

# Activity Report 2023



 Institut de  
Cancérologie  
de l'Ouest

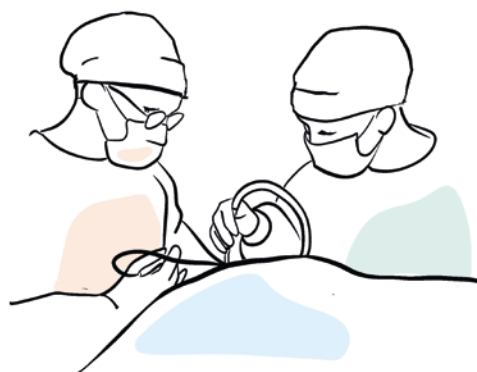
unicancer

PAYS DE LA LOIRE

 OECI  
**COMPREHENSIVE**  
Cancer Centre

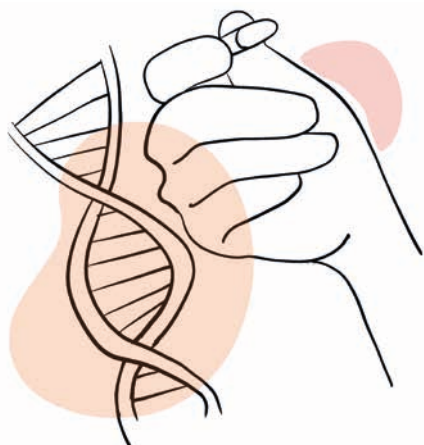
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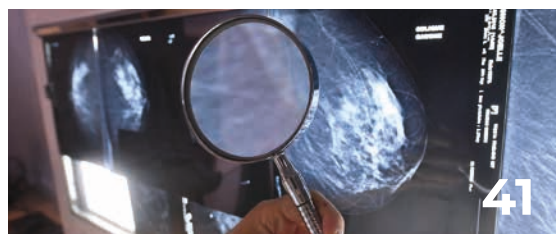
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# EDITORIAL



**Mrs. Viviane JOALLAND**, Assistant Managing director of ICO  
**Pr Mario CAMPONE**, Managing director of ICO

**In 2023, ICO consolidated its position as a major player in the fight against cancer, welcoming nearly 50,000 patients at our two sites, in Angers and Saint-Herblain. After accreditation by the OECI at the beginning of the year, 2023 was marked by the HAS (National Authority for Health) certification process, which led to ICO being awarded the High Quality of Care label at the beginning of 2024.**

The OECI accreditation at the beginning of 2023 marks a major milestone in our history. This recognition as an Integrated Cancer Center by the European Organization of Cancer Institutes (OECI) was a testament to our excellence and commitment to our patients. This accreditation underscores our commitment to providing the best possible care to those who need it. It is the result of a collective effort, which reflects the expertise of each of our employees.

The launch of the establishment project for the period 2023-2027, under the inspiring theme of «From a care pathway to a life pathway», embodies our holistic vision of cancer care, focusing on the needs of patients throughout their journey. A key element of the 2023-2027 Establishment Project is the appointment of a pair of medical coordinators for each of the nine major care and research sectors. A kick-off seminar was held on Monday 18th December 2023 and brought together all the medical coordinators of the sector, the management, the health executives and the research and care project managers. It thus marked the beginning of a new era of coordination-oriented «care pathways» at ICO.

On the clinical and research front, we achieved an initial success for INCa's AAP (a call for proposals from the National Cancer Institute) entitled «AMGEN Innovative Molecules» with the BEMAFLOT project in medical oncology, and with three clinical research projects which were funded by the DGOS (the Organisation for General Direction of Care), as part of the PHRC-k Call for Projects. Finally, 2023 confirmed the rise in the number of studies carried out

by paramedics: for the first time paramedical studies are on the podium of studies open for inclusions. The successes achieved at the INCa call for proposals are a testament to our leadership in research. With 1,610 patients enrolled in 276 clinical trials, our clinical research continues to push the boundaries of knowledge and innovation in oncology.

At the same time, we also invested in innovation and entrepreneurship, with equity investments in NAOGEN PHARMA, HEALSHAPE, GLIOCURE and ABCELY, reinforcing our commitment to supporting the development of innovative solutions in the field of oncology. The launch of the «Fork & care» open-innovation system for healthy food and the conclusion of new partnerships with start-ups and industrials demonstrate our desire to remain at the forefront of innovation.

This year, we have strengthened our commitment to prevention and the well-being of our patients, in particular via the opening in June 2023 of an onco-genetic consultation activity at Vendée's Departmental Hospital Center (CHD) in La Roche-sur-Yon and the establishment of the Addiction Liaison and Care Team (ELSA).

We would like to express our deep gratitude to our partners, donors and patrons who have provided unwavering support to our institution throughout the year. Together, we have achieved a lot; Let's keep this momentum by continuing to work together to advance the fight against cancer and to improve the lives of those affected.

# ICO: THE WESTERN CANCER INSTITUTE: A CENTER OF EXPERTISE

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**ICO, a Centre for the Fight Against Cancer, benefits from almost a hundred years of experience, and welcomes nearly 50,000 patients each year at its two establishments in the Pays de la Loire, in Angers (head office) and at Saint-Herblain. ICO was OECD accredited at the beginning of 2023 and obtained the High Quality of Care label from the HAS (National Authority for Health) in January 2024.**

Each year, ICO's 1,500 professionals welcome nearly 50,000 patients (49,718 in 2023) at its two establishments in the Pays de la Loire, in Angers (head office) and at Nantes/Saint-Herblain.

**CUTTING-EDGE MEDICINE AT THE SERVICE OF PATIENTS:** Specialized in oncology, ICO's professionals accompany patients at all stages of their care pathway, in a personalised, innovative and multidisciplinary way. From rapid diagnosis to surgery, chemotherapy and radiotherapy, care also extends to supportive care, which is highly developed at the establishment.



**THE INTEGRATION OF CARE, RESEARCH AND INNOVATION:** ICO's Research activity, a mission in its own right, is carried out from the fundamental level all the way through to clinical trials, via translational research. It is available in all oncology disciplines: medical oncology, radiotherapy, surgery, anaesthesia, nuclear medicine, medical imaging, supportive care, human sciences. Being treated at ICO means that you have privileged access to cutting-edge clinical trials in oncology. The Innovation division also has a mission to support innovation in oncology and thus to supporting project leaders, internal or external, from the idea stage through to the operational deployment of the innovation.

Through its teaching mission and its academic expertise, the institution contributes to training tomorrow's cancer-care professionals.

**49 718**

**Patients  
welcomed in 2023**

# BOARD OF DIRECTORS

as of 31<sup>st</sup> December 2023

## *Ex officio President*

**Mr. Philippe Chopin**  
Prefect of Maine-et-Loire

## *Ex officio Members*

**Professor Antoine Hamel**  
Dean of the Medical and Technical Training and Research Unit  
Medical – Faculty of Medicine of Nantes  
**Mrs. Cécile Jaglin-Grimonprez**  
Managing Director of the Angers University Hospital

## *INCa Representative Scientific personality*

**Mr. Philippe Juin**  
INSERM Research Director

## *Representative of the Regional Economic, Social et Environmental Council (CESER)*

**Mrs. Marie-Thérèse Bonneau**  
Representative of the CESER

## *Qualified personalities*

**Mr. Bertrand Affilé**  
Mayor of Saint-Herblain  
Vice-President of Nantes Métropole  
**Mr. Simon Gigan**  
Municipal Councillor in charge of health at the City of Angers  
**Mr. Antoine Chéreau**  
Vice-President of the Regional Council of Pays de la Loire  
**Doctor Grégoire Hinzelin**  
Free-lance neurologist

## *ICO's Medical Conference Representatives*

**Professor Jean-Sébastien Frenel**  
President of the ICO Medical Conference

**Doctor Rémy Delva**  
Vice-President of the ICO Medical Conference

## *Staff representatives*

**Mrs. Geneviève Perrocheau**  
Management staff representative  
**Mrs. Lydie Le Guillou**  
Non-management staff representative

## *User Representatives*

**Mrs. Fabienne Renaud**  
National Secretary of EUROPA DONNA

**Mr. Paul Iogna-Prat**  
Representative of the Dep. Committee of the League Against Cancer of Maine-et-Loire

## *Advisory Members*

**Professor Mario Campone**  
Managing Director of ICO  
**Mr. Jérôme Jumel**  
Director General of the Pays de la Loire Regional Health Agency

**Mrs. Patricia Salomon**  
Director of the Loire-Atlantique Territorial Delegation

**Mrs. Annyvonne Auffret**  
Director of the Maine-et-Loire Territorial Delegation

**Mrs. Viviane Joalland**  
Assistant Managing Director of ICO

## *Ad-hoc guests*

**Mr. Nicolas Bukovec**  
Director of Financial Affairs  
**Mrs. Catherine Romefort**  
Assistant Director of Financial Affairs  
Director of Management Control

**Doctor Olivier Guérin**  
Director of the Medical Information Department

# ORGANISATIONAL CHARTS

## EXECUTIVE AND MEDICAL COMMITTEE



### GENERAL MANAGEMENT

*Prof. Mario Campone*, General Manager  
*Viviane Joalland*, Assistant General Manager

#### MEDICAL MANAGEMENT SAINT-HERBLAIN

Director: *Dr M. Le Blanc-Onfroy*

Medical Oncology and Supportive Care:  
Dr M. Saint-Jean

Surgical Oncology: Dr. C. Loaec

Anaesthesia: Dr L. Pouplin

Radiotherapy: Dr A. Mervoyer

Nuclear Medicine: Dr C. Rousseau

Medical & interventional Imaging:  
Dr I. Doutriaux-Dumoulin

Medical Physics: G. Delpon

Anatomy and pathological  
cytology: Dr V. Verrière

Medical Biology: Dr A. Lefrançois

#### DIRECTION MÉDICALE ANGERS

Medical Oncology and Supportive Care:  
Dr J. Vanbockstael

Surgical Oncology: Dr R. Wernert

Anaesthesia: Dr N. Lebrech

Radiotherapy: Dr A. Goineau

Nuclear Medicine: Dr S. Girault

Medical Imaging: Dr Y. Bourrée

Medical Physics: D. Autret

Anatomy and pathological  
cytology: Dr V. Verrière

Medical Biology: Dr L-M. Chevalier

#### MEDICAL RESEARCH MANAGEMENT

Director:  
*Pr J-L. Harousseau*

##### CLINICAL RESEARCH MANAGEMENT

Director:  
*R. Charron-Bighetti*

##### SUPPORT SERVICE FOR TRANSLATIONAL RESEARCH

Administrative  
Manager:  
*C. Le Manach*

Research  
Programs and  
Grants Manager:  
*K. Joubel*

#### ECONOMIC DEVELOPMENT AND INNOVATION

Director: *G. Mercusot*

#### DEPARTEMENT OF HEALTH PROMOTION AND PREVENTION

*Pr M. Bellanger*

#### HIGH SCHOOL TEACHING IN CANCER (HECTOR)

*Dr V. Barbarot*



# IT HAPPENED IN 2023

## OECI Labellisation

ICO was accredited as a Comprehensive Cancer Centre by the OECI in early 2023, which is a guarantee of excellence for our patients. ICO thus becomes a centre of excellence in oncology, in the Pays de la Loire, and is recognised by Europe. This achievement is the result of a collective approach and is a recognition of the daily commitment of the ICO teams.



## ESMO Labellisation

ICO received the ESMO label for the period 2024-2026 as a designated integrated center for oncology and palliative care. It is a testament to the centre's commitment to clinical excellence, cutting-edge research and comprehensive care for cancer patients.



## ICO acquires a photobiomodulation machine

By stimulating tissue healing and regeneration through the application of red light in the form of short sessions lasting a few minutes, photobiomodulation reduces the side effects of certain cancer treatments and improves the daily lives of patients. This innovative technique is offered to patients treated with radiotherapy for ENT cancer, to help limit painful mucositis induced by radiation.

## Kiplin, The «Health trail» challenge of thousands of steps

The goal was to create teams of 5 employees (at most) and to walk as many steps as possible together. Several corporate sponsors were mobilized and they participated in the collective achievement of 31,963,197 steps, the equivalent of 22,374 kilometres. The 120 ICO employees achieved 16,894,916 steps. This event was designed to help people adopt new lifestyle habits.





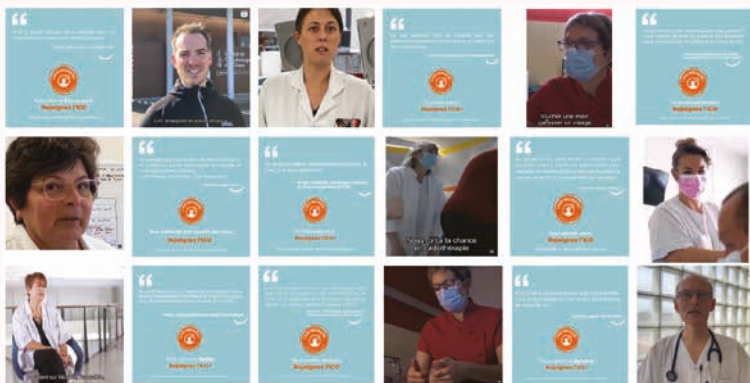
## A new place for clinical research's day-hospital at Angers

With 6 beds, this unit makes the organisation of the department more efficient and has definite advantages for patients. From now on, they are followed by a single doctor who becomes their main interlocutor, and who coordinates their care pathway within the therapeutic trial.



## HR attractiveness campaign

Recruitment at ICO takes place all year round. The floor is given to those who speak best about our professions: such as volunteers from our medical and paramedical teams, who pass on their passion.



## Music

Music is a moment "out of time" and it is for everyone. Hospitalized patients and caregivers were able to enjoy the visit of two musicians on June 21st, which allowed them to forget their illness for a moment. Since the beginning of 2023 publicity-free music has also been available all year round in the waiting rooms at ICO in Angers.



## Vital Emergency Numbers Campaign

To enable ICO staff to be able to react in the event of a life-threatening emergency, a large-scale campaign is being carried out internally.



## Radiotherapy Expertise - ALIGNRT®

Thanks to the installation of new AlignRT surface repositioning systems on two accelerators, ICO's radiotherapy department offers its patients ever more precise positioning during daily care.



## HAS certification

In September, ICO received a week-long visit from HAS experts. After two years of preparation and continuous improvement, the good news of a High Quality of Care Certification was achieved.



### Women's cancers – Pink October

The Prefect of Maine-et-Loire and the Mayor of Angers visited ICO's stand during the annual race of the Women's Committee 49 and received information about cancer prevention. Profits from this annual event are donated to ICO.



### Men's Cancers – November

30 mins to learn all about prostate cancer and testicular cancer. ICO regularly organizes thematic sessions, which are open to all and available in replay. These round table sessions with the Cancer Osons association aim to lift taboos.



### Exhibition

Halfway between October Rose and Movember, an exhibition by photographer Hugues Charrier highlighted portraits of women and men suffering from cancer. The multitude of testimonies submitted speak for themselves about the importance for patients to be able to share their feelings, whether through images, words or actions.



### International Staying Healthy Think tank: Innovative community tools

Debating on primary prevention of cancer: this is the aim of this international event. Scientists from the fields of life sciences, data sciences, humanities and social sciences, along with clinicians, public health experts and members of the public community come together to discuss priorities for the challenges of tomorrow.

### Dr. Denis Dupoirion receives the Axel Kahn Prize

This award recognizes Dr. Dupoirion's major contribution to the management and treatment of cancer pain, and to the treatment of intractable pain through the development of intrathecal analgesia. ICO at Angers is currently the 1st European center, and one of the first in the world, in terms of the implantation of intrathecal pumps and research on the treatment of cancer pain.



### Inauguration of Radixact, a new radiotherapy accelerator in Saint-Herblain

This equipment is the first of its kind in the region. It permits a large processing volume and unmatched repositioning quality. The inauguration took place in the presence of the Mayor of Saint-Herblain, the Vice-President of the Pays de la Loire Region and of course, the radiotherapy and medical physics teams of Saint-Herblain.



# WE GET TOGETHER

## Launch of the 2023 – 2027 Establishment project

A flagship element of ICO, the 2023 – 2027 establishment project was presented to ICO's teams via educational meetings aimed at explaining and creating momentum around the theme that engages us all: «From a care pathway to a life pathway.»



## First seminar for medical managers in the fields

It is the backbone of our 2023-2027 Establishment Project. A pair of medical coordinators was appointed for each of the nine major care and research sectors. The approach was officially launched on Monday 18th December 2023 during a seminar organised in the presence of all of the medical coordinators in the various disciplines, the management, health executives as well as research, and care project managers.



## World Climate Day: Angers and Saint-Herblain

Two events took place in connection with World Climate Day, respectively on the Saint-Herblain site and on the Angers site. With the support of environmental engineers, we held workshops dedicated to raising awareness which encouraged constructive discussions, moments of reflection and information sharing between ICO employees.



## Inter-company marathon

After several years of interruption due to Covid and then a heat wave, three teams raised the ICO flag high at the inter-company relay marathon in Angers.



**Mobilization against breast cancer** (Pink October), **prostate cancer** (November) and **ovarian cancer** (Turquoise September).







# MEETING AND INFORMATION SPACE

**The ERI – Espace de Rencontres et d'Information – in Angers and Saint-Herblain welcomes patients, relatives, carers and professionals, by appointment or without.**

This space which is dedicated to listening allows for transmission of accurate information and guidance for visitors, as part of his/her care pathway, or in response to his/her questions. Confidentiality is paramount. In 2023, 1,550 people were welcomed at Angers and 2,277 at Saint-Herblain.

**The ERIs offer different types of workshops.**



## **WORKSHOPS TO TAKE CARE OF YOUR BODY:**

- Hand and nail care
- Eyebrow Drawing
- Hair advice, scarf knotting
- Skin Care / Makeup
- Relaxation / breathing / sophrology
- Sexology
- Pilates
- Patient-caregivers, hand massage duo

The Culture and Health programme is supported by the Region, the DRAC of the Pays de la Loire and the ARS. The following actions result from this:

### **ANGERS:**

- Vocal experiments and singing improvisation: **6 workshops of 3 patients**
- Body and theatrical expression: **5 participants over 10 sessions** + visit to a show
- Creative expression « Playing with words and colours »: **9 to 12 participants over 8 sessions** including one at Museum of Beaux-Arts, followed by an exhibition at ICO

### **SAINT-HERBLAIN:**

- Company Tombée des Nues: **10 theatre workshops for 5 people**
- Singing workshops (Airs de rien/Looks like nothing): **6 workshops for 4 people**
- Writing workshops (Sandra Belland): **10 workshops for 8 people**
- Art (Delphine Vaute): **10 workshops for 8 people**
- Dance workshops (CCNN): **5 workshops for 5 people**

And numerous thematic information days organised at each site.

# ICO IN NUMBERS

## PEOPLE

ICO is made up of men and women committed every day to the oncological care of patients in the region.

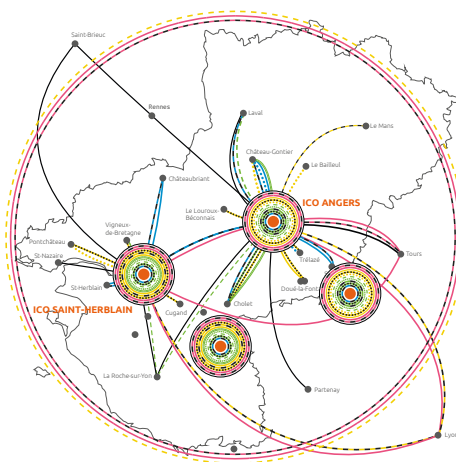
**1525**  
PROFESSIONALS



**221**  
Practitioners

## A DYNAMIC ECOSYSTEM

ICO is the keystone of a rich and dynamic ecosystem for the benefit of progress in oncology.



- Affiliated Chemotherapy Center
- Centralised Chemotherapy Preparation (CCP)
- Oncology (available, collaborations and support care)
- Ana path-biology (including genetics)
- Surgery
- Nuclear Medicine
- Radiotherapy
- Imagery / Interventional Radiology
- Radiotherapy / Proton therapy
- RCP
- Consultations
- Home Hospitalisation (HtH)
- Follow w-up care and readaptation (SSR)
- E-Health
- Research
- Teaching
- Other activities

ICO, is an expert cancer center, with significant activity.

## CARE

**91 980** Radiation therapy sessions  
**43 073** Chemotherapy sessions  
**46 947** Medical imaging sessions  
**4 368** Surgical stays and site implantations  
**16 053** Nuclear medicine sessions

## RESEARCH

**276** open-label clinical trials  
**32** ICO Promoted projects  
**610** trials managed by ICO teams  
**1 610** patients included (investigation)  
**685** New patients included



# FINANCIAL AFFAIRS

**The Western Cancer Institute ended 2023 with a positive financial result of + 1924349 €.**

This positive result remains solid. The implementation of ICO's real estate master plan in the coming years (new building in Saint-Herblain, extension of the research premises) requires that this positive balance is maintained.

**AT THE END OF THE FINANCIAL YEAR, THE REVENUE STRUCTURE IN THE BUDGET IS AS FOLLOWS:**

**124 913 046 €**

47.5% came from T2A revenues linked to our activities

**71 212 016 €**

27,14 % came from additionally funded drugs and implantable medical devices

**24 611 578 €**

9,4 % came from the MIGAC and FIR endowments

**4 415 619 €**

1,7 % came from Title II revenues

**37 854 550 €**

14,45 % came from other products

## DONATIONS

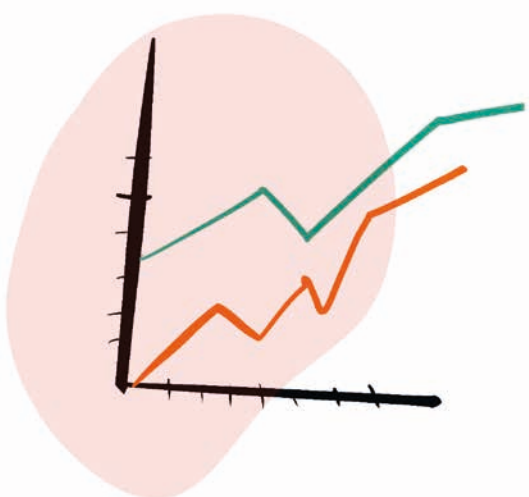
In 2023, the total amount of donations received by ICO was

**1 054 687,07 €**

## LEGACIES AND LIFE INSURANCES

In 2023, ICO received a total amount of legacies amounting to

**1 664 779 €**



# HUMAIN RESSOURCES

In a societal context that is seeing the relationship to work evolve, and in a job market that is experiencing strong tensions, we demonstrated a strong recruitment dynamic (154 permanent recruitments finalized in 2023).

## TOTAL HEADCOUNT ON 31<sup>ST</sup> DECEMBER

	2023		2022		2021		ÉVOLUTION 2022/2023	
	Real	In FTE	Real	In FTE	Real	In FTE	Real	In FTE
Non-managers	1123	1032,74	1107	1015,14	1102	1010,86	1,45 %	1,73 %
Employees	43	38,45	58	51,50	65	60,35	-25,86 %	-25,34 %
Technicians & Supervisors	1080	994,29	1049	963,64	1037	950,51	2,96 %	3,18 %
Mangers	181	166,95	171	158,25	153	140,35	5,85 %	5,50 %
Practitioner	221	193,11	218	186,41	209	177,50	1,38 %	3,59 %
<b>TOTAL</b>	<b>1525</b>	<b>1392,8</b>	<b>1496</b>	<b>1359,8</b>	<b>1464</b>	<b>1328,71</b>	<b>1,94 %</b>	<b>2,43 %</b>

We are continuing our skills-development dynamic with strong investment, which exceeds our regulatory obligations, in a multi-year logic co-written with the heads of departments, the care department and Hector's scientific department.

With the QVCT steering committee set up at the end of 2022, we designed and then carried out a social climate survey in the spring of 2023. The analysis of this survey enabled us to draw up axes of work that are currently being

deployed, particularly for conflict management and occupational health.

The modernisation of the HR information system is continuing. After deployment (at the end of 2021) and stabilising the GTA tool (time and activity management), we put the new payroll and personnel administration tool (HR Teams) into operation at the beginning of 2023. Work is continuing on this tool, which aims to open up workflows for employees to their supervisors.

## ACADEMIC POSITIONS

### PU-PH: Professor-Partitionner:

Mario Campone  
Jean-Sébastien Frenel  
Jean-Marc Classe  
Stéphane Supiot  
François Boquet  
Dominique Heymann  
Michel Chérel

### MCU-PH: Lecturer-Practitioner:

Olivier Capitain  
Caroline Rousseau

### University Professors:

Alain Morel  
Michel Bertrand  
Martine Bellanger

# 119

Medical and pharmacy interns

# 284

hospital students in medicine and pharmacy were welcomed and trained at the ICO during the 2022-2023 academic year

\*PU-PH : University Professor - Hospital Practitioner

\*MCU-PH : University lecturer - hospital practitioner

# USER RELATIONS

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**The mission of the Users' Commission (CDU) is to ensure that users' rights are respected and to contribute to improving the quality of the welcome for sick people, their relatives and patient's care.**

Two user representatives from voluntary associations that have signed an agreement with ICO are present on each site and are active members of this Users' Commission (CDU).

Since 2018, the CDU has been home to ICO's Users' Collective, an association representing ICO patients at each site and which participates diligently in the CDU as an invited member.

By virtue of Decree 2016-726 of 1 June 2016, the CDU may propose a users' project with a view to developing the Establishment Project; the CDU has thus enabled the establishment of «patient resources» initiative on the Angers site since June 2017, and on the Saint-Herblain site since November 2019. These «patient resource»

who have personally been confronted with cancer, help patients in need by sharing their experiences and by being an interface with caregivers. Patients can also be accompanied by a CDU user representative during a meeting with the medical mediator. Every year, the CDU collects comments from the voluntary associations that have entered into agreements with ICO.

It (the CDU) participated in the development of the ICO Establishment Project 2023-2027.

The commission works in synergy with the bodies and committees involved in improving the quality and care of the Institute's users.

## **MEETINGS HELD DURING THE YEAR**

Plenary sessions: 4

## **MEETINGS HELD FOR THE PURPOSE OF EXAMINING COMPLAINTS AND CLAIMS**

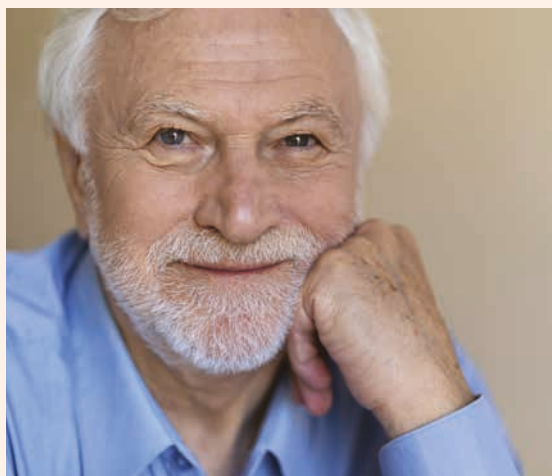
Plenary sessions: 4

## **MEETINGS HELD IN THE CONTEXT OF IMPROVING THE QUALITY OF CARE**

Plenary sessions: 4

## **MEETINGS HELD FOR THE PREPARATION OF THE ANNUAL REPORT**

Plenary sessions: 1



# ICO IS A MEMBER OF THE UNICANCER NETWORK



**Unicancer is the only national hospital federation 100% dedicated to the fight against cancer. Through its health cooperation group (GCS), Unicancer brings together 19 private, non-profit, health care establishments: the 18 French Centers Fighting against Cancer and one affiliated member, spread over 22 sites throughout France.**

It is the guarantor of a unique and different model for the care of cancer in France, combining excellence, humanity, solidarity, and innovation.



Unicancer has more than

**22 000**

**employees engaged daily**, in the permanent quest for excellence of care, of research and of higher education.



**1<sup>st</sup>**

**academic promotor** of Cancer Clinical Trials in Europe – With close to 7 654 patients included, in more than 739 actively promoted clinical trials in the CFAC network and Unicancer's R&D programs, and 63 000 patients registered in the ESME database



**A unique model of comprehensive, coordinated cancer care, which guarantees high-quality care,** accessible to more than

**530 000**

**patients each year.**



More than

**14 %**

**of patients at the CFAC** are included in clinical trials, compared to 8.5 % on average in French health establishments.



# CARE

“

*Thank you to all the teams mobilized to accompany us in the ordeal of disease. Treatments without Human support would not have the same therapeutic effects. I benefited from a very good follow-up with supervision, listening and exceptional care that allowed me to get through this ordeal with great ease, without feeling sick. Today, in remission, I say congratulations to the whole team and a big THANK YOU*

***A patient treated at ICO.***

”

# CENSORIAL

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**Breast cancer is the most common cancer in women in the world, with 61,214 new cases occurring in metropolitan France in 2023 (INCa).**

The announcement of cancer, treatment modalities, and their side effects can generate unpleasant emotions, such as fear for example, and the resources to deal with this differ from patient to patient. Coming to ICO for chemotherapy is in itself a source of anxiety.

The use of music in a care process is a therapy that can allow patients to reduce the intensity of their unpleasant emotions. So-called «active» music therapy requires the patient to participate by playing an instrument, or singing, or to move one's body in motion in rhythm without any musical skills being required. The presence of a qualified music therapy professional is essential, especially for handling the emotions that can be generated during the sessions. The sessions can be collective or individual.

In breast cancer, music therapy has shown its effectiveness in reducing pain, anxiety, depressive symptoms and the length of hospitalization in patients who have undergone mastectomy surgery.

The main objective of this randomized controlled study is to evaluate the effect of music therapy in the reduction of anxiety as part of outpatient management of patients with localized breast cancer undergoing chemotherapy, versus a group without musical intervention. The secondary objective is the evaluation of the impact of music therapy on quality of life.

The project is ongoing, and we have included 13 patients out of the 27 expected. The results are anticipated for 2025.

## THERAPEUTIC DE-ESCALATION BREAST RECONSTRUCTION SENO CHIR COURSE

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Therapeutic de-escalation consists of deploying effective strategies aimed at reducing the after-effects of cancer treatment. 40% of patients who had breast cancer underwent a mastectomy, i.e. about 2000 patients. ICO in Angers has submitted a project, as part of an INCa call for projects on therapeutic de-escalation, in order to better inform patients about the different types of surgery and consolidate a care pathway dedicated to eligible patients who require a mastectomy, and who request breast reconstruction. This project consists of proposing a less invasive surgical technique,

Re-enforcing access to therapeutic surgical education workshops and to develop specific help for patients through supportive care.

Since September 2023, a preoperative pathway has been set up by offering coordinated outpatient care (PECCA) in the month preceding surgery. This multidisciplinary course involves the surgeon, the anaesthetist, a surgical nurse, a physiotherapist, and sometimes a psychologist. The nurse assesses the patients' needs for supportive care and organises appropriate and personalised care.



The evaluation of this care pathway will be conducted by monitoring many indicators such as the inclusion rates, the number of patients concerned by breast reconstruction (Immediate Breast Reconstruction or RMI by minimum flap or prosthesis), postoperative pain, aesthetic evaluation, the number of inclusions in TPE...

Since its implementation, more than 40 patients have been followed as part of this project.



## RADIOTHERAPY FOR CHILDREN

The Western Cancer Institute is one of the 15 French centres authorised to carry out paediatric radiotherapy, on the basis of criteria described by the National Cancer Institute (INCa). As part of the Great West Paediatric Cancers (GOCE) network, the radiotherapy department at ICO Saint-Herblain is the reference service for the radiation treatment of children that are followed by the University Hospitals of Nantes, Angers, Tours and Poitiers. Due to the absence of tomotherapy at the Eugène Marquis Cancer Center in Rennes, young patients followed in the University Hospital Centers of Brittany can also be cared for by ICO.

Paediatric treatments (for patients under 18 years of age) are different from other treatments. Indeed, the immobility required for the entire duration of the radiotherapy session (on average 30 minutes) imposes a constraint on the child that is sometimes difficult to maintain. Occasionally, sedation, or even general anaesthesia, is necessary to correctly conduct the child's session. In addition, because of their young age, the support of parents is necessary and the triangular partnership between caregiver / patient / parent is essential.

Expertise in this unique care requires a particular organisation to meet the healthcare need of young patients, sometimes within short deadlines.

The objective of this organisation is to provide safe care for every child at all radiotherapy sessions, via:

- Coordination of the anaesthesia/radiotherapy teams
- A specific paediatric pathway
- Support for parents

En 2023, le service de radiothérapie de Saint-Herblain a accompagné 41 enfants et réalisé 638 séances. Des anesthésies générales (AG) pédiatriques ont été proposées mais non systématisées. 3 radiothérapies sous AG ont ainsi eu lieu après des essais de séances à « blanc » infructueux. Un circuit « AG pédiatrique » a été mis en place via une liste de distribution de mail à destination des professionnels concernés (radiothérapie, MAR, AM, IADES, CDS).

Un retour d'expérience récent a permis de mettre en lumière la nécessité de création d'un document d'information synthétique à destination des parents présentant notamment les numéros à joindre en cas d'urgence. Le parcours reste à finaliser et un espace dédié à la pédiatrie est en cours d'aménagement en SSPI.

# ELSA

On October 19th, 2023 the Addiction Liaison and Care Team (ELSA) was officially started at ICO Angers. This project, led by the Department of Prevention, has several objectives:

- Supporting patients in reducing or even stopping their consumption
- Being a privileged interlocutor for the care teams
- Participate in the resolution of complex situations
- Training-on and deployment-of tools for professionals
- Developing links with addiction actors in the Maine-et-Loire department
- Conduct research missions

Indeed, alcohol and tobacco use increase the risk of complications in cancer patients. Therefore, offering support around this theme is essential to guarantee optimal quality of care. The ELSA team is made up of qualified nurses, psychologists, social workers and a doctor. The team primarily targets support for tobacco, alcohol and opioid withdrawal. Nevertheless, it can also deal with other forms of addiction. The ELSA team began its activity with an information campaign aimed at professionals. The aim of this campaign was to raise awareness among the teams about the detection of addictions and the risks of drug interactions with cancer treatments.

In this context, ELSA can:

- **Offer care adapted** to the patient's motivational stage, with the aim of risk reduction or abstinence, according to his or her abilities, and the implementation of substitution or withdrawal treatments,
- **Establish a coordination link with the supportive care team** for patients that often have significant psycho-social needs,
- **Rapidly propose an out-of-hospital connection with actors in the Maine-et-Loire department**

Since its creation, ELSA has developed numerous awareness-raising tools for professionals (requests facilitated via DxCare, interventions in various departmental meetings, creation of communication tools) and for patients (information leaflets, identification and presentations). The team has set up about forty follow-ups and 25% of the patients, who were accompanied by the ELSA team, have initiated a follow-up.



# IMPLEMENTATION OF PODIATRY WORKSHOPS

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At the end of 2022, the Pays de la Loire Regional Institute for Training in Rehabilitation and Rehabilitation in Pedicure and Podiatry asked ICO Saint-Herblain to implement a collaborative project, to validate the training curriculum of a teaching unit for students in Pedicure and Podiatry. Meetings between the care department, the legal affairs department and the IFM3R trainers made it possible to understand the expectations and to see how ICO could meet them, and to identify the benefits for patients and employees.

Several months of work was carried out by Anne-Lise Joubert, the establishment's touch-massage referent, accompanied by the care management and Dr Lucie Peuvrel, onco-dermatologist, on the definition of objectives, communication materials and the organisation of workshops. On May 15, 2023, IFM3R students made their project a reality with the implementation of preventive

workshops for patients on the side-effects of treatments (dryness, wounds) and, more specifically, on hand-foot syndrome. The next day, workshops for health professionals were organized with the aim of informing them about the fields of expertise of a podiatrist, the advice to be given to ICO patients and recommendations on footwear and fitting for professionals.

The evaluation of the action highlighted the positive feedback from IFM3R students on the time spent interacting with patients and professionals. The professionals also highlighted the investment of the students and the best approaches to the different activities of the podiatrist's profession. These contributions will make it possible to guide patients better. The advice on daily footwear for caregivers was a real bonus. Given the success of the experiment, this scheme will be renewed in 2024.

## ETP CLICK PAIN

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ICO's Therapeutic Patient Education (TPE) core program was enriched in 2023 by the participation of the Angers site in a national study led by the Curie Institute, called, «DECLIC EPRI: the Patient Education Program on Chronic Pain Linked to Cancer - Evaluation of an Interventional Research Project in Population Health». Five centres are participating in this study which aims to develop Therapeutic Education in the field of pain. This study allowed 2 new qualified nurses to participate in the ETP activity.

In the autumn of 2023, we started this experiment by deploying 5 workshops, to meet the needs of the patient:

- Communication about pain
- Understanding pain and its treatment
- Dare to move
- Learning to manage my PIT
- I am learning to manage my TENS  
(Transcutaneous Neuro Electrical Stimulator)

In addition to these workshops, this project made it possible to democratize therapeutic education via the creation of a group of «influencers» who raise awareness of this approach among non-healthcare professionals.

The TPE program is intended for all of ICO's patients. It has made it possible to create new bridges between professionals (socio-aestheticians and psychologists for example at the workshop «communicating about pain») which promises great collaborations for the development of future programs. The program positions the patient at the creator of his/her ecosystem, where each of the members can play an influencer role (with the goal of promoting TPE).

# IMPLEMENTATION OF THE PRÉUCAMA CIRCUIT

The evolution of the outpatient surgery activity has made it necessary to implement a project for the redesign of the patient circuit at Saint-Herblain's Department of Surgical Oncology and Anaesthesia, which was put in place several years ago.

The objectives of this project were to:

- Improve the quality of patient care with a specific outpatient reception, and for patients in the conventional sector who arrive on the day of their operation,
- Modification of the reception of patients for the placement of implantable sites (changing from the outpatient's clinic to surgery),
- Improving the flow of surgical patients, particularly in connection with the management of morning discharges,
- Reduction in stretcher time due to the proximity of the operating room to the reception area,
- For senology patients, the detection of sentinel lymph nodes in nuclear medicine and medical imaging prior to their admission to outpatient surgery.

This project, led by the Operations, Pathways and Activities Department, the Purchasing, Logistics and Works Department and the Care Department, was comprised of an initial architectural phase and then a second organisational phase. The architectural component consisted of the development of a terrace on the 3<sup>rd</sup> floor respecting the principle of a forward moving patient pathway step:

- Administrative reception
- Reception in an open office area for the completing admission, then accompaniment to the cloakroom,
- A common waiting area for all specialties: for all patients that can walk to the operating room,
- Deposit of personal belongings in lockers at the entrance to the operating room,
- Intervention in the operating room, then the recovery room,

- Recovery of the patient's belongings by the stretcher-bearer,
- Hospitalisation in an Outpatient Surgery Unit,
- Light meal (transformation of the family lounge into a dining room),
- Discharge (the former reception of the surgery department was transformed into a waiting area).

The organisational component has made it possible to implement this new circuit by modifying the organisation of the paramedical teams as a function of the flow of patients, such as only installing stretchers or chairs in the surgery department post-operatively, following a call from the recovery room. For this circuit to function correctly, adjustments of the various actors involved in it have taken place via several meetings, and the equipment has been improved (stretchers, chairs, care trolleys...).

The implementation of the project began on October 2<sup>nd</sup>, 2023. An initial assessment highlighted:

- The efficiency of a centralized reception of all surgical patients,
- A gain in places in the Day Hospital due to the reception of port-à-cath® (PAC) patients in pre-Ucama,
- Optimization of hospital stay time for patients,
- Improved patient flow in the operating room and in surgery, in particular for morning discharges.

This pre-UCAMA project should make it possible to test the organisation, in order to prepare those that will be set up as part of the AmbiCion project, for which a Forward Ambulatory Surgical Unit (UCAMA) in direct connection with the operating room is being planned.



# 49 718

Patients welcomed  
in 2023

## Figures by activity in 2023

<b>Number of patients (outpatient and/or inpatient)</b>	<b>49 718</b>
Of which new patients	12 776
<b>Number of billable medical consultations</b>	<b>100 189</b>
<b>Number of onco-genetic consultations</b>	<b>4 850</b>
<b>Number of medical imaging visits</b>	<b>46 947</b>
<b>Number of Nuclear Medicine Visits</b>	<b>16 053</b>
<b>Number of patients under treatment (excluding oral treatments)</b>	<b>14 295</b>
<b>Number of radiotherapy sessions</b>	<b>91 980</b>
<b>Number of chemotherapy sessions</b>	<b>43 073</b>
<b>Number of Surgical Stays</b>	<b>4 368</b>
<b>Number of «pain» stays</b>	<b>4 751</b>
<b>Number of stays excluding radiotherapy</b>	<b>64 244</b>
Of which sessions and outpatients	58 906
Of which conventional	5 338

Sources : DIM 2023

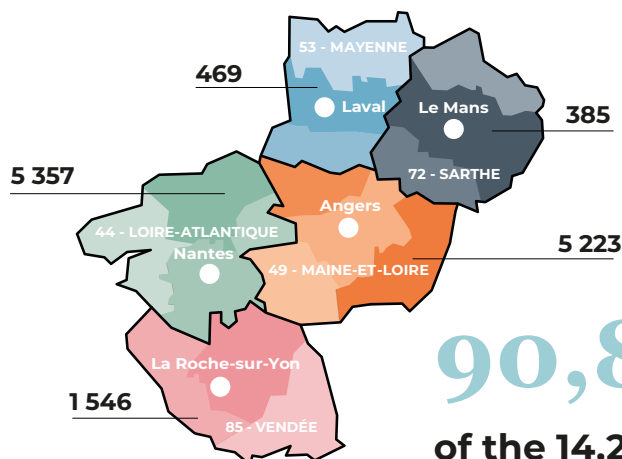


## The active treatment list (PMSI)\* 2023

\*PMSI: Information Systems Medicalisation Program

The active treatment list (PMSI) 2023 corresponds to the number of different patients admitted for hospitalisation or outpatient care during the year 2023.

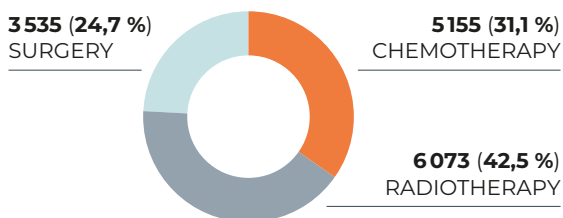
FA - PMSI 2023	ICO	
<b>Pays de la Loire</b>	<b>12 980</b>	<b>90,8 %</b>
44 Loire-Atlantique	5 357	37,5 %
of which 1 108 were from Nantes		
49 Maine-et-Loire	5 223	36,5 %
of which 1 015 were from Angers		
53 Mayenne	469	3,3 %
72 Sarthe	385	2,7 %
85 Vendée	1 546	10,8 %
<b>Bretagne</b>	<b>511</b>	<b>3,6 %</b>
<b>Poitou Charentes</b>	<b>610</b>	<b>4,3 %</b>
<b>Centre</b>	<b>112</b>	<b>0,8 %</b>
<b>Basse Normandie</b>	<b>29</b>	<b>0,2 %</b>
<b>Autres</b>	<b>53</b>	<b>0,4 %</b>
<b>TOTAL</b>	<b>14 295</b>	<b>100,0 %</b>



## Gender distribution

Men	Women
5 027 (35,2 %)	9 268 (64,8 %)

## The range of therapeutic choices in the active treatment list



## Hospitalised patients per cancer location

<b>Digestive system</b>	<b>1 613</b>
<b>Respiratory/Thorax</b>	<b>1 177</b>
<b>Haematology</b>	<b>192</b>
<b>Female genitalia</b>	<b>1 152</b>
<b>Male genitalia</b>	<b>1 394</b>
<b>Skin</b>	<b>535</b>
<b>Breast</b>	<b>4 915</b>
<b>Central Nervous System</b>	<b>397</b>
<b>Thyroid/endocrine glands</b>	<b>260</b>
<b>Soft tissues</b>	<b>245</b>
<b>Upper aerodigestive tract</b>	<b>1 014</b>
<b>Urinary tract</b>	<b>480</b>
<b>Other</b>	<b>105</b>

90,8 %

of the 14,295 patients in the 2023 active treatment list come from the Pays de la Loire.





# RESEARCH



*ICO is undoubtedly a centre of very high quality, with exceptional care and benevolence for patients.*

*A patient treated at ICO.*



# TRANSLATIONAL RESEARCH ON THE RISE

**2023 was a year of consolidation with respect to the transitional research. After many new arrivals and team creations over the previous 2 years, 2023 was marked by the renewal of SIRIC ILIAD and the emergence of promising inter-team projects.**

## INDIVIDUALISED ONCOLOGY

The work of the THePreMed team led by Dominique Heymann has led to the development of a microfluidic chip for the isolation and culture of rare cellular events (circulating tumour cells in particular). The team is also collaborating with IFREMER on the identification of anti-tumour activity of polysaccharides of marine origin. This collaboration was the subject of 2 patent applications in 2023. Finally, on behalf of Nantes University, the team is a partner in 2 European projects (ERA-NET and MSCA).

For Pascal Jézéquel's Omics & Data Science team, the year 2023 marked the end of the robust subtyping project for triple-negative breast tumours. This work was carried out on the largest cohort of triple-negative breast tumours ever constituted (1,942 patients). In particular, it settled the question of the existence of one or two mesenchymal subtypes (*mesenchymal stem-like* and *mesenchymal-like*), confirming the existence of a single mesenchymal subtype, called mesenchymal-like immune-altered. In addition, this work showed that this tumour type is enriched in dysfunctional T lymphocytes, which from the immunity point of view distinguishes it from the *basal-like immune-activated subtype*.

At the CRCI<sup>2</sup>NA, team 7 led by Philippe Juin was awarded a Ligue Contre le Cancer label for the project « **Identification of MCL-1-dependent mechanisms and compensation contributing to the cellular heterogeneity of aggressive breast cancers** ».

The Oncoproteomics team (Catherine Gnette / François Guillonnet) was the winner of the 2023 edition of the call for projects « **Loire Research Infrastructures** ».

This regional funding will support the technological development of the Prot'ICO platform.

In 2023, the Genomics team (Alain Morel / Isabelle Tournier) acquired the first equipment in the Pays de la Loire Region capable of performing spatial transcriptomics on tumours thanks to funding from the Institute for Research in Respiratory Health. The team also obtained AstraZeneca funding for its CRISPR genome editing project (known as «DNA scissors» technology, winner of the 2020 Nobel Prize in Chemistry) for variants of unknown significance.

## RADIOTHERAPY & NUCLEAR MEDICINE

The radiotherapy research conducted at ICO aims to reduce toxicity and improve the effectiveness of treatments. Its excellence is confirmed by the financing of 2 projects led respectively for ICO by Grégory Delpon and Vincent Potiron :

► INCA call for projects « **Limiting the sequelae of radiotherapy and improving quality of life** » - Project « **Multi-scale predictive models of radiation-induced toxicity in ENT with a view to optimized personalized radiotherapy** ».

► Aviesan / ITMO call for projects on the contribution of mathematics and computer science to oncology - PREDTWIN project « **Prediction of recurrence and optimized planning after prostate cancer radiotherapy via data fusion and integrative computational in silico modelling of tumour growth and response to irradiation** ».

## Focus on cross-team projects

### ► **IRTCell : ICO (Pierre Vidi, Vincent Potiron, Sophie Chiavassa) / Moffitt Cancer Center / MD Anderson Cancer Center**

The aim of this project is to evaluate the synergies between new radiotherapy methods and anti-tumour immunological effects.

- **Master 2 Recruitment** spring 2023
- **Winner of the ICO internal call for projects** in December 2023
- Response to the **project call Aviesan / ITMO Cancer PCSI** in December 2023

### ► **PESTIFOL : ICO (Pierre Vidi, Martine Bellanger) / Luxembourg Institute of Health**

This project focuses on the genotoxic effects of pesticides in children, using hair and its follicle for pollutant quantification and cell analysis.

- Publication of **preliminary data** in 2023
- Start of **Marie Robert's Science thesis**
- **Financing from ANSES** (National Research Programme on Environment, Health and Work)
- **CPP approval** for the first samplings in 2024

### ► **Search for luminal breast tumour subtypes by proteomics: (Omics & Data Science / Oncoproteomics)**

Analysis of the largest cohort of luminal breast tumours screened by proteomics (n = 150) using a Bruker timsTOF Pro mass spectrometer with an independent data acquisition approach. This work has made it possible to identify three luminal subtypes: luminal-mesenchymal, luminal-mixed and luminal B.

### ► **Development of a radiomics activity (nuclear medicine Angers / Anne Patsouris / Omics & Data Sciences)**

Use of physical parameters associated with PET and CT images to provide information that will improve patient care. This new category of omics projects enriches the team's repertoire of omics expertise, led by Pascal Jézéquel, which until now consisted of transcriptomic, proteomics, genomics, metabolomics, nuclear morphomics.

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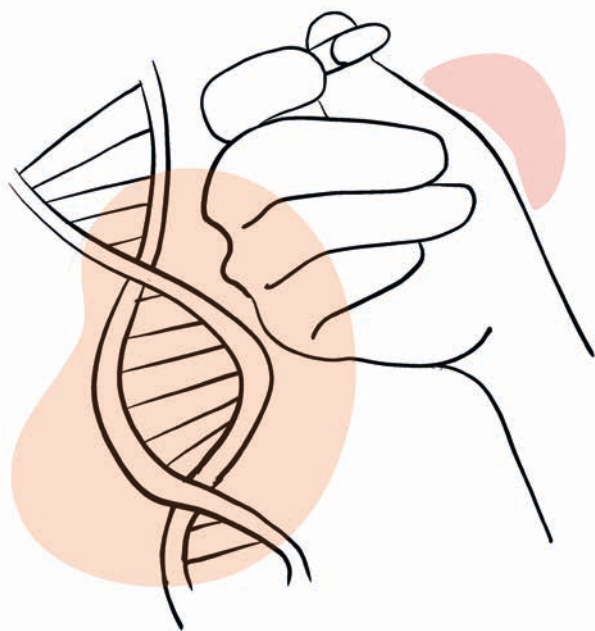
Of note : the university investiture of Marianne Boudon (lecturer at Nantes University) and Isabelle Tournier (Professor at the University of Angers).

## PREVENTION

The SHS team led by Martine Bellanger was strengthened in 2023 by the arrival of Bertrand Porro, whose research focuses on return to work after cancer. He develops his research within the framework of the REWORK program of SIRIC ILIAD. In 2023, REWORK obtained the support of the ARS Pays de la Loire.

In November 2023, the IBCN network, co-directed by Sophie Lelièvre and Martine Bellanger, organised its annual think tank in Angers. About thirty international researchers discussed the theme « **Staying healthy: innovative community tools for a better future** ». In the continuity of IBCN, the project « **Primary Cancer Prevention Network focused on the Gene-Environment Relationship** » led by Sophie Lelièvre was the 2023 winner of the ANR's MRSEI call for projects, which aims to strengthen research networks in order to respond to the European Commission's calls for projects.

Finally, the REGEN and SHS teams were also supported in 2023 by the Greater Western Canceropole as part of the Epi-Sport project « **Sport and epigenetics: towards personalised breast cancer care** ».



## SIRIC ILIAD: RENEWAL OF THE LABEL OF THE NANTES INTEGRATED CANCER RESEARCH SITE

Based on a research-care continuum, SIRIC ILIAD is a consortium that brings together 13 clinical teams from 3 health establishments and 20 research teams, supported by high-level technological platforms.

Supported by the Pays de la Loire Region, SIRIC ILIAD works closely with two patient associations, Europa Donna and AF3M, and covers a population of more than 5 million people.

The ICO teams and INSERM partners will play an important role in this consortium, pooling their knowledge and resources to advance the research. They will participate in the 3 research programs of SIRIC ILIAD, as follows:

- **PROGRAMME 1 – PRECIZE** (*PREdict and CharacterIZE high-risk patients in breast cancer and multiple myeloma*). The PRECIZE program responds to a critical medical need for early detection of high-risk patients in multiple myeloma and breast cancer, in order to offer risk-appropriate therapies as early as possible.
- **PROGRAMME 2 – DECIPHER** (*unDErstanding resistance of tumor eCosystems to develop and evaluate Innovative Promising tHERapies*). The DECIPHER program aims to identify and evaluate new vulnerabilities of tumour cells and their environment through multi-scale (cell-to-whole-body) and multiparametric characterization of resistant tumour ecosystems
- **PROGRAMME 3 – SICAJOB** (*Social Inequalities in Cancer survival: from care pathways to sustainable JOB retention*). The SICAJOB program combines multidisciplinary skills in HSS, epidemiology and public health, and focuses on the life course of patients to meet 2 challenges: to better understand the impact of social disparities in cancer survival and to promote the sustainable retention of people affected by cancer.

# CLINICAL RESEARCH ACTIVITIES

En 2023, ICO's clinical research activity resulted in 1,610 patients being included in 276 clinical trials open to inclusion.



## 1 391

**patients included in interventional trials**  
(Categories 1 and 2)

## 219

**patients** have participated in observatories or surveys relating to therapeutics, care or professional practices

## 1 610

**total inclusions in 2023**

### NUMBER OF PATIENTS BY TYPE OF STUDY IN 2023

Phases I and I/II	<b>140</b>
Phase II	<b>171</b>
Phase III	<b>389</b>
Other interventional trials	<b>691</b>
Observatories/Surveys	<b>219</b>
<b>Total</b>	<b>1610</b>



### ACCESS TO INNOVATIVE THERAPIES

ICO is the 1<sup>st</sup> recruiting center in the world for a study involving first ever administrations to human patients with gastric, pulmonary or colorectal cancers.

ICO is the 1<sup>st</sup> recruiting center in France in the field of gynaecological cancers within the GINECO group (more than 150 centres).

Nearly 1,000 patients have benefited from innovative therapies with early access.

### FOCUS ON THORACIC AND SENOLOGICAL SECTORS

The opportunities for access to early-phase studies and the tripling of enrolments in thoracic trials between 2022 and 2023 reinforce the strong dynamism of the thoracic sector, which is the result of the complementarity of the different disciplines and the collective commitment of our professionals.

The continuous investment of professionals and a marked culture of clinical research have enabled more than 500 patients to benefit from a clinical trial within the senology sector.

# 2023 TRIALS IN A FEW NUMBERS

## 74

**new trials initiated at ICO in 2023** including 33 new early phase trials (Phases I, I/II and II)

## 276

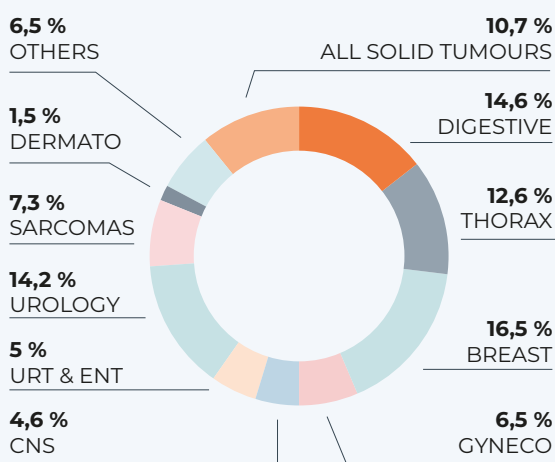
**Clinical trials open to inclusion** (261 interventional trials and 15 non-interventional trials)

In total,

## 610

**trials managed by ICO teams**

### BREAKDOWN OF OPEN-LABEL TRIALS BY PATHOLOGY



### INTERVENTIONAL TRIALS BY DISCIPLINE

	Trials	Patients
Medical Oncology	188	946
Surgery	17	72
Radiotherapy	41	185
Nuclear medicine	8	42
Medical Imaging	2	70
Onco-genetics	2	47
Bio-pathology	3	29
<b>Total</b>	<b>261</b>	<b>1391</b>

### DISTRIBUTION OF OPEN-LABEL TRIALS AND INCLUSIONS BY PATHOLOGY

	Trials	Patients
Digestive	38	64
Thoracic	33	108
Breast	43	538
Gynaecology	17	64
Brain tumours	12	31
Prostate	22	132
Sarcomas	19	30
ENT	13	11
Urology (excl. prostate)	15	14
Endocrine system	1	1
All solid tumours (early phases)	28	131
All solid tumours (excluding early phases)	16	265
Dermatology	4	2
<b>Total</b>	<b>261</b>	<b>1391</b>



# PROMOTION OF CLINICAL RESEARCH

The Clinical Research Promotion Department was created at the end of 2011.

The main missions of the service can be summarized in 3 functions:

- **Help with methodology and biostatistics:** editorial assistance, design and analysis of clinical trials,
- **Project monitoring:** organisation, administration, management, control, technical and regulatory support for clinical trials,
- **Data Management:** Database preparation, administration and management.

## In practice:

Starting from a research idea submitted from within ICO, the Internal Promotion Department builds a protocol, submits it to calls for tenders to obtain funding, takes care of all the regulatory aspects to allow the research to be initiated and then manages and monitors the investigator centres throughout the life of the trial.

When the trial is underway, the Internal Promotion Department is responsible for collecting and verifying all the information required from the various health establishments (CFAC, University Hospital, etc.) in charge of the investigation. Of course, ICO participates as an investigator in the trials sponsored by ICO.

## IN CONCLUSION

Depending on the type of research project, the service takes care of:

- **All of the interventional and/or prospective studies:** Category 1 to 3 Human Involvement Research (RIPH) promoted by ICO,
- **Submission of retrospective research projects to the Ethics Committee** (excluding RIPH: research on data), the databases of which are managed by the Datafactory, so that these projects can be published and therefore promoted.





# THE PROMOTION DEPARTMENT'S HIGHLIGHTS FOR 2023



## The first success at the INCa «AMGEN Innovative Molecules» call for proposals in 2023 !

Dr. Judith RAIMBOURG was the 1st ICO doctor to win this call for projects accessible only to CLIP<sup>2</sup> labelled establishments (a label to conduct early phase studies), with the [BEMAFLOT](#) project (Medical Oncology).

## 3 PHRC-k obtained in 2023 !

For the 1<sup>st</sup> year, 3 clinical research projects were funded by the DGOS, as part of the PHRC-k Call for Projects (a Hospital Clinical Research Program in Oncology). The 3 winners were:

- Dr Luc OLLIVIER with the project [BRADI](#) (Radiotherapy)
- Dr Bruno MAUCHERAT and Dr Marie LACOMBRE with the project [PASSIFLORE](#) (Nuclear Medicine)
- Dr Frédéric DUMONT with the project [PPOX-02](#) (Surgery)

► These 3 projects will be deployed in the various participating institutions during 2024.

## The rise of ICO's paramedical research

2023 confirmed the increase of studies carried out by paramedics.

For the 1<sup>st</sup> year, paramedical studies are on the podium of studies open to inclusion.

► 6 ICO internally promoted paramedical studies were offered to patients in 2023 ([RAPASS](#) / [CENSORIAL](#) / [BOREV](#) / [PREPAC-01](#) / [SOPH-NEURO](#)).

## European scope: activation of the centres in Spain for an internal ICO project

The « [OP2C](#) : Prialt® Observatory in Clinical Practices » Protocol (Esteve Funding), led by Dr. Denis Dupoiron, was opened for inclusion in several Spanish hospitals at the end of 2023.

The 1<sup>st</sup> international inclusions will be for the beginning of 2024.

# SUMMARY OF THE RESEARCH INVOLVING THE HUMAN BEINGS (RIPH 1 TO 3)

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In 2023, the Clinical Research Promotion department took charge of 89 RIPH studies, including 46 studies open to inclusion and follow-up.

Of these 46 ongoing studies, 32 studies are open for inclusion, 8 of which will be open in 2023.

In 2023, this corresponded to 685 new patients included.

The 32 studies open for inclusion and promoted by ICO are distributed in the different research typologies as follows:

- **15 interventional studies** (RIPH category 1 + CER Medicine (2014/536)), including:
  - **7 Drug Product studies,**
  - **8 Non-Health Product Studies,**
- **12 Category 2 RIPH studies** (minimal risks and constraints)
- **5 Category 3 RIPH studies** (non-interventional research)

All of ICO's disciplines are represented, with the main ones being: **medical oncology, radiotherapy, paramedical, pain-supportive care, surgery...**



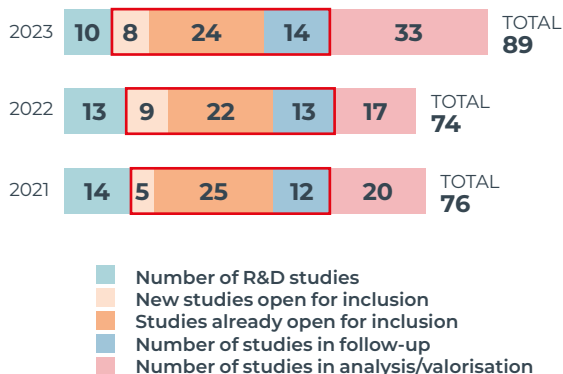
# 2023 TRIALS IN A FEW NUMBERS

## THE NUMBER TO REMEMBER

# 54 %

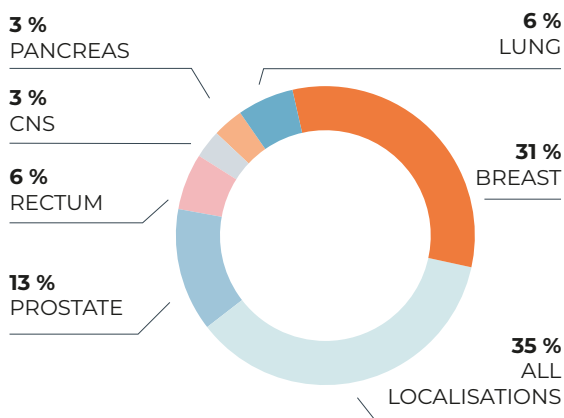
of our interventional studies (RIPH category 1 + REC Medicine (2014/536)) are early phase studies (Technology Readiness Level «TRL» 6 to 7)

## CHANGE 2021-2023 ICO promoted studies being conducted (RIPH 1-2-3)

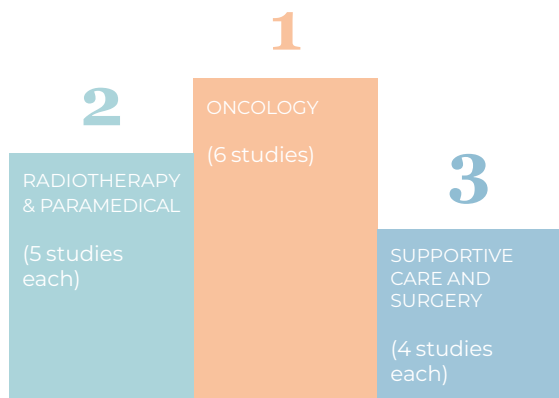


## 2023 BREAKDOWN

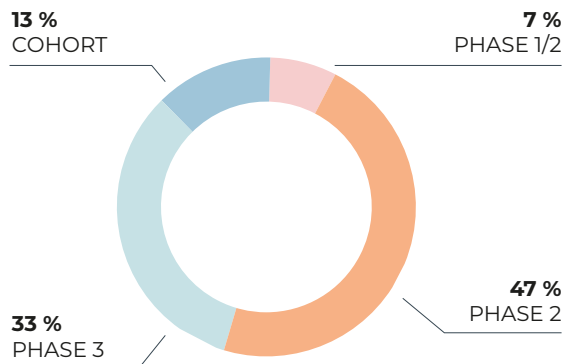
### RIPH 1-2-3 studies open to inclusion by pathology



## DISCIPLINE PODIUM RIPH (1-2-3) studies open for inclusion in 2022



## 2023 INTERVENTIONAL STUDIES RIPH 1 + CER Medicines (2014/536): Breakdown by phase





# ACTING TOGETHER

“

*These workshops are interesting for the information they provide and the exchanges they provide with other patients. Everyone's experience is different and allows us all to move forward. It's reassuring to do it with patients rather than doctors, to whom we don't always dare to say things in the same way. I really enjoyed these moments and would recommend them to all patients, according to their feelings and wishes.*

”

***Patient who attended a Therapeutic Patient Education workshop.***

# DEVELOPMENT AND INNOVATION

**In 2023, ICO took a new step in the execution of its innovation strategy and is arming itself to encourage innovative projects and accelerate the valorisation of research.**

The Western Institute of Cancer (ICO) has opened up to the international market by joining the ARC (Accelerate Redesign Collaborate) community to accelerate its innovation process and is aiming for the ARC Center label in 2024. ARC brings together more than 150 partners around the world, including leading hospitals, innovative startups, industrial and strategic investment partners.

Being part of the ARC community means benefiting from the exchange of best practices, having access to cross-over experimentation, being able to rely on existing models and gaining in efficiency. To effectively drive its roadmap, ICO will be able to rely on collaborative projects undertaken with the community.

*ARC team*





2023, also marks the recognition of ICO at national level for Third-Party Experimentation in Digital Health, by being the winner of the France 2030 call for projects. Alongside leading partners, ICO created the «Onco-Atlantic» third-party to improve the complex journeys of oncology patients: from biomarkers to «third-party» care. «Onco-Atlantic» is the first Third-party project which is 100% dedicated to the acceleration of digital solutions in oncology healthcare. Two projects already demonstrate this: SEMEIA-OncoWise, a remote monitoring solution for the prostate cancer patients and RDS-MultiSense®, a remote monitoring device designed to secure early post-operative discharge.



RDS-MultiSense®



RDS-MultiSense®



Dr Céline Renaudeau et Dr Augustin Reynard,  
Chirurgiens à l'ICO

After investing in the capital of NAOGEN PHARMA and HEALSHAPE, ICO's subsidiary, ICO INNOV, took a stake in GLIOCURE and ABCELY. GLIOCURE is a biotech company from Angers, specialising in the development of drugs against brain tumours and other solid tumours overexpressing  $\beta$ III-tubulin. The biotechnology company, ABCELY, is specialised in the development of a brand-new class of orally active therapeutic molecules, class A immunoglobulins, thus initiating an innovative anti-cancer therapeutic approach, which is unique at the global level.



These new investments are accompanied by the implementation of collaboration on the development of innovative 3D models of tumours on chips to identify new therapeutic indications in cancer. This expertise has been developed at ICO via the Laboratory of Cancer Sensitivity to Treatments (SCaT) directed by Professor Sophie Lelièvre, that is very useful to start-ups. ICO thus offers expertise in oncology and provides a structuring testing ground for start-ups. It is also this expertise that ATONCO has solicited, starting a collaboration in the field of astatine-211 vectored radiotherapy, to identify new indications with unmet medical needs in the fight against cancer.

Through these collaborations for the development of tumour-on-a-chip models, ICO has continued its support for the maturation of its future spin-off TESTEROC. This deep-tech start-up, which will be co-founded with Prof. Sophie Lelièvre, offers a breakthrough innovation in tumour modelling by 3D cell culture on a chip, allowing evaluation of drug candidates for biotechnology companies and the pharmaceutical industry.

In 2023, the open-innovation system for healthy food, called "Fork & care", was launched with the integration of two agri-food manufacturers, Eureden and Fleury Michon. Brainstorming workshops were held with our doctors, dieticians, researchers, etc. They made it possible to identify needs and specific use-cases in terms of prevention, malnutrition and microbiome. The first steps are now starting with a call for solutions from the start-up community to try to meet these challenges.

2023 has also seen the conclusion of new innovative partnerships with start-ups and industrialists such as ARXUM to test their solution in a research laboratory (a process designer coupled with AI and a blockchain system to visualize various tasks to be performed using augmented glasses, in real time) or BOUCHARA RECORDATI, which supports ICO's teams of radiotherapists, cardio-oncologists and pharmacists to develop a tool to optimize cancer management (prevention of cardiovascular risk and the risk of drug interactions induced by hormone therapy). These experimental and development projects position ICO as an accelerator of oncology innovations with its ecosystem and its healthcare professionals.



*The SCaT team.*

# THE DEPARTMENT OF HEALTH PROMOTION AND PREVENTION (DPSP) IN 2023

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The DPSP continues its influence and structuring as part of the 2023-2027 establishment project. It includes three new units: Therapeutic Patient Education (TPE), the Addiction Liaison and Care Team (ELSA) and the prevention of infectious risk. The DPSP units are part of a complementary approach to health promotion, prevention and education, to contribute to the reduction of the risks and recurrences of cancers, and to the improvement of the quality of life of patients during treatment and beyond. The main risk factors amongst others, are related to behaviour, genetics, infections, treatments and living conditions. The activities of the DPSP are at the heart of the "care and life pathways" based on continuous prevention, care, follow-up of cancer patients, their carers and populations in the territories close to ICO.

## TPE, A PERSONALIZED AND PATIENT-CENTRED PRACTICE OF CARE

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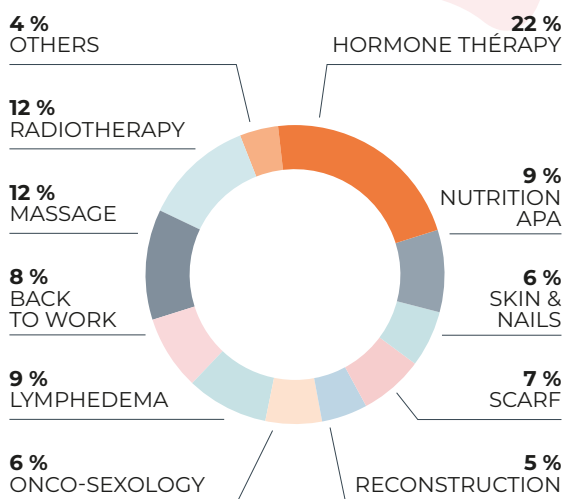
The TPE approach includes a pedagogic element that allows the patient to acquire knowledge, develop skills and implement behaviours adapted to his/her disease and/or the different phases of treatment. The goal of TPE is to improve the quality of life of patients. As a reminder, this care activity is practiced within a strict legal framework. Included in the Public Health Code. These programs, previously authorized by the ARS, have been subject to a declaratory regime since January 2021. TPE is subject to regulatory requirements because it is included in the ten-year strategy for the fight against cancer 2021 – 2030, as part of the HAS V2014 certification, as well as that of the OECl - *Organisation of European Cancer Institutes, for a Comprehensive Cancer Center (ICO accredited in 2022)*.

In 2023, **3 FTE programs were deployed and were active at ICO** out of the 7 programs authorized by the ARS. Indeed, the core program, program 1, lasts for 4 years and so it is renewed each year (Core Program Figure 2). The workshops of the other programs were included in this renewed program. For example, programme 2 "*Living better during and after my radiotherapy*", whose authorisation was due to expire in March 2023, was not renewed. In anticipation of this, and in accordance with the ARS's expectations to group the programmes, the workshops were increased in the core programme when it was renewed.

Program 6 "*My immunotherapy treatment... I'm in charge!*" is a regional program which, in addition to the 2 ICO sites, includes 2 departments of the Angers University Hospital and the Vendée University Hospital in La Roche/Yon. This program, which is currently being renewed, is also the experimental arm of an **EDITHO randomized controlled study (2019-2023)** which includes 9 sites in addition to those mentioned above. **This study evaluates the impact of therapeutic therapy on the toxicity of immune checkpoint inhibitors in oncology** – PHRIIP 18-0271; NCT03948724, coordinated by Mrs. Beaumont. **80% (166/205) of patients in the experimental arm were included at ICO.** The workshops of the program 7 "*How can I improve the management of my bone lesions?*" is being carried out as part of the core program.

At Saint-Herblain, program 4 "*Breast cancer: becoming an actor in my care pathway*" is being carried out (105 patients). New group workshops (5 themes) for patients with prostate cancer were deployed in 2023, allowing 120 patients to benefit from them. This was possible thanks to an industrial sponsor who took charge of training radiotherapy professionals for the 40 hours of TPE.

### Distribution of TPE workshops by category, in %



Coordinated by the TPE unit, the activity is collaborative. Professionals from the various departments respond to the needs of patients. **In 2023, 640 new patients benefited from TPE workshops, 370 and 270 in Angers and Saint-Herblain respectively.** For example, **in Angers, 15 collective workshops were offered in 2023.** Among a total of 565 patients that participated, more than 1/5th of the patients participating in the TPE workshops benefited from hormone therapy workshops. Workshops on radiotherapy and scar massage followed on (Figure 3). Breast cancer was the main location treated.

### Research in TPE and the Humanities and Social Sciences (HSS) approach

The research focuses on **the perceived value of TPE, and is done in collaboration with a patient resource researcher** and researchers in management sciences. This experimental research includes evaluation of practice, the measurement of the value of TPE as seen from the point of view of 207 breast cancer patients (perceived benefits and costs) and the analysis of the history and consequences of TPE satisfaction. The assessment takes into account the patient's experience. This study has been the subject of several publications, in particular the one in late 2023-early 2024 in the Journal *"Health Service Management Research"*. The patient-reported experience and its measurement are very important in

evaluation of services provided to patients and complements self-reported outcomes (such as PROMs). From January to April 2023, a 2<sup>nd</sup> study was conducted amongst 500 patients via sending out questionnaires by email (URL link).

Other studies are conducted as part of the external promotion, financed by INCa. **SKYPE 2** is a randomized, open-label study evaluating the effectiveness of combined physiotherapy and yoga intervention. **DECLIC-EPRI** focuses on Chronic Pain Related to Cancer. It is population health intervention research. In addition to the financial aspect of the study for ICO, ETP trainings were funded as part of the study, including a seminar entitled "Influencers", by Tréma Consulting. This seminar allowed **the implementation of a pain axis with 4 TPE workshops** dedicated to the study, from which **14 patients and 2 caregivers** benefited. The objective is to perpetuate this pain-specific offer.

**The dissemination of research activities related to TPE was continued in 2023**, with oral and poster communications at various national and international conferences.

### 2023 A PIVOTAL YEAR IN ADDICTION CARE

The DPSP participated in the launch of our anti-addiction activities, thanks to funding from the ARS Pays de la Loire. This is reflected in their financial support, for three years, via the **Fund for the Fight against Addiction to Psychoactive Substances (FAAD)**, for both of our sites, so that ICO becomes a tobacco-free health site (LSST). And, above all, it is the long-term funding of an **Addiction Liaison and Care Team (ELSA) in Angers**, as part of our missions of general interest that mark this year as being special.

In mid-October 2023, **ELSA** was started at ICO in Angers. It is composed of a doctor, two nurses, two social workers, a psychologist and a secretary. A dynamic and friendly team, ELSA has been rapidly deployed, with the establishment of a dedicated consultation and a mobile team. It has developed tools to identify the use of psychoactive substances, such as caregiver questionnaires, increasing awareness and providing leaflets to patients. ELSA works closely with the DPSP via the LSST operational committee, as well as stakeholders at ICO and the region. It participated

in the rollout of the Tobacco Free Month in November 2023. The decrease in cigarette butts observed around buildings on both sites is encouraging for the achievement of the objectives set: to obtain a silver medal in the 2024 LSST audit of the ADDiction Prevention Network (RESPADD) and to obtain compliance with the expectations of the OECl's "Comprehensive Cancer Center" accreditation.

In the long term, ELSA aims to identify all patients who consume alcohol, tobacco and cannabis and to screen for the misuse of painkillers. Finally, ELSA is a relay for any health professionals would like support to stop the consumption of addictive substances.

## PREVENTION OF INFECTION RISKS

**2023 represents an important year for the operational hygiene team, which became the infectious risk prevention team**, following its integration into the DPSP. The team continued its usual missions of audits and using indicators for the surveillance of infections (surgical site infections, infections related to central catheters, management of BMR and BHR).

In order to provide the best possible support to professionals concerning the risk of infection, the team **organises and participates in numerous training courses**, some of which are open to external professionals via HECTOR: bio-cleaning, use of central catheters, ambulance drivers, workshop on PICC-LINE. **About 110 people have been made aware this year via these trainings.** In 2023, the team also set up a **flash training on the risk of infection for ICO caregivers**. It consisted of role-playing around the issues related to the risk of infection. 40 people benefited from it at each site and we expect a strong increase in 2024.

## ONCO-GENETICS ACTIVITIES IN 2023

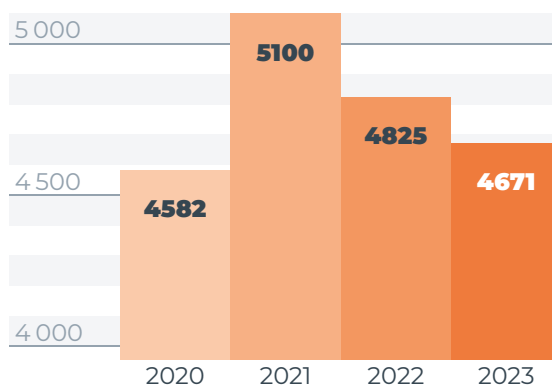
The onco-genetics activity is organized around three axes: consultation, teaching, and research.

**The predominant activity, consultations, is stable: 4,671 consultations carried out with 2,496 at Saint-Herblain and 2,175 at Angers.** if a temporary decrease in staff (linked to the maternity leave of two doctors) is taken into account. In fact, **an increase in the number of consultations with a theragnostic purpose which is a new contribution outside of ICO.** Since June 2023, an onco-genetic consultation

activity has been set up at the CHD Vendée in La Roche-sur-Yon. Finally, the number of psychology consultations related to onco-genetics is on the rise with 340 consultations carried out in 2023 (148 in Saint-Herblain and 192 in Angers).

In 2023, an ICO gynaecological onco-genetics team was created, which is common to the 2 sites. The digestive onco-genetics team, created in 2022, works in collaboration with the Nantes and Rennes University Hospitals, the Confluent Private Hospital and more recently the CHD Vendée. These two teams are destined to evolve towards respective multidisciplinary consultation meetings (RCP). Since 2021, the oncogenetics unit has been actively participating in the SmPCs of the France Genomic Medicine 2025 Plan, where the files of families eligible for genomewide analysis are presented.

### Evolution of the onco-genetic Consultations activity



**Teaching and continuing education activities** are continuing with a view to optimising the referral of oncogenetic patients and disseminating management recommendations. An illustrated book has been produced to facilitate intra-familial genetic screening for Birt-Hogg-Dubé syndrome, with the aim of national and soon international dissemination, within the framework of the PREDIR network (PREDIspositions to kidney cancer).

The unit also participates in **national and European collaborative work** to establish recommendations for the management of people with a genetic predisposition to cancer, the National Thesaurus of Digestive Oncology



2023-2024, European recommendations for the management of gastric precancerous lesions MAPS III, national GGC-UNICANCER and PREDIR working group on the definition of the panel of genes predisposing to kidney tumours, update of the Phare Grand Ouest reference system).

**The unit contributes to onco-genetics research activity** and continues its participation in national studies such as COVAR, AAS-Lynch (end of study in June 2023), CoF-AT2. Two new studies were set up in 2023, including the SarcLynch study, which evaluates the risk of sarcoma in people with Lynch syndrome, and COCO, which corresponds to the creation of a national cohort of patients with Cowden's disease to estimate the risk of cancer. This research activity has led to publications, including **the completion of the first study on adherence to breast follow-up in the PHARE GRAND OUEST cohort**, in collaboration with the Humanities and Social Sciences Unit, as part of the DPSP.

## "SEXUAL AND REPRODUCTIVE HEALTH IN ONCOLOGY" BY THE MEDICAL GYNAECOLOGY UNIT

The bi-site **PECCA INTIMA course** is a success. This course consists of offering a hyaluronic acid injection in the vaginal vulva to patients suffering from dryness of intimate mucous membranes, motivating an increase in participation in 2024. In 2023, in Saint-Herblain, 58 out-patients, with an average value of €503, because most often three consultations were carried out, and in Angers, 20 out-patients, with an average value of €727, because four consultations were usually carried out.

In 2023, the members of the unit continued their contribution to **medical training UPR - Postgraduate Education**: two UPRs on the theme of Onco-sexology took place; research, such as the ISIS project on women's reproductive health after breast cancer which were initiated in 2022 as part of the UNIBASE call for expressions of interest; **communication**, by participating in two events, as part of Pink October.

Initiatives have emerged, in particular the establishment of a regional working group on onco-sexology, coordinated by Dr Dezellus and the ONCOPL, and the creation of an onco-fertility multidisciplinary consultation

meeting (RCP) with the ONCOPL, coordinated by Dr Dezellus and Dr. Sauterey, to discuss complex fertility preservations and post-cancer pregnancy desires.

Dr. Clémence HERRENSCHMIDT joined the medical gynaecology team at the Angers site in November 2023. Dr. Sauterey holds a Master 2 degree in Public Health: Health Promotion and Prevention since September 2023 and continues his duties as co-head of the DPSP.

## HEALTH PROMOTION AND PREVENTION FOR TERRITORIES CLOSE TO ICO

In 2023, **the DPSP continued the Community Health Action Research project in a district of the city of Angers – RASQA** – for the benefit of the residents of the Roseraie district. For this three-year project funded by the ARS, the DPSP is working in close collaboration with Angers' public health department and the IREPS, and relies on both institutions and associations in the district. By getting inhabitants to actively participate in the project, coupled with an approach based on valorising their assets and those of the stakeholders, it has become possible to identify the priorities (see below). Since March 2023, about twenty residents participated every two months in an Operational Committee (COMOP), interacting both during- and after- the workshops, whose themes were: **1) Children's health and lifestyle; 2) Prevention and access to health services and 3) Food and housing**. An action plan is being defined in relation to these three themes. The results of this project, whose objective is to "find favourable conditions to reduce social inequalities in health", will be identifiable in the long term. However, intermediate results from this project led by the DPSP have been identified. For example, fostering coordination of actions between school doctors and general practitioners, which did not exist before the project. This has also enabled the establishment of a "collective of 20 general practitioners" in the Roseraie, and the recruitment of a health mediator in the Roseraie district. **Finally, this collaborative work and the commitment from local stakeholders has enabled ICO to be integrated as an institutional partner into the Angers Loire Métropole Local Health Contract (CLS).**



# HECTOR: TRAIN TOGETHER

With the aim of continuous improvement of its training actions, HECTOR Pays de la Loire has maintained its Qualiopi certification by validating its surveillance audit on June 8th, 2023.



The Quality certification was issued under the following category of actions: **Training Activities**

## ACTIVITY REPORT

In 2023, HECTOR trained **346 professionals** in total, of which:

 **217**  
ICO employees

 **129**  
external professionals  
including 11 freelance

Functions: nurse, nursing assistant, dietician, physiotherapist, technician, medical assistant and doctor

 **28**  
training actions in total, of which:

- 11 with external and mixed audience
- 17 with internal audience



**I have a feeling of confidence and re-motivation for continuing my profession more serenely. I'm very happy with the recognition you bring to our profession.**

*Isabelle,*  
**Paramedic, Kéolis Santé Anjou**  
Training for paramedics



## SEMINARS

About sixty oncologists from ICO met **by video for two bi-site post-congress evenings: on June 23<sup>rd</sup> for ASCO and November 23<sup>rd</sup> for ESMO**. These very convivial evenings were an opportunity to exchange and learn about the latest medical advances presented at the congresses, in various fields (senology, gynaecology, digestive, pulmonology, urology, ENT).

On December 20<sup>th</sup>, **Dr. Sophie Abadie-Lacourtoisie** proposed a seminar to present the results of the APA prescription consultation to oncologists in Angers

On June 13<sup>th</sup>, **Dr. Lucie Peuvrel** and **Dr. Mélanie Saint-Jean** brought together local dermatologists along with their oncologist and surgeon colleagues, on onco-dermatology topics. The evening is rescheduled for 2024.



**HECTOR Pays de Loire** is **Qualiopi certified** and implements a continuous improvement dynamic for training actions.

## HECTOR

**Operational Manager**  
Dr Véronique BARBAROT

**Training Manager**  
Brigitte LEMARQUAND

**Training Coordinator**  
Sylvie CARTON

# THE DRIVE FOR QUALITY

## CERTIFICATION OF HEALTH ESTABLISHMENTS BY THE FRENCH NATIONAL AUTHORITY FOR HEALTH (HAS)

Since 2017, ICO has maintained an A certificate from the French National Authority for Health, which is the highest level of certification.

Certification  
Reference 2014



## ACCREDITATION AND DESIGNATION AS A COMPREHENSIVE CANCER CENTER BY THE ORGANIZATION OF EUROPEAN CANCER INSTITUTES (OECI)

Engaged in the accreditation and designation program of the "**Organisation of European Cancer Institutes**" since 2020, **ICO was accredited as a "Comprehensive Cancer Center"** in November 2022. We are thus the 6th French centre to be accredited as a "Comprehensive Cancer Center" by the OECI, alongside the Léon Bérard Center (2017), the Institut Curie (2018), the Paoli Calmettes Institute (2019), the Toulouse Oncopole (2020) and the François Baclesse Center (2020).

The OECI ([www.oeci.eu](http://www.oeci.eu)) has two key objectives:

1. To provide European cancer patients equal access to high-quality care,
2. To help European Cancer Institutes to set up a quality system for cancer care.

For our patients and correspondents, this European recognition, which is valid until 2027, is a guarantee of excellence. It means that **ICO fulfils its missions of care, research and teaching in accordance with the OECI's levels of requirement**. It also allows us to position ourselves in certain European calls for research projects.

## ACCREDITATIONS AND CERTIFICATION OF OUR ACTIVITIES

Our **Biopathology division, which brings together the activities of Medical Biology and Pathological Anatomy and Cytology**, is accredited by COFRAC (the French Committee for Accreditation) according to the NF EN ISO 15189 standard (accreditation N° 8-3281 - List of sites and scopes available on [www.cofrac.fr](http://www.cofrac.fr)).

Our **Biological Resource Center (BRC) / Tumour Bank** is a structure available to clinicians and researchers to meet the need for the constitution of biological collections and the provision of biological samples in the context of basic, translational and clinical research projects. It is certified according to the NF-S-96900 standard "BRC management system and quality of biological resources". This certification guarantees the reliability and safety of the processes put in place for the management of biological resources.

## MEASURING THE VALUE OF OUR CARE

Since 2018, ICO has been engaged in a process of implementing indicators to measure the value of care, including Patient Reported Outcomes Measures (PROM).

In 2022, ICO continued its partnership with the VOICE consortium (Value based healthcare for Outcomes In breast and lung Cancer in Europe) as part of a European benchmarking on breast cancer care.

## QUALITY AND SAFETY INDICATORS OF CARE AT THE ANGERS SITE

### Satisfaction of hospitalised patients

#### Medicine, Surgery, Obstetrics (MCO)



→ stable



80,6 %

▶ ICO patients gave a rating of **79/100 for the quality of care** in the MCO Hospitalization category (175 evaluations)

▶ **80.6% of hospitalised patients would definitely recommend ICO** (175 evaluations)

#### Day Surgery (DS)



→ stable



87,3 %

▶ ICO patients gave a rating of **82/100 for quality of care** in the outpatient surgery category (284 evaluations)

▶ **87.3% of the patients would definitely recommend ICO** (284 evaluations)

### Pain Management

#### Medicine & Surgery > 48h



100 %

↗ in progress

▶ For **100% of patients** who were hospitalized for more than 48 hours, **pain was assessed** and, if necessary, managed.

### Coordination Hospital - town

#### Medicine & Surgery > 48h



65 %

↗ in progress

▶ This indicator measures **the quality of the liaison letter, given to the patient at discharge** and which is addressed to their GP. It is a key element in ensuring good coordination between the hospital and the town.

### Infection risk control



99,3 %

↗ in progress

▶ This indicator measures **the consumption of hydro-alcoholic solutions**, an indirect marker of good hand hygiene practices. This reduces healthcare-associated infections and the spread of antibiotic-resistant bacteria.

### Outpatient Surgery



93 %

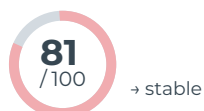
↗ in progress

▶ This indicator measures **the quality of the liaison letter, given to the patient at discharge** and which is addressed to their GP. It is a key element in ensuring good coordination between the hospital and the city.

## QUALITY AND SAFETY OF CARE INDICATORS ON THE SAINT-HERBLAIN SITE

### Satisfaction of hospitalised patients

#### Medicine, Surgery, Obstetrics (MCO)



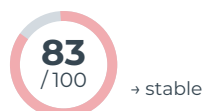
→ stable



84,1 %

- ▶ ICO patients gave a rating of **81/100 for the quality of care** in the MCO Hospitalisation category (202 evaluations)
- ▶ **84.1 % of hospitalised patients would definitely recommend ICO** (202 evaluations)

#### Day surgery (DS)



→ stable



89,9 %

- ▶ ICO patients gave a rating of **83/100 for quality of care** in the outpatient surgery category (356 evaluations)
- ▶ **89.9 % of hospitalised patients would definitely recommend ICO** (356 evaluations)

### Pain Management

#### Medicine & Surgery > 48h



100 %

→ in progress

- ▶ For **100% of patients** who were hospitalized for more than 48 hours, **pain was evaluated** and, if necessary, managed.

### Coordination Hospital - town

#### Médecine & Chirurgie > 48h



68 %

→ in progress

- ▶ This indicator measures **the quality of the liaison letter, given to the patient at discharge** and which is addressed to their GP. It is a key element in ensuring good coordination between the hospital and the town.

#### Outpatient Surgery



86 %

→ in progress

- ▶ This indicator measures **the quality of the liaison letter, given to the patient at discharge** and which is addressed to their GP. It is a key element in ensuring good coordination between the hospital and the town.

### Infection risk control

#### Medicine & Surgery > 48h



61,1 %

→ in progress

- ▶ This overall score reflects the **implementation of additional precautions and the information given to patients with, in particular antibiotic resistant bacteria**, with the objective of limiting their spread.



100 %

→ in progress

- ▶ This indicator measures the percentage of patients carrying or infected with a microorganism which require **Complimentary Contact precautions** for which there is evidence of **effective implementation**.



61,1 %

→ in progress

- ▶ This indicator measured the percentage of patients carrying or infected with a microorganism which require **Complimentary contact precautions** for which there is evidence that **information has been given to the patient or their entourage**.



103,1 %

→ in progress

- ▶ This indicator measures the **consumption of hydro-alcoholic solutions**, an indirect marker of good hand hygiene practices. This reduces healthcare-associated infections and the spread of antibiotic-resistant bacteria.

# PATRONAGE CONFIRMS ITS TERRITORIAL ROOTS



The Vendée Association for the Fight against Cancer on an immersive visit to ICO Saint-Herblain. The teams welcomed the volunteers to share the daily life of the establishment and to make the association's donations tangible.

As the Pays de la Loire's Cancer Center, ICO was able to count on the loyalty and commitment of the region's patrons in 2023. From Vendée to Mayenne, via Loire-Atlantique and Maine-et-Loire, more than 50 solidarity events took place for the benefit of our establishment. Companies, associations and individual donors in the Loire Valley have once again mobilised to support the institute by financing research and care projects.

At ICO we benefit from the generosity of **3 types de donors**:



**2 444 INDIVIDUALS**

donated **363 111 €** with an average donation of 148,57 €



**72 ASSOCIATIONS**

supported ICO by raising a total of **435 984,97 €**

**13** associations and **167 852,97 €** more than in 2022: the strength of volunteers for the benefit of patients is confirmed.



**81 COMPANIES**

raised **255 591 €** in 2023.

## 2023 Figures

**1 054 687,07 €**

**of donations** (+1 % compared to 2022)

**of which**

**216 551 €**

**online donations** (+60 % compared to 2022)

**1 372 795,66 €**

**bequests and life insurances** (- 34 % compared to 2022)



## DONATIONS IN ACTION

Donors continued to mobilise with clear impact, for the benefit of patients. This year, donations were allocated to research, care, the purchase of equipment and for the first year, to support the teams. Here are a few examples:

- ▶ Purchase of a **NEOPROBE Bluetooth probe**, led by Dr Céline RENAUDEAU. This equipment enables the intraoperative detection of tumour cells, which provides a way to improve surgical oncology outcomes.
- ▶ The PHARE BREAST **research project**, led by Dr Caroline Abadie, in collaboration with the Department of Health Promotion and Prevention. The aim is to identify the genetic risk of breast cancer in order to set up increased surveillance in women at very high risk, in order to allow early detection.
- ▶ **Improving the care of young patients**, a project led by Marie Bizouarn and her team. The aim was to receive young patients in the best possible way during radiotherapy treatments. The generosity of donors has made it possible to i.) redecorate the waiting

room ii.) buy games to reduce anxiety iii.) illustrate an educational welcome booklet and iv.) to inform through play thanks to the purchase of Playmobil.

- ▶ **Support for the teams**, backed by the sponsorship department and encouraged by the company Oh my Brunch. To close and celebrate the end of the "Kiplin" connected steps challenge, our employees shared a moment of conviviality on the 2 sites, via a brunch.

In 2023,

**89 %**

**of donations were allocated to ICO's missions of general interest.**

## 31 PINK DAYS

Every year, the month of October is adorned in pink for the fight against breast cancer. 31 days during which associations, companies and individuals are mobilised to raise awareness of screening and to raise funds.

In 2023, for the 1<sup>st</sup> time, ICO wanted to join forces with committed patrons and donors to finance a new senograph mammography system. This community of more than 50 sponsors have been involved through numerous events throughout the Pays de la Loire.

At the same time, ICO and corporate employees took up the "Kiplin" connected steps challenge. A fun game mixing prevention and physical activity. Over 15 days, 270 people covered 22,117 km. A great success!



## HIGHLIGHTING...

### ... A territory supporting us.

All year round, we are present with our patrons to carry out the establishment's priority projects together. We are committed to being in the region, with the general public to prove that every gesture counts in the fight against cancer.

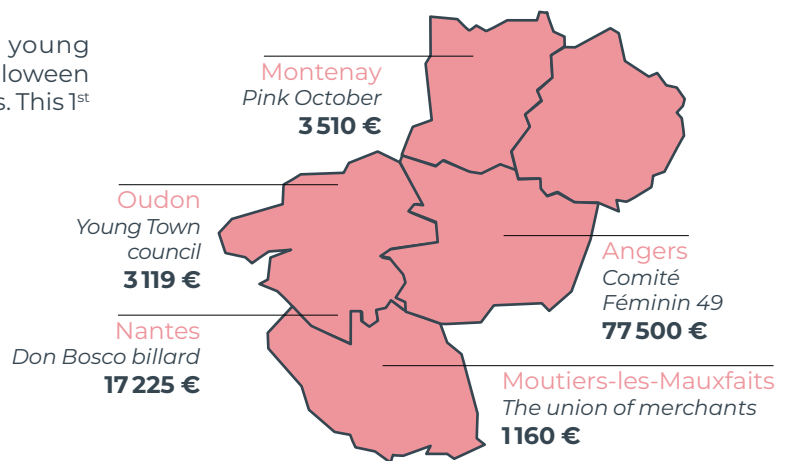
At Montenay, a group of Anglo-Saxon friends mobilized to raise support for one of them. Pink castle, choir, buffet, games... This festive and daring 1st edition raised €3,510.

In the municipality of Oudon, the young municipal councillors organised a Halloween village for the benefit of young patients. This 1<sup>st</sup> successful collection reached €3,119.

In Nantes, over 1 month, Diane Ausseur and her billiard club, Don Bosco, organised a sporting event which was widely relayed in the media. A real success for "Billiards for Them" which raised €17,225 for NEOPROBE.

In the Vendée, it was the shopkeepers of Moutiers-les-Mauxfaits who mobilised. Each of them donated part of their profits during October to support the fight against women's cancers. A collective action: €1,160 was donated.

Loyal for many years, the Comité Féminin 49 organized its traditional Pink October event. To talk about screening, ICO teams met with the general public.



## THANK YOU

*In 2023, ICO was once again able to count on the loyal support of its donors. Sharing, solidarity and benevolence are more essential than ever in the fight against disease. Thanks to the commitment of each and every one of us, our institute can move forward with concrete projects that are useful to patients.*

*ICO thanks each donor and each sponsor for their generosity, which is useful to patients in the region.*

*Together, let's continue to join forces against cancer.*

A dedicated team, a single address:  
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