, including replacing the existing autoclave in the Lenoir manufacturing facility, upgrading Greer Pharmacy, and integrating new technology to improve efficiencies across manufacturing.

Mitigating risks through strategic investments

The global economic impact of COVID-19 forced Stallergenes Greer to look at all aspects of its operational structure and supply chain to ensure the greatest risks have been anticipated and mitigated. That analysis resulted in a series of strategic investments in the Americas, including a multi-year investment to upgrade the enterprise resource planning (ERP) system and the expansion of the U.S. land footprint to insource the collection of certain pollen allergens.

Reinforcing its commitment to customer service

After more than 100 years serving the allergy community in the U.S., Stallergenes Greer is a partner to its customers. That mission took on new meaning in 2020. In order to help struggling customers, the company remained in contact via

digital means, including conducting a variety of virtual sales and training activities, implemented market promotions to help customers resume their practices, and offered financial support, through flexible payment agreements.

2020 introduced new challenges for Stallergenes Greer, in addition to the competitive marketplace and uncertainty in the insurance and reimbursement landscape that the company faces daily.

Stallergenes Greer Americas responded to these challenges by remaining committed to its strategy of investing in its core infrastructure, focusing on providing superior customer service, and ensuring product availability.

Stallergenes Greer veterinary business in U.S. catches COVID-19 ‘tail’-wind

Stallergenes Greer has been providing allergen immunotherapy testing and treatment products to the veterinary market for more than 30 years. When the pandemic struck, it was unexpected that the veterinary market would grow from the previous year. While the human allergy business followed the U.S. economy and declines in patient visits, the veterinary allergy business showed strength and growth in 2020.

The reasons for this growth are multifaceted, and market intelligence suggests that it is partly a result of market indicators providing a tailwind for Stallergenes Greer. According to reports, many Americans welcomed pets into their home during lockdowns, which may have resulted in a general increase in the total market of pets. In addition, pet owners working from home, may have noticed more clearly the effects of allergies on their pets and sought treatment, increasing the percentage of pets on AIT.



Stallergenes Greer

Europe and international



In a challenging environment, Stallergenes Greer's teams demonstrated their resilience and commitment to strive for success by providing patients and healthcare professionals with the allergy care they deserve."

Petr Tor, Senior Vice President, Commercial Operations Europe and International

In a complex environment and despite the negative impact of COVID-19, the Europe and International region posted top line growth while continuing to focus on commercial excellence to better serve patients and the medical community.

Geared for growth

Throughout the year, the Europe and International region continued to invest in its operations to better meet future market developments.

In Germany—the largest allergen immunotherapy (AIT) market in the world—Stallergenes Greer reorganised and significantly increased its sales force to continue to strengthen its market position and prepare the launch of STAGR320, the Group's house dust mite AIT tablet, following the submission of the European marketing authorisation application in April.

In the United Arab Emirates, Lebanon and Morocco, the Group upgraded its business models and started working with new distributors to further enhance customer service. In Japan, Stallergenes Greer entered into an agreement with its partner Shionogi to intensify its commercial focus and to start to offer larger packs of house dust mite tablets to respond to market demand.

The year was also marked by the geographic expansion of Stallergenes Greer with the launch of sales in Hong Kong and Thailand. The Group also initiated an assessment of an entry strategy in China which is regarded as a new priority market for Stallergenes Greer.

Adapting to a changing environment

The global pandemic also accelerated Stallergenes Greer's exploration of new working models. To address this unprecedented situation, the Europe and International region swiftly implemented a variety of digital solutions such as e-detailing with healthcare professionals, digital masterclasses and training programmes, and the development of online resources and apps, to strengthen its engagement with its stakeholders.

Stallergenes Greer successfully participated in the 2020 EAACI fully digital congress which was attended by more than 8,000 participants. The Group's 3D virtual booth offered delegates access to Stallergenes Greer's products, a media library as well as direct access to symposium, videos, etc.

A dynamic year

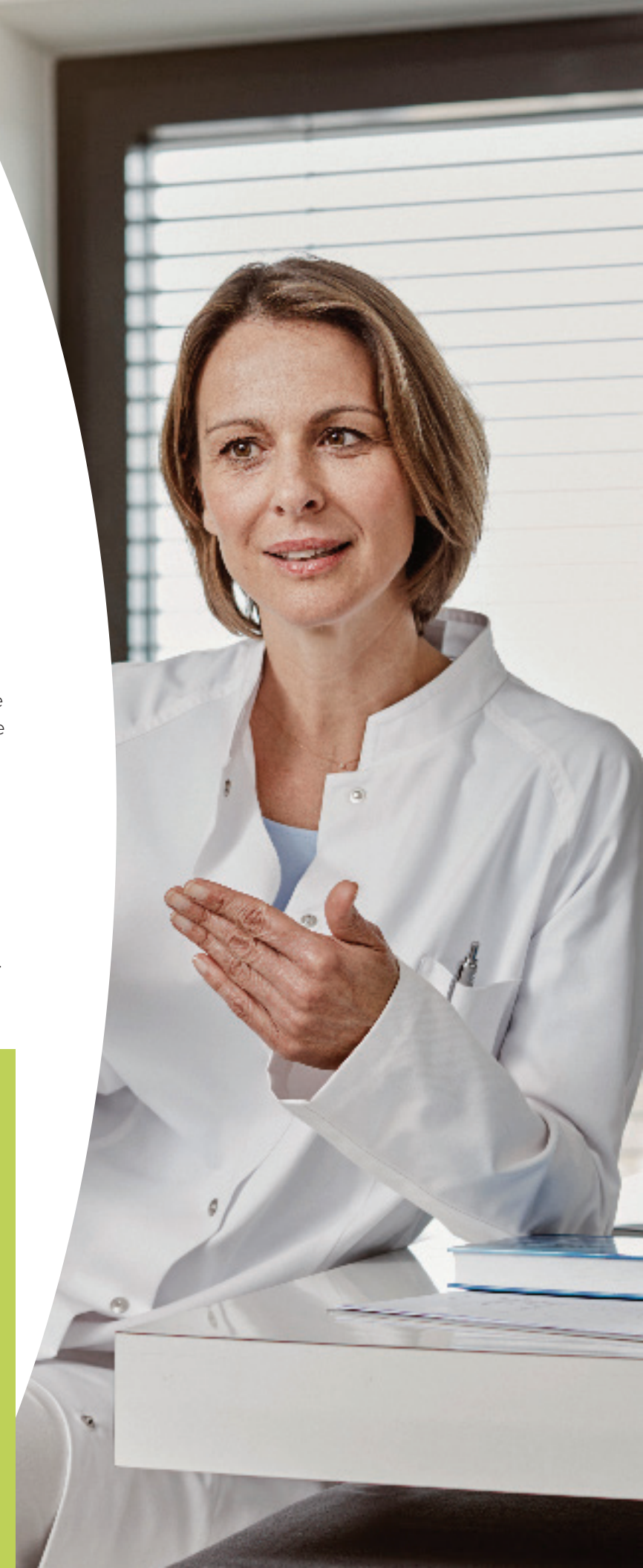
Despite increased competition, a challenging regulatory and market access environment in some of the region's major markets, and the effects of the COVID-19 pandemic, Stallergenes Greer showed strong sales thanks to a resilient and optimised business model.

The Group relaunched a significant number of Staloral® references and prick tests across the region. Performance was primarily driven by the company's core brands Staloral®, Oralair® and Actair® in the countries in which they are marketed.

STAGR320 European marketing authorisation application

In April 2020, Stallergenes Greer announced the submission of a marketing authorisation application for STAGR320, its sublingual house dust mite immunotherapy tablet, via a European decentralised procedure.

This significant milestone demonstrates the Group's determination to offer patients and the medical community an extensive portfolio of personalised treatment options including injectable and sublingual therapies such as drops and tablets.



Stallergenes Greer

France



“I am proud of our teams who stayed focused on our mission while rapidly adapting our operating model to further support patients and healthcare professionals in a challenging environment. I am thankful to physicians and patients for their renewed trust in our company and products.”

Dominique Pezziardi, General Manager France, Global Head of Pricing & Market Access

In 2020, Stallergenes Greer France showed sustained growth across all market segments while developing a range of services to strengthen stakeholder engagement in a changing landscape.

Staying focused and anticipating change

In an environment marked by the COVID-19 pandemic, our French operations remained focused on supply continuity and making treatments available for patients. Proactive steps were taken to adapt patient and healthcare professional support services, as well as sales and marketing activities, while protecting the health and safety of employees.

The Group's Antony and Amilly (France) manufacturing sites operated at normal levels throughout the year and allergen immunotherapy treatments were consistently delivered on time. Customer services were also fully available and continued to provide critical information to healthcare professionals and patients. Colleagues whose physical presence was required on site were, and continue to be, subject to strict measures to ensure their health and safety (social distancing, personal protective equipment, reinforced cleaning, etc.).

Thanks to our digital platforms, Ordolzy® (our online information platform for patients undergoing allergen immunotherapy treatments) and OrdoApsi® (our online named patient product prescription platform), patients were updated in real-time on the availability of their treatment and physicians could send their patients prescriptions and contact them remotely.

Engaging with patients and healthcare professionals

With many people working remotely, we swiftly adapted our ways of working and developed novel initiatives to support healthcare professionals and patients.

To ensure that patients with chronic conditions continued their treatments during the pandemic, we launched a series of online conferences aimed at informing, reassuring and fostering dialogue between experts in allergology and the general public. At year-end two conferences, bringing together 250 participants had been organised.

Stallergenes Greer also worked with SYFAL (the French association of allergists) to help promote the use of tele-health by healthcare professionals. Less than a week after stay-at-home orders, the affiliate launched the first in a series of webinars on tele-

health solutions which was attended by over 200 allergists. In 2020, more than 11 online conferences attended by 680 allergists were organised with SYFAL on topics ranging from tele-health to sanitary measures.

Growing market share

2020 was another year of dynamic growth for Stallergenes Greer France. In a competitive environment, the French affiliate continued to gain ground in all of its market segments (total AIT market in value and in terms of new patients within the allergy specialists space).

The year was marked by the relaunch of close to 20 Staloral® allergen references and more than 10 Alyostal® prick references, the full availability of the Group's imported venom products and the launch of new references such as an additional Staloral® Cat reference to address unmet medical needs.

The Group resumed the supply of subcutaneous products (SCIT), which are produced at its Antony site in France, and further broadened its offering to patients and the medical community through sustained investments in quality and operational excellence. Stallergenes Greer is currently the only allergen immunotherapy company to produce sterile injectables in France.



Who
we are



At a glance

A world leader in allergen immunotherapy, Stallergenes Greer has an extensive global footprint and the largest allergen and finished AIT product manufacturing capacity globally.

San Diego, California, U.S.

Production of bulk allergens and custom-order products

Dutton, Ontario, Canada

Preparation of named-patient subcutaneous immunotherapy

Lenoir, North Carolina, U.S.

Production and processing of source materials, bulk allergens and supplies for human and veterinary use

Stallergenes Greer is a fully integrated global biopharmaceutical company specialising in the diagnosis and treatment of allergies through the development and commercialisation of allergen immunotherapy (AIT) products and services.

The company's extensive product portfolio, available in multiple formulations (subcutaneous, sublingual drops and tablets), offers patients innovative solutions to enable people with allergies to live normal lives.

Stallergenes Greer is a private company owned by interests associated with the Bertarelli family, which are advised by the Waypoint Capital Group.

Waypoint is a business enterprise for the managers and advisers of the funds and investments associated with the Bertarelli family. The group is active in two areas: life sciences and asset management. Chaired by Ernesto Bertarelli, Waypoint is headquartered in Geneva, with offices in London, Jersey, Boston and Luxembourg.

Antony, France

Production of sublingual (SLIT), subcutaneous (SCIT) and tablets covering all of the company's allergen extracts and venoms

Amilly, France

Production of raw materials (pollen) and securing of house dust mite strains

1,079
employees
in 19 countries

19
countries
with a direct
presence

41
countries with
a distribution
network

Executive committee

Stallergenes Greer's Executive Committee, which is chaired by the Chief Executive Officer, is comprised of senior leaders from across the company which represent a breadth and depth of knowledge and experience to lead our business.



Michele Antonelli

Chief Executive Officer

Michele Antonelli has been CEO of Stallergenes Greer since January 2019. He joined the company in 2015 as Head of Europe and International. Previously, Michele Antonelli held roles of various responsibility and scope at UCB, most recently serving as EVP and Head of Immunology Europe, overseeing the region's commercial, medical, and market access activities. Prior to UCB, Michele Antonelli spent 16 years at Merck Serono, ultimately serving as SVP and Global Head of Biotech Manufacturing and Process Development. Michele Antonelli is Swiss and Italian.



Valérie Benhamou

General Counsel

Valérie Benhamou joined Stallergenes Greer in 2017 as Associate General Counsel Europe and International. Valérie Benhamou joined the company from Abbott, where she was Senior Legal Counsel for France, Benelux and Africa. Prior to Abbott, she served as Senior counsel for Bristol-Myers Squibb where she provided legal support to all divisions in France and to EMEA commercial operations, and practiced at law firms where she focused on healthcare matters. She has been a member of the Paris Bar since 1999. Valérie Benhamou is French.



Amer Jaber

Executive Vice President Operations, Europe and International

Amer Jaber joined Stallergenes Greer in 2018. Prior to joining Stallergenes Greer, Amer Jaber was Head of Biotechnology Operations at R-Pharm responsible for developing the long-term strategy and execution of technical operations for CMC Development and Manufacturing. Amer Jaber was previously Head of Global Biotech Development and Manufacturing for Technical Operations and Managing Director of UCB Switzerland. Before joining UCB, he held roles of increasing responsibility at Mondobiotec, Serono International and Rivopharm. Amer Jaber is Lebanese and Swiss.



Nicola Lamacchia

Chief Financial Officer

Nicola Lamacchia joined Stallergenes Greer in March 2017 as Head of Finance for Europe and International. Prior to joining Stallergenes Greer, he was Head of Finance for International at Shire, leading the creation of a new financial framework and supporting the company's growth and expansion. Prior to Shire, Nicola Lamacchia held several country, regional and division-level financial roles at Merck Serono. Nicola Lamacchia is Swiss and Italian.



Tibor Nemes

Executive Vice President, Head of Americas

Tibor Nemes joined Stallergenes Greer in 2016 and served as Global Head of Technical Operations before taking over as Head of the Americas in May 2018. Tibor Nemes previously spent eight years at Novartis where he held roles of increasing responsibility, most recently as the Global Operations Head, Tech Ops Manufacturing, Strategy and BDM&A. Prior to Novartis, Tibor Nemes held Engineering and Operations leadership roles at Novavax, Inc., Bristol-Myers Squibb Company, Elan Pharmaceuticals and Hypex, Inc. Tibor Nemes is American.



Dominique Pezziardi

General Manager France, Global Head of Pricing and Market Access

Dominique Pezziardi joined Stallergenes Greer in 2012 as Head of Strategy and Business Operations. Prior to joining Stallergenes Greer, Dominique Pezziardi gained his expertise in several therapeutic fields including fertility, growth hormones, diabetes, rare diseases, cardiology and medical devices in the pharmaceutical sector at Ciba, Sanofi and Merck Serono. He successfully managed global product launches, life cycle development plans, mature franchise relaunches, alliances with strategic partners, and more recently, corporate strategy development. Dominique Pezziardi is French.



Petr Tor

Senior Vice President, Commercial Operations Europe and International

Petr Tor joined Stallergenes Greer in 2010 as General Manager of the Czech and Slovak subsidiary and since 2014 he has held commercial responsibilities for various regions of increasing scope and complexity in Europe, the Middle East and Africa. Petr Tor gained his expertise in several therapeutic fields including asthma, cardiology, diabetes, glaucoma, antibiotics and HIV at Merck & Co., where he spent 16 years. Petr Tor is Czech.

Science and Manufacturing

SCIENCE

At Stallergenes Greer, we have been working with allergens for more than 100 years. We aim to develop treatments that address the unmet needs of a growing number of allergy patients around the world.

Our therapeutic approach

We concentrate our efforts on allergen characterisation as well as on optimal approaches to deliver allergens to the immune system.

Allergen immunotherapy (AIT) is the only therapeutic class capable of modifying disease progression and potentially preventing the onset of the disease. AIT consists in administering allergens by sublingual or subcutaneous route, thus allowing the reorientation of the immune responses of patients towards allergen-specific tolerance induction.

A high level of scientific expertise

Each allergen source contains several molecules which are recognised by the immune system as allergens and will trigger an allergic reaction. Allergens are large, complex molecules composed of a multitude of atoms. Working with large molecules requires a high level of scientific expertise and state-of-the-art technologies to characterise and quantify allergens. Specific processes are required due to both the complexity of the molecules and their biological nature.

Focusing on precision medicine to advance personalised solutions

Stallergenes Greer boasts a long-standing expertise regarding the mechanism of action of AIT and has been intensifying the identification of biomarker candidates to predict and monitor the efficacy of the company's AIT treatments.

Our precision medicine approach involves personalised medicine as defined by the European Commission¹: "a medical model using molecular profiling technologies for tailoring the right therapeutic strategy for the right person, at the right time, and to determine the predisposition to disease at the population level and to deliver timely and stratified prevention."

Our research has allowed us to identify pro-allergenic cells, such as Th2A –T helper cells that are involved in the production of IgE (immunoglobulin E, antibodies produced by the immune system when it overreacts to certain substances) as a therapeutic target for AIT. We continue to work towards identifying the most relevant allergens for the treatment of allergies and partner with renowned academics in the field of respiratory allergies to characterise the molecular profiles of allergic patients.

From one-size-fits-all to precision medicine tailored to each patient's needs and profile

At Stallergenes Greer, we take allergy personally. Our precision medicine approach focuses on the clinical and molecular biology of allergies and investigates biomarkers, phenotypes and genotypes to guide our R&D strategy.

Biomarkers are indicators of disease. They help to identify and classify patients with regard to their risk of developing a disease and their response to treatment.

Phenotypes are an individual's physical characteristics or "observable traits". They allow to better understand the physiology of a disease.

A genotype is an individual's collection of genes. The use of DNA-sequencing is enabling a better understanding of the genetics of a disease.

Clinical development

Clinical trials are designed to provide evidence that a treatment is both safe and effective and to produce high-quality data for decision-making.

Staloral®: 30 double-blind, placebo-controlled studies; 3,200 patients enrolled in total. The studies aimed to evaluate the tolerability and efficacy of Staloral® for the treatment of allergic rhinitis and asthma in the short- and long-term, as well as after stopping the treatment, in children and adults.

Oralair®: full clinical development; more than 2,500 patients enrolled. The studies evaluated the tolerability and efficacy of Oralair® after one month, in the short- and long-term and after the treatment has ended.

Actair®: full clinical development; more than 3,500 patients enrolled. The studies evaluated the tolerability and efficacy of Actair® after four months, in the short-term as well as one year after the treatment has ended.

Further evidence of Stallergenes Greer AIT treatments beyond clinical trials is demonstrated through real-world studies, such as the company's BREATH programme which studies the benefits of AIT based on the decrease of symptomatic treatment dispensation for allergic rhinitis and asthma for patients with respiratory allergies outside of a clinical trial setting. This real-world approach is increasingly being used by Stallergenes Greer. Since it is based on large populations of patients, it provides useful data to optimise AIT prescription and clinical performance.



"Precision medicine is the focus of Stallergenes Greer's strategy. We are committed to promoting progress and developing precise and personalised therapeutic solutions which are tailored to the individual profile and needs of each patient."

Amer Jaber, Executive Vice President Operations Europe and International and Head of R&D

1. European Commission, online: https://ec.europa.eu/health/human-use/personalised-medicine_fr - 2. National Human Genome Institute, "Phenotype", online: <https://www.genome.gov/genetics-glossary/Phenotype>

MANUFACTURING

Stallergenes Greer is committed to bringing allergen immunotherapy (AIT) to the highest quality standards and to delivering state-of-the-art AIT products to patients. As biologic drugs, the manufacture of allergen products is inherently challenging and complex¹.

Manufacturing biologics: quality, safety and controls

Like other biologics, Stallergenes Greer's allergens are derived from living systems.

Controlling the quality of allergen products is of prime importance to guarantee consistent optimal clinical benefits². To ensure batch-to-batch consistency, quality and purity of its products, Stallergenes Greer has implemented stringent controls regarding the source and nature of the starting materials and applies a large number of process controls to ensure that target quality attributes are delivered.

Each batch of product is the combination of the product, documentation and controls.

AIT starts with a personalised approach

At Stallergenes Greer, our product design is based on a clear understanding of patient needs and individual profiles:

- patient exposure to a specific allergen;
- patient sensitisation;
- allergen clinical relevance.

Stallergenes Greer covers the value chain from allergen extraction to the production of personalised treatments adapted to the individual needs of each patient, in sublingual and subcutaneous forms.

Continued investments in our manufacturing capabilities

In 2020, Stallergenes Greer continued to upgrade its manufacturing facilities. The company's Lenoir, North Carolina (U.S.) site notably replaced its primary autoclave with state-of-the-art technology and multiple projects designed to improve operational efficiency in areas such as pharmacy, mycology, quality control chemistry and sterile filling.

Stallergenes Greer also broadened its subcutaneous (SCIT) offering throughout 2020. The company's Antony (France) site fully resumed the manufacturing of SCIT products for the Europe and International region.

Our manufacturing facilities in France produce tablets and individual treatments that are delivered directly to patients. In the U.S., our bulk allergen extracts are delivered to medical practitioners who prepare the individual treatment for their patients.

Consistent biological potency through process standardisation

Stallergenes Greer ensures the consistent biological potency of its tablets, sublingual and subcutaneous products through standardised and validated quantitative analytical methods.

Driving operational excellence

We seek excellence in every part of our organisation. We aim for a lean operating model without compromising on quality and draw on improved and sustainable production processes and procedures to consistently deliver the highest quality products to patients.

Our approach to manufacturing the highest quality products relies on continuous learning and improvements to ensure we are continually modernising our quality controls and improving our processes through investments in our facilities. Over the past few years, we have made continuous improvements to our manufacturing capabilities, both in France and the U.S., in order to put in place a manufacturing and quality system that meets the highest product quality standards.

These improvements are supported by programmes designed to strengthen and reinforce our culture of quality and continuous improvement.

95%
average service
rate Antony
manufacturing
plant

1. Declerk PJ. Biologicals and biosimilars: a review of the science and its implications. *GaBI J* 2012;1:13-6. - 2. Zimmer J, et al. Standardization and regulation of allergen products in the European Union. *Curr Allergy Asthma Proc* 2016;16(3):21.



Our people

At Stallergenes Greer, we strive to develop a culture of inclusion, engagement, opportunity and recognition. We believe that diversity and inclusion are the foundations on which to develop our performance as a responsible corporate citizen, focused on patient needs. Our entrepreneurial spirit drives us toward success.

Fostering engagement and dialogue

In 2020, Stallergenes Greer continued to build on the results of the global employee engagement survey conducted the previous year. A variety of new initiatives and measures were developed across the company to address employee needs and expectations and further develop our corporate culture. Increased communication and transparency, focusing on employee rewards and recognition and the introduction of new employee benefits are but some of the initiatives that were implemented throughout the year.

Employee development

At Stallergenes Greer, we know that our people are the foundation of the company's success. We encourage our employees to unleash their full potential and to continuously learn, develop and grow.

Bespoke training programs were developed in Europe and the U.S. to help employees strengthen role-based skills, build soft and business skills, and continue to meet compliance requirements. Training programmes regarding the specificities of proteins, processes and analytics were also rolled out for employees working in quality assurance, manufacturing, development and analytics.

Our Lenoir, North Carolina (U.S.) colleagues also focused on development and cross training on all aspects of operations in order to increase the agility of its workforce. In France, a programme regarding the certification of professional qualifications (CPQ) was launched in various areas with CPQs in fields such as biotech manufacturing processes, drug production equipment maintenance, logistics operations, etc.

Giving back to our communities

We strive to have a positive impact in the communities in which we live and work. In 2020, in an environment marked by the rise of the COVID-19 pandemic, Stallergenes Greer employees across the company stepped up to lend a helping hand to their communities and healthcare professionals.

To help those engaged in the fight against the pandemic, Stallergenes Greer donated personal protective equipment (hand sanitisers, masks and gowning) to frontline responders and healthcare professionals. Many employees across the company also sewed masks which were distributed to those in need.

With many families severely impacted by the economic situation created by the pandemic, Stallergenes Greer's employees continued to provide support to their communities with donations of food and basic necessities to schools and disadvantaged families.



Caring for the health and safety of our people

Stallergenes Greer quickly adapted to the constraints created by the pandemic. Protective measures were taken to protect the health and safety of its staff members -- whether on site or working from home.

Personal protective equipment was made available for all staff members, production teams and shifts were reorganised, remote work solutions were implemented for all employees who did not need to be on site, etc. These measures continue to be applied across the company's offices and facilities.

A sustainable organisation

We operate a sustainable organisation that protects our employees, the environment and our communities. We strive to reduce our environmental impact by monitoring our greenhouse gas emissions and being careful of the way we use resources. Our employees are committed to giving back to the communities in which we live and work.

Our ways of working embody our entrepreneurial mindset and create a high-performance culture where employees perform at their best.

KEEPING IT SIMPLE

We are streamlining our systems and processes to increase efficiency and eliminate complexity.

A simpler operation means that we can more easily communicate, collaborate, innovate and future-proof our business to create value for our stakeholders.

EMPOWERING

Our patients are present in every decision we make, empowering us in how we act.

We are responsible and accountable for our decisions.

We're learning to see failure as a building block to success.

We invest in our people and are creating a learning culture so we can all reach our potential, together.

FOCUSING

We constantly deepen our knowledge of complex allergies.

We are clear in our goals and objectives.

We stay focused on patient needs and prioritise to deliver the best-in-class products.

We identify and collaborate with the right academic researchers and life science organisations to progress our purpose.

STAYING AGILE

Our robust and stable operations mean we are nimble and can make the most of opportunities, fast.

We embrace and celebrate entrepreneurial spirit.

Our people go above and beyond, finding ways to fulfill our patients' needs, every day.

We are responsive to the needs of payers and public health bodies.



Our
portfolio

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London E1W 1DD
United Kingdom

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