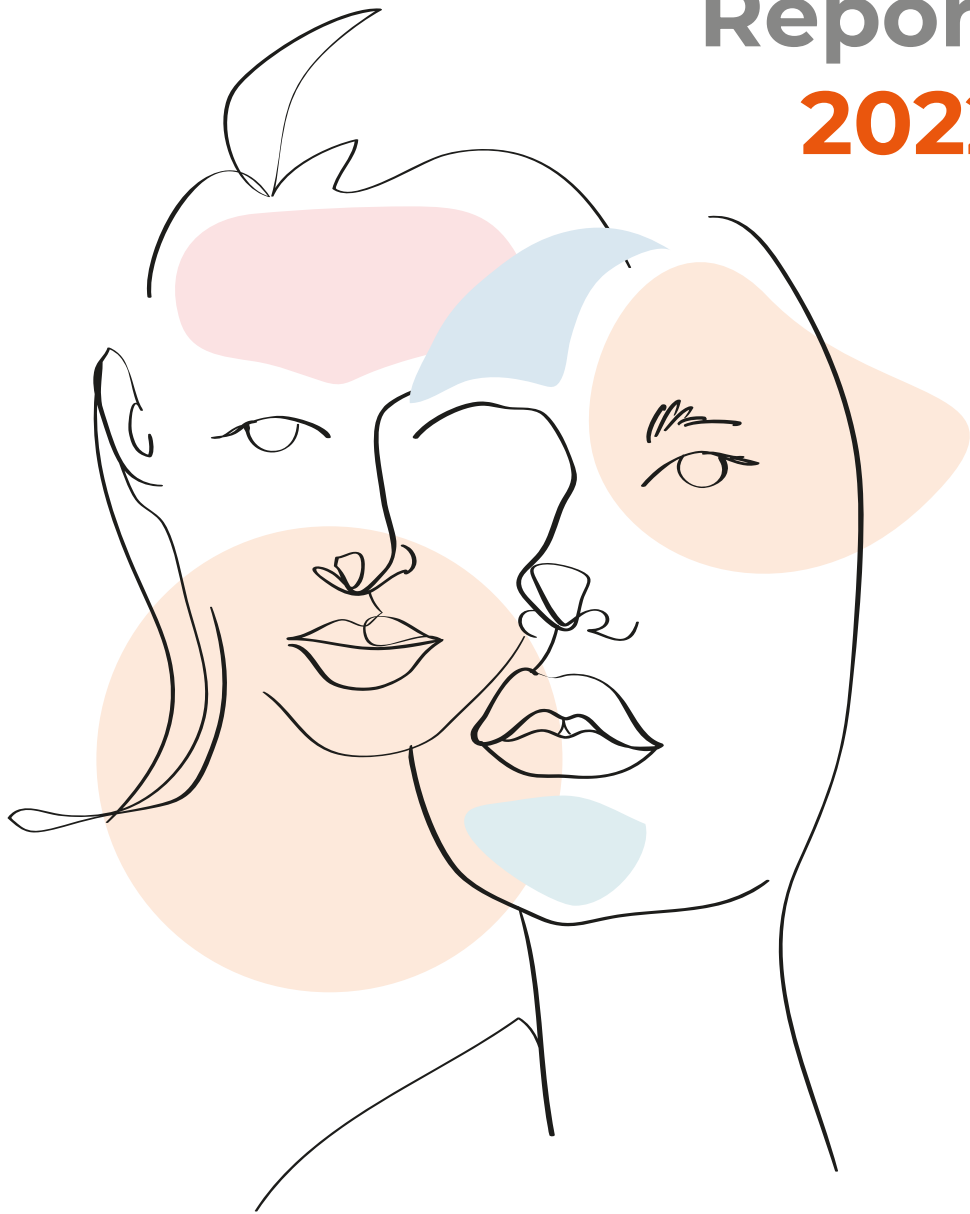


Activity Report 2022



 Institut de
Cancérologie
de l'Ouest*

 unicancer

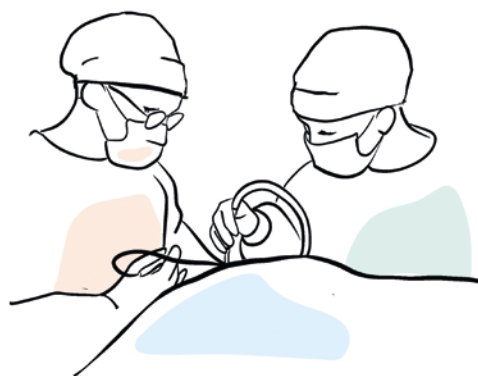
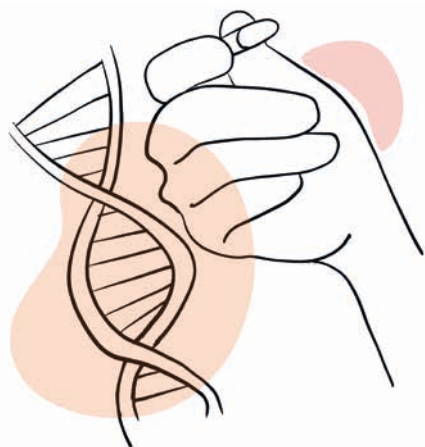
PAYS DE LA LOIRE

 OECI
COMPREHENSIVE
Cancer Centre

* The Western Institute of Cancerology

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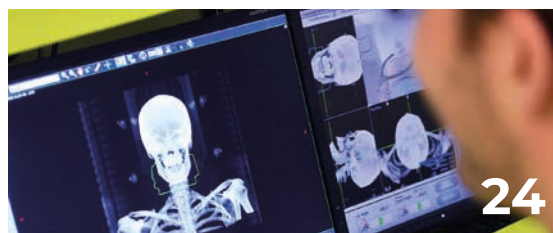


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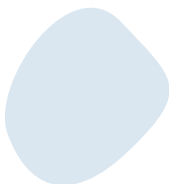
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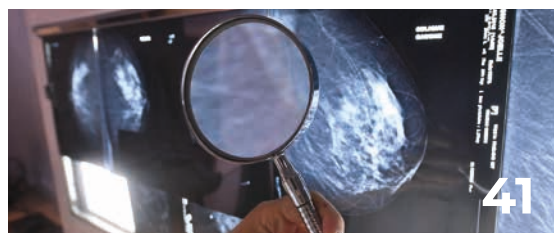
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EDITORIAL



*Mme Viviane JOALLAND, ICO's Assistant General Manager
Prof. Mario CAMPONE, ICO's General Manager*

In 2022, the excellence of both our care and research services for patients, was recognised through a new European Label and the attribution of new national research programs.

The new European Accreditation of Excellence was delivered by the OECE (The Organisation of European Cancer Institutes). It signifies that ICO is recognised for its core missions which are care, research, teaching, and prevention, according to the European criteria for quality and efficiency. This achievement is the result of a collective effort and is a recognition of the high level of engagement provided by all of our staff.

In the research field, we have been selected for a number of ambitious projects. Notably, a collaboration with the INCa (The French National Institute of Cancer) for setting up «Quaternary prevention in medical oncology», (bi-site) and the DESTHERS project «DESTHERS: Therapeutic de-escalation in Breast Reconstruction» at the Angers site, and we also won a call for tender related to Massive Data Analysis, Unibase, started by the Health data hub via the ISIS project and the Nantes Metropole Health Innovation fund. In addition, our SIRIC ILIAD was confirmed at the end of INCa's call for projects. The excellence of our research at Nantes and Angers has been recognised once again, which is a real victory.

Related to our Persée Foundation, several new benefactors have pledged support for ICO: Fondation Groupama, Manpower, Pantacom, Ficamex, Atlantis le Centre etc. A large campaign with the Groupe ERAM and its brands was undertaken in the month of October.

2022 was also rich in building projects. At Angers, we started an extension of our research laboratories, and in the spring, we acquired the grounds on which our Saint-Herblain establishment is situated, from the CHU at Nantes. Important advances were also made for the AmbCiOn project, thanks to collaboration and participation with the services, between June and October which aimed to choose the most pertinent project with respect to our five main objectives: CAPACITY (capacity adapted to the predicted activity over the next two decades) + MODERNISATION (modernisation of the Out-Patient Hospital in the new building) + QUALITY OF LIFE AT THE WORKPLACE (Thoughtful conception for optimal working conditions) + PATIENT PATHWAYS + EVOLUTIVE (Back-up space and evolutive locals that can easily adapt to future challenges and care needs).

And 2022 was of course largely dedicated to the preparation of our new 2023-2027 Establishment Project, entitled: « From a Care Pathway to a Life Pathway», with almost 200 people getting involved (employees and partners), as well as General Cancer Assemblies which were organised with the general public in order to allow health democracy and receive propositions for future improvements of our healthcare.

It's thanks to this collective mobilisation that we will be able to serenely kick-off our major projects for the next five years.

THE WESTERN INSTITUTE OF CANCEROLOGY: A CENTER OF EXPERTISE

ICO, a Center Fighting Against Cancer, rich from almost one hundred years of experience, welcomes close to 49 000 patients each year at its two establishments in the Pays de la Loire, at Angers (headquarters) and at Saint-Herblain.

CUTTING-EDGE MEDICAL CARE AT THE SERVICE OF PATIENTS: specialised in Cancerology, ICO's professionals accompany patients at all stages of their healthcare program, in an innovative, multidisciplinary and personalised way. From rapid diagnosis to surgery, chemotherapy, and radiotherapy, the care also extends to supportive care, which is highly developed at our Center.

THE INTEGRATION OF CARE, RESEARCH AND INNOVATION: Research activities, which are a specific mission at ICO, are undertaken from the fundamental level all the way through to clinical trials, passing via translational research. This research is conducted in all Cancerology disciplines: medical oncology, radiotherapy, surgery, anaesthesia, nuclear medicine, medical imagery, support care, and human sciences. To be cared for at ICO, gives privileged access to cutting-edge clinical trials in Cancerology.

The Innovation Centre, created in 2021, is dedicated to accompanying innovation in oncology, and thus supports internal and external projects, from the idea stage, all the way to operational deployment of the innovation.

Via its teaching mission and its university expertise, our establishment participates in the training of tomorrow's Cancerology professionals.

Strengthened by its 4 missions – **Prevention, Care, Research and Teaching** – ICO offers broad, state-of-the-art expertise that is exclusively dedicated to Cancerology.



Center Fighting Against Cancer in the provinces, in terms of patient numbers

48 357

Patients welcomed in 2022

ADMINISTRATIVE COUNCIL

President ex officio

Mr. Pierre Ory
Prefect of the Maine-et-Loire

Ex-officio Members

Professor Pascale Jolliet
Dean of the Medicine and Medical Techniques Training and Research Unit -
Faculty of Medicine, Nantes
Mrs. Cécile Jaglin-Grimonprez
General Manager of the University Hospital (CHU), Angers

Representative of INCa, Scientific Personality

Mr. Philippe Juin
Director of Recherche INSERM – CRCNA UR 892

Representative of the Regional Economic Social and Environmental Council (CESER)

Mr. Jacques Bodreau
President of CESER

Qualified Persons

Mr. Bertrand Affilé
Mayor of Saint-Herblain
Vice-President of Nantes Métropole

Mr. Simon Gigan
Town Councillor, Angers

Mr. Antoine Chereau
Vice-President of the Regional Council of the Pays-de-la-Loire

Mr. le Docteur Grégoire Hinzelin
Freelance Neurologist

Representatives of ICO's Medical Conference

Dr. Jean-Sébastien Frenel
President of the Medical Conference

Dr. Rémy Delva
Vice-President of the Medical Conference

Representatives of the personnel

Mrs. Geneviève Perrocheau
Representative of the management

Mrs. Lydie Le Guillou
Representative of non-management personnel

Representatives of patients

Mrs. Fabienne Renaud
National Secretary of EUROPA DONNA

Mr. Paul Iogna-Prat
Representative of the Maine-et-Loire Committee of the Ligue against Cancer

Advisory Members

Professor Mario Campone
General Manager, ICO

Mr. Jean-Jacques Coiplet
General Manager ARS, Pays de la Loire

Mrs. Patricia Salomon
Territorial Director Loire-Atlantique - ARS

Mrs. Isabelle Monnier
Territorial Director Maine et Loire - ARS

Mrs. Viviane Joalland
Assistant General Manager, ICO

Occasional guests

Mr. Nicolas Bukovec
Financial Affairs Manager, ICO

Mrs. Catherine Romefort
Assistant Financial Affairs Manager,
Director of Management Control

Dr. Olivier Guérin
Manager of the Medical Information Department, ICO

ORGANISATIONAL CHART

MANAGEMENT AND MEDICAL COMMITTEES



GENERAL MANAGEMENT

Pr. Mario Campone, General Manager
Viviane Joalland, Assistant General Manager

MEDICAL DIRECTOR SAINT-HERBLAIN
Dr. M. Le Blanc-Onfroy

Medical Oncology and Supportive Care:
 Dr. H. Senellart

Surgical Oncology: Dr. F. Dumont

Anaesthesia: Dr. D. Labbe

Radiotherapy: Dr. A. Mervoyer

Nuclear Medicine: Dr. C. Rousseau

Medical Imaging: Dr. C. Labbe

Medical Physics: G. Delpon

Anatomy and pathological cytology:
 Dr. V. Verrière

Medical Biology: Dr. A. Lefrançois

MEDICAL DIRECTOR ANGERS
Dr. N. Lebrech

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 TRANSNATIONAL 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

IN-PATIENT PHARMACY
 Managing Pharmacist: *Dr C. Devys*
 Pharmacist co-ordinator: *Dr D. Betton*

MANAGEMENT OF INFECTIOUS RISKS RELATED TO CARE
 Practicing Hygienist: *Dr. S. Savouroux*

HIGH SCHOOL TEACHING IN CANCEROLOGY (HECTOR)
Dr. V. Barbarot

THERAPEUTIC EDUCATION
Dr. V. Berger

IT HAPPENED IN 2022



The Healthcare Identity Movement

The information system evolved in order to better serve patients. ICO was equipped with a system that is compatible with the National system for Health Identification.

A film by François Gauducheau was aired on France 3, entitled: « Facing the Dragon »

A tribute to the carers at ICO.

Cybersecurity

In response to cyber-menaces, ICO riposted. The vigilance of ICO's employees was requested in order to avoid the pitfalls of digital technology.



The States General of Cancer

Two advances for the democracy of Health Care. ICO gave the floor to patients, their health carers and to all citizens who wished to give their opinion on cancer care.



The Establishment Project

2022 was a year of reflection, during which the main orientations of the 2023-2027 Establishment Project were written. Working Groups met regularly to accomplish this.



Partnership in Cardio-oncology Tietronix - ICO

The junction between sectors and different expertise gave rise to an innovative solution for cardiological surveillance and diagnosis for astronauts on missions.



Gala dinner

Fund raising and developing the reputation of ICO. Over 600 guests were present at Saint-Herblain for our gala dinner hosted by award-winning chefs from the Loire-Atlantique.



Arts month: exhibition

During treatment, at the moment of announcement, or after being cured, art has an important place for patients. Artistic talent is sometimes present prior to falling ill, but it is often revealed during cancer care, and this artistic expression gives patients a relaxing time, which is out of time and space.

UNIBASE – ISIS

The first database dedicated to fertility after cancer, in France. This database allows the risk of infertility after breast cancer to be evaluated in women between the ages of 18 and 41 years old. The ultimate aim is to better understand how to maintain fertility in breast cancer patients.

NAOGEN

An industrial partnership profiting Nuclear Medicine. The expertise of NAOGEN PHARMA with respect to innovative radiopharmaceutical products based on Rubidium 82, could soon find an application in cancerology.



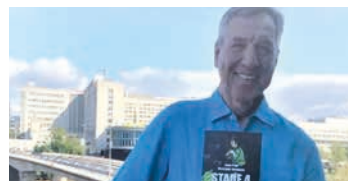
Culture & Health

A third season co-financed by the ARS, the Regional Council and the Regional Directorate of Cultural Affairs. Based on personal preference, patients had access to workshops on theatrical and corporal expression, on vocal and musical improvisation, and on creative expression.



Conferences on kidney and ovary cancer, and epigenetics

Thematic discussion sessions were proposed to patients, as well as to anyone interested. In addition to providing information about the illnesses and their care, the sessions gave the participants an opportunity to find the answers to any questions that they had.



Jean-Paul Bertrand-Demanès : a new ambassador for ICO

The legendary goalkeeper of FC Nantes between 1969 and 1987, Jean-Paul Bertrand-Demanès, wrote «Stage 4: the match of my life» for the profit of ICO, in which he describes his fight against cancer. le match de ma vie » au profit de l'ICO, dans lequel il relate son combat contre le cancer.



The World Day against pain

For the first time, a life-size survey was conducted to measure the quality of pain management. 364 patients and 94 professionals took part in the survey.

IT HAPPENED IN 2022



ERAM

Ten brands from the ERAM group organised a “Solidary Rounding-up exercise” at their cash tills during the month of October. Just under 110,000 euros was collected towards research on cancer prevention.



Taste week

A quality diet is a key requirement in the fight against cancer. At Angers, an awareness campaign was undertaken destined for patients and professionals.



Research

Dr. François-Xavier Piloquet won a PHRC-K call for projects, for CAPNEUCHIM (treatment of drug-induced peripheral neuropathy) and Céline Thomas obtained a PHRIP for her project PREPAC (Prevention of care worker burnout in Cancerology).



Pink wave

Physical activity happens all year at ICO. The race organised by Odyssea and the Women's Committee 49 once again demonstrated the public's appetite for activities that combine sport and solidarity.



The ARS Pays de la Loire gives a “thumbs up” for the installation of two radiotherapy accelerators at Cholet. The authorisation application dossier was submitted by ICO, by associating the Private Hospital of Confluent, at the request of the ARS. This new radiotherapy equipment will reinforce the cancerology care offer proposed to residents of the Cholet catchment area.



Renewal of the international certification NOVALIS CERTIFIED ©

An assurance quality program which reinforces the quality of patient care, as well as its organisation, and the level of training and the security.

LET'S GET TOGETHER



The **2023-2027 Establishment Project** at Terra Botanica on the 28th of February.



Continuation of medical seminars, at Ancenis, on the 16th of November, with a session dedicated to patient pathways.



AFTER THE COVID YEARS, 2022 FINALLY ALLOWED EMPLOYEES TO MEET!

Projection of a film by François Gauducheau, entitled: « Facing the Dragon », A tribute to ICO's care workers, shown at the Concorde Cinema at Saint-Herblain and in the amphitheatre at ICO Angers.



Throughout the year, **bi-site team meetings**, brought employees together for the Establishment Project.



Let's walk? The Kiplin challenge clocked up almost 25 million steps!



Mobilisation against Breast and Prostate cancer, all in colour for the events of Pink October and November.

THEY'RE TALKING ABOUT US



ICO has a strong presence on social networks and in the press.



343 956

Facebook Covers



33 412

Instagram Covers



347 541

Organic Impressions
Linkedin



10 830

Twitter Impressions



67 742

YouTube views



185

Articles mentioning ICO: 3 articles a week on average over the year.

Fertilité post-cancer : du nouveau à l'Ouest

L'Institut de cancérologie lance une première base de données en France. 5 000 à 6 000 femmes par an sont concernées.

Avec le recul de l'âge de la première grossesse, de plus en plus de femmes françaises auront un cancer avant d'avoir eu leur premier enfant. Et cela, d'autant plus que l'incidence de cette maladie est en augmentation : chaque année, environ 5 000 à 6 000 femmes de moins de 45 ans sont ainsi diagnostiquées.

Ce constat est dénoté par l'Institut de cancérologie de l'Ouest (ICO) à la tête de deux établissements dans les Pays de la Loire, à Angers (son siège social) et à Saint-Herblain, près de Nantes. Précédemment, deux spécialistes de l'ICO, l'oncologue Marie Robert et l'oncologue gynécologue Aletta Dezallus, viennent de lancer un projet important baptisé Isis.



L'Institut de cancérologie de l'Ouest est à la tête de deux établissements, à Angers et près de Nantes.

Préserver la fertilité des femmes touchées

Celui-ci est l'aboutissement d'un appel à manifestation d'intérêt lancé en novembre 2021 par Unicancer (réseau hospitalier français dédié à 100% à la lutte contre le cancer) et Health data hub (groupement d'intérêt public qui associe par exemple le Cnam ou le CNRS). Isis, comme infertilité secondaire aux traitements du cancer du sein, bénéficiera donc de financements dédiés.

L'objectif principal d'Isis est d'évaluer le risque d'infertilité après un cancer du sein de stade 1 à 3 chez les femmes âgées de 18 à 41 ans. Bénéfices attendus ? La prise en compte de l'impact des nouvelles thérapies sur la fertilité, les conséquences de la prise des traitements chez les enfants à naître, etc.

L'étude nécessite un grand nombre de patients, pour un suivi à long terme. Trois centres de lutte contre le cancer participeront à ce projet avec l'ICO : le centre Léon-Bérard à Lyon ; l'Institut Curie à Paris, et le centre Oscar-Lambert à Lille. Lu bo est ce do

RECHERCHE

L'ICO entre au capital de Naogen Pharma



L'Institut de cancérologie de l'Ouest (ICO).

L'Institut de cancérologie de l'Ouest (ICO), centre expert de lutte contre le cancer basé à Angers et Nantes / Saint-Herblain, vient d'entrer, par l'intermédiaire de sa filiale ICO Innov, SASU détenue à 100%, au capital de Naogen Pharma, une biotech basée à Saint-Herblain. Créée en 2016 par Jean-François Chatal, pionnier de la médecine nucléaire, qui a travaillé la majeure partie de sa vie dans ce secteur, Naogen Pharma, présidée depuis mars 2020 par Sylvain Faucher, développe des solutions radiopharmaceutiques innovantes en imagerie moléculaire non invasive pour les services de médecine nucléaire des hôpitaux. Or, l'expertise de Naogen Pharma en matière de produits radiopharmaceutiques innovants, à base de Rubidium 82, pourrait prochainement trouver une application en cancérologie.

SANTÉ

L'Institut de cancérologie de l'Ouest passe un cap avec ICO Innov

La recherche et l'innovation sont au cœur de l'ADN de l'Institut de cancérologie de l'Ouest (sur les sites d'Angers et de Saint-Herblain). En 2022, un cap est franchi avec la filiale ICO Innov.

« À peine créée, cette filiale concrétise un premier rapprochement porteur avec Naogen Pharma, dans le domaine de la médecine nucléaire », explique-t-on au sein de l'ICO.

Située à Saint-Herblain, Naogen Pharma a été créée en 2016 par Jean-François Chatal. « C'est un pionnier de la médecine nucléaire. Naogen Pharma, présidée depuis mars 2020 par Sylvain Faucher, développe des solutions radiopharmaceutiques innovantes en imagerie moléculaire non invasive pour les services de médecine nucléaire des hôpitaux ».

Perfusion du myocarde

La biotech développe l'utilisation du Rubidium-82 (Rb-82) en médecine nucléaire TEP (Tomographie par émission de positons). Alors que cette pratique est déjà utilisée aux États-Unis depuis 50 ans, la biotech bénéficie de l'utilisation émergente de cette technologie en Europe.

« L'expertise de Naogen Pharma



L'Institut de cancérologie de l'Ouest à Saint-Herblain (Loire-Atlantique).

repose sur le développement d'un générateur de Rubidium-82, Rubiger®, associé à Rubijet®, injecteur automatique, développé par Lerner Pax, basée à La Chapelle-sur-Orléans.

Ces produits sont développés notamment pour évaluer une anomalie de la perfusion du myocarde.

Ces produits sont actuellement en développement et ne disposent pas encore d'autorisation de mise sur le marché.

« Dès lors au domaine de la cardiologie, ils pourront à l'avenir gagner la charnière oncologie ».

THE MEETING AND INFORMATION SPACES

The ERI© – Espace de Rencontres et d’Information – (en. Meeting and Information Spaces) – at Angers and Saint- Herblain welcome patients, helpers and professionals, with or without an appointment.

The spaces are reserved for listening and ensure that exactly the right information is given, and that the visitor is correctly informed about his/her healthcare path, or his/her questions. In 2022, 1,958 people were helped at Angers (+12 %) and 2,339 (+4 %) at Saint-Herblain. The ERI propose different types of workshops:



WORKSHOPS TO TAKE CARE OF THE BODY:

- Hand and nail care
- Drawing eyebrows
- Hair advice; Scarf tying
- Skin care / Make-up
- Relaxation / respiration / sophrology
- Sexology / Pilates
- Patient-helpers, Duo hand massage

WORKSHOPS TO PAMPER THE MIND:

- Creation of a heart-shaped cushion: **20 patients**
- Drawing workshop with a live model: **6 sessions with patients**

The Culture and Health program benefits from the support of the Region, the Pays de la Loire DRAC and the ARS. The following activities took place:

- Vocal experimentation and improvised singing: **two sessions of 6 workshops each of 7 patients**
- Corporeal and theatrical expression: **26 participants for 6 to 10 sessions**
- Creative expression « Playing with words and colours »: **66 people**
- Stop Motion Workshop – making videos: **14 people**

And many thematic information days organised on each site.



L'ICO IN NUMBERS

PEOPLE

ICO, is men and women, engaged every day to give oncology care to patients from our region.

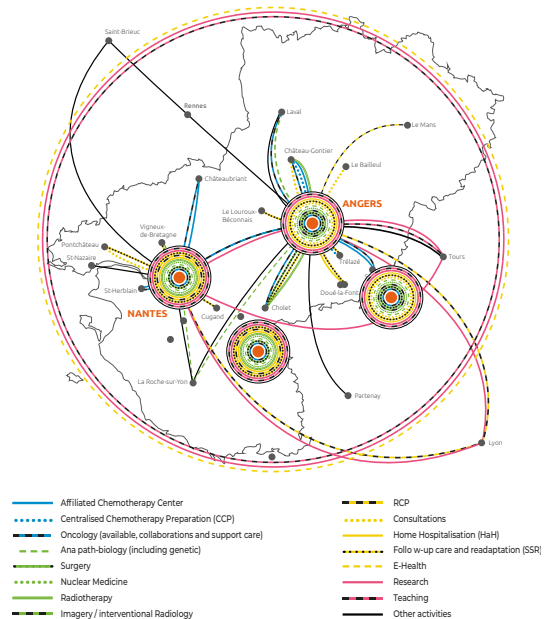
1 514
PROFESSIONALS



+ de
200
doctors

A DYNAMIC ECOSYSTEM

ICO, is the keystone of a rich and dynamic ecosystem providing state-of-the-art oncology care.



ICO, is a Center of expertise in cancerology, with significant activity.

CARE

92 141 Radiotherapy sessions
41 660 Chemotherapy sessions
47 513 Medical imaging sessions
5 838 Surgical stays and site implantations
16 503 Nuclear medicine sessions

RESEARCH

270 on-going Clinical Trials
31 ICO promoted projects.
1 390 patients included (investigation)
1 215 new patients included

FINANCIAL AFFAIRS

The Western Institute of Cancerology (ICO) finished 2022 with a positive financial result of + 1 691 274 €, amid a background of inflationary pressure.

Despite headwinds, our positive results remain solid. The execution of ICO's Real Estate Master Plan in the years to come (new building at Saint-Herblain, creation of a radiotherapy center at Cholet, extension of the research facilities) requires that this level of results must be maintained.

AT THE CLOSE OF THE FINANCIAL EXERCISE, THE REVENUE STRUCTURE WAS AS FOLLOWS:

114 455 273 €

(49.3 %) came from T2A products linked to our activities,

54 450 662 €

(23.4 %) came from additionally funded drugs and implantable medical devices,

23 271 043 €

(10 %) came from the MIGAC and FIR endowments,

4 173 047 €

(1.8 %) came from Title II revenues.

35 937 127 €

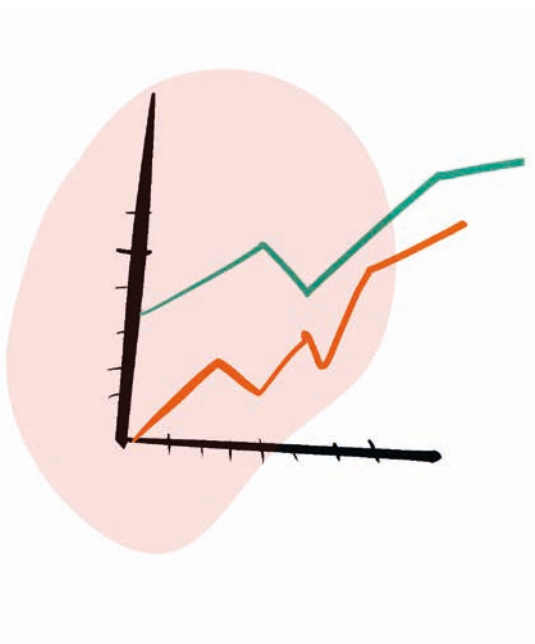
(15.5 %) came from other products

DONATIONS

In 2022, the total amount of donations received was **734 496 €**

LEGACIES AND LIFE INSURANCES

In 2022, ICO received legacies amounting to **2 098 234 €**



HUMAN RESOURCES

In the current social context, in which relationships to work are changing, and with heavy strain on the available labour market, we achieved a strong increase in recruitment (147 recruitments for permanent posts in 2022, giving a net increase of more than 50 FTEs).

TOTAL HEADCOUNT, 31ST DECEMBER

	2022		2021		2020		EVOLUTION 2022/2021		EVOLUTION 2021/2020	
	Real	FTE	Real	FTE	Real	FTE	Real	FTE	Real	FTE
Non-manager	1124	1034,85	1104	1012,86	1067	976,91	1,81 %	2,17 %	3,47 %	3,68 %
Employes	96	88,3	65	60,35	59	54,15	47,69 %	46,31 %	10,17 %	11,45 %
Technician & Supervisors	1028	946,55	1038	952,51	1008	922,746	-0,96 %	-0,63 %	2,98 %	3,23 %
Managers	168	157,05	153	140,35	143	129,65	9,80 %	11,90 %	6,99 %	8,25 %
Practitioners	222	190,21	209	177,50	201	169,17	6,22 %	7,16 %	3,98 %	4,92 %
TOTAL	1514	1382,11	1466	1330,71	1411	1275,73	3,27 %	3,86 %	3,90%	4,31%

We continued our dynamic growth in proficiencies with a major investment in the development of competences, which was greater than our regulatory obligation, in the context of a multi-year plan co-written by the department heads, the Care Management group and Hector's Scientific management.

Our QVCT (en. Quality of life and Conditions at Work) policy was boosted: The QVCT steering committee was renewed. Groundwork was undertaken aimed at refining the QVCT policies, via a survey of the social climate. An initiative

enabling social assistance for employees was set up.

The modernisation of the HR information system was continued. Throughout 2022, we stabilised the GTA tool (related to Management of Time and Activities) which was deployed at the end of 2021. In parallel, preparatory work for the deployment of a payroll tool for administrative management of employees was finalised.

UNIVERSITY POSTS

Professor-Partitionner:

Mario Campone
Jean-Marie Bard
Stéphane Supiot
Jean-Marc Classe
Dominique Heymann
Michel Chérel

Consultants, Two retired Professor- Practitioners:

Jean-Luc Harousseau
et Jean-Yves Douillard

Lecturer-Practitioner:

François Bocquet
Olivier Capitain
Caroline Rousseau

Heads of Clinic:

Tanguy Perennec
Pierre Kubicek

University Professors :

Alain Morel
Michel Bertrand
Martine Bellanger

Lecturers:

Christine Bobin-Dubigeon

111

trainee doctors and
pharmacists

274

Hospital student doctors and
pharmacists were welcomed
and trained a ICO during the
year.

USER RELATIONS

The Users' Commission (fr. Commission des Usagers, CdU) has a mission to safeguard the rights of users and to contribute to the improvement of the quality of the welcome given to patients and their relatives, as well as improving patient care.

Two representatives of the users, that come from voluntary associations are officially appointed by ICO. They are present on each site and are active members of the Users' Commission (CdU).

Since 2018, the CdU also involves ICO's « Collectif des Usagers », an association that represents ICO's patients on each site, and who participate regularly in the CdU as an invited member.

In view of the decree 2016-726 of 1st June 2016, the CdU can propose a project from the users with respect to further development of the Establishment Project; thus, the CdU is behind the implementation of the « Patient Resource » initiative at ICO's Angers site, since June 2017 and on the Saint-Herblain site since November 2019. These « Patient Resources», are people that

have personally had a cancer themselves, who actively listen to patients that wish to share their experiences, and act as a "go-between" with the caregivers. Patients can also be accompanied by a representative member of the CdU during a meeting with a medical mediator. Each year the CdU gathers observations from the voluntary associations that have been officially appointed by ICO.

It participated in drawing up ICO's 2023-2027 Establishment Project.

The Commission works in synergy with the institution and the committees that are engaged in improving the quality of care and the well-being of ICO's patients.

MEETINGS HELD IN THE YEAR:

4 plenary sessions

MEETINGS HELD TO EXAMINE COMPLAINTS AND RECLAMATIONS:

4 plenary sessions

MEETINGS HELD WITH THE AIM OF IMPROVING THE QUALITY OF CARE:

4 plenary sessions

MEETINGS HELD TO WRITE THE ANNUAL REPORT

1 plenary session



L'ICO IS A MEMBER OF THE UNICANCER NETWORK



Unicancer is the only national hospital federation 100 % dedicated to the fight against cancer. Via its Sanitary Cooperation Group (SCG), Unicancer brings together 19 private, not-for-profit, health establishments: the 18 French Centers Fighting against Cancer and an affiliated member, spread over 21 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

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



1^{er}

academic promotor of Cancerology Clinical Trials in Europe – With close to 7 654 patients included, in more than 700 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

“

At ICO we receive very professional, high-quality care, which must be commended, in addition to great kindness from the care givers.

In my view, rehabilitation care, is extremely important because it helps ensure that we can cope with the mental stress. I really received a lot of care at ICO.

”

A patient cared for at ICO.

Within the framework of building its next Establishment Project for 2023- 2027, ICO has reinforced the coordination of the patient pathway (also known as « patient itineraries ») as the pillar of the organisation of care.

In November 2022, ICO began a large-scale concertation with all of its doctors and health managers on the thematic of patient pathways. This seminar allowed identification of the fields of work needed

to reinforce the existing coordination systems and to drive the quality of care via the patient itineraries. The help of our medical and paramedical assistants was also solicited so that they could share their vision and practices with respect to care coordination. This concertation will help ICO to transform the coordination of patient itineraries. A test phase will be started in early 2023 for several aspects of the care pathway.

CARDIOLOGY ACTIVITIES, ANGERS SITE

In 2022, at Angers, we proposed a new offer for out-patient care by developing a cardiology activity.



From August 2022 onwards, we started cardiology consultations at the consultation unit, which are conducted by a cardiologist. This specialist consultation is necessary for protocols involving pre-chemotherapy checks, and if needed, it helps follow-up of any chemotherapy induced toxicity, for hospitalised patients.

Then in December 2022, a multi-disciplinary care pathway involving the act of anaesthesia, nursing care and the cardiologist was put in place.

Several nurses from the consultation unit were trained for this new activity, allowing the development of new competences in order to assure quality care.

ACTIVITY REPORT OF THE CSIRMT 2022

As per the decree n° 2010-449 of 30th April 2010 relating to the commission of nursing care, re-education and medical techniques in public healthcare establishments, the **CSIRMT is consulted for advice on :**

- The nursing care project
- The general organisation of care, as well as the level of support for patients
- The policy for continued quality improvement, the safety of care and the management of risks linked to care
- The general aspects of reception and care of users

- Research and innovation in the field of care
- The policy of continued professional development

La CSIRMT is informed about:

- The Establishments Internal Regulations
- The implementation of the procedure foreseen by article L. 6146-2 (ICO is not concerned by this article)
- The Establishment's annual activity report

In 2022, the activities of the Care Commission were structured around six major areas:

Area	Work and Presentations
1 The project for nursing care, re-education and medical techniques proposed by the Care Director	<ul style="list-style-type: none"> • Renewal of the members of the CSIRMT • Renewal of the board members of the CSIRMT • Elections of the representatives of the sub-commissions
2 General organisation of nursing care, re-education, medical techniques, and patient support	<ul style="list-style-type: none"> • Presentation of stoma therapy (extension of the activity at Saint-Herblain to Angers) • Partnership Conventions with the University Hospitals (CHUs) at Angers and Nantes for cornea donations
3 The policy for continued quality improvement, the safety of care and the management of risks linked to care	<ul style="list-style-type: none"> • Audit of Patient trackers • Observatory Audit
4 The general aspects of reception and care of users	<ul style="list-style-type: none"> • Multi-disciplinary workshop on the « Establishment Project 2023-2027»: Patient Pathways
5 Research and innovation in the field of nursing care, re-education and medical technics.	<ul style="list-style-type: none"> • PHRIP Project implicating an IPA for care of Adolescents and Young Adults (AYA) (Common Project CHU/ICO) • Multi-disciplinary workshop on the «Establishment Project 2023-2027»: Paramedical Research
6 The policy of continued professional development	<ul style="list-style-type: none"> • Multi-disciplinary workshop on the «Establishment Project 2023-2027»: Evaluation of professional practices and competences. • Multi-disciplinary workshop on the «Establishment Project 2023-2027»: Tutoring paramedical students

REORGANISATION OF MEDICAL ONCOLOGY, **ANGERS SITE**

In 2022, the Medical Oncology Service put in place a think-tank on the whole of the Department, because the types of patients welcomed, the diversity of the scope (of treatments), the distribution of beds and places, and the work organisation, no longer corresponded to the needs of patients and professionals.

A project approach was taken and allowed the identification of 4 areas for improvement: the pathways, work organisation, communication and treating irritations.

This participative approach driven by the General Management and the Care Management, was led by the Medical Director, the framework coordinator, and the Health Managers. The approach allowed us to bring the paramedical and medical teams together.

All of the professionals became involved in this dynamic project, by job-role, but also transversally to allow better understanding of the work of each group in the service of patients.

Six months after the development of the new organisation, follow-up meetings revealed that today there is a feeling of satisfaction and efficiency, and that the project has re-given sense and coherence in the care that is dispensed.

Through a leverage effect, this reorganisation has allowed us to resolve some difficulties encountered in the out-patients hospital to schedule patients within a reasonable delay. And today, the delays are adapted to needs.

The creation of an Out-Patient's Pain and Care Support Unit (Unit 3) on the 4th floor permitted us to reduce the number of locations involved and coherence in the care pathway.

This project, which met several needs, served to clarify the pathway of patients needing chemotherapy.



THE « PATIENT RESOURCE » IN RADIOTHERAPY, SAINT-HERBLAIN SITE

The « Patient Resource » project, which we set up in association with the League against Cancer, started in April 2022.

Thanks to the motivation of a practitioner in the radiotherapy service and the participation of several other professionals, since April 2022 we have developed a « Patients Resource » offer in the radiotherapy service at the Saint-Herblain site. It consists of volunteers who participate in accompanying people currently suffering from cancer, by proposing one-to-one meetings in the service. The volunteers are people who have developed «**knowledge through experience**», and they play a major role in the improvement of the quality of the care pathway, because they are complimentary to the regular medical staff.

To become a « **Patient Resource** », the volunteer must meet several criteria such as:

- **Currently have cancer or have had cancer in the past**, and they must have enough “distance” with respect to their own illness.
- **Have practical knowledge** of a large panel of treatments.
- **Act strictly as a volunteer via an association** whose objective is the interest of people suffering from cancer.
- **Have passed a recruitment interview** with a psychologist from the League against Cancer.
- **Have completed a specific training on how to be a « Patient Resource ».**

Since starting the sessions, which are held twice a week, around twenty patients treated with radiotherapy have benefited from interaction with a « Patient Resource ». In view of the current need and the number of unattended sessions, an adjustment to one session per week has been proposed.

The sessions allowed a time for active listening and the transmission of experience which has benefited patients undergoing treatment by helping them to cope better with their care pathway and to take an active role in their care.

The project is undergoing evaluation, and the first “word-for-word” feedback from patients is striking:

« **Beyond my expectations** »

« **The real-life experience, told with humility, reinforced my hope of a cure** ».

« **I have always been positive and a fighter... now I’m pumped up to the nines** ».

Every patient that wishes to benefit from this service can either make contact with the reception desk at the radiotherapy service, talk to the staff in electro-radiology, or to the secretariat of the radiotherapy department.

LEARNING SITUATIONS FOR ANGERS' IFCS MANAGERIAL STUDENTS AT ICO

This project arose from the observation that it is often necessary to prepare managerial students better, before they start their jobs, as well as there being a need to foster collaboration around their shared management mission, in order to improve the competence of student HealthCare Managers.

This project was set up in partnership with the Care Management department at the University Hospital (CHU) at Angers, and the management of IFCS (The Institute for Training Health Managers (fr. Institut de Formation des Cadres de Santé)). It came about from a desire to set up to a solid training program to improve the readiness of managerial students for their future jobs.

Although the training for many Healthcare professions is increasingly being done at universities, effective professional training of future HealthCare Managers requires the development of certain competencies that can only be achieved in real-life situations.

To achieve this goal, we proposed to set up a program, within module 4 « management », that permits trainees to acquire experience in real-life managerial situations.

The program is based on the following principles:

- Situations, which are selected by active professionals in the field, are used as educational examples.
- Using the example situation, the trainees must build their knowledge via literature searches on the subject, interaction “on the ground” and/or via dialogue with the teachers.
- Self-analysis is encouraged.

To validate the module 4 « management » training, the trainees must make a presentation at IFCS, which is then repeated for the management of ICO.

In 2022, we trained six groups of three students who worked on learning situations to validate their module 4 « management » training.

We performed cross-party feedback, between the students and the healthcare managers that had hosted them, and the feedback was very positive. While some students found the training to be somewhat stressful, they all agreed that the training will be very useful for their future jobs.

This project using real-life learning situations will be carried on in 2023.





48 357

Patients received
in 2022

Numbers by activity (source DIM 2022)	2021	2022	2022/2021
Number of patients (outpatients and/or hospitalised)	47 767	48 357	1,2 %
Of which, new patients	12 762	13 852	8,5 %
Number of billable medical consultations	94 552	96 056	1,6 %
Number of patients hospitalised	13 755	14 097	2,5 %
Number of radiotherapy sessions	96 579	92 141	-4,6 %
Number of surgical stays and implantable venous port	5 777	5 838	1,1 %
% Outpatients	67,7 %	68,3 %	0,9 %
Number of chemotherapy sessions	41 152	41 660	1,2 %
Number of pain-relief sessions	5 125	5 243	2,3 %
Number of medical imaging appointments	49 708	47 513	-4,4 %
	1 280	1 218	-4,8 %
Conventional Radiology	4 344	3 136	-27,8 %
General Ultrasound scans	4 338	4 160	-4,1 %
Senology	17 196	16 321	-5,1 %
Scanners	15 136	15 047	-0,6 %
MRI scans	7 414	7 631	2,9 %
Number of nuclear medicine appointments	15 900	16 503	3,8 %
Diagnostic Scintigraphy	7 452	7 633	2,4 %
PET scans	8 448	8 870	5,0 %

The active treatment list PMSI* 2022

*PMSI : Program of Medicalisation of Information Systems

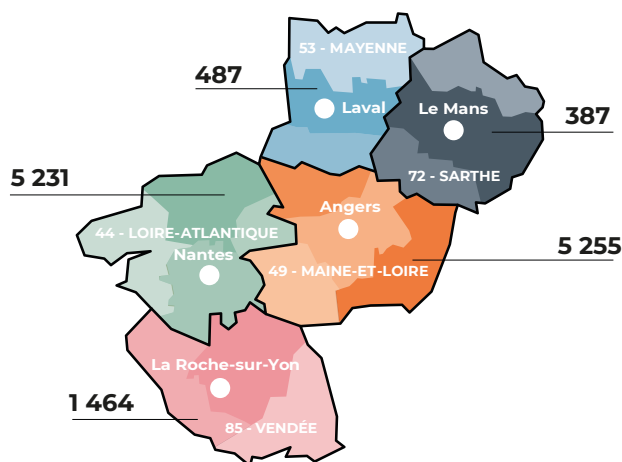
The active treatment list PMSI 2022 corresponds to the number of different patients admitted for a hospitalisation, or for outpatient care, during the year 2022.

FA - PMSI 2022	ICO	
Pays de la Loire	12 824	91,0 %
44 Loire Atlantique	5 231	37,1 %
49 Maine et Loire	5 255	37,3 %
53 Mayenne	487	3,5 %
72 Sarthe	387	2,7 %
85 Vendée	1 464	10,4 %
Bretagne	487	3,5 %
Poitou Charentes	615	4,4 %
Centre	104	0,7 %
Basse Normandie	20	0,1 %
Others	47	0,3 %
TOTAL	14 097	100,0 %



91 %

of the 14 097 patients in the 2022 active treatment list came from the Pays de la Loire.



The main therapeutic choices for patients in the active treatment list

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2022/2021
Chemotherapy	4 290	4 376	4 406	4 551	4 643	4 571	4 639	4 834	4 952	5 107	5 031	-1,5 %
Radiotherapy	5 025	5 133	5 191	5 294	5 397	5 566	5 692	5 903	5 826	6 051	5 931	-2,0 %
Surgery	2 785	2 880	2 925	2 986	2 919	2 760	2 936	3 130	3 035	3 349	3 470	3,6 %



RESEARCH



Thank you ICO for existing and for being close-by. Thank you for the quality of your care, your teams, and your services... Thank you for the research, and for everything else.



A patient cared for by ICO.

TRANSLATIONAL RESEARCH IN FULL SWING

In 2022, the excellence of ICO's research was recognised at the European level via the obtention of an OECl label. In its conclusions on the section about research, OECl commended the excellent structure of our clinical research and our continuing progress to strengthen translational research.

The substantial investment in research that ICO has made over the last few years was strengthened in 2022, with the set-up of new teams and the start of promising pluridisciplinary collaborations. In this context, and after an initial audit in 2019, the SAB (Scientific Advisory Board), met again in 2022, this time to specifically audit translational research. Since 2021, the strategy, which is supported and encouraged by the internal bureau, is organised around 3 main areas, which are, i.) personalised medicine, ii.) Ionising radiation, iii.) Prevention.

PERSONALISED ONCOLOGY

Research on personalised medicine at ICO is based on a multiomics strategy and the exploration of tumour heterogeneity. The multiomics strategy links « big data » and data science in order to optimise the search for markers that are usable in personalised medicine. Multiomics data are provided by the genomics platforms (A. Morel, I. Tournier), proteomic platforms (Prot'ICO – C. Guette, F. Guillonnet), and by ICO's research teams (ThePreMed Lab, REGEN et InGenO). The Omics and Data Science Group, led by P. Jézéquel, analyses the omics data. This activity also includes the platform for research in anatomy and pathology (M-F. Heymann) and the CRB Tumour Library (D. Heymann) who assure the traceability, the storage and the access to samples.

- **The year 2022 marked the start-up of the Prot'ICO platform with state-of-the art TIMS TOF Pro2 mass spectrometry (Bruker)**

- **In 2022, the “Tumor Heterogeneity and Precision Medicine Laboratory” Team**, led by D. Heymann, obtained 2 European fundings. They also stand out in terms of their literature publications and other forms of valorisation (conferences, communications, patent).

It is also this field that created a direct collaboration between ICO and CRCI²NA :

- ▶ **The SOAP team « Signalling in Oncogenesis, Angiogenesis, and Permeability »**, led by J. Gavard, focused on the way in which tumour cells hijack signalling pathways and cellular traffic, to assure their own survival, as well as the way they interact within their ecosystem, and in particular with the tumoral vascular network.
- ▶ **The STATE team « Stress Adaptation and Tumor Escape »** led by P. Juin and involving many of ICO's researchers, aims at describing the molecular mechanisms and the reprogramming pathways which, in response to diverse types of cellular stress participate in the organisation of epithelial tumours into pseudo-organs; to understand the signals involved in the escape from tumour suppression; and to identify the therapeutic approaches which will allow the reactivation of tumour suppression.

As a continuity of the preceding years, 2022 was notable, due to the large number of scientific articles published by these 2 teams.

Zoom-in on the new teams

► **The REGEN program and the ScaT laboratory – Sophie Lelièvre**

The ScaT (Sensitivity of Cancers to Treatments) Laboratory has been operational since June 2022 (2 post-doc recruitments in 2022). Its activities focus on primary and tertiary prevention:

- **The research on primary prevention** is based around the epigenome as a source of biomarkers, because it is a receptacle of environmental exposure, and the ultimate target of intervention. Breast cancer is the main model currently used, prior to extension to other types of cancers.
- **The research on tertiary prevention** aims to develop and use cancer-on-a-chip models for different projects which explore anti-cancer treatments.

► **The program InGenO – Pierre-Alexandre Vidi**

The beginning of 2022 was dedicated to the acquisition of equipment and to recruitments. The InGenO (Integrity of the

Genome in Oncology) program focuses on the damage and repair mechanisms of DNA, and consists of 3 sub-projects :

- **Impact of the cellular micro-environment on the response to DNA damage.** Obesity and high mammographic density increase the risk of breast cancer and are characterised by major modifications of the extra-cellular matrix. The rigidification of the matrix is equally a characteristic of the initiation of a hepatocarcinoma. What are the molecular connections between these physical and chemical changes and the maintenance of the genome?
- **Chromatin movement and DNA repair.** How do chromatin dynamics change in response to DNA damage and what are the functional consequences of DNA movements on the outcome of DNA repair?
- **The Genotoxicity of Environmental pollutants.** Children re exposed to pesticides and other toxic chemical products in their environment. What are the consequences of this exposure on their health?

RADIOTHÉRAPIE, MÉDICINE PHYSIQUE ET ONCOLOGIE NUCLÉAIRE

Radiotherapy is a technique that aims to irradiate the unhealthy tissues while limiting the damage to healthy tissues. Work performed today by the radiotherapy and nuclear medicine departments, led by Prof. Stéphane Supiot, Dr. Vincent Potiron and Dr. Gregory Delpon, seeks to improve the benefit-risk ratio of this treatment. This consists, on the one hand of limiting the toxicity (cf. the « Flashmod », « Beyond the Heart » and « Dero » studies which studied the biological and physico-chemical mechanisms, the cardio toxicity and the dental toxicity of radiotherapy, respectively), and on the other hand, to improve its efficacy via the study of molecules that can either protect healthy

tissue or make tumour more radiosensitive in order to better target and destroy tumours. The teams are also working on new techniques, notably FLASH radiotherapy (at ultra-high dose) with the same objective of reducing toxicity while increasing efficacy. ICO's radiotherapy and medical physics departments are amongst the largest in France, with close to 4 000 new patients each year, some of whom actively participate in these research programs. Studying these research subjects is equally made possible due to the strong ties with other units specialised in experimental radiotherapy {INSERM (PETRY team), CNRS}. This closeness also facilitates the training of doctors and physicians and allows the development of joint projects between the laboratory and the clinic.

In 2022 the Nuclear Oncology department worked on research projects dedicated to the use of alpha particles and targeted beta radiotherapy of tumours, as well as predictive and prognostic imaging. Led by Dr Caroline Rousseau, the strength of these projects demonstrates the implication of the department in the development of new treatments, quantitative imaging and new markers using innovative radionuclides (astatine 211, Lutetium-177), making the department one of the world leaders in this field.

In 2022, more than 60 articles were published by these 3 departments.

PREVENTION

Activities in the field of prevention rely on close collaboration between S. Lelièvre's team, the SHS unit and the Health Promotion Department. The latter two are led by Martine Bellanger and were created in 2020 and 2021, respectively.

Prevention requires taking the environment, as a whole, into account: physical and chemical exposure, stress, lifestyles (in particular eating habits) and social factors. Research in this field is part of a **multi-disciplinary, international** framework, notably via the IBCN.

A NEW SIRIC SUCCESS

For the second time running, the ILIAD project was certified SIRIC for 5 years! Championed by ICO and the University Hospitals of Nantes and Angers, the renewal of the SIRIC label for ILIAD by the National Institute of Cancer (INCa) is proof of the excellence of the research at the Nantes- Angers sites, where medical and social science research are integrated with respect to breast cancer and multiple myeloma. For the next 5 years, the SIRIC ILIAD mission will consist of conducting advanced multi-disciplinary research thanks to the knowledge of the partners in the project: Universities, Health Establishments, associations, Engineering Schools, and research laboratories such as CRCI²NA and Arronax who are members of Labex IRON. The ultimate aims are to increase the remission and cure rates of patients and to raise the awareness of professionals to include and adapt treatments to the professional lives of patients with cancer.

THE EPICURE PROGRAMS

The EPICURE programs aim to discover new biomarkers and the development of models that are either diagnostic or predictive for response to treatment, to achieve systematic and personalised care: 1 patient = 1 specific care.

To achieve this, a huge number of biological samples and data (both clinical and on quality of life) are collected in a longitudinal fashion. In 2022, 2/3 of the required inclusions were achieved for the EPICURE Breast program, 3 articles were published, and 2 posters were presented at the San Antonio Breast Cancer Symposium. 2023 will see the opening of the NEO EPICURE and the EPICURE Lung programs.

IBCN

The pluri-disciplinary network IBCN (International Breast Cancer & Nutrition) brings together more than 60 researchers from around the world, to study the link between diet, the genome and the risk of breast cancer.

Examples of pluri-disciplinary projects involving several teams from ICO

- **PREVBIO**, financed by INCa (2022-2024) on a risk model for breast cancer allowing identification of the impact of exosomes coming from the stroma and from adipose tissue. Coordinated by S. Lelièvre. Internal collaboration with the INGENO laboratory (P-A. Vidi) and the Data Science and Omics unit (P. Jézéquel). External collaboration with CRCI²NA (P-F. Carton) and the Central School at Nantes (L. Vidal et J-Y. Hascoët)
- **BC EXPOS**, financed by CGO (2022-2025) and the Persée Foundation. The project targets the influence of the environment (exposome social, nutritional and chemical) on breast cancer in order to identify new opportunities for primary and tertiary prevention. Internal collaboration between the SHS unit and C. Bobin-Dubigeon, and externally with IRSET (Rennes), SPHÈRE, LABERCA (Oniris-INRAE) and N2C (Tours)
- **PESTIFOL**, collaboration between the SHS unit and the InGenO team on impregnation and the genotoxic effects of pesticides in farmers' children.

CLINICAL RESEARCH ACTIVITY

In 2022, ICO's clinical research activity permitted 1 390 patients to be included in 270 clinical trials that were open for inclusions.



1 053

patients included in interventional trials (Category 1 and 2)

337

patients participated in observatories, enquiries related to treatments, care or Professional practices

1 390

inclusions in total in 2022

NUMBER OF PATIENTS BY TYPE OF STUDY IN 2022

Phases I et I/II	107
Phase II	180
Phase III	297
Other interventional studies	469
Observatories/Enquiries	337
Total	1390



The different study phases

PHASE I

A phase I study is the first study to explore the efficacy of a medicine.

It consists of evaluating the tolerance and absence of serious side-effects. Phase I studies are always conducted with a small number of patients. They also permit very early access to innovative molecules

PHASE II

A phase II study aims to test the therapeutic efficacy; they are run with around 100 patients.

PHASE III

Phase III is a comparative efficacy and tolerance study. It compares the new treatment against either a reference product or a placebo (if no reference exists).

A high number of patients (several hundred) are included. The results of phase I, II and III studies are included in the dossier to request a Product Licence (PL).

2022 TRIALS IN NUMBERS

60

New trials were started at ICO in 2022 of which 22 were new early phase trials (Phases I, I/II and II)

270

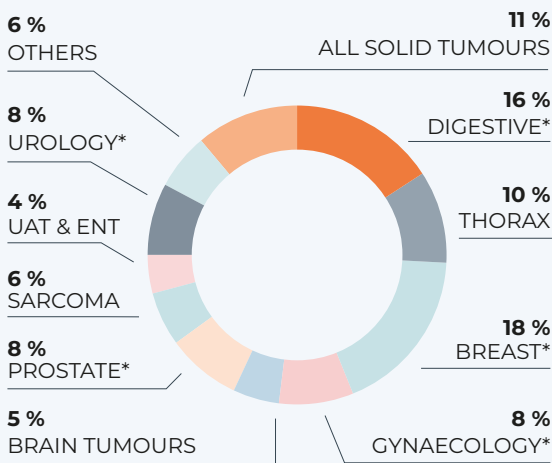
Clinical trials open for inclusion (250 Interventional trials and 20 non-interventional trials)

In total:

637

trials managed by the ICO teams

INTERVENTIONAL TRIALS OPEN FOR INCLUSION BY PATHOLOGY



* Trials = 62 % of the activity

INTERVENTIONAL TRIALS BY DISCIPLINE

	Trials	Patients
Medical Oncology	181	683
Surgery	19	68
Radiotherapy	34	161
Nuclear Medicine	10	42
Medical Imaging	2	45
Onco-genetics	3	48
Biopathology	1	6
Total	250	1053

DISTRIBUTION OF TRIALS OPEN FOR INCLUSION BY PATHOLOGY

	Trials	Patients
Digestive	39	99
Thoracic	25	69
Senology	46	313
Gynaecology	19	52
Brain Tumours	12	27
Prostate	20	140
Sarcoma	16	27
ENT	10	15
Urology (excl. prostate)	20	35
Other	14	176
All solid tumours	27	98
Dermatology	2	2
Total	250	1053

PROMOTION OF CLINICAL RESEARCH

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

The main missions of the service can be summarised by 3 functions :

- **Help with methodology and biostatistics:** assistance with the conception, writing and analysis of clinical trials,
- **Project follow-up:** organisation, administration, management, checks, and technical & regulatory support for clinical trials,
- **Data management:** preparation, administration and management of databases.

In practice :

Starting with a research idea developed at ICO, the Promotion Service designs a study protocol, submits it out to tender to obtain financing, manages all of the regulatory aspects required to be allowed to start the study, then runs the management and the follow-up of the participating centres throughout the trial.

Once the trial is running, the Promotion Service is responsible for collecting and checking the information required from the different health centres (CFACs, Hospitals...) conducting the trial. Of course, ICO can also participate as an investigator in trials for which ICO is the promotor.

TO CONCLUDE

As a function of the type of research the service takes care of:

- **All interventional and/or prospective studies:** Research Involving a Human Person (RIHP) from categories 1 to 3 promoted by ICO,
- **The submission of retrospective research projects** where the data is managed by Datafactory (excluding RIHP: data searches) to the Ethical Committee, so that that these projects and be published and thus valorised.



KEY ACHEIVEMENTS OF THE PROMOTION SERVICE IN 2022



The growing importance of paramedical research at ICO:

2022 saw confirmation and promotion of the paramedical research dynamic at ICO, which was started a few years ago.

► **2 projects were financed in the framework of Paramedical tender bids (RAPASS / CENSORIAL)**

Promotion of a project which is open in 2 other European countries

The Protocole «*OP2C*: Observatoire du Prialt® en Pratique Clinique » (Financed by Esteve), led by Dr Denis Dupoiron, was authorised to be initiated in 12 European centres, in addition to the French centers. The international inclusions will start in 2023.

6 new clinical research projects financed in 2022 !

► **Among these 6 projects, 2 notably won national project calls (DGOS Financing) (PREPAC / CAPNEUCHIM01)**

9 new research projects promoted by ICO, were initiated and proposed to patients in 2022, of which 6 were interventional trials.

► **Focus on the TRAILOCLORI01 trial, for lung cancer patients that have received an immunotherapy and who have been proposed a localised radiotherapy (TRAILOCLORI01): financed by the PHRC-k 2020 (Hospital Program for Clinical Research in Cancerology).**

OVERVIEW OF RESEARCH INVOLVING PEOPLE (RIHP 1 TO 3)

In 2022, the Clinical Research Promotion Service undertook **74 RIHP studies**, of which 44 studies are still open for inclusion or are in a follow-up phase.

Of the **44 studies**, **31 studies are still open for inclusions, of which 9 specifically this year.**

In 2022, this corresponded to **1 215 new patients** included, which represents a total active treatment effective of **11 503 patients** followed by our team (CRA promoters, data managers).

The 31 studies **open for inclusions** that are promoted by ICO represent the following types of research:

- **15 category 1 RIHP studies, of which:**

- 9 studies on medicines,**

- 6 studies not involving medicines,**

- 9 category 2 RIHP studies**

- (Minimal Risks and Constraints)

- 7 category 3 RIHP studies**

- (Non-interventional Research).

The full range of ICO's disciplines are also represented, of which the main ones are: radiotherapy, nuclear medicine, supportive care/pain management, oncology, surgery...



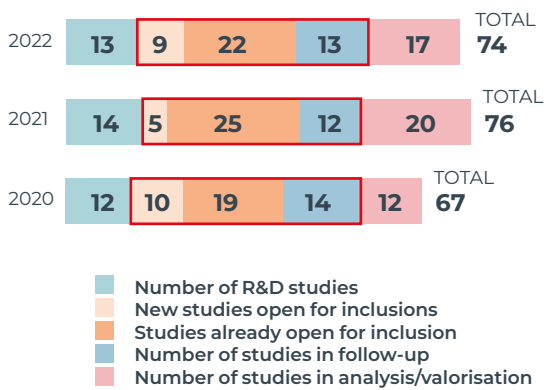
2022 TRIALS IN NUMBERS

THE "TAKE-HOME" NUMBER

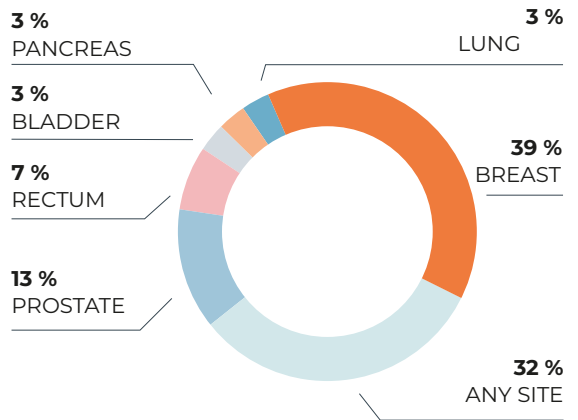
45 %

of interventional studies promoted by ICO (RIPH cat. 1 and 2) were early phase studies. (Technology Readiness Level «TRL» 6 to 7).

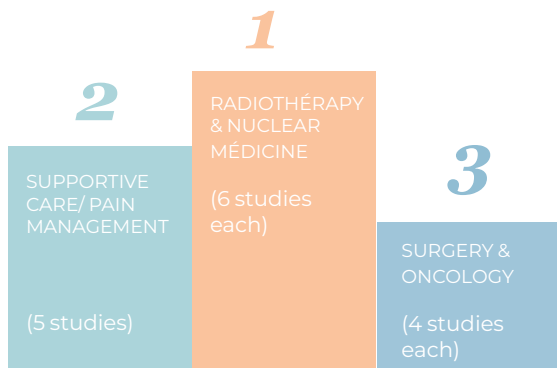
PROGRESSION 2020-2022 for studies promoted and managed by ICO (RIPH 1-2-3)



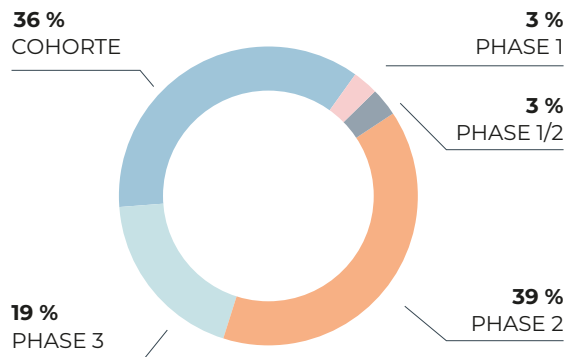
DISTRIBUTION of RIPH (123) studies open for inclusions by pathology in 2022



PODIUM OF DISCIPLINES of RIHP (123) studies open for inclusions in 2022



DISTRIBUTION of RIPH (123) studies open for inclusions by phase in 2022





ACT TOGETHER

“

We need you to be close to us, and we need to have confidence (in you), because accepting that we are ill is not always easy. For us, having confidence is paramount.

”

A patient cared for at ICO.

DÉVELOPPEMENT AND INNOVATION

In 2022, ICO consolidated and continued the deployment of its strategy of development and innovation. The Institute reinforced its initiatives in order to encourage innovative projects and to valorise the research and health data.

I - IN 2022, ICO ACCELERATED ITS INNOVATION PROGRAM AND SET ITS ROADMAP FOR THE NEXT 5 YEARS

ICO continued its support of the maturation of its future spin-off TESTEROC. This “deep tech” start-up, which will be co-founded with Prof. Sophie Lelièvre in 2023, proposes disruptive innovation via tumour modelling using 3D cell culture on a chip, allowing evaluation of drug candidates for biotechnology companies and the pharmaceutical industry. The CEO of TESTEROC has been nominated and the incubation program was undertaken throughout 2022, including the first agreements with ICO related to the future partnership agreement and the company collaboration agreement.

After the investment in the capital of NAOGEN PHARMA in 2021, in 2022 ICO took a stake in the company HEALSHAPE, via its daughter company ICO INNOV. This « Med-tech », founded in 2020, has developed a 3D-printed breast prosthesis using biocompatible ink, for women that have had a total or partial mastectomy.

This new stake in HEALSHAPE, was accompanied by the signing of a collaboration contract throughout the development cycle of the product, in which the first step aims to accompany the start-up during the pre-clinical development phase of the prosthesis. In this way, ICO will valorise the expertise of its teams and will offer a structuring experimental environment for HEALSHAPE.

In 2022, ICO took the decision to implement “third-party trial sites” (fr. « Tiers lieux d’expérimentation »). This consists of mobilising several groups of partners, including health establishments, Health-

Tech startups, industrials, and patient representatives, who are brought together to test and evaluate the real-life usage of new services and health products. Amongst other things, this initiative aims to benefit from the feedback of users (impact, accessibility...) and to measure the medico-economic and/or clinical advantage(s) of the solutions and products tested, and to accompany the access to the market for solutions that have a proven positive impact.

In 2022, ICO developed and setup a model of third-party trial sites dedicated to digital health solutions with the objective of certifying the best ones via a wave of “third-party trial sites” project calls that have been initiated by the French Ministry of Health as part of its France 2030 plan.

In 2022, ICO also started a system for accelerating projects and experimentation in the field of diets. With this « third-party » called « Fork and Care », co-founded with the University Hospital of Nantes and the Start-up Incubator, Palace, ICO once again won the laureate prize of the Health Innovation Fund Innovation 2022 that was held by Nantes Métropole.

2022 also saw the start of innovative new partnerships with start-ups and industrial partners such as RAYSEARCH Laboratories (to develop a unique model for automatic segmentation of the heart and the cardiac sub-structures, in order to reduce cardiotoxicity of thoracic radiotherapy) and THERAPANACEA (for evaluation of the performance of their tool for generating synthetic-CT). These co-development projects, following on from the INTERCURE project started in 2021 and continued in 2022, allows ICO to position itself at the hub of innovation at the heart of its ecosystem.



II – IN 2022, ICO LAID THE FOUNDATIONS OF ITS MODEL FOR DATA VALORISATION

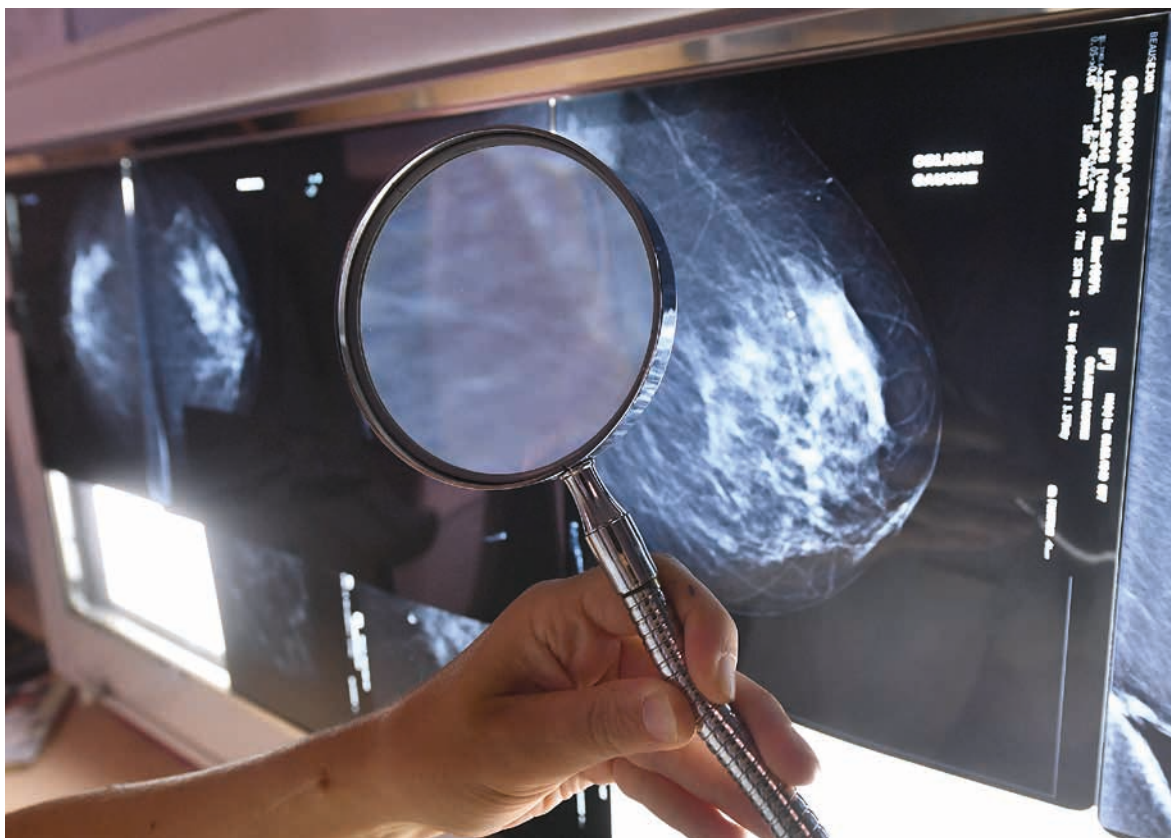
In 2022, ICO continued the deployment of its data warehouse and the integration of new tools to exploit data. New variables of interest were added to the data catalogue in the warehouse (data on height, weight, ECOG, date of death, integration of data from INSEE, anatomical-pathology data, biomarkers). In parallel, the implementation of the data mining tool ConSoRe was almost completely achieved and will be finished in the 1st trimester of 2023.

ICO also continued the consolidation of its network of « data » partners, and thus in 2022 it signed up for integration into the OncoDataHub consortium. Set up by UNICANCER and the group ROCHE, this partnership aims to create a reference platform in oncology for the real-life usage of therapies. As a kind of « observatory of medicines », this platform, which is fed by the data coming from Health Establishments (both private and public) provides information on medicine usage in terms of treatment strategies, practices and the populations targeted.

At the start of 2022, ICO won the laureate prize in the first wave of the call for interest UNIBASE.

Over a period of 3 years, the UNIBASE program aims to create a collection of reference databases in cancerology. This collection can be built from projects where certain data and results are made available to the scientific community. In order to build the foundation stone of the UNIBASE program, UNICANCER and the Health Data Hub (HDH) started an initial call for interest that was open to CFACs.

Amongst all of the projects that were submitted, 3 were selected. ICO was one of the laureates with its ISIS project. The ISIS, project, led by Dr. Marie Robert and Dr. Alette Dezellus, aims to evaluate the risk of infertility after breast cancer in young women. To this end, the data from the medical files in the ConSoRe tool, and the data in the medico-administrative database of the French Social Security System will also be used. It is a study on real-life multi-centric data which brings together the Curie Institute, the Oscar Lambret center and the Léon Bérard center. Within the framework of signing this partnership with the Health Data Hub, ICO obtained a grant of 200K€.



ICO is also a partner in another project with a call for interest, which is led by the Curie Institute: The DASTO project. This project is focused on the risk of developing venous thromboembolism (VTE) in cancer patients. By associating data from medical files from the ConSoRe tool and data in the medico-administrative database of the French Social Security System, it will allow the risk factors to be better understood using data from a cohort of 100 000 patients.

Finally, in 2022, ICO implemented the first deliverables of its service offer for studies on real-life data. The CODEX offer (Collaborative & Oncology Data EXploitation) proposes to run studies on data in response to different requests from the pharmaceutical industry, medical device manufacturers, CROs and Bio/Medtechs.

Thus, in 2022, ICO won, and started, two studies as a service provider:

- The OMEGA project, a RWE (Real World Evidence) study on gastric cancer treated with Trastuzumab at the request of ASTRAZENECA DAICHI

- The REASSURE project, a RWE study on the efficacy and safety for patients with HR+ / HER2-, advanced BCa or metastases treated with Ribociclib or Alpelisib at the request of NOVARTIS



THE DEPARTMENT OF HEALTH PROMOTION AND PREVENTION (DPSP) IN 2022

2022 WAS A PROMISING YEAR FOR ICO AS A HEALTH ESTABLISHMENT WITHOUT TOBACCO, AND FOR THE PREVENTION OF ADDICTIONS

After a bronze medal in 2021 for becoming a « Health Establishment without tobacco », ICO continued its efforts and received the gold medal in 2022, with the DPSP, as well as all the other stakeholders, engaged in the effort to prevent exposure to tobacco smoke. To achieve this in 2022, efforts were redoubled to help **patients and employees that smoke, to quit their smoking habit** using quality monitored approaches, follow-up tools, and a plan to develop a systematic detection tool.

Close collaboration between nurses specialised in addictions that are involved in follow-up care, the communications team and the DPSP project leader, allowed us to set up various events. These consisted of a « tobacco awareness day », with information stands present on site all-day during the World Without Tobacco Day on the 31st of May 2022. Other events took the form of dedicated timeslots during November 2022 - the month without tobacco -, with information stands manned by clinicians and other health professionals, quizzes for people waiting in the entrance hall, and exchanges on the benefits for cancer patients if they can reduce and stop smoking.

The DPSP successfully won a call for tender from the ARS Pays de la Loire and obtained an exceptional extension of its **financial support for three years via the 2022 Fund for fighting against addition to psychoactive substances (FAAD) 2022**, for its project « Together against addictions », which was started in 2020.

Finally, during 2022, in line with one of ARS's orientations, for the setup of an **Addictology Liaison and Care Team** (fr. Équipe de Liaison et de Soins en Addictologie, ELSA) at ICO: As part of a regional cancer plan, the DPSP coordinated a think-tank and a needs

assessment for the ELSA project, in relation with the Care Management department, the DSI, the DOPA and the Legal Affairs Management.






CONTINUED GROWTH OF ONCOGENETIC ACTIVITIES IN 2022

Oncogenetics activities are essentially built around our consulting activities, the number of which continued to increase in 2022, reaching 4825 consultations (2297 and 2528 for Saint-Herblain and Angers, respectively). The territorial dynamic was maintained with the setup of oncogenetics consultations at Cholet and LeMans by the assistants at Saint-Herblain and Angers respectively. A parallel increase in the number of psychological consultations linked to oncogenetics also occurred with 220 consultations performed in 2022 (119 and 101 for Saint-Herblain and Angers, respectively). In order to improve the care for patients, extra staff in digestive oncogenetics were attributed in April 2022 to cover ICO, the University Hospitals at Nantes, Angers and Rennes, as well as the Confluent private hospital.

Continuous education and teaching are also necessary in order to improve the oncogenetics service (such as the knowing optimal selection of patients that could benefit from consultation and the dissemination of recommendations for screening for people that carry a genetic risk). As a result, continuous education sessions were conducted in 2022 for general practitioners and gynaecologists at Nantes, as well as for care workers at a readaptation center at Angers. In addition, targeted awareness campaigns for the general public were held, in association with the League against Cancer 49 and the ARTUR association.

The oncogenetics unit was also actively engaged in research in oncogenetics, via its participation in national protocols such as COVAR, AAS-Lynch and CoF-AT2. Finally, in collaboration with the Human and Social Sciences unit, the first steps were taken for the PHARE GRAND OUEST study, which aims at assessing follow-up data from the inter-regional cohort of breast cancer patients who have a genetic risk of developing cancer, an activity which is fully aligned with the missions of the DPSP.



«SEXUAL AND REPRODUCTIVE HEALTH IN ONCOLOGY» : AN ONCO-FERTILITY PATHWAY STARTED IN 2022

Préserver la fertilité des patient(e)s atteint(e)s d'un cancer et dont les traitements ont des effets sur la santé sexuelle suppose d'organiser une prise en charge pluridisciplinaire dédiée. À l'initiative des gynécologues des deux sites, le parcours PECCA INTIMA a démarré. Dans ce même axe, un staff d'oncofertilité/désir de grossesse post-cancer a été mis en place au niveau régional. De plus, les gynécologues, en collaboration avec d'autres cliniciens, ont contribué à l'étude KALICOU, afin d'évaluer l'effet des compétences émotionnelles de femmes jeunes, ayant un cancer du sein et de leurs partenaires sur leur vécu tout au long du parcours de soins, dont les résultats ont été publiés en 2022. De plus, un projet de recherche ISIS, a été sélectionné pour conduire en collaboration interne et externe avec d'autres CLCC, une étude sur la santé reproductive des femmes après cancers du sein dans le cadre de l'appel à manifestation d'intérêt UNIBASE, porté par Unicancer et le Health Data Hub.

The year 2022 was also made notable by the contribution to facilitating Post-University Education (PUE) for town GPs about HPV-induced cancers. Finally, the DPSP participated in the organisational committee of the CRCDC - the Regional Center for Coordination of Cancer Screening, (fr. Centre Régional de Coordination des Dépistages des Cancers) - thanks to one of the gynaecologists from the department.



THE PROMOTION OF HEALTH AND PREVENTION: MOMENTUM WITHIN AND « OUTSIDE ICO'S WALLS »

A project selected and financed in 2022

Out of more than seventy projects submitted to the ARS Pays de la Loire in the framework of the call for interest on Social and territorial inequalities in health (STIH), the DPSP project was selected and financed by the ARS as part of FEDER – European Funds for Regional Development. This research-action project, called RASQA, which takes place in a priority neighbourhood of Angers, aims to determine the favourable conditions and methodology to act on social inequalities in the neighbourhood of the Roseraie,

Social Health inequalities are «Differences in health observed between individuals that are linked to social factors or criteria of differentiation, such as social groups, socio-professional categories, income categories or level of education». These inequalities affect people at different periods of life, including in childhood. The consequences can translate to a lower quality of life or the development of certain long-term illnesses. These social inequalities can be more pronounced in certain rural or urban territories or as a function of the neighbourhood with a single town. For the most part, these inequalities are avoidable.

a neighbourhood which was selected following the first step of the study which started in May 2022. For this project, the DPSP is working in close collaboration with the Public Health Management of the town of Angers, and with IREPS – the Regional Instance of Health Education and Promotion.

When Prevention rhymes with “training project for apprentices”: This project was accessible to trainees at the **CFA – The Centre of Training for Apprentices of our Building Site at Saint-Herblain. In 2022, as part of their French program and under the supervision of Professor Florence Robin**, some young roofing carpenters on CPA and BP trainings, chose to collect money and to create a work of Craftsmanship for the benefit of research on the prevention of cancers. After being briefed at the CFA with Dr. M. Doré about the risk of cancer, they were welcomed at ICO by the benefactor’s team and the DPSP, and they were able to visit a biology research laboratory that is working on cancers and environmental exposure.

Prevention and promotion of Health: a life-long training

Dr Baptiste Sauterey didn’t hesitate to go back to University in 2022 to undertake a Masters 2 degree.

« The objectives of this project, which are as much personal as institutional, are to conceive and drive policies, to gain knowledge, and coordinate cooperations in the Pays de la Loire on Public Health themes for the promotion of health and prevention. There are multiple strategies for helping populations achieve behavioural changes to reduce habits that are bad for health, and to achieve reduction of risks, (such as a global and positive approach via proportional universalism, or via social marketing) which are all based on the participatory mode, for dissemination of knowledge and the power to act. It lifts everyone up and permits more efficient actions by reinforcing autonomy of individuals so that they take care of themselves and others».

Dr B. Sauterey.

HECTOR : TRAIN TOGETHER

AN EFFICIENT REGROUPING OF THE TRAINING ORGANISATIONS OF BRITTANY & PAYS DE LA LOIRE

As major actors in cancerology in the regions of Brittany and the Pays de Loire, the Western Institute of Cancerology (ICO) and the Eugène Marquis Center are part of the 18 Centers Fighting Against Cancer distributed across France.

As regional, national and international reference centers, they house university disciplines in medical oncology, surgery, radiotherapy, medical imaging and nuclear medicine and have 4 main missions: Prevention, Care, Teaching and Research.

Each establishment has been engaged for many years in favour of an external training offer, for all professionals that intervene in the care pathways of cancer patients.

The trainings are run by teachers that have expertise and professionalism that is anchored in practice. The trainings respond to the needs of professionals, but also of patients, by proposing a range of pluri-disciplinary themes.

Strengthened by their mutual experiences, the training bodies of the two institutes wished to increase their visibility and presence in the world of oncology training in Brittany and in the Pays de la Loire, by sharing the same name: HECTOR for the High School (fr. Ecole) of Cancerology of the Territories of the West (fr. Ouest) Region.

Pr Mario CAMPONE, **General Manager of the Institut de Cancérologie de l'Ouest**

Pr Renaud de CREVOISIER, **General Manager of the Eugène Marquis Center**



A very rich and interesting training, with very friendly teachers, speakers and participants. I would recommend this training to my colleagues without hesitating!!

You're welcome.

Anais,
Coordination Nurse at HAD Saint-Sauveur



HECTOR Brittany and HECTOR Pays de Loire are both certified Qualiopi and have set up a mechanism of continuous improvement for their actions and training.

HECTOR

Operational Manager,
Dr Véronique BARBAROT

Training Manager,
Brigitte LEMARQUAND

Training Coordinator,
Sylvie CARTON

A NEW LOGO FOR HECTOR


To illustrate the joining of the two training organisations, we created a new logo for HECTOR Brittany - Pays de la Loire, which is available for each region.



OVERVIEW OF ACTIVITIES

In 2022, HECTOR received a total of **326 professionals**, of which :

 **240**
ICO employees

 **86**
External people of which 50 freelance functions : nurses, orderlies, dietitians, physiotherapists, manipulators, medical assistants and doctors

Number of sessions:

 **25**
Training sessions
in total, of which :

- **6 sessions** with a mixed public
- **5 sessions** with an external public
- **14 sessions** with an internal public

A NEW ORGANISATIONAL TOOL

Following a call for tender by UNICANCER for the training organisations at CFACs, HECTOR was equipped in Novembre 2022 with an organisational program, DENDREO, which permits faster, centralised follow-up of training sessions with respect to Qualiopi criteria. Each student and trainer can find the documents which are pertinent to them on his/her personal extranet.

A NEW E-LEARNING PLATFORM

As a replacement of Unicancer's MOODLE, today, HECTOR is developing e-learning sessions on DOKEOS, its new e-learning platform, which is initially destined for ICO's employees.

SEMINAIRES

Forty of ICO's oncologists met up during two evenings **after a bi-site video congress: on the 23rd of June for ASCO and the 6th of October for ESMO**. These very convivial evening were occasions to exchange information and be informed on the latest medical advances that were presented at the congress, within the various fields (senology, gynaecology, digestive, pneumology, urology, ENT).

Dr Catherine Devys, managing pharmacist of the PUI (the Internal Users Pharmacy), along with her colleagues and two oncologists, organised two evening for the Return of Experimentation – Art 51 Onco'link – Oral Therapies which welcomed 70 community pharmacists in total.

Dr Frédéric Dumont organised an EPU on rare diseases of the peritoneum which gathered together experts in the field.

Dr Sophie Abadie-Lacourtoisie proposed a seminar for surgeons and anaesthetists to raise awareness of the need for physical evaluation of patients in order to establish medical prescriptions for adapted physical activities.

Dr Lucie Peuvrel and **Mélanie Saint-Jean**, along with their oncologist and surgeon colleagues, gathered the dermatologists from the town to exchange on onco-dermatology subjects. The success of this evening has encouraged them to repeat this activity in 2023.

Dr Dominique Berton organised an evening for pluri-disciplinary exchanges on early and advanced endometrial cancer.

THE DRIVE FOR QUALITY

CERTIFICATION OF HEALTH ESTABLISHMENTS BY THE HIGH AUTHORITY OF HEALTH (HAS)

Since 2017, ICO has held an “A” certificate from the High Authority of Health, which is the highest level of certification.

Certification
Referential 2014



ACCREDITATION AND DESIGNATION AS A «COMPREHENSIVE CANCER CENTRE» BY THE ORGANISATION OF EUROPEAN CANCER INSTITUTES (OECI)

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

The OECI (www.oeci.eu) has two key objectives:

1. Provide European cancer patients equal access to high quality care
2. Help European institutes fight against cancer by putting a quality system in place for oncology care

For our patients and our correspondents, this European recognition which runs to 2027 is a grantee of excellence. It signifies that **ICO performs care missions, research, and teaching in respect of the OECI's level of exigence**. It also allows us to position ourselves in certain European research project calls.



Organisation of European
Cancer Institutes

ACCREDITATIONS AND CERTIFICATIONS OF OUR ACTIVITÉS

Our centre of **Biopathology which regroups the Medical Biology, Anatomy and Pathological Cytology activities**, is accredited by COFRAC (COmmittee FRançais of ACcréditation) according to the norm NF EN ISO 15189 (accreditation N° 8-3281 – List of sites and available scopes at www.cofrac.fr).

Our **Center of Biological Resources (CRB) / Tumour Library** is a structure at the disposition of clinicians and researchers to reply to the need for building biological collections and providing access to biological samples for fundamental, translational, and clinical research. It is certified according to the norm NF-S-96900 « Management system for a CRB and quality of biological resources ». This certification allows us to guarantee the reliability and the security of the processes that are in place for the management of biological resources.

MEASURING THE VALUE OF OUR CARE

Since 2018, ICO has been engaged in an approach of implementing a system to measure the value of our care, via the results reported by our patients « PROM » (Patient Reported Outcomes Measures).

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

INDICATORS OF THE QUALITY AND SAFETY OF CARE ON THE ANGERS SITE

Satisfaction of hospitalised patients

Medicine, Surgery, Obstetrics (MSO)



▶ ICO patients attributed a score of **79 / 100** for **the quality of care** in the category Hospitalisation MSO (175 evaluations)

▶ **80,6 % of hospitalised patients would certainly recommend ICO** (175 evaluations)

Out-patient Surgery (OS)



▶ ICO patients attributed a **score of 82 / 100** for **the quality of care** in the category Out-patient Surgery (284 evaluations)

▶ **87,3 % hospitalised patients would certainly recommend ICO** (284 evaluations)

Pain management

Medecine & surgery > 48h



▶ For **100 % of patients** that were hospitalised for more than 48h, **pain was evaluated** and, where needed, it was satisfactorily relieved.

Coordination Ville - Hôpital

Medecine & surgery > 48h



▶ This indicator measures **the quality of the liaison letter, given to patients at discharge** which is addressed to their General Practitioner. It is a key element to ensure good coordination between the hospital and the town.

Management of infectious risks



▶ This indicator measures the **use of hydro-alcoholic solutions**, an indirect marker of good hand hygiene practices. This reduces the risk of nosocomial infections and the development of antibiotic-resistant bacteria.

Out-patient Surgery



▶ This indicator measures the quality of the liaison letter, given to patients at discharge which is addressed to their General Practitioner. It is a key element to ensure good coordination between the hospital and the town.

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

Satisfaction of hospitalised patients

Medicine, Surgery, Obstetrics (MSO)



→ stable



84,1 %

- ▶ ICO patients attributed a score of **81 / 100** for the quality of care in the category Hospitalisation MSO (202 evaluations)
- ▶ **84.1 % of hospitalised patients would certainly recommend ICO** (202 evaluations)

Out-patient Surgery (OS)



→ stable



89,9 %

- ▶ ICO patients attributed a **score of 83 / 100 for the quality of care** in the category Out-patient Surgery (356 evaluations)
- ▶ **89.9 % hospitalised patients would certainly recommend ICO.** (356 evaluations)

Pain Management

Medicine & Surgery > 48h



100 %

↗ in progression

- ▶ For **100 % of patients** that were hospitalised for more than 48h, **pain was evaluated** and, where needed, it was satisfactorily relieved.

Coordination Town - Hospital

Medicine & Surgery > 48h



68 %

↗ in progression

- ▶ This indicator measures **the quality of the liaison letter, given to patients at discharge** which is addressed to their General Practitioner. It is a key element to ensure good coordination between the hospital and the town.

Out-patient Surgery



86 %

↗ in progression

- ▶ This indicator measures **the quality of the liaison letter, given to patients at discharge** which is addressed to their General Practitioner. It is a key element to ensure good coordination between the hospital and the town.

Management of infectious risks

Medicine & Surgery > 48h



61,1 %

↗ in progression

- ▶ This global score reflects the **set-up of complementary precautions and information for patients**, particularly those carrying antibiotic-resistant bacteria in the interest of limiting their propagation.



100 %

↗ in progression

- ▶ This indicator measures the number of patients carrying or infected by a micro-organism which requires **complementary precautions for close contacts**, for which we could trace that **appropriate measures had been put in place.**



61,1 %

↗ in progression

- ▶ The indicator measures the number of patients carrying or infected by a micro-organism which requires **complementary precautions for close contacts**, for which we could find **evidence that the information had been delivered to the patient or their entourage.**



103,1 %

↗ in progression

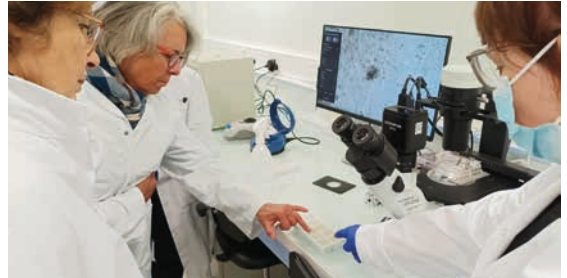
- ▶ This indicator measures the use of **hydro-alcoholic solutions**, an indirect marker of good hand hygiene practices. This reduces the risk of nosocomial infections and the development of antibiotic-resistant bacteria.

BENEFACTORS RAPIDLY INCREASING

In 2022, the Benefactors and Donor Relation Service confirmed its engagement in our research projects and in the improvement of patient care, via a record level fund-raising for ICO. The year was notable due to the integration of numerous corporate benefactors, as well as the continuing loyalty of individual donors and local associations.

WHAT IS A BENEFACTOR AND WHO ARE OUR DONORS?

A benefactor is a legal entity (eg. a company) which supports a cause of general interest without expecting any specific or direct return. It is an act of unselfish generosity. A benefactor is different from an individual donor who is a private individual (eg. a person).



The Women's Committee 49 (fr. Le Comité Féminin 49) visiting the SCAT Laboratory

AT ICO WE BENEFIT FROM THE GENEROSITY OF **3 types of donors:**



2 292 INDIVIDUALS

gave **393 950,71 €** with an average donation amount of 171,88 €



59 ASSOCIATIONS

supported ICO by collecting a total of **268 132 €**



119 COMPANIES

gathered **368 450,29 €** in 2022.

Numbers for 2022

1 030 533 €

of donations (+ 57 % compared to 2021) of which **296 037 €** via the **Persée Foundation** housed by the Foundation of France.

of which

254 191 €

were on-line donations (+ 380 % compared to 2021)

2 098 234 €

de legs et assurances vie (+ 189 % par rapport à 2021)

THESE BENEFACTORS JOINED US IN 2022

GÉMO

Fondation
Crédit Mutuel
Alliance Fédérale

FICAMEX

AVLC
Associations Vendéennes de
Lutte contre le Cancer

BTP CFA
LEIDE-ATLANTIQUE
Le Centre de l'Apprentissage BTP



Groupama

ATLANTIS
LE CENTRE

tbs

Manpower

DRESCO

FONDS DE DOTATION
REALITES

pantacom

HOW TO DONATE TO ICO?

1. MONETARY DONATIONS

Fund raising is indispensable for ICO, in order to be able to conduct projects. Monetary donations are usually given to finance a specific, existing project. Monetary donations can also be monthly, the gift of a life insurance, the legacy of a will etc. Our dedicated team pays special attention to ensure that the donation is used as intended by the donor.

2. A DONATION IN KIND

Accompanying patients, the helpers and the well-being of care-workers has high priority. ICO would benefit from donations in kind such as office furniture, thoughtful attention

for patients and/or our staff, or the donation of items for sale at auction where the profits go to ICO.

3. A DONATION OF COMPETENCE

Giving your time and sharing your competencies through collaboration with ICO's teams. This is a new kind of donation which is rapidly increasing. It takes the form of a provision of services, and every donation counts: accompanying a service by putting your know-how at the disposition of ICO's teams, is acting together against cancer.



PROJECTS STARTED THANKS TO DONATIONS

Donations are used to fund specific projects in order to perform research and/or improve patient care. Your donations have allowed the following projects to be run:

▶ **A RADIOTHERAPY research project:** The FLASHMOD project is led by Prof. Stéphane Supiot and his team. They are working on ultra-high rate (flash) radiotherapy for treatment of paediatric cancers. This new radiotherapy technique may limit the off-target toxicity of the treatments without reducing their efficacy, and should increase the comfort of young patients.

▶ **The BEVITRA project** consists of gathering and analysing real-life health data on rare tumours. It aims to build a qualified database to help overcome difficulties in diagnosing and treating patients with rare cancers.

▶ **BCEXPOS**, this research project is led by Prof. Martine Bellanger. Its aim is to contribute to the search for environmental factors that influence the risk of developing breast cancer. This project lays the groundwork for long-term research which will target the environmental influences that can cause breast cancer in the west of France. It will create new opportunities to prevent this cancer.

▶ **Support for MAX CELIO NZATSI NZATSI** This Gabonese student is supervised by Dr Caroline Rousseau within the nuclear medicine service. Your donations have allowed us to complete the financing of his 3-year Ph.D. thesis on the optimisation and the evaluation of dosimetry procedures applied to the treatment of metastatic prostate cancer.

Several other projects on improving care, and the welcome and accompanying of patients were carried out in 2022, thanks to donations: drawing workshops with a live model were held at the ERI, the patio for patients was refurbished, and new games were bought for young patients at ICO.

In 2022,

94 %

of donations were allocated to a mission of general interest (which allows tax-relief for the donor).

A CAMPAIGN WITHOUT PRECEDENCE

All 10 brands of the ERAM group, a leading company in the Maine-et-Loire, got together for Pink October.

Each made an act of generosity for the Persée Fondation, resulting in a national donations campaign without precedence: **110 000 € to help prevent breast cancer.**

Of note **the brand GEMO collected more than 90 000 €** thanks to donations at their cash tills. More than ever, unity is strength...



THEY'RE TALKING ABOUT US



« Donating to ICO gives you a sense of purpose and balance. In some situations, our personal and professional lives are not as far apart as you would think. »

Stéphane EVAIN, General Manager MOINARD & VS Vendée. Benefactor



« Fabienne would not have died in the XXIst century, if there had been more donations for research. »

Priscille BOURHIS. In memoriam benefactor



« Via our sponsorship of ICO our aim is to support a local research project in our region. »

Magali DUVAL, Directrice Loire-Atlantique GROUPAMA Loire Bretagne. Benefactor



« The staff are making a maximum amount of effort for me, so I must fight for them too. »

M. QUOIT. Private Donor

THANK YOU

Once more, ICO has benefited from the enormous generosity of the public, companies, and local associations, each of whom believe in helping research to advance and in continuously improving patient care.

Because each donation makes a difference, ICO thanks all of its benefactors and donors for their precious support.

See all of the messages from our donors, on video, at <https://www.institut-cancerologie-ouest.com/comment-donner>



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