STRATEGIC PLAN 2030

TOWARDS ULTRA-PERSONALIZATION & ANTICIPATION IN ONCOLOGY

GUSTAVE ROUSSY 2030

CANCER CAMPUS
GRAND PARIS

STRATEGIC PLAN 2030

Gustave Roussy moves towards ultra-individualisation and anticipation in oncology. Loyal to its pioneering past, Europe's leading anti-cancer institute is launching a new strategic plan and joining forces to offer cancer patients a new future.

With a 100-year history steeped in research and a successful multidisciplinary approach, Gustave Roussy is looking ahead to 2030, launching an ambitious, innovative plan that harnesses the energy and determination of all its teams.

This operational roadmap responds to the challenge of transforming the vision of cancer into a disease that will soon no longer generate fear. In order to map out a new future and give hope to all cancer patients and to society as a whole, Gustave Roussy is restructuring how it supports and cares for patients, exploring new avenues of research and collaboration along the way.

Based on three distinct avenues, this new strategic plan seeks to revolutionise the scientific, medical, technological and societal approach to oncology based on ultra -individualisation.

To achieve this visionary goal for patients, Gustave Roussy is initiating future prevention and defining new, tailor-made treatment pathways to meet all needs, at every stage of the disease.

Broadening the scope of its expertise, the institute is entirely rethinking all of its research activities and the synergy of stakeholders, disciplines and talents to transform treatments and increase the chances of finding a cure for cancer.

Founder of the 3.0 hospital of today and tomorrow, Europe's leading oncology institute is revamping its development model based on an agile approach that promotes well-being and extends progress to benefit as many individuals as possible.

SUMMARY

3 QUESTIONS PUT TO PROF. FABRICE BARLESI, GENERAL DIRECTOR OF GUSTAVE ROUSSY

True to its pioneering past, building on a century-old multidisciplinary approach and success within a fertile knowledge base, Europe's leading anti-cancer centre is proudly launching its new strategic plan looking ahead to 2030 and joining forces to offer cancer patients a future. This is a 3.0 strategy reconciling science and humanity in a bid to increase the chances of finding a cure for cancer.

A meeting with Professor Fabrice Barlesi, Gustave Roussy's new Director General, who outlined the decisive changes that will take place over the next decade.

INTERCEPTING CANCER IN 2030, SCIENCE-FICTION OR REALITY?

Faced with the vast challenges posed by scientific advances and the need to help cancer patients, we are endeavouring to **transform the scientific, medical, technological and societal approach to oncology.** Our new strategic plan, which looks ahead to 2030, is extremely ambitious and will direct our actions over the next few years to change the way in which cancer is addressed. It is based on three approaches, the first of which is to **prevent and treat differently in a bid to challenge the prognosis and offer each patient a future.**

As a public health stakeholder, we will strive to develop new expertise by intervening at all stages of the disease, including the earliest stages in the field of prevention and to **intercept cancer prior to onset** or before it becomes difficult to treat.

Today, this is already a reality at Gustave Roussy thanks to the Interception programme launched in 2021 as a pilot clinic for individualised cancer prevention. In addition, we will also draw on our experience with the 'one-day diagnoses' introduced by Gustave Roussy back in 2004 (breast and thyroid cancer, then lung cancer in one week) to operate a rapid, smart diagnostic centre on our site.

Following the decade of genotyping and targeted therapies in 2000 and the decade of immuno-oncology in 2010, we are now entering the era of drug combination therapies and ultra-individualisation by offering our patients customised treatment pathways, from before cancer to after cancer. Our challenges are to screen based on personal risk, diagnose even earlier and faster, offer individualised treatments to increase the chances of recovery, anticipate relapses or treatment toxicity by identifying patients at increased risk of recurrence and sequelae from the onset of treatment, and to personalise the support offered to each patient in a bid to improve quality of life after cancer using digital technology and artificial intelligence in particular.

WHAT WILL YOU DO ABOUT THE CANCERS THAT ARE NOT CURABLE TODAY?

We need to **harness and focus on the best that science has to offer in order to drive rapid impact 3.0 research.** This is the second approach in our strategic plan, namely collaborative research that is increasingly interdisciplinary, more technological and geared towards rapid solutions that directly benefit patients and are useful to society as a whole. We are now moving on to **anticipation-oriented research, for example, to prevent the disease and control it more effectively.** The Prism programme, for instance, which unites Gustave Roussy teams with other partners, is already working on developing future solutions.

The aim is that, in five years' time, it will be possible to create a biological and also digital avatar for each patient, i.e. a virtual cancer that will identify the molecular, cellular, immunological and genetic mechanisms that promote cancer progression in order to offer individualised treatments from diagnosis onwards. This is also the vocation of the Paris-Saclay Cancer Cluster, co-founded by Gustave Roussy, which closely connects the key stakeholders in oncology innovation. It will serve as a real catalyst for promoting projects and pooling talent. The aim is to encourage **the development of French oncology 'unicorns' (French start-ups) giving patients rapid access to advances in research and promoting independent health.** The aim is to give patients a rapid diagnosis, including modelling of their disease markers and an individual treatment plan, over the next ten years.

The creation of large cohorts to profile each patient and generate more knowledge, and the **use of AI** to process these data in ultra-fine detail are also key to this approach. **We are expanding our partnerships in various scientific fields, and with the University of Paris-Saclay in particular.** We are convinced that the cross-fertilisation of complementary intelligence in fields such as mathematics, physics and the humanities and social sciences will provide answers to crucial, hitherto unresolved oncology issues.

« Looking ahead to 2030, our aim is to provide unique treatment for each patient by combining science and technology. »

WHAT WILL GUSTAVE ROUSSY LOOK LIKE IN 2030?

The third major focus of our strategic plan is to **make Gustave Roussy a smart hospital and the HQ of European cancer research.** We will transform our site into a 3.0 hospital in an ultra-efficient ecosystem that meets both organisational and structural challenges around new, more connected patient pathways that are better adapted to the needs of society. This new, more digitalised structure will also enable caregivers to rediscover the meaning of their profession by spending more quality time with patients and refocusing on tasks that mobilise their humanity, which is at the very heart of their vocation.

Because we are convinced that well-cared for patients recover faster and better, the **smart hospital will give patients a personal welcome.** This will allow us to create the new 3.0 outpatient unit. **By digitalising part of the care package,** patients will be able to record their vital signs at home, document symptoms or side effects, and choose their treatment slot in order to minimise the impact of the illness on their personal and professional life. Care units will be renovated and revamped alongside our recently completed interventional oncology and pharmacy platforms. The creation of **additional hospitalisation units, the opening up of the current site** with the imminent arrival of underground rail lines 14 and 15 coupled with large-scale real estate projects including the construction of buildings have al-ready been launched or are in the process of being launched. These developments will facilitate the creation of a Gustave Roussy-based European cancer campus facilitating high-level research and optimum innovative care.

Last but not least, the forging of **partnerships, alliances and joint ventures** will disseminate our new models across the country and worldwide.

Major investments to the tune of several hundred million euros are required to implement this plan. We are already guaranteed support from the State, investment funds, patrons and loyal donors. We hope that they will be joined by new civil society stakeholders keen to help us cure cancer. For 100 years, Gustave Roussy has continued to build on the visionary legacy of its founder to consolidate its role as the leading European institution in the fight against cancer. Today, we are at a turning point in our history, pursuing our ultimate ambition, namely **to cure adult and childhood cancers in the 21st century.**

« Gustave Roussy will be a flex hospital that will adapt to the patient and allow everyone to live and be treated easily. »

PROF. FABRICE BARLESI

**MEDICAL DIRECTOR AND DIRECTOR OF CLINICAL RESEARCH AT GUSTAVE ROUSSY SINCE 2020,
HE WAS APPOINTED GENERAL DIRECTOR OF GUSTAVE ROUSSY BY THE MINISTER OF HEALTH ON AUGUST 1, 2021**

Specialist in lung cancer, precision medicine and cancer immunology, Prof. Fabrice Barlesi is a major contributor to research in the field of novel oncological therapies Fabrice Barlesi is Professor of Medicine at the University of Aix-Marseille and will join Paris Saclay University in 2022. He has been head of the Multidisciplinary Oncology and Innovative Therapies Department of the Nord Hospital in Marseille (Marseille Public Hospitals) and the Marseille Centre for Early Trials in Oncology (CLIP2) which were established by him. He holds a doctorate in Sciences and Management with methods of analysis of health care systems, together with an ESSEC (international business school) master's degree in general hospital management.

Professor Barlesi was also a co-founder of the Marseille Immunopôle French Immunology network, which aims to coordinate immunological expertise in the Aix-Marseille metropolitan area. In this context, he has organised PIONeeR (Investment in the future RHU 2017), the major international Hospital-University research project whose objective is to improve understanding of resistance to immunotherapy - anti-PD1(L1) – in lung cancer and help to prevent and overcome it. He was also vice-chair of the PACA (Provence, Alps and Côte d'Azur) Region Cancer Research Directorate.

Professor Barlesi is the author and co-author of more than 400 articles in international journals and specialist publications. In 2018, the European Society of Medical Oncology (ESMO) and the International Association for the Study of Lung Cancer (IASLC) awarded him the prestigious Heine H. Hansen prize. He appears in the 2021 world list of most influentialresearchers (Highly cited researchers, Web of Science Group).

ULTRAPERSONALIZATION

Transforming the management of patients living with cancer

Prevent and treat differently to defy the prognosis and offer a future to each patient, adult or child

An entirely different prevent and treat strategy focusing on a swifter, earlier, more individualised approach to defy prognosis and offer a future to each patient - adults and children alike – regardless of the stage of the disease, and covering life before and after cancer.

Gustave Roussy 2030 is moving towards ultra-individualisation, taking new-generation precision medicine even further and intercepting cancer more quickly to prevent disease onset or progression. With the Interception programme, a further step has been taken towards individualised prevention based on a risk-identification system (biomarker screening) and follow-up adapted to each profile.

Gustave Roussy now offers rapid cancer diagnosis to avoid missed opportunities for cancer patients. This is a truly innovative approach culminating in the world's only rapid diagnosis centre offering two pioneering, one-day diagnosis programmes, which will be developed for all types of cancer. Challenging prognoses also means treating patients more quickly and effectively via an individualised approach using 3D pill printing, for example, to predict treatment efficacy for each patient with organoids, but also to anticipate the risk of relapse thanks to artificial intelligence. Several pioneering, cancer-modelling programmes such as PRISM, are paving the way to predictive medicine for all.

GUARANTEE INDIVIDUALISED CARE PATHWAYS THROUGH TO THE POST-CANCER SCENARIO

Further to the increased use of digitalisation and remote follow-up, part of the care package can be delivered at home, resulting in shorter travel times, or within renovated and revamped Gustave Roussy facilities in an attempt to adapt strategies in line with patients' lifestyles.
The Institute continues to invest in post-cancer care in a bid to improve quality of life and limit treatment-related sequelae. Deployed as part of the strategic plan, the Interval programme provides a dedicated care structure called My Care, which offers specific support programmes for the most vulnerable individuals.

ULTRAPERSONALIZATION

For a focused, instrumental multidisciplinary research

To bring together the best that science has to offer and to closely connect medical, scientific and industrial experts in a bid to promote rapid research that impacts society by mobilising data, cutting-edge technologis and a culture of curiosity, persistence and openness.

> MORE INFO ON OUR TEN FLAGSHIP PROGRAMMES

The Gustave Roussy 2030 Plan - a new scientific strategy shaping the next 10 years – is revolutionising its research based on an anticipation of preventing cancer and controlling it more effectively.

RELY ON INDUCTIVE, INTERDISCIPLINARY AND COLLABORATIVE RESEARCH

Co-founded by Sanofi, Inserm, the Institut Polytechnique de Paris [Paris Polytechnic Institute] and the Paris-Saclay University, the Paris Saclay Cancer Cluster combines optimum interdisciplinary expertise and biotechnology within a high-potential ecosystem. Around ten innovative projects and major trials will be selected each year within this prospective oncology centre and all oncology stakeholders are invited to participate.

Increased collaboration between doctors, researchers, industrialists and start-ups should facilitate and encourage more technological and collaborative structured research exploring new disciplines (Maths, Physics, Human and Social Sciences, etc.), educational fields and professions. A cross-synergy for the benefit of concrete innovations: therapeutic solutions based on microbiota, stem cells or molecular analysis of Rare Circulating Cells.

GENERATE RESEARCH TO DIRECTLY BENEFIT PATIENTS

This research, which is linked as closely as possible to Gustave Roussy patients, will have greater impact in transforming care and treatment in the future. **Ten major, flag-ship medical and scientific programmes** have been launched as part of the strategic plan and are geared to this objective. From childhood cancers (Crescendo) to an understanding of the mechanisms of resistance to innovative therapies, they call on the latest advances (profiling of samples analysed on high-throughput platforms, biomarkers, etc.) and give patients - adults and children alike - early access to large cohorts (Canto) and sound scientific advances.
The university hospital research projects (UHR), heralding the future and symbolising this concentration of expertise, also reflect the ambition of individualised, more targeted and less invasive research.

ULTRAPERSONALIZATION
through a massive investment plan

To make Gustave Roussy a smart hospital HQ for European oncology in response to the organisational and structural challenges posed by reinvented pathways in a high-performance ecosystem, while restoring meaning to our professions at the same time.

In order to adapt the organisation in line with the realities of everyday life and the needs of 21st century society, Gustave Roussy has to be remodelled to create a unique location where it is a privilege to work and reassuring to be treated.
Digitalisation will create a 3.0 outpatient unit including a day hospital and an anticancer production unit covering a larger surface area. This transformation will optimise flows and pathways whilst further promoting safe care and treatment.
The new Gustave Roussy structure is more flexible and focused on collaborative and agile management. With more time to spare, caregivers can refocus on delivering the human touch in working environments conducive to promoting talent.

A MASSIVE INVESTMENT PLAN TO BOOST HIGH PERFORMANCE

Resources will include major financial, real estate, material and human investments designed to accelerate the performance of Gustave Roussy 3.0 to meet the ambitious targets set out in this strategic plan.
Soon to be more accessible with the imminent arrival of the underground rail network, Site 3.0 with its brand new facilities is rethinking its development model and seeking strategic national and international partnerships in a bid to cast its disruptive innovation net further afield.

Backed by strong support from the State, among other sources, this approach also requires a tenfold increase in philanthropy. The wealth of this plan is underpinned by the great patrons and donors who will bring it to fruition. It is hoped that new civil society stakeholders will join forces with them in this venture.
At the forefront of cancer research for 100 years, Gustave Roussy will continue to extend its expertise beyond its walls and across borders in its commitment to make major advances in curing cancer accessible to as many individuals as possible and indeed to society as a whole.

GUSTAVE ROUSSY AT A GLANCE

Working tirelessly to give hope to every patient.

Leading Cancer Centre in Europe, Gustave Roussy is ranked #6 world's best oncology hospital according to Newsweek magazine and the first one outside the United States. The institute treats patients with all types of cancer at any age and is expert in the treatment of rare and complex tumours.

The Institute is a founding pillar of the Paris Saclay Cancer Cluster. A source of therapeutic innovations and diagnostic advances, the Institute welcomes nearly 50,000 patients each year and develops an integrated approach between research, care and teaching.

Gustave Roussy is an expert in rare and complex cancers and treats all cancers, at all stages and at all ages. It offers its patients personalized care that combines innovation and humanity, taking into account not only treatment but also physical, psychological and social quality of life.

With 3,200 professionals at its Villejuif and Chevilly-Larue sites, Gustave Roussy has the expertise required for high-level cancer research; a quarter of the patients treated are included in clinical trials.

With its 2030 strategic plan, Gustave Roussy is initiating a major turning point for ultrapersonalization in oncology. The result of a process of reflection conducted since February 2020 by all staff members, Gustave Roussy's institutional strategic plan has been supported and validated by all of its governing bodies and a committee of patients. This plan, which defines Gustave Roussy's roadmap to 2030, has been ambitiously designed to identify and meet the challenges facing the hospital and cancer research over the next ten years. The Gustave Roussy teams are united and determined around a single objective: to cure cancer in the 21st century.

TO FIND OUT MORE ABOUT GUSTAVE ROUSSY AND FOLLOW THE INSTITUTE'S NEWS:

www.gustaveroussy.fr/en

GUSTAVE ROUSSY IN FIGURES

50,000 patients seen in outpatients

of whom **13,000** were new

3,500 patients seen in paediatric visits

472 beds and **135** day-case places

- Villejuif site: **398** beds and **106** day-case places
- Chevilly-Larue site: **74** beds and **29** day-case places

100,000
day-case care episodes

16,200
full hospital admissions

4,400
patients treated by surgery

40 %
of patients with cancer included in clinical studies

3,200
FTE

1,200
nurses

570
doctors

1,150
full-time research staff

480 M€
overall budget

164
publications in international journals with an *impact factor > 30* *(excluding conferences)*

10
doctor-researchers in the *"Highly cited researchers list"*

3,300
students trained

and **14,000**
registered for the teaching facility

110 M€
research budget on Gustave Roussy's site

10
research units

15
start-ups created, valued at €450 million

93
families of patents

36
research teams

Data for first half of 2023.