THE FRENCH NATIONAL CANCER INSTITUTE IS THE PREEMINENT HEALTH AND SCIENCE AGENCY IN CHARGE OF CANCER CONTROL

Created by the Public Health Act of 9 August 2004, it is attached to both Ministries of Health and Research.

Established as a public interest group, INCa brings together the key players in cancer research and health, i.e. the State representatives, the large NGOs, health insurers, research organisations, and hospital federations. All these players share the goal of reducing the incidence of avoidable cancers and the number of cancer deaths, improving the quality of life of people with cancer during and after their illness, and reducing health inequalities.

INCa guides and structures cancer research and cancer care organisation, produces or commissions expert reports, supports and stimulates innovation, and disseminates knowledge and fosters its acquisition, in support of patients and those close to them, users of the health and social systems, health care professionals, researchers, experts and care decision-makers.
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A thousand new cancer cases are diagnosed daily; four hundred people die from cancer each day. Given the size of the challenge, it is worth recalling the objectives that unite the partners in our public interest group (GIP), and that motivate INCa teams on a daily basis: to reduce the occurrence of avoidable cancers and cancer mortality, and to improve the quality of life of those affected, both during and after their illness.

By linking the tools of its different areas of intervention—prevention, screening, care, research and information—that work as so many levers for attaining these objectives, INCa devoted 2012 to consolidating the actions undertaken under the 2009-2013 Cancer Plan. Different programmes have thus entered their mature phase, such as the specific care arrangements for individuals with rare cancers or those with a genetic predisposition, elderly people, children and adolescents, and the designation of integrated research sites (SIRICs). This year, INCa adopted an Institutional Project and new Strategic Orientations for the 2012-2015 period, in order to keep abreast of developments in science, health and legislation, and the expectations of the public authorities and society in general. The Institute has thus formalised its commitment to a proactive approach to health democracy by acquiring the tools needed to guide its action in close association with its stakeholders, namely patients, those using the health system, and professionals involved in healthcare and research. Through these strategic orientations, INCa has restated its mission of supporting scientific, technological and organisational innovation, and the translation of validated discoveries into benefits for the population. It has found ways to support and stimulate major developments in precision medicine, and is developing programmes to support innovative cancer treatments (targeted therapy and intraoperative radiotherapy).

There are so many tangible examples of INCa’s role in supporting progress and its ever-increasing wish to meet the major challenges in the fight against cancer, as will be set out in the upcoming 3rd Cancer Plan, announced during our Annual Meeting last December by the President of France, Mr François Hollande.
The power of an integrated approach in the fight against cancer

Through its actions in 2012, INCa sought to get the best from the merging of all facets of the fight against cancer within a single institution. Taking a broader approach to the various subjects, coordinating the players, and offering an overall view of cancers, are essential elements of the added value of an institute dedicated to this pathology. This is why INCa is committed to consolidating the portals between research and care, to building links between prevention and care, and to helping sustain its recommendations on the research work it stimulates.

Having observed that the prevention of avoidable risk factors in France remains unchanged, with a resurgence of tobacco use, obesity and lack of physical inactivity, INCa, together with AVIESAN (French National Alliance for Life and Health Sciences) Institute of Public Health, has initiated a reflection on research priorities for prevention and behavioural change, which has given rise to a dedicated call for proposals scheduled for 2013.

The year 2012 also saw the launch of an integrated research programme on melanoma, which has just completed a set of linked actions concerning the observation (analysis of stage at diagnosis based on registries), prevention (work on UV exposure), mobilisation and training of health professionals (web tools for training in screening), and finally, promotion of screening to the general public (support for the National Day of Screening).

In the same spirit of integration, INCa encourages cooperation between all areas of research—basic, translational, clinical—as well as human sciences, mathematics, information technology, etc. One of the key actions of 2012 was the designation of six new integrated cancer research sites (SI/RICs), in addition to the two sites designated in 2011. Each of these brings together health services and multidisciplinary research teams around a single centre of excellence. The scheme will be evaluated by monitoring both the activity and social science role to measure the impact on research practices and progress.

It is by constantly pursuing this dialogue between expertise, research and organisation of quality care, together with its GIP partners, that INCa hopes to contribute to ever-increasingly relevant actions in the fight against cancer and the improvement in the quality of life of those affected.
MILESTONES

MARCH

GENOME SEQUENCING:
6th ICGC scientific workshop and initial results

An update on the projects undertaken under the International Cancer Genome Consortium (ICGC) was presented at the ICGC’s 6th scientific colloquium organised by INCa in Cannes from 20-22 March 2012. Over 22,000 tumour samples have already been sequenced, and the initial results on liver cancer have been published. The ICGC programme, which brings together 14 countries including France, is aimed at sequencing the genomes from some 50 types of cancer so as to better understand the role of genetic alterations in their development, in order to optimise treatment strategies through targeted therapies. The objective for France is to sequence the genome of five tumour types. The first phase, begun in 2009, involves sequencing of liver cancer (24 tumours studied) and breast cancer (50 tumours). A third sequencing programme began in 2011, concerning prostate cancer. The fourth programme, on Ewing’s sarcoma, was launched in 2012.

APRIL

FRENCH CANCER PLAN
Mid-term assessment

The French High Council for Public Health (HCSP) released its mid-term assessment report for the 2009-2013 Cancer Plan on 12 April 2012. The HCSP observed that the second Cancer Plan has enabled the orientations of the previous Plan (2003-2007) to be consolidated, and that it contains essential innovations regarding the individualised patient care plan and the social component. However, this review also reveals difficulties in implementing the cross-sectional themes of the plan, namely reducing social inequalities, increasing the role of the General Practitioner, and developing information systems. The report also makes recommendations in relation to the governance and management of the Cancer Plan at national and regional levels, some of which are intended to anticipate the requirements of the final assessment of the Plan, which ends in 2013.

MAY

ADOPTION OF INCA’S Institutional Project

Provided for in the Contract of Objectives and Performance signed between the State and INCa, and initiated in 2011, the Institutional Project, supported by the Strategic Orientations for the 2012-2015 period, was unanimously adopted during the Institute Board Meeting of 11 May 2012.

251 projects selected following 21 calls for proposals in the areas of research and public health
September

Anne Burstin appointed General Director of INCa
Anne Burstin, General Inspector for Social Affairs, was appointed General Director of the French National Cancer Institute by Decree of 11 September 2012. Alongside Prof Agnès Buzyn, Chairperson of INCa, Anne Burstin has the particular role of implementing the Institutional Project and Strategic Orientations defined for the years 2012 to 2015.

October

Controversy surrounding breast cancer screening
Debates as to the limits and risks of breast cancer screening were widely publicised at the time of the “Octobre Rose” campaign. When confronted with these questions, the Minister for Social Affairs and Health, Ms Marisol Touraine, speaking at a press conference to launch the month of action, requested that work on the subject be accelerated. In November 2012, INCa published a report on the ethical aspects of the screening programme, and defined a strategy for integrated action on breast cancer, a priority for its action plan for the year 2013.

November

International R&D Dating “Cancer: Research and Innovations”
The 4th International R&D Dating meeting (RIR in French), dedicated to cancer, took place on 13 November, 2012, in Paris, attended by Jean-Marc Ayrault, Prime Minister, Ms Geneviève Fioraso, Minister for Higher Education and Research, Ms Marisol Touraine, Minister for Social Affairs and Health, and Mr Arnaud Montebourg, Minister for Industrial Renewal. Organised this year by the French National Alliance for Life and Health Sciences (AVIESAN) and the French Alliance for Research and Innovation in Health Industries (ARIIS), the RIR are aimed at developing partnerships between French academic research teams and the health industries. This year’s meeting was particularly successful, enabling, from an initial assessment, over 200 contacts to be established between teams of excellence in the area of cancer sciences and private companies. It also allowed a comprehensive inventory of the forces at work through the preparation of academic and industrial portfolios prior to the meeting.

December

Announcement of the 3rd Cancer Plan by the President of France at INCa’s Annual Meeting
INCa’s 4th Annual Meeting was held on 4 December 2012 at the Cité Universitaire de Paris. It brought together over 400 participants. At the end of this event, the President of France, Mr François Hollande, accompanied by the Ministers for Social Affairs and Health, and for Higher Education and Research, announced a third Cancer Plan. This Annual Meeting was devoted to the fight against inequalities in cancer under the heading, “Inequalities in Cancer. Research, care and public health: the need for an integrated approach.” In mobilising different players and different disciplines, the objective of this Meeting was to better characterise cancer-related inequalities and to understand the mechanisms involved in their development, as well as to analyse schemes and their implementation in France and elsewhere, with a view to reducing them.
In 2012, INCa adopted its Institutional Project, and defined new Strategic Orientations to set the course for the next four years. Some of these strategic areas are a continuation of actions already undertaken; others help to meet the new challenges associated with changes in the medical and scientific landscape.
To continue and formalise efforts to increase the efficiency of the Institute

State-INCa Contract of Objectives and Performance 2011-2014
ADOPTION OF THE INSTITUTIONAL PROJECT AND NEW STRATEGIC ORIENTATIONS FOR 2012-2015

In order to meet its commitments under the Contract of Objectives and Performance signed between INCa and the State in 2011, and in the light of trends in the medical and scientific landscape, the Institute finalised the preparation of its Institutional Project and its New Strategic Orientations for the 2012-2015 period in the first half of 2012. This collaborative approach has led to a new internal organisation.

MEETING THE NEW CHALLENGES IN THE FIGHT AGAINST CANCER

The process of preparing the Institutional Project was launched in 2011, to allow implementation of the commitments made under the Contract of Objectives and Performance (COP) signed with the State for the period from 2011 to 2014, and to meet the changing expectations of the supervisory bodies and society in relation to the roles and responsibilities of the health and research agencies.

ORGANISATIONAL AND REGULATORY TRENDS

Recent years have indeed seen major changes in the areas of health and research. The organisational framework has evolved, especially with the adoption in 2009 of the “Hospital, Patients, Health and Territories” Act, the creation of the Regional Health Agencies (ARS) and the creation of the French National Alliance for Life and Health Sciences (AVIESAN) and the Multi-organisation Thematic Institute dedicated to Cancer (ITMO Cancer). Large structuring initiatives were launched, such as the Personal Medical File (DMP in French), and its cancer component, the Cancer Communication Record (DCC in French), and the “Investment for the Future” programme.

Moreover, following the health crisis associated with Médiator, the 29 December 2011 Act concerning increased drug and health product safety has led to a modification in practices, restricting access to innovative drugs (80% of anticancer drugs), and strengthening the rules governing expertise in the medical area.

A COLLABORATIVE AND PARTICIPATIVE APPROACH

Given this complex background, the Institutional Project emphasises the strengthening of INCa’s position as an agency of reference for scientific and medical expertise, improving the transparency of its action, and adapting its governance to the present challenges of transparency and quality.

The outcome of a collaborative and participative approach linking staff from the Institute to lead and participate in working groups, the Institutional Project was adopted at the end of the first half of 2012, and led to a modification of INCa’s internal organisation. It should, moreover, enable all staff members to root their actions in a collective approach, with due consideration for the strategic orientations agreed by the Board of Directors.
These are the strategic orientations that INCa will strive to implement between 2012 and 2015. The object is to accentuate the effort given to some of INCa’s founding roles, and to identify new roles or give preference to those that have become priority in the present context.

The implementation of the Institutional Project is provided through an annual action plan validated by the management committee, which frames the work programmes for the relevant hubs and divisions. Monitoring of implementation is designed to allow its assessment at the end of the project.

The following pages help to emphasise the key elements, both cross-sectional and organisational, and the initial achievements associated with the implementation of these strategic orientations in 2012.
OPTIMISATION OF RELATIONS WITH THE INSTITUTIONAL PLAYERS AND GIP MEMBERS

To strengthen its unifying and coordinating role in the cancer area, INCa must consolidate its interactions with institutional players involved in health and research, most importantly the members of INCa’s constituent Public Interest Group (GIP).

COLLABORATIONS WITH GOVERNMENT DEPARTMENTS

PROTOCOL FOR COORDINATION WITH THE GENERAL HEALTH DIRECTORATE

A protocol for coordination was signed between the Director General for Health and the Chairperson of INCa on 15 November 2012. Provided for in the Contract of Objectives and Performance signed by the State and INCa, this protocol establishes and formalises the organisation of relations between the French General Health Directorate (DGS) and INCa, for all areas of interaction, for the 2012-2014 period.

Formalisation of coordination with the government departments should continue in 2013, especially with the French Directorate General for Healthcare Provision (DGOS), and the General Secretariat of the Departments with responsibility for Social Affairs, in order to organise relations with the Regional Health Agencies (ARS).

INCREASED COLLABORATION WITH DGOS TO SUPPORT RESEARCH

In 2012, collaboration between INCa and DGOS with regard to their shared actions to support cancer research has been developed and consolidated. Texts of calls for research proposals handled by INCa and funded by DGOS (Hospital Clinical Research Programme – PHRC Programme to Support Innovative Techniques) or jointly funded with the DGOS (Investigator-driven Research Projects for Translational Cancer Research) were drafted with greater interaction between the two partners, especially with regard to defining the orientations. The two parties also agreed on procedures for selecting projects (general use of a two-stage international review process, i.e. letter of intent followed by complete application) and monitoring of selected projects (routinely long term monitoring and seminars to present results).

A noteworthy change was initiated concerning criteria for the distribution of recurrent funds allocated by DGOS to structures identified and coordinated by INCa. Thus, the overall budget for mobile clinical research teams (EMRC) was increased by 13% after assessment of these structures. The annual grant awarded to the tumour banks by DGOS was redistributed for the first time since 2005, on analysis of the activity reports from these structures, based on criteria for scientific contribution defined by INCa. Finally, DGOS jointly funds the Integrated Cancer Research Sites (SIRICs), together with INCa and the French National Institute of Health and Medical Research (INSERM), accounting for close to a third of their annual budget. The three funding partners will work together to monitor and establish a scheme to assess the activities of the SIRICs.

PARTICIPATION IN THE DRAFTING OF BUDGET CIRCULARS AND MONITORING OF CANCER PLAN FUNDING

INCa has determined with DGOS the terms and criteria for distribution of funding for the measures in the Cancer Plan, and has participated in the drafting of three annual budget circulars.

The Institute has also provided monitoring for funding awarded under the Social Security Finance Act (LFSS), and has contributed to the drafting of cancer-related proposals for the 2013 social security finance bill (PLFSS).
In order to ensure better consistency among projects, INCa has the role of defining the cancer research programme in consultation with the French National Alliance for Life and Health Sciences (AVIESAN) and the French National Research Agency (ANR), and forging collaborations with other cancer funding organisations. The partnership with AVIESAN relies on the Multi-organisation Thematic Institutes (ITMO) of the Alliance, most especially ITMO Cancer and the French National Institute of Health and Medical Research (INSERM), a member of the INCa GIP.

**A STRONGER INTERFACE BETWEEN INCA, ITMO CANCER AND INSERM**

The framework agreement signed between INCa and IMSERM in 2010 led to the following tangible developments in 2012:

- weekly meetings on planning, and monitoring of calls for proposals in progress;
- promotion and dissemination of cancer-related scientific information;
- organisation of two international colloquia (2nd ProCaRT forum on research prospects – see page 57, and International R&D Dating – see page 9);
- joint production, with ARC French Foundation for Cancer Research, of a web documentary on advances in research (see page 25);
- shared preparation of two information packs for the wider public (physical activity and cancer, targeted therapies and personalised medicine).
- a joint analysis of investments made in cancer research, presented in the 2012 INCa Scientific Report.

**RESEARCH PLANNING WITH ITMO PUBLIC HEALTH AND IRESP**

Interactions between INCa, ITMO Public Health and the French Public Health Research Institute (IReSP) in 2012 led to the publication of a joint strategy report for preventive research. This reflection was based on the work of a multidisciplinary group comprising researchers in human and social sciences, public health and epidemiology. The report was presented to INCa’s International Scientific Advisory Board in 2012. It proposes new avenues for development which should help to initiate coordination between public health players in two directions—one, between research funding agencies, to consolidate funding and attract researchers on a path less travelled at the moment; on the other hand, between players in research and public health, in order to develop an integrated approach that best meets the hopes of the former and the needs of the latter.

INCa also participates in the steering committee for cohorts supported under the schemes for Very Large Research Infrastructures (TGIR) and Investment for the Future, coordinated by ITMO Public Health and IReSP.
SHARED APPROACH FOR RESEARCH ON ENVIRONMENTAL RISKS

Since the end of 2011, support for research on environmental risks in relation to cancer has made progress with the help of research funding organisations. Several calls for research proposals cover all aspects of research in the environmental area: “Cancer and Environment,” operated by ITMO Cancer in collaboration with INCa, “Work-Health-Environment,” operated by the French Agency for Food, Environmental and Occupational Health Safety (ANSES), and the “Environmental Contaminants” programme operated by ANR, in which projects devoted to cancer are funded by INCa. Overall, the number of research projects funded in this context, and the resources mobilised, made strong progress between 2009 and 2012, going from 11 projects selected in 2009, for an amount of €2.3 million, to 35 projects in 2012, for an amount of €10.4 million. A new call for research proposals aimed at supporting the development of new tools for assessing the role of environmental factors in the occurrence of cancers was launched in December 2012 by ITMO Cancer in collaboration with INCa.

IN-DEPTH REVIEW OF THE INCA GIP CONSTITUTIVE AGREEMENT

The Act for the Simplification and Improvement of the Quality of Law of 17 May 2011 requires public interest groups to have their constitutive agreements comply with the provisions of this same Act, before 16 May 2013.

INCa, created as a GIP in 2005, decided to use this compliance procedure to update its constitutive agreement and rules of procedure. The result was an in-depth review of both texts, which began in May 2012. It was submitted, in September, to the Ministries responsible for Research and Health, and in October, to the Ministry with responsibility for the budget. The General Assembly is expected to approve this new constitutive agreement in March 2013, and the Board of Directors is expected to validate the rules of procedure.

Finally, INCa participates in the “R31” network, operated by ANSES, which aims to increase cooperation regarding questions of health risk assessment, and to provide a role of monitoring and warning for the public authorities in the event of risks to public health.

PARTNERSHIPS WITH NATIONAL CANCER ASSOCIATIONS

INTEGRATED RESEARCH ACTION PROGRAMMES

Since 2007, in the context of a partnership with ARC Foundation for Cancer Research and the French National Cancer League, INCa has implemented an integrated research actions programme (PAIR) for a given type of cancer every year. PAIRs are aimed at supporting all dimensions and research questions (basic biology, clinical research, epidemiology, innovative technologies, prevention, screening, diagnosis, and human and social aspects) of a given pathology. The three partners, with assistance from the scientific community, define the areas for the call for proposals, which are reviewed by an international committee.

Following colorectal cancer (early forms) in 2007, lymphomas in 2008, liver cancer in 2009, prostate cancer in 2010, and upper aerodigestive tract cancers in 2011, the 2012 PAIR was devoted to gynaecological cancers (cervical, uterine and ovarian). The three partners also planned PAIR 2013, devoted to melanomas, and organised a national seminar, the 4 July 2012, to present results of the reflection process and priority areas for research on this theme.

INCREASED SYNERGY WITH ARC FOUNDATION FOR CANCER RESEARCH

INCa expanded its relations with ARC Foundation regarding major actions in the Cancer Plan; on the one hand to help identify and once and for all, to “remove obstacles faced by cancer patients in re-entering the workforce,” and on the other hand to support programmes led by the early-phase clinical trial centres (CLIP²). Finally, ARC Foundation joined INCa to support translational research projects conducted by French teams under the European TRANSCAN programme (see page 65).
PARTNERSHIP WITH THE NATIONAL CANCER LEAGUE FOR PROOFREADING OF CLINICAL PROTOCOLS

In addition to the multi-year framework agreement on the development of the Cancer Info platform (see pages 52-53), relations between INCa and the National Cancer League have resulted in the signature of a partnership agreement for the proofreading of protocols by the League’s Patients’ Clinical Research Committee (CPRC) prior to setting up clinical trials. The main mission of the CPRC is to make the patient an active partner in the design of therapeutic trials through his/her real-life experience of the pathology. For 12 years, the League has had such a partnership arrangement with Unicancer. The scheme is effective and has proven useful; however, too few sponsors use it. The challenge for the partnership signed with INCa is to extend the scheme to all academic and industrial sponsors.

ORGANISATIONAL COLLABORATIONS WITH THE HEALTH AGENCIES

In fulfilling its roles, INCa interacts directly with all health agencies and authorities working in cancer-related areas, in the context of partnerships, framework agreements and programmes of shared action, as mentioned in this report. Here we offer an overview of some noteworthy collaborations from 2012.

RENEWAL OF THE PRODUCTIVE PARTNERSHIP WITH THE FRENCH INSTITUTE FOR PUBLIC HEALTH SURVEILLANCE (INVS)

During 2012, the partnership work programme between InVS, INCa, Lyon General Hospitals (HCL) and the French Cancer Registry Network (FRANCIM) helped to achieve the following three main objectives: to gain a year in the production of data from the cancer registries; to produce scorecards on the time to treatment for cancer patients based on data from specialised cancer registries; and to integrate data per stage or per diagnosis for five types of cancers into the communal cancer database. The year 2012 was also given to the drafting of a report on the survival of people with cancer in France for the 1989-2007 period (to appear in February 2013).

Under its partnership with the Institute for Public Health Surveillance, INCa participated in establishing the mandatory notification of mesothelioma, and in organising

Inter-canceropole working groups

INCa and the canceropoles carried out collaborative actions through working groups defined under agreements signed for the 2012-2014 period.

• The “Bibliometry” working group helped to optimise a methodology for analysing French scientific production in oncology, and contributed to a bibliometric report produced by INSERM for the 2006-2010 period. The group also helped to implement the directory of cancer research teams compiled by ITMO Cancer.

• Reflections carried out by working groups in human and social sciences, epidemiology and public health helped to guide the call for proposals planned for 2013 on nutrition and reduction of inequalities.

• The working group for clinical research worked all year to identify the levers that favour the inclusion of patients in clinical trials. A status report and recommendations will be submitted to INCa by the working group during 2013.
INCa/French National Institute for Prevention and Health Education (INPES) partnership: main findings from Cancer Barometer 2010

The second edition of this general population survey, carried out by telephone during the first half of 2010 on a representative sample of 4,000 people aged 15 to 85 years, assessed the knowledge, attitude and behaviours involving risk factors for cancer, screening practices, perception of the disease and perceived quality of care. Repeating the methodology of the previous Barometer enabled the measurement of trends between 2005 and 2010, especially in the area of social health inequalities. Although the proportion of people mentioning cancer as the most serious disease increased significantly between 2005 and 2010 (from 64.5 to 69.6%), and nearly all (95%) believed that no-one is safe from cancer, most believed that having had cancer did not prevent their living a normal life.

A better knowledge of risk factors for cancer was observed, but at the same time, there was misinformation as to the relative weight of each risk factor. The perception of the influence of environmental risks on cancer progressed substantially between 2005 and 2010. This proliferation of perceived risks enabled some people to downplay specific risks (for example, 65% of those questioned thought that breathing city air was as bad for health as smoking cigarettes).

Regarding the health system, results show more or less unanimous satisfaction among patients with respect to the quality of their care (stable since 2005). Cancer patients perceived their pain to be better managed in 2010 than in 2005. However, more than one in four patients (one in five in 2005) believed that they were still not being given enough information.

Finally, between 2005 and 2010, opinions concerning cancer showed increased differences along social lines. This distinction was found with respect to risk factors (tobacco, UV, nutrition), as well as access to screening and holding opinions that devalue people with cancer.

of the National Registries Committee’s colloquium. Since the 2008-2012 framework agreement had come to an end, a new InVS/INCa agreement was signed on 17 December, for a further period of 3 years.

**JOINT PUBLICATION WITH THE BIOMEDICINE AGENCY**

As part of their shared action programme, INCa and the Biomedicine Agency continued work on the consequences of cancer treatment and the preservation of fertility in 2012. Although cancer treatments have indeed improved considerably in recent decades, their unwanted effects may particularly affect reproductive function. The ability to become a parent is essential to quality of life, next to recovery from illness. Preservation of fertility is therefore a real preoccupation for patients, their families, and medical teams.

For over thirty years, the storage of spermatozoa in the Centres for the Study and Conservation of Human Ova and Sperm (CECOS) has helped to preserve the fertility of many men. For women, ovarian tissue was first stored in France in 1995. However, there are large disparities in management between medical teams, with wide heterogeneity in the information provided to patients. A working group made up of cancer care and reproduction specialists and patient representatives contributed to a situation report completed at the end of 2012. This document reviews the current knowledge regarding the toxicity of treatments, possible strategies for preservation of fertility and the situation in France; it offers perspectives regarding the organisation of care, systematic information of patients and research (due to appear in February 2013).
JOINT PREVENTIVE ACTIONS WITH INPES
The collaboration between the two institutes has been especially well illustrated by the publication of the INPES/INCa Cancer Barometer results for 2010 in June 2012. There has been a focus on the promotion of physical activity in local government areas with the help of the tool “Physical Activity: Communities are Getting Involved, why not Yours?” (www.des-communes-sengagent.fr, also accessible via www.mangerbouger.fr). The complementarity of the two institutes was also consolidated by joint efforts in the prevention of melanoma (solar and artificial UV) and cervical cancers, anti-smoking campaigns, and with the link between nutrition and cancers, especially with the publication of the “Excess Weight, Obesity, and Cancer Risk” Reference Sheet.

INVOVING INCA IN THE IMPLEMENTATION OF HEALTH DEMOCRACY
As a health agency entrusted with coordinating actions to combat cancer, INCa maintains a wide circle of close relationships. Being institutional by nature, this interaction is, however, not in itself a guarantee that all the needs and expectations of its stakeholders will be taken into consideration. INCa has therefore chosen to become more involved in the implementation of health democracy. It has found ways to lead the action while paying close attention to the needs and expectations of the ultimate beneficiaries and those working on the ground in the fight against cancer, i.e. individuals with cancer, those close to them, users of the health systems, citizens in general, and professionals from the health, social and research sectors.

CALL FOR APPLICATIONS FOR THE USERS’ AND PROFESSIONALS’ COMMITTEE
In 2012, the Institute decided to set up a Users’ and Professionals’ Committee (COMUP), a permanent advisory body positioned close to the Chairperson of INCa, and reporting to the Board of Directors. A call for applications was opened at the end of 2012, and widely circulated. It led to the compilation of 213 applications that were examined by a review committee in February 2013 with a view to creating a body comprising 28 members (14 patients or individuals close to patients, and users; and 14 health professionals, from both the social sciences sector and research). COMUP replaces two distinct bodies which had existed hitherto, the Committee of Patients, Friends and Family and Users (CMPU), and the Advisory Committee of Health Professionals (CCPS), in order to extend the health democracy process through direct dialogue between stakeholders. The drafting of a charter for relations between INCa and its stakeholders was also undertaken in 2012. These actions were implemented through a Stakeholders’ mission created under the Institutional Project. This mission also has a role in supporting INCa staff in their role of developing participative processes.

PARTICIPATION OF USERS IN THE ASSESSMENT PHASE OF CALLS FOR PROPOSALS
The participation of patient representatives, those close to patients, and users in review committees for calls for proposals was initiated in 2011. This approach began by offering CMPU representatives an opportunity to participate in committees reviewing proposals for research projects. Subsequently, this offer was extended to include review committees from all INCa’s areas of action. Thus two representatives participate in debates, extending the elements to be considered in decision-making. Future training for these representatives has been judged necessary, in order to increase the relevance of their contributions, specifically in the research area.
DEVELOPMENT OF INTERNATIONAL COLLABORATIONS

The Institute continues to act towards strengthened involvement of French researchers in European and international programmes, and support the development of global collaborations in cancer.

International research networks and partnerships

- ICGC International Cancer Genomics Consortium.
- IHEC International Human Epigenome Consortium (ITMO)
- IRCI International Rare Cancers Initiative (currently being formalised) rares (en cours de formalisation).

Europe

- BASIS Research project: Breast cancer somatic genetic study: 13 partners, 8 countries
- TRANSCAN ERA-NET: translational research: 25 partners, 19 countries.
- Joint action EPAAC: European Partnership for Actions Against Cancer: 36 partners, 27 countries
Key actions in 2012

- **ICGC**: 6th Scientific Conference, Cannes. At international level, 22,000 tumour samples have already been sequenced, and the initial results of the study on liver cancer supported by INCa have been published. In France, launch of the 4th genome sequencing programme, on Ewing’s sarcoma.
- **Côte d’Ivoire**: signature of a cooperation agreement with the health authorities.
- **Senegal**: pursue of training activities (medical oncology) and definition of a research programme to support the organisation of secondary prevention program (cervical cancer).
- **IAEA**: organisation, under the current agreement, and with support from INCa, of a subregional workshop which brought together in Mauritania 5 francophone countries from West Africa to elaborate a coordinated strategy for cancer control in the participating countries.
- **NCI/INCa/Afrox conference**: development of priority actions for 2013 and alignment of international strategies between the National Cancer Institute (US) and INCa, in association with African organisations (AORTIC, Organisation for Research and Training in Cancer).
- **EPAAC**: forum held in Brussels for decision makers and cancer research funders, and a meeting in Paris focused on two innovative pilot projects.

**IAEA-PACT**

- **Collaborative agreement**: cancer control support for low and medium income countries.

**Thailand**

- Research and public health projects on cervical cancer (HPV/HIV).

**Africa**

- **Telepathology network**: support for diagnostics (lymphoma).
- **Senegal**: research, coordination, training and capacity building.
- **Mauritania and Côte d’Ivoire**: training and capacity building.
IMPROVED OBSERVATION OF CANCERS AND A SYSTEMATIC APPROACH TO ASSESSMENT

As a complement to the action of other players and agencies involved in these areas, INCa has continued in its general role of observation and evaluation of schemes to fight cancer and the research activities it funds.

DEVELOPING A SYSTEMATIC APPROACH FOR ASSESSMENT

The new Strategic Orientations emphasise the need for a systematic assessment approach at INCa. The Observation, Monitoring and Assessment Department (Public Health and Care hub) has consolidated its action in this area, and a dedicated research assessment role has been created within the Research and Innovation hub. At the same time, a cross-sectional assessment network has been created within INCa. It aims to promote a culture of communal assessment and drafting of procedures. Two organisational projects for assessment were implemented by INCa in 2012, namely the Health Investments Observatory, “Helios,” and the “Cancer Cohort.”

HEALTH INVESTMENTS OBSERVATORY (HELIOS) IN THE AREA OF CANCER

The observatory project, “Helios” (Health Investments Observatory) will be developed in 2013, pursuant to a feasibility study conducted in 2012. The objective is to develop an observatory for health investments in cancer-related research areas, and to produce indicators for the impact of these investments in scientific, social and economic areas. This project will be conducted in collaboration with INSERM for ITMO Cancer.

THE CANCER COHORT

The “Cancer Cohort” tool for analysing the trajectory of care of people with cancer was designed on the basis of medico-administrative data from France’s main health insurer. Its originality comes from the linking of care provided in hospitals with that provided outside of hospitals, for a clearly identified population monitored over a long period. Through this review and the analyses that feed into it, it is becoming possible to monitor the care plan of individuals with cancer, from diagnosis to medium- and long-term follow-up, and thus characterise care trajectories and their trends. Together with this analysis, the development of scorecards for monitoring and assessment, and medico-economic studies will help to optimise the management of different actions to combat cancer. The first of these tasks is the development of scorecards for radiotherapy taking place outside hospitals. This work is being done in collaboration with the French National Health Insurance Fund for Salaried Workers (CNAMTS) and the French Health Data Institute (IDS).

THE CANCER ALGORITHM

Data on private and public hospital activity (Programme for the Medicalisation of Information Systems-Medicine, Surgery, and Obstetrics—PMSI MCO), together with data on consumption, e.g. for expensive molecules (FICHCOMP) made available by the Agency for
Information on Hospital Care (ATIH) have been the subject of numerous analyses. The latter include the development of an algorithm for the selection of hospitals (consultations and stays) for cancer care (“Cancer Algorithm”), in the diagnostic, treatment, or follow-up phases, as well as for the care of complications, or activities related to the monitoring of individuals at increased risk of cancer. The algorithm has been validated by the working group that includes the main players in the area (AITH, the National Agency for Supporting Medical Institutions’ Performance, the French Hospital Federation, the French Private Hospital Federation, Unicancer, etc.). An assessment will be undertaken in 2013, in order to ensure its relevance.

**SUPPORT FOR THE CANCER REGISTRIES: FROM SURVEILLANCE TO OBSERVATION**

The cancer registries have “gained” a year. In the area of cancer surveillance, efforts made under the partnership programme between INCa, the French Institute for Public Health Surveillance (InVS), the French Cancer Registry Network (FRANCIAM), and the Biostatistics Department of the Lyon General Hospitals (HCL) have been repaid. Incidence data will henceforth be collected and available a year earlier, which will allow publication of projected incidence after a three-year lag, compared with four years in 2011.

In order to contribute to the promotion, sharing and dissemination of knowledge from the cancer registries, INCa jointly organised, together with InVS and INSERM, a colloquium, Registries and Public Health Policy, which took place in Paris on 6 and 7 December 2012. This colloquium was devoted to the composition of the registries, their place in research and surveillance, and their contribution to assessment of public health policy. It provided players using documentation from registries with an opportunity to meet registry staff. A day devoted to regulatory aspects, access to the different medico-administrative data sources, and the Personal Medical File (DMP) completed the colloquium.

Finally, INCa has maintained its support to the cancer registries (both general and specialised) by providing 75% of funding for the registries under the InVS/FRANCIAM/HCL/INCa partnership, and by funding studies specifically developed to improving their quality process.

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**Multi-thematic scientific monitoring**

Nota Bene Cancer, a scientific monitoring bulletin devoted to cancer, continues to be disseminated, with over 3,700 subscribers at the end of 2012. Whether they are researchers, professionals working in health, administration or the non-profit sector, some coming from countries such as the United States, Benelux or Canada, subscribers have been able to access the 48 issues dealing with all areas of the fight against cancer, from fundamental biology to treatments and public health (prevention, screening, economics, epidemiology, etc.).

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**The cancer data portal is evolving**

The cancer data portal (lesdonnees.e-cancer.fr) has celebrated its first year of existence, with over 76,000 visits and 211,000 pages viewed in 2012. It has progressively expanded, including new indicators and fact sheets covering fields from observation to post-cancer, while continuing to provide numerical data on cancer and cancer research. Presentation of research projects funded by INCa and its supervisory bodies was also completed. The portal respects accessibility and “open data” rationale, and thus allows reuse and sharing of data.

**The cancer situation in France in 2012**

The 2012 edition of the report, “The Cancer Situation in France,” provides a summary of the data and indicators concerning cancer and cancer research. This status report refers to the most recent data available in September 2012, from institutional and scientific studies and publications, and made available on the cancer data portal. Health inequalities, a highly significant problem, and central to the Cancer Plan, are the subject of a new chapter in this 5th edition, in response to the recommendations of the French High Council for Public Health (HCSP), during the mid-way review of the Plan. It introduces the definitions and concepts of health inequalities, and describes several indicators and data used or under development in the cancer area.
SUPPORTING THE DETECTION AND DISSEMINATION OF INNOVATIONS FOR THE BENEFIT OF ALL

As one of INCa’s founding missions, and part of the Cancer Plan and INCa’s COP, support for innovation in all areas of cancer research is restated as a priority area in the new Strategic Orientations.

CREATION OF A DEDICATED INNOVATION DEPARTMENT

The Institute must be able to identify grassroots initiatives or discoveries of interest for patients and the population, to evaluate them quickly, to support their deployment in practice, and to advocate this deployment to the public. It must also be able to respond when certain fields are designated high priority, by fostering innovation in those fields. In particular, this will involve establishing a continuum between fundamental, translational and clinical research and making the advances made in these areas available to patients. Innovation covers all scientific and technological areas, as well as organisational and social areas. It translates into progress in treatment, prevention, screening and social care.

An internal working group has given consideration to innovation, and submitted its conclusions during the first quarter of 2012. Support for innovation was formalised and structured within INCa by expanding the roles of the former Research Division, now the Research and Innovation hub, and by creating a dedicated Innovation Department within this hub.

NEW MISSION, "DRUG REFORM"

The Act to increase drug safety has involved modifications in access to innovative therapies. As part of its Institutional Project, INCa wished to develop a new mission to support professionals in their approaches to prescribing drugs without marketing authorisation (MA) or pre-MA, in consultation with the French Medicine Agency (ANSM). The “Drug Reform” mission began a programme for safe access therapeutic innovations in 2012.

THE ACSÉ PROGRAMME

For the last 10 years, drugs targeting a specific molecular abnormality in a tumour have changed the treatment and prognosis of some cancers. Developments in biology have enabled the identification of relevant targets, and treatments that interact with these targets. Their number is constantly increasing. Nearly 800 drugs are being evaluated in early phase clinical trials, and approximately fifteen currently have marketing authorisation (MA) for identified malignant pathologies.

The molecular targets initially identified in a given pathology have been found to be present in other cancers for which the treatment was not developed and/or MA was not requested. The AcSé Programme aims to offer controlled access for patients likely to benefit from these drugs, outside the framework of MAs obtained or planned by the pharmaceutical companies.
The objectives of the AcSé Programme are as follows:
- to offer cancer patients, for whom validated therapies have failed, access to a treatment based on a molecular abnormality of their tumour, in the context of a therapeutic trial;
- to study the interest of these innovative target-oriented molecules, in terms of efficacy and tolerance, for patients with cancers of different cytological or histological types that feature the targeted molecular abnormality, in the absence of MA, a developmental clinical trial, cohort ATU (temporary authorisation for use) or temporary recommendation for use (RTU) for this indication;
- to allow equal access for patients to innovative treatments, throughout French territory, whether these patients are being cared for in the public or private sector.

The molecular genetics centres will allow identification of patients likely to be included in the AcSé Programme by screening the molecular abnormalities of their tumours. These trials will be a priority for the mobile clinical research teams. The INCa-designated early-phase clinical trial centres (CLIP²) will be mobilised to support the deployment of these trials in all authorised public and private facilities.

“Cancer Research: Everything is Moving Faster,” a web documentary devoted to advances in research.

On World Cancer Day, 4 February 2012, INCa launched the web documentary, “Cancer Research: Everything is Moving Faster” (www.recherche-tout-saccelere.fr), in partnership with INSERM and ARC Foundation. Intended for a non-specialist audience, this multimedia interactive resource sheds light on the most promising areas of research, with the recurring theme of the advances that have contributed to the development of personalised medicine. The objective: to explain and personify existing and emerging advances, and thus contribute to changing the way this illness is seen.

Comprising intersecting reports and interviews, it has the original feature of showing the connection between the work done by researchers and the reality experienced by patients. It is organised into four parts corresponding to the main fields of application of research, namely understanding – treatment – support – prevention and detection. With support from an online launch campaign in February 2012, the web documentary received over 116,000 visits up to the end of the year. A 52-minute version for television will be broadcast in 2013.
FROM QUALITY OF EXPERTISE TO OVERALL RISK MANAGEMENT

Risk management policy, supported by a quality assurance approach initiated in the area of expertise in 2012, is one of the priority issues for the coming years.

QUALITY AND SAFETY OF EXPERT OPINIONS ON CANCER AND CANCER-RELATED ACTIVITY

INCa has the role of producing expert opinions to guide the public authorities, professionals, patients, and the general public in making decisions that concern cancers. These expert opinions must be of exemplary relevance, exactness and transparency. The management of risks in relation to interests is a central component.

Having been present at the drafting of the 29 December 2011 Act regarding drug and health product safety, INCa worked within the French Agency Network Facilitation Committee (CASA) to draft the Decree of 9 May 2012 regarding the public declaration of interests (PDI) and transparency, and to draft the future Decree regarding the charter on expertise. INCa quickly modified its scheme through the following actions:

- implementation of a PDI form, in French and English, to comply with the Order of 5 July 2012, in September 2012;
- definition of INCa staff and bodies subject to regulatory obligations, with the consent of the Ethics Committee;
- definition of a transitional arrangement to organise the management of new PDIs and their online availability on the website.

Additional work under quality and risk management will be carried out in 2013 to refine the scheme and to strengthen the process for assembling expert groups and conducting expert assessments. These processes are managed by the delegation created specifically within the Division for Recommendations and Quality of Expertise, and by the Committee for Risk Management and Internal Control, and all three were instituted on foot of the Institutional Project.

“Expertise in health responds to the principles of impartiality, transparency, plurality and cross examination”

Article L. 1452-1
Act of 29 December 2011, concerning the enhancement of drug and health product safety.
**ESTABLISHMENT OF MEASURES FOR QUALITY AND RISK MANAGEMENT EXTENDED TO ALL ROLES WITHIN INCA**

As part of the Institutional Project, measures for risk management have been extended and reviewed. Thus, a specific delegation worked on scenarios to allow measures for risk management initiated in 2009 for processes involving financial matters to be extended to INCa’s “core activities.” The initial achievement of this delegation was to formalise a common map of INCa’s activities. This resource is an essential prerequisite for the comprehensive mapping of risks faced by the Institute, and prioritisation of actions.

Governance of the scheme was also reviewed, with a single steering committee for risk management and internal control, and the identification of risk managers and management for a network of contact persons for internal control. This new organisation will be implemented in 2013, and will be driven by the Administrative Director, in association with the Internal Auditor.

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**“ESTABLISHMENT OF A PROCEDURE FOR QUALITY ASSURANCE REGARDING CONFLICTS OF INTEREST WHEN MAKING CLINICAL PRACTICES GUIDELINES”**

In the specific area of guidelines, existing procedures have been strengthened through the systematic application of a tool for tracking interests, and a reminder of the principles of the Ethics Charter, at the start of meetings, to participants of working groups.

The four national recommendations initiated or published in 2012 depended on expert groups who had completed a declaration which was analysed and then validated by the Departmental Manager, the relevant Division and the Chairperson, and finally published on the INCa website. Analyses led to the exclusion of approximately 25% of candidate experts proposed by learned societies or responding to calls for experts. An identical approach was applied for guides describing the care of long-term illnesses (ALD) for General Practitioners, jointly produced by INCa and French National Authority for Health (HAS). In 2012, 3 working groups were set up, bringing together 40 experts. One hundred PDIs were analysed by INCa and HAS, with each institution applying its analytical criteria for interests.
CROSS-DISCIPLINARITY, COLLEGIALITY AND EFFICIENCY IN THE INSTITUTE

Being committed to a programme of improvement, the National Cancer Institute has implemented the necessary means to establish a long-term culture of service, responding to the needs and expectations of professionals and the public, together with ways of working that allow for substantial cross-disciplinarity.

NEW INTERNAL ORGANISATION

To ensure better cross-disciplinarity and more streamlined exchange between disciplines, a new organisation was introduced on 1 June 2012. Thus, roles identified as priority have been strengthened, through the creation of dedicated entities such as the Division for Recommendations and Quality of Expertise, and the creation of roles for Evaluation, Drug Reform, Quality of Expertise and Relations with Stakeholders. Support and management roles have been clarified so as to better meet INCa's priorities. Finally, the number of divisions has been tightened, with two large activity hubs, each with a wide range of activity, together with two management divisions that have a cross-disciplinary support role.

This reorganisation has promoted breaking down barriers and merging disciplines, both by increasing work in the project mode and the creation of specific committees, and by a greater reliance on collegiality and empowerment. A strategic and organisational framework has also been constructed under the Institutional Project to improve the conditions for constructing, sharing and assimilating the annual action plan.

In applying this reorganisation, the arrangement of the premises has been reviewed in order to favour decompartmentalisation and foster cross-disciplinarity. This has resulted in bringing the teams, departments and services from a given division into closer physical proximity, and in the grouping together of support operations on the same floor. This rearrangement was wanted and was done consistently in order to support cross-disciplinarity (see organogram on page 86).

TOOLS TO SUPPORT COLLABORATIVE WORK

Operation in project mode has been developed, providing coordination between the “professions,” and “supports,” and procedures and application tools have been put in place. Operation in project mode is essential for INCa, which must provide management for projects involving various actors, both externally among the partners, service providers, contractors or assistant project managers, and internally for the support of all staff.

With regard to procedures and application tools, the main projects implemented in 2012, consistent with the Master Plan for the Information Systems (SDSI 2009-2012) were the following:

- MOSAIC (Implementation of INCa Activity Monitoring): the project enabled, prior to deployment of the tool, the organisation of the different working groups around INCa's major activities and the large strategic areas constituted by the Cancer Plan, the Action Plan, the Institutional Project and the Contract of Objectives and Performance. Different configuration tasks completed by the working groups have helped to produce, through an iterative process, increasingly improved versions
COMPLIANCE WITH STATE REAL ESTATE POLICY

To comply with the new State real estate policy, and INCa’s multi-year real estate strategy plan (SPSI in French), approved in 2011 by its supervisory ministries and by France Domaine, the Institute continued to implement its commitment to optimising its real-estate performance in 2012, and to comply with the standards set out by the State operators, taking a comprehensive approach to rationalisation of costs and control of expenditure.

Indeed, having vacated its Lyon offices at the end of 2011, the Institute continued to apply its SPSI by vacating the 2 top floors and the 4th basement of the building it occupies in Boulogne-Billancourt, on 31 March 2012. In vacating these floors, the Institute is currently renting the first 5 floors of the site, thus occupying a gross usable area of 3,511m².

Améliorer la production et la valorisation des publications de l’INCa


Un nouveau processus de publication a également été mis en place en octobre 2012, au profit d’une capacité d’anticipation améliorée, d’une vision transversale des projets et d’une plus grande fluidité de réalisation. Il se découpe en six phases, de l’amont (cadrage) à l’aval (évaluation) et prend appui sur : une fiche de validation et de suivi, accompagnant la publication à chaque étape du processus ; un Comité des publications, présidé par la directrice générale et réuni pour la première fois en novembre ; un nouveau circuit de validation institutionnelle des documents avant édition ; une cellule de valorisation des publications au sein de la direction de la communication et de l’information, au service de chaque porteur de projet.

- of a software package devoted to this project, due for deployment throughout INCa at the start of 2013;
- GiPSI (Integrated Management of Projects Monitored by INCa): this tool should allow paper-free and streamlined management of projects monitored by INCa. Due to an unsuccessful call for tenders, this project will commence in 2013;
- Collaborative tools: the deployment of the Microsoft SharePoint® collaborative tool has been widened to include a number of important departments as projects have been submitted that are eligible for collaborative work, giving users a good chance to adopt it; however, training is still required in order to exploit all its functions.
INCa strives to produce quality expert reports through the compilation and analysis of scientific data on cancer and oncology. It also conducts studies and assessments in relation to prevention, screening, and care.

PREVENTION, DETECTION AND CARE OF CANCERS

SPECIFIC CARE PLANS IN ONCOLOGY
Deployment of schemes for oncogeriatrics and rare cancers

INDIVIDUALISED PLANS FOR PATIENTS DURING AND AFTER CANCER
Initial quantitative and qualitative assessment of experiments
We must use developments in scientific knowledge to support professionals and inform the public in a transparent way.”

Jérôme Viguier, Director, Public Health and Care Hub
PREVENTION OF RISK FACTORS

In an effort to reduce the number of avoidable cancers, INCa participates in the definition of national and international prevention strategies, and contributes to their implementation.

TOBACCO USE AND CANCER RISKS

When invited in 2012 to contribute its expertise to the work of Member of Parliament Yves Bur, whose report was released in March 2012, and to that of the Court of Auditors on the anti-smoking campaign (report published in December 2012), the Institute prepared a memorandum, including data from projects that it funds concerning tobacco use.

Internationally, INCa participated in the French delegation to the 4th Conference of the WHO Framework Convention on Tobacco Control (FCTC), held in Seoul in November 2012. A protocol aimed at eliminating the illegal sale of tobacco products was adopted, together with a set of principles and recommendations regarding taxation and the regulation of the composition of tobacco products. INCa contributed to the drafting of Article 6 of the FCTC, concerning taxation.

Wave 3 of the International Tobacco Control (ITC) France survey was conducted from September to December 2012. INCa is a member of the French team coordinated by INPES (French National Institute for Prevention and Health Education) and the University of Waterloo. In addition to financial support, it contributed its expertise for the drafting of the questionnaire. The ITC Project is the first cohort study carried out internationally on tobacco consumption.

The objective of the ITC Project is to provide arguments based on scientific evidence to guide policy implemented under the FCTC, and to conduct a systematic assessment of the efficacy of public policy on tobacco use. With a sample of 1,735 smokers and 525 non-smokers, this third wave will particularly help to assess the impact of graphic warnings on tobacco packaging, and of measures to increase tobacco prices.

NUTRITION AND CANCER

INCa prepared a Reference Sheet entitled “Physical Activity and Cancer,” published in January 2012. This Reference Sheet provides an overview of the benefits of physical activity, particularly in terms of cancer prevention and improvement to quality of life during and after treatments. It also gives an overview of the different actions taken to promote physical activity in recent years. INCa has created a website dedicated to the promotion of physical activity to elected representatives, “Physical Activity: Communities are Getting Involved, why not Yours?” The launch of the site, in December 2012, comes under the 2009-2013 Cancer Plan and Action 11.1, “Provide information to elected representatives and regional civil servants on the links between nutrition and cancer and the role of physical activity.” In addition to raising awareness of the health benefits of physical activity, this site indicates possible areas for intervention, as well as some thirty examples of actions already in place in local government areas—a list that is likely to receive new contributions on the subject. This site is designated “PNNS” (French National Nutrition and Health Programme).
ARTIFICIAL ULTRAVIOLET LIGHT

After drafting two expert reports, in 2010 and 2011, on the cancer risks associated with UV tanning booths, in 2012 INCa participated with the DGS (General Healthcare Directorate), InVS (French Institute for Public Health Surveillance), INPES, ANSES (French Agency for Food, Environmental and Occupational Health Safety), DGCCRF (French Directorate-General for Competition, Consumer Affairs and Fraud Repression), in drafting an issue of the Weekly Epidemiological Bulletin (BEH) published by InVS entitled: “Artificial sun tanning: a real but preventable threat for public health.” In particular, INCa was in charge of an article refuting some misconceptions that are widespread among the public, and known to motivate people to engage in this practice. The arguments in the BEH article were repeated in the press to inform the wider public: tanning in booths is not a safe way to tan. It accelerates ageing of the skin, it does not allow effective preparation of the skin for the sun, and it can never be used for the benefit of health (endogenous production of vitamin D, protection against certain non-cutaneous cancers), given its known carcinogenic effect on the skin.

INCa also gave the DGS its opinion on a draft decree being examined by the Council of State to modify the Decree on the Availability of UV Tanning Booths (Decree No. 97-617 of 30 May 1997), during an open consultation on 28 November 2012.

Risks associated with the sun, and with artificial UV administered in tanning booths, were recalled on the 14th National Day of Prevention and Anonymous Free Screening for Skin Cancers, held on 24 May 2012 by the French National Union of Dermato-Venereologists, and supported by INCa (see page 39).

MORE INFORMATION ON www.e-cancer.fr
PREVENTION, DETECTION AND CARE OF CANCERS

PREVENTION OF ENVIRONMENTAL EXPOSURE AT HOME AND IN THE WORKPLACE

With respect to environmental health, in 2012 INCa was involved in the areas of surveillance and prevention of occupational cancers, working alongside occupational health players in particular. Prevention of exposure associated with housing was also the subject of joint actions.

OCCUPATIONAL CANCERS

In line with Measure 12 of the 2009-2013 Cancer Plan and Action 32 of the Occupational Health Plan, conducted by the French Directorate General for Labour, INCa contributed to the drafting of several recommendations for good practice prepared by the French Society of Occupational Medicine regarding “the medico-professional surveillance of workers exposed or with a history of exposure to chemical carcinogens: application to bladder carcinogens,” and “medico-professional surveillance of individuals that work shifts and/or nights.” In addition, INCa is funding a feasibility study for the application of recommendations on “the medico-professional surveillance of workers exposed to the carcinogenic effects of wood-dust.”

In June 2012, INCa presented the occupational health component of a training module on skin cancers, during the 32nd Occupational Medicine Conference in Clermont-Ferrand.

In December, INCa published an article “Inventory of information sources for occupational physicians on the prevention of occupational cancers: needs and expectations,” in Archives des Maladies Professionnelles et de l’Environnement, presenting the results of two surveys sponsored by INCa. Based on these results, a monitoring bulletin and a guide to documentary resources on the tools and information materials on the prevention of occupational cancers were prepared and given a favourable assessment by the main organisations working in prevention of occupational cancers, partners in the project. These tools will be widely disseminated, especially among professionals working in occupational health, from the beginning of 2013.

INCa funds and provides monitoring for the project, “NET-KEEP—a Network for Cancers and Assessment of Occupational Exposures” carried out by CHU de Nancy, in order to set up consultations devoted to occupational cancers on a trial basis, and once and for all, to reduce inequalities in relation to diagnosis and notification of these cancers.
Mandatory notification of mesothelioma

The area of surveillance increased in the beginning of January 2012 by the addition of mesothelioma as the 31st disease with mandatory notification. Mesothelioma is a cancer associated with asbestos exposure, which represents an important public health challenge, since the exposure may be occupational as well as environmental. INCa participates in the steering committee led by InVS, and promotes the dissemination of information to players in the field, such as the regional cancer networks (national conference of the regional cancer networks on 4 and 5 October 2012), and the expert centres on rare cancers. Furthermore, it contributes its knowledge of the health professionals involved, and of how these are organised: Mesonat, the National registry for Mesothelioma surveillance; Mésopath, the French College of Anatomic Pathologists Specialised in Mesothelioma; RENAPE, the National Reference Centre for Rare Peritoneal Tumours; and Mesoclin, the National network of Expert Centres for Mesothelioma, etc.

Surveillance tools for occupational cancers

In order to allow occupational health professionals to access up to date information on occupational cancers, work has led to the preparation of a monitoring bulletin, “Cancer Pro Actu,” and a dynamic guide to documentary resources, “Cancer Pro Doc.” Now that the first four bulletins have been assessed and validated by the working group made up of representatives of different contributors to the area, widespread dissemination is planned for 2013.

EXPOSURE TO RADON IN DWELLINGS

On 20 March 2012, a day jointly organised and jointly funded by the Department of Health, the Regional Health Agency of Brittany and the National Cancer Institute was held on the theme, “Healthy Homes and Radon: How Do We Act at Local Level?” This meeting allowed discussions on experiments conducted in France and abroad, and presentation of the prospects for possible actions for local authority areas or for associations involved in the prevention of risks associated with this gas. This day also highlighted the original and experimental project conducted by the Consumer Affairs, Housing and Quality of Life (CLCV) association in Finistère, aimed at raising public awareness of the effects of radon exposure in dwellings. Results of this action are eagerly awaited, in order to see if the formula may be reproduced in another region where radon is known to be present.

MORE INFORMATION ON www.e-cancer.fr

93% of occupational physicians have to deal with occupational cancer risks”

KEY FIGURES FOR 2012

1,200-2,900 deaths annually from lung cancer attributable to domestic exposure to radon
(source InVS)
ETHICS AND INFORMATION ON SCREENING AND EARLY DETECTION OF CANCERS

The problem of inequalities in access and uptake of cancer screening is a key measure in the 2009-2013 Cancer Plan, which has led INCa to engage in a process of ethical reflection about the organisation of and information on screening programmes.

**ETHICAL APPROACH TO ORGANISED SCREENING**

In the context of screening-related measures in the Cancer Plan, INCa has initiated a process of reflection on the ethical aspects of cancer screening programmes in France. Based on a number of independent expert opinions, the Ethical think-tank (GRED) produced an initial report entitled “Ethics and Organised Screening for Breast Cancer in France,” in November 2012.

The objective of this report is to recall, on the one hand, the fundamental ethical principles on which a public health programme such as organised breast cancer screening should be based, and on the other hand, to question the ethics of the present organisation of the programme (procedures for inclusion, follow-up, information, etc.) It emerges that the development of a culture of health education in the population is an essential prerequisite to spreading the public health message underlying a proposal to perform screening. Uptake of the programme requires the development of information on the benefits, limits and uncertainties associated with this screening. The report also proposes to increase the role and involvement of the relevant health professionals in relaying information and helping with decisions, and to end conflict between processes of individual detection and organised screening by recapitulating the indications for each of these approaches. The work done by GRED will be continued in 2013, with the ethical analysis of the screening programme for colorectal cancer.

**REDUCING INEQUALITIES IN ACCESS TO AND UPTAKE OF SCREENING**

Through its annual calls for proposals, INCa supports local actions that aim to develop primary or secondary prevention, especially those targeting individuals who are vulnerable for social, economic or cultural reasons. Projects submitted in 2012 had to be part of a partnership-based and regional dynamic, and be amenable to assessment with a view to possible national implementation. These actions may also be supported as health intervention research projects.

A one-day meeting to present the results of projects funded by INCa on the theme of “social inequalities in health and cervical cancer” took place in January 2012. The objective of this meeting was to discuss the contributions of these different initiatives and experiments, and to make recommendations in favour of an improvement in conditions for access to and uptake of screening, mainly for the benefit of vulnerable populations.

A second meeting, in October 2012, dealt with actions to support breast cancer screening. In addition, a survey was conducted in 2012 among structures handling screening, in order to take stock of actions put in place to combat inequalities of access to and uptake of cancer screening, with a view to improving them for all the players, and to promoting their possible use throughout the system.
PROVIDING INFORMATION TO IMPROVE SCREENING

Information campaigns on screening propose events during the year to help raise awareness and increase uptake, as a complement to local and long-term actions. The year 2012 was punctuated by four advertising periods. Each campaign attempted to meet the objectives of the screening programme involved (targeting one cancer site) and the targets for uptake stated in the Cancer Plan. The messages disseminated took into consideration the knowledge level of the target population, possible obstacles, and new developments in the knowledge to be conveyed.

- In March, the television campaign for colorectal cancer screening continued its work of raising awareness of this still recent type of screening (deployed at national level in 2008), by making this cancer a household name, and recalling the importance of discussing it with one’s doctor.
- In May, INCa provided support to the National Day of Prevention and Anonymous Free Screening for Skin Cancers (24th of May), and disseminated an information leaflet on the early detection of melanoma. A press campaign was conducted with all the players involved, in order to alert opinion on the increasing incidence of skin cancers.
- In June, materials were made available to local players to recall the importance of cervical cancer screening and the recommendations concerning vaccination against HPV (human papillomavirus).
- In October, the information campaign on breast cancer screening emphasised the importance of regular screening (every 2 years), and was conducted in partnership with France Télévisions, making room for involvement by well-known and popular presenters. Information was made available online, and relations with the press were mobilised in order to clarify questions raised as to the benefits and limits of this type of screening.

PARTNERSHIP-BASED CAMPAIGNS RELAYED BY HIGHLY MOTIVATED LOCAL PLAYERS

Campaigns conducted are partnership campaigns organised in association with the Department of Health and the Health Insurance funds, for breast cancer, cervical cancer and colorectal cancer screening. A certain number of players are associated with these campaigns: the French National Cancer League, the Women’s Committees, Mutualité française (French federation of health insurance), Cespharm (Health and Social Education Committee for French Pharmacy), ARC French Foundation for Cancer Research, etc. On a local scale, management structures in charge of screening have developed many information activities, in association with ARS (Regional Health Agencies), local governments, non-profit organisations, primary Health Insurance funds, mutual societies, etc. Information on early detection of melanoma is part of an overall approach for the prevention of skin cancers jointly led in 2012 by the Ministry of Health, INPES, InVS, ANSES, the French National Union of Dermatologists and INCa.

“SCREENING, LET’S NOT FORGET ANYONE” PROGRAMME

The level of participation in screening hides different realities; populations at the margins of the health system, from disadvantaged social classes, of migrant origin or living in areas with few medical services use it less, which leads to cancer-related inequalities. Specific activities have also been developed to inform these populations in a targeted manner:
- community radio programmes about screening for breast cancer and colorectal cancer (Radio Orient, Africa No. 1 and Beur FM);
- leaflets and multilingual mini-posters offered to all local players;
- partnerships with key players such as the French National Agency for Social Cohesion and Equal Opportunities and the French National Union of Community Social Action Centres, mobilised to work with vulnerable or immigrant populations. They have ensured the relay of information through 243 City Health Workshops and 7,500 social action community and intercommunity centres.
Different actions contribute to the evolution of programmes and strategies for cancer screening, depending on their assessment and the incorporation of scientific and technical advances.

**ORGANISED BREAST CANCER SCREENING**

In November 2009, the General Health Directorate requested INCa to carry out a national survey of management structures, with respect to development of the facilities, and variation in cancer detection rates as a function of the technologies and mammography units, digital or analogue, used in the organised breast cancer screening programme. This survey, which was conducted in 2010, highlighted differences in performance in terms of cancer detection, depending on the types of units. These factors contributed to an improvement in quality control in France, decided by ANSM (French Medicine Agency; decision of 22/11/2010, setting out procedures for quality control of digital mammography facilities). INCa repeated the survey in 2011 and 2012, in order to collect information for the 2010-2011 period. The initial results were presented at the National Seminar on Organised Cancer Screening Programmes, on 29 January 2013, and will be the subject of a report planned for the first half of 2013.

**COLORECTAL CANCER SCREENING**

The year 2012 saw the continuation of work described in the report published in November 2011, on the move to immunochemical testing for colorectal cancer screening. INCa, at the request of DGS, studied the possibility of reducing to one the number of stool specimens required to perform the immunochemical test. This work helped to define the clinical performance associated with these conditions of use, to document the stability of the specimen, and the cost and acceptability of these conditions, and to address the medico-economic aspects. INCa also produced a document setting out the prerequisites for the effective use of these tests in the national programme. Work initiated in 2011, in association with the reading centres that had participated in experimental testing, and with plans to prepare a guide for organisation and a procedure for reading immunochemical tests, was continued in 2012. The management structures involved were also requested to prepare information and training materials for the target population and for health professionals. This work will be completed in 2013. In addition, in the knowledge that in organised colorectal cancer screening, a large proportion of the target population receives the screening test in the mail during the second round, and that a large majority of the tests is not used, alternatives were tested by the management structures to see if it were possible to improve the final participation rate and the efficiency of the procedure. Between May and September
2012, INCa conducted a survey to compile the tests and initiatives carried out by the management structures as an alternative or as an adjunct to the procedures involving repeated invitation defined in the terms and conditions of the screening programme. An analysis of some thirty initiatives compiled was presented at the National Seminar on Organised Screening Programmes held on 30 January 2013, and will be the subject of a report during the first half of 2013.

**CERVICAL CANCER SCREENING**

**CONTINUATION OF EXPERIMENTS**
The experimental programme for the prevention and screening of cervical cancers, for women aged 25 to 65 years, was continued in 2012. This “integrated” action to combat cervical cancer was conducted at 9 sites. The experimental sites finished recruiting in 2012, and will finish compiling results from all smears and follow-up of positive smears in 2013, which will enable the assessment of these experiments.

At the same time, the Meuse and Ardennes sites were chosen by INCa for a call for applications launched in 2010 to examine the detection of DNA from oncogenic HPV as a method of primary screening. These experiments are being funded for 4 years, after which participation in screening and detection of pathologies will be assessed, together with the acceptability of this screening process to the public and to health professionals.

**PROMOTION OF PREVENTION AND EARLY DETECTION OF SKIN CANCERS**

INCa contributes to funding the organisation and assessment of the Annual Day of Prevention and Screening for Skin Cancers, managed by the French National Union of Dermato-Venereologists (SNDV in French). In 2012, as a continuation of the existing partnership, INCa published the “Report on the 2011 National Day of Prevention and Screening for Skin Cancers” in association with SNDV. INCa also supported the organisation of the day, which took place on 24 May 2012. A total of 14,340 individuals presented for a screening exam carried out by volunteer dermatologists in 242 centres distributed throughout the territory. On this occasion, 4,100 individuals were found to have suspicious lesions, and 5,000 suspicious lesions were detected.

**IMPACT AND USE OF ONLINE TRAINING MODULES**

Over the last four years, INCa has developed training modules on the prevention and detection of oral, skin and cervical cancers. A survey of 500 General Practitioners was carried out in 2012, to determine the impact of these modules in terms of raising awareness of cancer screening and assisting clinical practice. Although the assessment of these training resources by users was very positive, and their ability to encourage cancer screening is recognised by doctors, the knowledge and use of the training modules is still a very private matter (2-5% of physicians interviewed).

INCa has therefore persevered in these communication initiatives, especially with GPs supervising trainees, in partnership with CNGE (French National College of Teachers in General Practice): email shots, participation in conferences, workshops, etc. Moreover the training module in skin cancers was the subject of a CPD (Continuing Professional Development) programme carried out by CNGE in 2012, an operation which should be expanded in 2013.
ORGANISATION OF CANCER CARE PROVISION

INCa has the role of monitoring and assessing schemes implemented for the care of cancer patients.

REPORT ON THE IMPLEMENTATION OF THE SCHEME FOR CANCER TREATMENT AUTHORISATIONS

The first Cancer Plan led to the preparation of a scheme for the authorisation of cancer treatment in order to guarantee a minimum level of quality and safety of care, consistent for all patients with a malignant pathology. During the second Cancer Plan the ARS progressively deployed the scheme in all facilities treating patients for cancer.

At the end of 2012, INCa and DGOS (French Directorate General for Healthcare Provision) jointly launched a survey following compliance visits to obtain an initial assessment of the application of accreditation criteria, cross-disciplinary measures for quality, and any difficulties in attaining minimum thresholds of activity, i.e. the three main pillars supporting the scheme.

The main observation concerns the organisational nature of the scheme, which has enabled a reconfiguration of the provision of care, while contributing to improvement in overall quality for all three disciplines involved in treatment, i.e. cancer surgery, radiotherapy and chemotherapy.

The joint analysis by DGOS/INCa/ARS of the results of this survey will contribute to the revision of “INCa accreditation criteria” and to cross-disciplinary measures. This work was conducted throughout 2013, and will be based on additional assessment elements, taking the patient and professionals’ point of view into consideration.

RADIOThERAPY

Radiotherapy services in France, with 172 centres distributed over the national territory, among the most extensive in Europe (in second place with Italy after Germany). The national complement of radiotherapy services comprises 426 accelerators, with a regular 3% annual increase in the number of these instruments since 2006.

FRENCH NATIONAL OBSERVATORY OF RADIOThERAPY

INCa coordinates the implementation of the annual survey and the drafting of the resulting report, the “National Observatory of Radiotherapy.” This survey contributes to establishing the status in terms of equipment, activity and staff. The latest report, “National Observatory of Radiotherapy. Survey report: situation at the end of 2011 and development since 2007,” describes the most marked trends since 2007. This document was jointly prepared with all institutions involved in the discipline (SFRO—French Society of Radiation Oncology, SNRO—French National Union of Radiation Oncologists, SFPM—French Society of Medical Physics, ASN—French Nuclear Safety Authority and CNAMTS—National Health Insurance Fund for Salaried
Workers). In addition to the National Observatory of Radiotherapy and analyses based on PMSI (Programme for the Medicalisation of Information Systems) data, scorecards on private radiotherapy treatment are being developed in association with CNAMTS and the French Health Data Institute. They should be finalised in the first quarter of 2013. These scorecards are part of “Cancer Cohort” (see page 22).

CURRENT STATUS OF RADIOThERAPY
Based on data from the National Observatory of Radiotherapy, CNAMTS and PMSI, an analytical view of the “Status of Radiotherapy in 2011” shows the recommendations made by INCa. Thus, improvement in quality and safety of treatments implemented by the National Radiotherapy Monitoring Committee since 2008 should continue, and regional disparities should decrease.

SUPPORT FOR THE INSTALLATION OF INTRAOPERATIVE RADIOThERAPY EQUIPMENT FOR BREAST CANCERS
In 2011, INCa launched a call for proposals on the new modes of treatment known as hypofractionated (aimed at reducing the number of radiotherapy sessions). Intraoperative radiotherapy is a classic example, since it allows treatment to be given in a single session. All seven teams selected to test intraoperative radiotherapy installed accelerators in 2012, and six of these have already begun to recruit female patients as part of a medico-economic assessment carried out under the scientific supervision of Cancer Institute Ouest (Nantes).

CURRENT STATUS OF CHEMOTHERAPY
The third edition of the report on the “Status of Cancer Chemotherapy” was published in July 2012. This publication retraces and analyses recent developments in chemotherapy practices carried out in 473 authorised health facilities in charge of initial prescriptions, and in facilities known as “associated,” which participate in patient treatment based on proximity and in close association with these authorised facilities. It contains a useful record of expenditure on cancer drugs by private hospitals and expenditure on cancer drugs by the private sector. A summary of international provisions, particularly in Europe, has also been included. This report covers the development of the legal framework, especially following the publication of the Act of 29 December 2011, concerning the enhancement of drug and health product safety.
The guarantee of quality care for cancer patients throughout the territory requires a better knowledge of the waiting times for key stages of care management, in order to identify any inequalities in access to treatment. As part of the same quality objective, INCa is responsible for monitoring the numbers of health professionals contributing to this treatment.

**WAITING TIMES FOR TREATMENT BASED ON REGION AND PATHOLOGY**

**STUDY ON TREATMENT WAITING TIMES FOR BREAST AND LUNG CANCERS**

In June 2012, INCa published results of the first phase of work conducted in 2011 on waiting times for cancers of the breast and lung, with assistance from the National Federation of Regional Health Observatories (FNORS). This first study, prepared with contributions from the regional cancer networks and the regional health observatories, was aimed at establishing the situation concerning waiting times for different procedures and key stages in care management, such as time to cancer diagnosis, time to treatment plan, and time to treatment. It enabled an analysis of the waiting times for care in eight regions of Metropolitan France, based on 2,530 cases of breast cancer and 1,945 cases of lung cancer.

This study revealed a relatively large variation in waiting times for care. A variety of factors, some intrinsic to the individual (age and sex), some related to the disease (stage), how the cancer was discovered, or the care system influence the length of waiting times. However, once these elements are taken into consideration, analyses confirm the persistence of important differences between regions, more marked for breast cancer than for lung cancer. Factors associated with services and with the organisation of care may be the main source of this heterogeneity, although the study does not allow identification of their exact role. Similarly, there were not enough individual context indicators available to discern the role of sociodemographic factors in waiting times.

The large variations seen suggest that there are inequalities in care, and hence potentially in health, for the individuals involved. Measurement of these waiting times might also help to better characterise these inequalities and to identify ways to improve the quality of care, and subsequently measure its impact. Results from the second phase of the study, carried out in 2012, involving cancers of the colon and prostate, will be published at the beginning of 2013.

**COMPLEMENTARY STUDY ON TREATMENT WAITING TIMES IN SPECIALISED REGISTRIES**

In addition, a report on treatment waiting times for cancers registered in the specialised registries of the FRANCIM (French Cancer Registry Network) network over the 1999-2008 period was published at the end of the year. It enables observation of trends in waiting times from receiving a diagnosis of cancer to the first treatment, in
areas covered by the specialised registries. This work may shortly be complemented by an analysis that takes the stage at diagnosis into consideration. It comes under the partnership between InVS, FRANCI, HCL (Lyon General Hospitals) and INCa.

DEMOGRAPHICS OF HEALTH PROFESSIONALS

MONITORING OF NUMBERS OF PROFESSIONALS TRAINING AND PRACTISING

INCa compiles and updates data from dynamic scorecards of numbers in training and practising in oncology and pathology specialities. This recording tool allows monitoring of professionals by region, and publication of an annual report on medical demographics.

Through its collaborations and institutional partnerships, INCa monitors and supports initial training in medical oncology, radiotherapy and pathology. INCa also observes the fluctuations in residency during the French “3rd cycle”, post-residency/fellowship, traineeship sites, and positions for teaching staff with a DES (Diploma in Specialised Studies) in oncology and a DES in surgical pathology.

The partnership between INCa and CNEC (French National Council of Teachers of Oncology) has had a positive outcome for 2012, since the full complement of planned activities has been carried out, i.e. an update on the criteria for traineeship sites for the DES in oncology and the DESC (Diploma in Specialised Complementary Studies) in oncology submitted to DGOS and to the President of the Conference of Deans, development of a tool to monitor teaching for interns and teachers, support for interns in the organisation of their annual courses, etc. A second partnership agreement should be signed in 2013, in order to ensure the maintenance of monitoring and support activities for initial training in oncology.

REGIONAL DEMOGRAPHIC ANALYSES

In order to identify regions of high demographic pressure in the medical oncology, radiotherapy and pathology specialities, INCa has conducted a regional demographic analysis based on cross-sectional data on activity, incidence and education. This analysis was submitted to the Ministries of Health and Higher Education in July 2012, so that the public authorities would know the current status when deciding to fund positions.

SURVEY OF ORGAN SPECIALISTS

The demographic studies hitherto conducted by INCa and the French National Observatory on the Demography of Health Professions (ONDPS) mainly focused on specialists working exclusively in oncology, i.e. medical oncologists and radiotherapists. The proportion of activity devoted to oncology by other specialist physicians is difficult to quantify. Moreover, organ specialists are often the ones to diagnose cancer, and frequently provide care for their patients, either by administering chemotherapy as part of their area of competence, or more generally, by being involved at some stage in the treatment and follow-up of a cancer patient.

A survey was therefore conducted among hepatologists, gastroenterologists, respiratory physicians, dermatologists and neurologists, to try to produce a map of cancer-related human resources throughout the territory, and to improve knowledge of practices in the area, for all these specialities. Particular attention was given to initial prescription of chemotherapy, which requires the acquisition of oncology skills through the DESC, a licence to practise, or a VAE (Approval of Experiential Skills).

This survey involved INCa, the French National Federation of Organ Specialists in Oncology (FNS2O in French) and the learned societies and professional bodies that comprise it. Data analysis and publication of results are due in the first half of 2013.
DEPLOYMENT OF SPECIFIC CANCER ORGANISATIONS

An organisational measure of the 2009-2013 Cancer Plan, the development of care sectors and specific management in the area of oncology has reached a phase of maturity in 2012.

COMPLETION OF THE ORGANISATION OF EXPERT CENTRES FOR RARE CANCERS

The organisation of care services for patients with rare adult cancers around national and regional reference centres, initiated in 2009, was continued in 2012. This organisation gives the patient the benefit of diagnostic certainty, through systematic double reading and a tailored treatment management, established following study of the file by experts at a multidisciplinary consultative meeting (RCP in French). A call for proposals was launched by INCa/DGOS in 2012, aimed at finalising the deployment of this organisation on a national scale. Ultimately, some twenty national expert centres for rare cancers will be identified. INCa provides annual monitoring for this organisation through a questionnaire addressed to all coordinators, and a follow-up seminar. An activity report for 2011 was published in November 2012.

PEDIATRIC ONCOLOGY

CRITERIA FOR INITIAL PRESCRIPTION OF CHEMOTHERAPY FOR PAEDIATRIC SPECIALISTS

In March 2012 the INCa Board of Directors deliberated on accreditation criteria in relation to initial prescription of chemotherapy by paediatricians not holding a DESC or other qualification in oncology. These criteria, defined by INCa with the consensus of professionals, concern training, place of practice, and activity data. Decree No. 2012-1038 of 10 September 2012, regarding technical operating conditions applicable to cancer treatment activity, repeats these criteria and provides for a three-year temporary period of application, while waiting for a DESC to be established.

With this aim, INCa set up a working group in October, made up of Teachers’ Councils and representatives from the national university councils for oncology and paediatrics in order to plan the creation of a “medical treatment of cancers in childhood and adolescence” option within the framework of the DESC in oncology. The work initiated will continue in 2013.

With regard to paediatric oncology, in 2012, INCa also provided monitoring for:
- the seven Inter-regional organisations with particular expertise in paediatric oncology identified in 2010. A discussion meeting with the coordinators in January 2012 allowed a review of the operation of interregional paediatric RCPs, and a description of the care systems identified in the 7 inter-regions;
- the eight projects selected following the INCa/DGOS call for proposals launched in 2011 aimed at supporting integrated innovative projects for the care of adolescents and young adults with cancer;
- the five pilot projects aimed at testing the post-cancer individualised care plan for patients treated for cancer in childhood, funded by INCa since 2011.
ONCOGENETICS

Nearly 5% of cancers are associated with constitutional genetic alterations, and to date, over 70 susceptibility genes have been identified. Diagnosis of these susceptibilities is carried out under the national oncogenetics scheme. This scheme, which supports the laboratories of genetic counselling services, is managed by INCa, which assesses its operation and conducts calls for proposals for projects required to optimise it. It is aimed at identifying people with an inherited predisposition for cancer, both patients (index cases) and family members who are free of disease (relatives). These individuals should be offered a specific and multidisciplinary care strategy, based on surveillance and/or prophylactic surgery.

MONITORING OF GENETIC COUNSELLING

The summary of the oncogenetics activity carried out in 2012 using activity data submitted by genetic counselling services and laboratories constitutes a detailed status report of the national scheme's activities for 2011 and its development since 2003. It helps to identify the strengths of the scheme, and areas for improvement. At the same time, a specific survey on waiting times for BRCA tests in the oncogenetics laboratories was launched in August 2012. This questionnaire enabled an accurate description of the current process for the management of index cases, together with the fast-tracking of priority requests. The analysis was incorporated into the summary of oncogenetics activities for 2011.

TOWARD APPROPRIATE CARE FOR INDIVIDUALS WITH AN INHERITED PREDISPOSITION FOR CANCER THROUGHOUT THE TERRITORY

In 2009, INCa and DGOS organised a call for proposals to conduct pilot experiments aimed at integrating and improving the general care of people with an inherited predisposition for cancer. In order to prepare for the national deployment of the scheme, a report on the progress of all these projects, setting out prospects for development and problems encountered, was published in February 2012. A seminar to present the results of these pilot experiments was organised by INCa in May. National deployment was launched on 4 May 2012, through a call for proposals on the multidisciplinary care of individuals with an inherited predisposition for cancer. Following review, 17 projects were selected. Covering almost all the territory, they received funding totalling nearly €2.7 million.

JEANNE-MARIE BRÉCHOT,
Project Leader, Department of Care Organisation

“The national deployment of care for the elderly has been achieved”

Following a procedure of calls for proposals, covering the period from 2011 to 2012, aiming at the national deployment of oncogeriatric coordination units (UCOG in French), 24 UCOG were selected and funded, covering 18 regions of Metropolitan France and one overseas department. To complete the deployment of this scheme for oncogeriatric care, oncogeriatric units have been identified in the 4 regions of Metropolitan France without UCOGs. These units are entrusted with organising for any cancer patient in their care, a systematic oncogeriatric screening test (Oncodage), the option of a geriatric consultation and/or a standardised geriatric assessment, initiation of an cancer treatment appropriate for the patient’s age and general health, and specialised care where necessary. Each of these units is attached to an interregional UCOG responsible for facilitating the access of patients to clinical trials, promoting the training of players involved (physicians, pharmacists, nurses, mobile geriatrics teams, etc.) and providing information to patients, their families, and the general public.

TRENDS IN THE NUMBER OF ONCOGENETIC CONSULTATIONS BETWEEN 2003 AND 2011

![Graph](image-url)
IMPROVEMENT IN THE CARE MANAGEMENT OF CANCER PATIENTS

Following the introduction on a trial basis of an individualised care plan for patients during and after cancer treatment, INCa proceeded to a first quantitative and qualitative assessment of this innovative scheme in experimental 2012, aiming, in particular, for better coordination between city and hospital.

RESULTS FROM TESTING OF THE INDIVIDUALISED PATIENT CARE PLAN DURING AND AFTER CANCER

In 2010, INCa and Directorate General for Healthcare Provision (DGOS) launched a call for proposals to carry out a one-year trial of a new individualised care plan for patients (PPS in French) during and after cancer, with involvement by hospital patient navigators (IDECn French), entrusted with facilitating coordination between hospital and community, social support, and establishment of a survivorship and rehabilitation individualised care plan (PPAC in French) handled with and by the GPs. Thirty-five pilot sites were selected for these trials in collaboration with their local medical, social and medico-social partners.

The initiative began in September 2010, and a bimonthly follow-up of the pilot projects through the use of monitoring indicators was put in place. The quantitative assessment at one year, carried out at the end of 2011 for 35 sites, shows that 9,200 patients were recruited to the study, of which 64% were given a PPS (18 sites having exceeded the 80% target for inclusion recommended in the 2009-2013 Cancer Plan). For 32% of patients, a social fragility was detected by the care coordinators, leading to provision of social care in two-thirds of these cases. Among the 2,800 post-treatment patients, 31% received a PPAC (8 sites having attained the 50% target for inclusion).

ASSESSMENT OF THE IMPACT OF THE SCHEME

Assessment of the impact of the scheme on patients and hospital health professionals and on GPs began at the end of 2011. It showed that the individualised oncology care plan has proven its relevance as an integrated care scheme, generating considerable satisfaction among patients, especially with respect to the involvement of the IDECs in the provision of information, listening and assessment of social needs. However, the short duration of the trial, the conditions for implementing the scheme and the assessment approach chosen do not allow a final decision as to the added value of the scheme in improving the handling of complex medical or social situations, city-hospital coordination or involvement of local players, especially the GP.
Support for the development of local accommodation

In 2012, INCa continued its process of encouraging actions devoted to provision of accommodation located near treatment centres, to facilitate the living conditions of patients during certain periods of treatment, by launching a call for proposals for the second consecutive year. This call for proposals was aimed at helping to create new projects and developing local places of accommodation. At the end of the review, 6 proposals were selected of 14 submitted, for a total sum of €1.2 million.

Since 2010, 21 projects were thus funded for up to €3 million. The actions are varied, and include funding of existing reception arrangements, creation of local accommodation (building or renovation), development or improvement of existing services, establishment of a host family scheme, and a study of accommodation needs. These projects are led by non-profit organisations (64%), non-profit private health facilities (27%), public health facilities (5%) and private for-profit facilities (4%).

Given these different observations, the trial should be continued into a second phase in 2013, in order to better define the objectives of the scheme, to focus more strongly on the most complex care plans from a medical and/or psychosocial standpoint, and to define the priority roles of the nurse coordinators. This second phase will include a cost-effectiveness exercise, in order to provide the decision-makers with objective elements in their decision as to the feasibility of deploying the scheme throughout the territory.

The assessment reports for the trial (full and summary reports) were published in October 2012.

“"The individualised oncology care plan has proven its relevance as an integrated care scheme, generating considerable satisfaction among patients.”"
ASSSESSMENT OF THE ANNOUNCEMENT PROCEDURE FOR CANCER DIAGNOSIS

Organisation of the announcement procedure has become a component in the authorisation of health facilities to treat cancer patients. INCa has coordinated a study to assess the procedure in relation to patients.

STUDY OF PATIENT’S EXPERIENCE OF THE PROCEDURE

The study was launched by INCa in 2011, in association with the National Cancer League and the Directorate General for Healthcare Provision (DGOS). It was aimed at assessing the impact of the announcement procedure in terms of patient experience, and the advisability of repeating the survey as part of an annual barometer. Data were collected from 53 randomly selected health facilities that had agreed to participate in the study, where 908 patients (60% female, and 60% under the age of 65) were interviewed by telephone 4-7 weeks after the consultation during which they had been told of their cancer diagnosis. The questionnaire dealt with the support scheme established to deal with the different elements of the announcement (organisation of the announcement, creation of an atmosphere of trust, offer and formalisation of individualised care, coordination with the GP and continuity of care), and the patients’ experience of the procedure compared with their expectations.

SATISFYING BUT CONTRASTING RESULTS

Patients interviewed generally expressed broad satisfaction with the atmosphere of trust established by carers around the announcement, and a favourable experience of the help and support provided by these carers. They also expressed satisfaction with the information provided on the illness and proposed treatments, both by the physician and while receiving care support. These results must, however, be tempered by the experience of some patient categories, especially those from more privileged socio-professional backgrounds, female patients and patients from Ile de France, who were more critical of the conditions of the announcement. The survey also showed that organisational aspects of the procedure—either in terms of access to care support, presentation of the individualised care plan (PPS) or the performance of a social assessment—contribute strongly to a positive experience for the patient.

Nonetheless, the implementation of the procedure is often incomplete in the facilities surveyed, something also observed during national monitoring of the deployment of the procedure, and reflects a highly variable interpretation and deployment from one facility to another. Finally, questions remain as to the coordination between hospital and community, especially with respect to the information provided to the GP and the course of action proposed for follow-up of these patients at home.
In the event of a repeat of the study, which would be aimed at supplying information to an observatory for support schemes for cancer patients, a less exhaustive collection of data should be planned. The results of this survey confirm the usefulness of organising a procedure for announcing a cancer diagnosis, and the positive impact of the procedure for patients with access to it. Results observed in this study conducted by INCa are consistent with other works especially that of the National Cancer League, with respect to several key concepts, including the importance to patients of having someone to listen to them and provide enough support when they receive the diagnosis, and of receiving appropriate information and personalised support from the entire care team.

The report from the study was published in May 2012.

Support for non-profit organisations

In 2012, INCa launched, for the 7th consecutive year, a call for proposals aimed at non-profit organisations. The objective was to promote the establishment of actions to improve the quality of life for patients and those close to them, with priority for those in vulnerable situations socially, economically, domestically or otherwise. Forty non-profit organisations responded to the call, and 15 projects were selected for a total amount of €800,000. Since 2006, INCa has funded 149 projects led by 98 non-profit organisations for a total amount of €3.5 million. Actions undertaken deal with support, health-giving and recreational activities, physical activity, help with daily living and psychological support. The beneficiaries are generally the cancer patients and those close to them, but the projects are also directed toward more specific populations such as children and adolescents, families (parents and siblings of sick children), helpers, volunteers, or patients in socially fragile or vulnerable situations, or in geographic isolation.
INCa contributes to the quality of patient care through the production and dissemination of guidelines for good practice intended for specialist physicians and general practitioners.

Two collections are offered to health professionals:
- clinical guidelines concerning topical questions, and aimed at promoting innovation or responding to variations in practices;
- guides that describe the standards of care for every cancer, from diagnosis to follow-up, with the aim of keeping the GPs informed and thus increasing their role in the care plan of cancer patients.

INCa targets its guidelines regarding topical issues with the help of health professionals. INCa bases its work on critical analysis of scientific data, and reasoned opinions from experts from a multidisciplinary working group and a reading group. Literature research, methodological analysis of data and drafting of the report are all done by INCa. In 2012, approximately 900 bibliographic references were analysed for different projects.

Work done in 2012 led to the publication of recommendations regarding 11 clinical questions relating to invasive breast cancer (non-metastatic) and 9 questions on Hodgkin's lymphomas. Moreover, INCa and the French Association of Urology published a summary of good practices regarding five urological cancers (prostate, bladder, kidney, testicular and penile cancers). Two other projects initiated in 2012 will be published in 2013. They involve the care of metastatic melanomas and an update on the 2009 report on uPA-PA1, OncotypeDXTM, and Mammaprint® tissue biomarkers in breast cancer care. For all these projects, INCa acts with all players involved.

The constitution of groups is based on proposals from the learned societies or non-profit organisations, the 25 regional oncology networks, and on spontaneous applications. Unicancer provides financial support for INCa's programme of guidelines. Dissemination has involved partner learned societies and the 25 regional oncology networks. At the same time as their online release on the INCa website, the works were disseminated in hard copy format and orally during conferences (conferences of the French Society of Radiation Oncology, the French Society of Senology and Breast Diseases or the French Association of Urology). A scientific publication appeared in the journal Cancer et Radiothérapie. Other actions are planned for 2013.

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lymph nodes, melanoma, colorectal cancers and prostate cancers. Revised guides for lung cancers, mesotheliomas and breast cancer have been initiated.

The year 2012 has also been a year of transition toward a new collection. These documents, formerly known as “ALD Guides,” were renamed “Guide to Care Plans,” and describe the medical care of the cancers, and the links between the different professionals, while including the medico-social dimension.

More generally, INCa is conducting a reflection in order to modify the content and materials produced for GPs to better meet their needs and consolidate their role during the acute phase of treatment and the surveillance period. The guides for professionals are available as 8-page summary documents for patients. Reiterating the three key phases of care (diagnosis, treatment and follow-up), these materials are given to patients by their GP once they are considered to have a long-term illness. Three guides were made available online in 2012, for stomach and oesophageal cancers, and for adult acute leukaemias.

MORE INFORMATION ON www.e-cancer.fr/publications

KEY FIGURES FOR 2012

43 learned societies and non-profit organisations involved

Over 150 health professionals and patient representatives recruited to working groups following analysis of their public declaration of interests

Nearly 650 health professionals and patient representatives recruited to reading groups.

“Individualised strategies for patients with Hodgkin’s lymphoma”

For the last 20 years, advances in treatment have considerably improved the prognosis for this lymphoma, but at the cost of long-term complications, including second cancers. Recently, less aggressive individualised strategies have shown their efficacy. However, since the affected population is often young, systematic follow-up is still needed for many years, involving GPs and hospital teams. A survey of professionals has identified the need to produce national guidelines for the promotion of these new approaches, including those for children, and to clarify for professionals the procedures for monitoring these individuals throughout the rest of their lives. We therefore formulated guidelines, in collaboration with the French Society of Haematology, which were disseminated in August 2012. A guide for GPs was produced to reflect the latter, and will be published during 2013.
INFORMATION FOR INDIVIDUALS AFFECTED BY THE ILLNESS

The Cancer Info platform, implemented in partnership with the National Cancer League, received over 2 million requests in 2012 via its three routes, namely the telephone hotline, the Internet section, and the information guides.

THE CANCER INFO HOTLINE

The first level of the telephone hotline is managed by INCa, and offers general information on practical, medical and social matters pertaining to cancers. The second level, provided by the National Cancer League, provides callers with a free counselling service and free legal advice. The year 2012 was marked by a change in the service provider handling Level 1 for INCa. The telephone hotline had to be internalised to the Institute from the 11th of June to the 6th of August, while the team for the new service provider was being trained. The latter took its first calls on the 7th of August. The initial training plan revolves around individual weekly debriefings, call monitoring, and training sessions with cancer specialists.

INFORMATION GUIDES

Produced in parallel with clinical guidelines for good practice for professionals, in an effort to deliver consistent messages and information to the different players in the care plan, the Cancer Info guides are intended for patients and those close to them, and describe the treatments and follow-up for each type of cancer.

The following three new guides were published in 2012:
- Treatment for cancers of the upper aerodigestive tract;
- Treatments for pancreatic cancers;
- Social provisions and cancer (update).

Four other publications were initiated, and deal with treatments for cancers of the thyroid, bladder, kidney and breast.

The collection contains a total of 28 titles; a little over 240,000 guides were ordered in 2012, i.e. approximately 32% fewer than in 2011. This is partly due to the fact that health facilities placed large orders in 2011, and thus had a good supply.

This year was marked by a revision of the methodology for producing the Cancer Info guides, out of concern over quality. The main developments concern the following:
- widening the working group, and increasing multidisciplinarity, especially through the systematic inclusion of GPs and oncology nurses;
- joint proof-reading by all members of the working group, health professionals and users, of the first draft of the document;
- the introduction of a one-day meeting at INCa for the experts, professionals and users comprising the work group. This enables revision of the reworked document following the proof-reading phase.

The methodology was also improved by the implementation of the policy for managing potential conflicts of interest. All experts involved in working groups completed a public
declaration of interests, analysed using the chart for detection of conflict of interests.
In total, 23 learned societies and patient associations enabled recruitment of 94 experts, who joined the 7 working groups constituted for the 3 guides validated in 2012, and the 4 publications in preparation.

**THE INTERNET SECTION**

With over 1,800,000 visits in 2012, the Cancer Info Internet section, accessible on the INCa website, experienced a 75% increase in visits compared with 2011, a year in which the section was substantially redesigned. The content was expanded to include a set of documents on cervical cancer, and the guides produced in 2012. The chapters on social provisions were updated; on this occasion the whole “Daily Life” section was redesigned. At the end of 2012 the Cancer Info dictionary comprised 1,251 terms covering all cancer fields and their care.

**SPREADING THE WORD ON THE CANCER INFO SERVICES**

In order to make the Cancer Info platform, dedicated to patients and those close to them, better known, the Institute rebroadcast a radio campaign from 19 November to 11 December 2012: three complementary messages based on the idea that when cancer becomes “my cancer” or “the cancer of someone close to me,” access to reliable, accurate and up-to-date information becomes vital, as does being able to talk about it and be listened to. The campaign was remembered by 53% of French people, and the broadcast had an immediate impact. The number of calls to the telephone hotline increased by approximately 30% (over 1,100 calls received in November and December, as against an average of 880 per month), with peaks of nearly 100 calls/day (compared with 38 on average) while the spots were being aired. The campaign seems to have reached its main target audience, since it generated a large proportion of the requests for medical information and psychological counselling. The Cancer Internet section recorded an increase in visits of nearly 50%, going to 235,998 visits in December (compared to the monthly average of 158,000).

Tools to promote the platform (leaflets and mini-posters) were also made available to other relevant players throughout the year.

A little over 10,000 calls were received on the Cancer Info hotline in 2012 by the Level 1 team. This represents an approximately 25% decrease in calls compared with 2011, largely due to reduced opening hours when the hotline was internalised during the summer due to a change in our service provider. Nearly 30% of calls related to medical questions on cancers, treatments, secondary effects, diagnostic tests, etc. Over 25% of requests concerned the legal and social fields (loans and insurance, financial management of care, leave from work, physical aids, etc.). Screening and prevention accounted for 25% of calls, the need to talk, 10%. The remaining 10% related to ordering information guides, obtaining addresses for care facilities or patient associations, etc.

The majority of callers were women (75%) and were aged 50 to 70 years (25%); 28% of individuals contacting the service were patients, 26% were people close to patients, and 6% were professionals. Finally, 39% of calls were from individuals without a direct connection with cancer. Their questions were mainly about national screening programs. The mean duration of the call was 6 minutes.
As an agency dedicated to a unique pathology, INCa detects original approaches and technical/technological breakthroughs, and promotes their timely implementation for the benefit of patients.

**COMPETITIVE CALLS FOR PROPOSALS**
Sixteen calls for proposals in research areas were organised in 2012.

**INTERNATIONAL CANCER GENOME CONSORTIUM**
Programmes to sequence four types of cancers were undertaken by France.
“The research programme for cancer biology is an important asset, and requires sustained funding”

International scientific advisory board of INCa
INVESTIGATOR-DRIVEN CALLS FOR PROPOSALS FOR BIOLOGICAL RESEARCH TO DETECT INNOVATION

In 2012, recurrent investigator-driven calls for proposals led to the funding of 32 new research projects in cancer biology and sciences, and 26 new translational research projects in oncology.

ATTRACTIVENESS AND COMPETITIVENESS OF INCA CALLS FOR PROPOSALS

A comparative analysis of the responses to the two calls for proposals since 2007 indicates a trend toward better judgement by researchers in situating their projects between fundamental biology and interdisciplinary approaches linking researchers with clinicians, in order to promote the translation of discoveries into clinical advances for the patient.

Selection rates reflect the competition for these attractive calls, and are in line with the recommendations of INCa’s international scientific advisory board, and with international standards.

In all, over 200 biomedical research projects funded by INCa are underway, from the detection of molecular abnormalities underlying cancers to the validation of therapeutic targets. By adhering more closely to the international classification for cancer research projects (CSO classification), the continuum of research areas, from cancer biology and sciences (PLBIO) to translational research (TRANSLA), is confirmed.

Since 2007, nearly 2/3 of unrestricted projects in biology have consistently focused on the initiation of cancer (chromosomal aberrations, oncogenes and suppressor genes) and on the mechanisms underlying tumour progression and metastasis. The mechanisms for response or resistance to treatments are also being studied in projects within the PLBIO programme. With respect to translational research projects, 80% of projects are on markers for early detection, diagnosis, and prognosis.

Since 2007, there appears to be a progression from projects initially devoted to the early phases of biomarker detection to the validation of therapeutic targets.

<table>
<thead>
<tr>
<th>Year of call for proposals</th>
<th>Unrestricted call for proposals in cancer biology and sciences</th>
<th>Call for proposals in translational research</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of letters of intent submitted</td>
<td>Number of projects funded</td>
</tr>
<tr>
<td>2007</td>
<td>106</td>
<td>40</td>
</tr>
<tr>
<td>2008</td>
<td>145</td>
<td>30</td>
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<tr>
<td>2009</td>
<td>342</td>
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<tr>
<td>2010</td>
<td>241</td>
<td>43</td>
</tr>
<tr>
<td>2011</td>
<td>203</td>
<td>31</td>
</tr>
<tr>
<td>2012</td>
<td>191</td>
<td>32</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1228</td>
<td>203</td>
</tr>
</tbody>
</table>

TRENDS IN THE SELECTION AND FUNDING OF RESEARCH PROJECTS IN BIOLOGY AND TRANSLATIONAL RESEARCH
discovery and technological development toward more advanced phases of validation, and hence toward transfer to the clinical context.

**SUPPORT FOR TECHNOLOGY TRANSFER FROM RESEARCH RESULTS**

In funding these projects, INCa undertakes to provide the broadest possible support for all aspects of cancer research in France, and to foster the generation of new scientific knowledge, as well as its translation into medical and technological advances.

The transfer of research results in terms of innovations and the development of public-private partnerships is an objective of the Cancer Plan on which INCa has made progress with its partners. Through its portfolio of funded projects, INCa has become involved in the identification of projects with a high potential for technology transfer, initially alongside INSERM Transfert in 2011, and then in 2012, as part of a partnership extended to other national and regional bodies for technology transfer, especially those from the canceropoles.

Research proposals are classified according to the following three criteria:

- organs and pathologies;
- scientific areas, i.e. genetics, epigenetics, cancerous stem cells, death, survival, cell growth, resistance to chemotherapy and radiotherapy, metabolism, drug delivery technology, angiogenesis, metastasis, immune systems and tumour antigens, stroma/extracellular matrix interactions, etc.;
- advances in terms of development, i.e. mechanisms and identification of targets, development of a therapeutic agent (new molecules, new targets for a known molecule, vaccines), and new diagnostic tools (biomarkers and technologies for imaging analysis).

The database thus constituted helps to visualise all project categories funded by INCa according to the three criteria, and to set out actions for detection, which are listed according to two main procedures:

- **Specific detection:** in response to a request from a pharmaceutical industry wishing to identify teams on French territory with whom partnerships might be developed on themes of interest. This approach may also be the subject of a joint campaign between INCa and technology transfer bodies, with the aim of raising awareness among pharmaceutical industries of the potential of French cancer research. In 2012, 60 teams presented their projects to industries as part of this activity.

- **Prospective detection:** identification of research projects with potential for technology transfer, and encouragement of researchers to protect the results of their research in order to facilitate transfer to industry. This detection is based on the results of the first review committee for each call for proposals.

The national partnership with all players involved in technology transfer should be configured in 2013 as a specialist technology transfer Consortium (CVT Cancer), with the goal of coordinating the detection of innovations made by research teams, along with the different stages of technology transfer, thus offering pharmaceutical industries a single window approach.

**MORE INFORMATION ON** [www.e-cancer.fr](http://www.e-cancer.fr)
SPURRING “INNOVATIVE MOLECULE” PROGRAMMES

An objective of the 2009-2013 Cancer Plan is to give patients in France access to innovative molecules. It involves making French clinical research attractive to pharmaceutical industries, while simultaneously offering patients, through clinical trials, molecules for indications that have not yet been developed by these same industries.

THE NETWORK OF EARLY-PHASE CLINICAL TRIAL CENTRES

In order to attain these objectives, INCa has carried out three initiatives since 2009:

- the designation of 16 early-phase clinical trial centres (CLIP²) in 2010. These centres receive logistical and financial support of €8.7 million over four years, in order to achieve the highest international level of quality for clinical trials;
- a collaboration agreement with the American National Cancer Institute (NCI), signed in 2010, enabling the CLIP² to respond to mass solicitations from the NCI via INCa, and to offer early-phase trials of molecules hitherto available only on North American territory;
- calls for proposals for early-phase clinical trials from 2011. In this context, French and international pharmaceutical companies agree to supply molecules under development to CLIP² proposing academic clinical trials aimed at testing these molecules for indications or pathologies that are different to those provided for in the development plans of the pharmaceutical companies. In order to conduct these initiatives, INCa receives support from the French National Centre for Management of Trials on Health Industry Products (CeNGEPS), from ARC French Foundation for cancer research, and from Lilly Foundation.

INCA/NCI COLLABORATION: TWO CLINICAL TRIALS UNDERWAY

At the end of 2012, the INCa/NCI collaboration led to the initiation of two early-phase clinical trials of innovative molecules. The first trial involves treatment of patients with advanced chondrosarcoma (CHONDROG trial). The expected number of patients (46) was attained a year earlier than expected. The initial results from the trial were the subject of an oral presentation at the American Society of Oncology (ASCO) in June 2012².

The second trial, involving patients with large B-cell lymphomas (AKTIL trial) has been open since November 2011, and 15 patients of an expected 51 have already been recruited. This trial is funded by INCa and ARC Foundation.

The first patient was recruited in January 2013. Five other trials should be put in place during 2013, for metastatic melanoma, acute myeloid leukaemia, GIST, triple-negative breast cancer, and a last trial of phase I trial concerning all tumours.

These trials will concern infrequently occurring pathologies, and rare pathologies in some cases. To facilitate conduct of trials on a national scale, and the rapid recruitment of patients, the CLIP² may depend on a specific organisation, put in place by INCa since 2009 for adult patients with rare cancers, with national and regional expert centres operating as “rare cancer networks” (see page 48). Some CLIP² belong to these networks, and simultaneously contribute their expertise as expert centres in both early-phase trials and rare cancers.

These initiatives will facilitate access to innovative molecules for patients in France. The process implemented between INCa and pharmaceutical companies was presented and discussed in July and October 2012, at research organised within the framework of the European Partnership for Action Against Cancer (EPAAC—see page 73). European cooperation will help to save time in the conduct of early-phase clinical trials, especially where rare cancers are concerned.

AGREEMENTS WITH PHARMACEUTICAL COMPANIES CONCERNING RARE CANCERS

Along with the collaboration with NCI, INCa has also developed interactions with several French and international pharmaceutical companies. INCa has thus launched calls for proposals for early-phase clinical trials of innovative molecules made available by these pharmaceutical companies. Since November 2011, 6 calls for proposals have been launched, in relation to 6 molecules from 4 different companies. The first clinical trial resulting from this collaboration received all authorisations 10 months after the collaboration agreement between INCa and the laboratory was signed. This is the PIK ORL trial for cancers of the head and neck, open for recruitment.
INTEGRATED RESEARCH ACTION PROGRAMMES FOR GYNAECOLOGICAL CANCERS AND SKIN MELANOMA

Integrated Research Action Programmes (PAIR) relate to problems of epidemiology, prevention, early diagnosis, patient care and human and social sciences, together with questions of cognitive, clinical and translational research related to one pathology.

PAIRs include a phase of multidisciplinary reflection and preparation, followed by a national seminar and a subsequent call for proposals. These programmes have been conducted since 2010, in partnership with ARC Foundation and the French National Cancer League (LNCC); each of the three partners makes an equivalent contribution to the funding of selected projects.

GYNAECOLOGICAL CANCER PAIR

The programme for 2012 is dedicated to gynaecological cancers. Six projects were selected for a total amount of €3.4 million. The areas selected for the call for proposals related to:

- the epidemiology of gynaecological cancers, screening, inequalities and access to care;
- the repercussions of gynaecological cancers and their treatments on the lives of those affected;
- the biology of gynaecological cancers and identification of disease markers;
- therapeutic innovations.

MELANOMA PAIR

INCa led the steering committee for the melanoma PAIR in 2012 (to be launched in for 2013). A multidisciplinary group of 16 experts, chaired by Dr Lionel Larue (Institut Curie/ CNRS UMR 3347/INSERM U 1021) held a think-tank to identify the priority areas for this programme, presented during a national seminar on 4 July 2012. It brought together over 120 clinicians and researchers. It was followed in 2012 by the publication of a call for proposals by INCa concerning the four areas selected:

- to increase basic knowledge in relation to molecular biology, cell biology and embryology;
- to gain a better understanding of the environment and the role of the microenvironment in fundamental, imaging, pathological and epidemiological terms;
- innovative therapies: monitoring of response, resistance, tolerance, compliance and economic impact;
- risk factors: a better understanding of risk factors and a better grasp of attitudes, beliefs, knowledge and behaviour among the population, and of the costs of health policies, in order to bring about progress.

Letters of intent were received in December, and will be assessed in 2013.

MORE INFORMATION ON www.e-cancer.fr
“This coming together of different scientific disciplines should enable patients to benefit more quickly from therapeutic advances. By thus sharing our resources within these programmes, we will magnify our efforts tenfold! This is the reason for the existence of ARC Foundation: to advance research and cure more patients.”

JACQUES RAYNAUD, President, ARC Foundation for cancer research

“The PAIRs can be distinguished from all other sources of research support by the integrated and thus multidisciplinary approach, and the concerted and thus proactive approach, of the funding sources, INCa, ARC Foundation, and the French National Cancer League. The gynaecological cancer and skin melanoma PAIRs might therefore become models for a more widely adopted strategy for cancer research.”

JACQUELINE GODET, President, French National Cancer League

###PAIR FOR GYNAECOLOGICAL CANCERS: TYPOLOGY OF SELECTED PROJECTS

<table>
<thead>
<tr>
<th>Principal investigator</th>
<th>Titre</th>
<th>Organ</th>
<th>Type of proposal</th>
</tr>
</thead>
</table>
| SOUMELIS Vassili, Institut Curie, Paris | Immune dysfunctions in ovarian carcinoma, and implications for immunotherapy | Ovary | - Cancer development and metastasis  
- Assessment of technology and/or markers according to the basic parameters of the methods employed  
- Systemic treatments—discovery and development |
| BERNET Agnès, Université Claude Bernard Lyon 1, Lyon | Dependence receptors as new therapeutic targets for gynaecological cancers | Uterus  
Ovary  
Endometrium | - Assessment of technology and/or markers according to the basic parameters of the methods employed  
- Systemic treatments—discovery and development |
| SASTRE-GARAU Xavier, Institut Curie, Paris | Innovative approach for the standardized identification of mutational HPV insertion in cervical carcinoma: toward personalized tumor biomarkers in clinical oncology | Uterus | - Triggering of cancer: oncogenes and tumour suppressor genes  
- Development of technologies and/or discovery of markers  
- Resources and infrastructures linked to early detection, diagnosis or prognosis |
| LEARY Alexandra, Institut Gustave Roussy, Villejuif | DNA repair, metabolism and genomic instability in chemoresistant high-grade serious ovarian cancers | Ovary | - Development of technologies and/or discovery of markers  
- Systemic treatments—discovery and development |
| CHAUVIN Pierre, INSERM UMR707, Paris | Social and territorial inequalities in HPV vaccination | Uterus | - Behaviour  
- Analyses of the costs and provision of healthcare |
| DE MARTINO Antonello, CNRS UMR7647 | Polarimetric imaging for the diagnosis and follow up of therapy for uterine cervix cancer | Uterus | - Development of technologies and/or discovery of markers  
- Assessment of technology and/or markers according to the basic parameters of the methods employed |
PARTICIPATION IN THE INTERNATIONAL CANCER GENOMICS PROGRAMME - ICGC

INCa coordinates and supports French participation in the ICGC international programme, which aims to sequence the genome of the main cancer types.

FRENCH CONTRIBUTION TO CANCER SEQUENCING

Begun in 2008, the International Cancer Genome Consortium (ICGC) has the objective of sequencing 50 types of cancers considered to be the greatest causes of concern clinically and societally, and making available to the scientific community a database cataloguing the characteristic somatic mutations. The validated catalogue of genomic alterations specific for each type of cancer should open up a vast field of investigation into the role of these alterations in tumour development, and lead to the design of new strategies for prevention, diagnosis and treatment. INCa is coordinating France’s participation in the ICGC programme with regard to 5 projects; 4 projects already began in 2012, and reflection is ongoing to decide a focus for the 5th project, dedicated to rare cancers.

The French contribution to breast cancer sequencing concerns two sub-types, HER2+ (an ICGC programme funded by INCa with collection, characterisation, sequencing and bioinformatics analyses) and ER+, HER2- (funded under the European BASIS project for sample collection and analysis).

INITIAL RESULTS OF THE TWO FRENCH PROGRAMMES

LIVER CANCER

Initial results of the ICGC Liver programme, conducted by Jessica Zucman-Rossi’s team (INSERM U 674), were published in 2012 in the journal Nature Genetics. Taken from patients with a hepatocellular carcinoma often associated with heavy alcohol consumption, 24 pairs of tumour and healthy tissue samples were analysed under the ICGC programme. Initially, the analysis helped to identify four new mutations that had hitherto not been identified in hepatic
tumours. Subsequently, a functional analysis carried out on approximately one hundred additional tumours showed that, from a physiological viewpoint, some mutations were specific to the cause identified for the transformation (alcohol, hepatitis C virus), and altered several distinct signalling pathways, by inactivating tumour suppression functions or by activating oncogenic functions. This work opens up new avenues of research for the development of therapies to target the products of these newly identified alterations.

**BREAST CANCER**

Conducted by numerous European researchers, including several French teams coordinated by Gilles Thomas (Université de Lyon 1), studies on breast tumours were the subject of two articles in the journal Cell: the first provides a “photograph” of somatic mutations, while the second attempts to reconstruct the sequence of events leading to this photograph. These results are the result of an unparalleled feat of sequencing, involving 21 tumour genomes. To address the problem of tumour heterogeneity, the genome of one particular tumour was analysed 188 times. The researchers proposed the following scenario for the development of breast cancer: initially, and for a certain period, the tumour is formed of small colonies of cells showing subtle differences, until for reasons as yet unknown, one type of colony becomes dominant, begins rapid growth, and ultimately induces symptoms. There is an additional, crucial observation: the essential mutations seem to appear very early in the life of a tumour. Since these mutations are present in the trunk of the tumour’s “genealogical tree,” strategic therapies targeting the products of these mutations retain all their promise.

6th ICGC scientific workshop, “High hopes among the scientific community”

France hosted the 6th ICGC scientific workshop, organised by INCa, in Cannes, in March. This meeting provided updates on many partner countries (14), on many ongoing sequencing programmes (47) and on many types of cancer for which tumour sequence data have been shared with the scientific community (12). Scientific discussions dealt with technological aspects (developments in sequencing methods, bioinformatics analyses, epigenomics, functional proteomics, etc.), along with, advances in sequencing by pathology.

At the end of the workshop, the programme coordinators drew conclusions as to the short-term challenges posed by ICGC. In addition to the results expected from all the sequencing projects in progress, questions related to the quality and validity of bioinformatics analysis, intra-tumour heterogeneity, functional validation of abnormalities, and finally, clinical applications of next generation sequencing, all of which represent crucial challenges and major expectations from the scientific and medical community.


MORE INFORMATION ON www.e-cancer.fr
EUROPEAN COORDINATION OF CANCER RESEARCH PROGRAMMES

In 2012, INCa became particularly involved in two European initiatives to coordinate actions for cancer control and research.

INCa has taken the European dimension of its research effort into consideration since 2006, initially in the context of bilateral projects with the United Kingdom, Germany and Poland through the joint funding of transnational research projects. Since 2010, INCa has invested more widely in the tools for European coordination and funding. INCa thus contributed actively to the creation of the TRANSCAN network for translational research in the context of an ERA-Net (a European scheme designed to improve coordination and cooperation in regional and national research programmes). It has also been involved in the European Partnership for Action Against Cancer (EPAAC), a joint action dedicated to the coordination and integration of actions for cancer control conducted by member states.

Within EPAAC (European Partnership for Action Against Cancer), INCa, together with ECCO (European Cancer Organisation), is co-leader of the research component, which aims to promote the coordination of funding and programmes between member states. At the beginning of 2012, research areas of interest shared by funding organisations, the scientific community, industries and associations were identified. A forum on cancer research, bringing together decision makers from the member states and main public and private research funding bodies, was held in Brussels in July 2012, and enabled the identification of specific opportunities for future coordinated actions. Two innovative pilot projects were presented, including one by INCa. This pilot project aims to set up new models for public-private partnerships in early-phase clinical research, thus helping to improve access to innovative treatments for patients. It is being conducted by INCa on the basis of the CLIP² programme, which allows French researchers in designated clinical centres in France unique access to molecules in order to conduct early-phase clinical trials (see page 66). The second pilot project concerns the development of a European platform for cancer outcomes research.

This forum was followed by a meeting organised in Paris by INCa with the objective, through these two pilot actions, of working on new methodologies for coordination at the European scale and defining key steps for their implementation. A third project, on research in prevention, was also proposed, and will be investigated in 2013.
THE INTERNATIONAL CANCER RESEARCH PARTNERSHIP – ICRP

INCa has been a member of the International Cancer Research Partnership (ICRP), an alliance of cancer research funders, since 2009. The objectives of ICRP are:
• to document cancer research funding at international level;
• to identify needs and underfunded areas;
• to strengthen coordination of actions, and discuss good practices.

ICRP published the first international analysis of the cancer research landscape in 2012. This report is based on data from projects and programmes, classified by type of cancer and research, among 59 member organisations. ICRP will hold its next annual meeting on 22 April 2013 in Paris, to be chaired by INCa.

www.icrpartnership.org

THE EUROPEAN ERA-Net TRANSCAN PROGRAMME

The European ERA-Net TRANSCAN programme aims to coordinate national programmes to support translational cancer research, and promote European collaborations through the launch of calls for joint research proposals. TRANSCAN brings together 25 partners from 19 countries, including France, represented by INCa, since the creation of ERA-Net in 2010. The first call for proposals, launched in December 2011, concerning the validation of biomarkers for the development of personalised medicine for oncology, enabled support for 10 European projects, including 6 that involved French teams. The second call for European proposals was launched in December 2012, with the theme of primary and secondary cancer prevention. In 2012, following an invitation to charitable organisations in partner countries to join the TRANSCAN network, ARC Foundation gave a commitment to fund this second call for proposals. For 2013, INCa will be responsible for all secretarial support for this call for proposals.

Moreover, one of TRANSCAN’s areas of work is dedicated to the analysis of funding allocated for translational research by the partners. This analysis is carried out on the basis of a categorisation of projects according to the CSO classification defined by the international ICRP network (see opposite). In publishing on its site the initial results of this analysis of active projects in 2011, TRANSCAN has enabled partners to progressively integrate into ICRP’s objectives for sharing and harmonisation.

MORE INFORMATION ON www.e-cancer.fr
FOSTERING THE CONTINUUM BETWEEN RESEARCH AND PUBLIC HEALTH

A major goal of INCa is to make discoveries from research contribute more rapidly to improved patient care, and to cancer screening and prevention.

INTEGRATED CANCER RESEARCH SITES (SIRIC)
Eight SIRICs designated and supported for a 5-year period

CHANGING CANCER RISK BEHAVIOURS
Strategic planning for prevention research
“Facilitating access for patients to new molecules based on genetic abnormalities of their tumour”

Fabien Calvo, Director, Research and Innovation hub
DESIGNATION AND COORDINATION OF INTEGRATED CANCER RESEARCH SITES: THE SIRIC PROGRAMME

In establishing a competitive policy for the designation of sites, INCa hopes to offer new opportunities for conducting translational cancer research, thus helping to optimise and hasten the production of new knowledge and promote its dissemination and application to cancer care.

Following two calls for applications (2011 and 2012), and based on the final recommendations of the international review committee, INCa designated 8 SIRICs for a duration of 5 years.

<table>
<thead>
<tr>
<th>YEAR</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>FUNDING INSTITUTIONS</td>
<td>INCa/DGOS (Department of Health)/AVIESAN-NSERM</td>
<td></td>
</tr>
<tr>
<td>OBJECTIVE</td>
<td>To bring together medical services, multidisciplinary research teams (clinical, biological, technological, epidemiological, and human, economic and social sciences, and public health) around one site, along with effective shared resources and services, in order to: - develop and conduct integrated research programmes; - establish programmes for the dissemination of knowledge and new practices</td>
<td></td>
</tr>
<tr>
<td>ASSESSMENT PROCESS</td>
<td>Review committee: 18 international experts  Stage 1: review of each application by 4-5 committee members  Stage 2: meeting of entire committee for hearings with the candidates  Stage 3: recommendations of the committee and final decision by INCa on funding</td>
<td></td>
</tr>
<tr>
<td>FUNDING IN € MILLION</td>
<td>19</td>
<td>45</td>
</tr>
<tr>
<td>APPLICATIONS SUBMITTED</td>
<td>12</td>
<td>9</td>
</tr>
<tr>
<td>APPLICATIONS SELECTED</td>
<td>2</td>
<td>6</td>
</tr>
</tbody>
</table>
The creation of the SIRICs should allow significant developments in multidisciplinary, integrated and transferable research. To allow assessment of the added value of the SIRICs to science and society, INCa is particularly keen to implement a system of coordination to help support and monitor the programme.

The top priorities of coordinating the SIRIC should help to provide a framework for the necessary interactions between SIRICs, so as to:

- encourage and facilitate scientific discussion among the SIRICs to stimulate collaboration and optimise the scope of projects;
- allow the sharing of experiences and coordinated development of managerial, organisational and institutional aspects;
- make proposals concerning the development of translational research, i.e., organisation of roles, professional advancement, expertise in making recommendations and helping to prioritise these lines of research.

Evaluation of SIRICs is eagerly anticipated, since they encompass both organisation of research and the production of new knowledge and its translation into clinical practice. The work to coordinate the SIRICs should also enable the implementation of a joint assessment process for these structures. Qualitative assessment of implementation of the SIRICs will be carried out in collaboration with a team from the Centre for the Sociology of Organisations (CSO, UMR CNRS-Sciences Po) whose scientific interests relate to changing the conditions for public action, particularly in the areas of health research, and the analysis of knowledge production. This assessment will be conducted by CSO as a project in partnership with INCa and the SIRICs, based on an approach of individual meetings and analysis conducted within each SIRIC, and by comparing SIRICs. The methodology of this study will be completed during the first half of 2013, and implemented over an initial period of 24 months.

In addition to the project jointly led with CSO, INCa and the SIRICs must define indicators for monitoring both organisational and scientific activities, with regard to their priorities and deliverables.
ENHANCING SCIENTIFIC USE OF BIOLOGICAL RESOURCES

INCa’s goal of rationalising the storage of biological resources in tumour banks and exploiting them for cancer research, to which it has been committed for several years, was pursued and strengthened in 2012.

The actions and recommendations established by INCa are aimed at optimising the organisation of the tumour banks with a view to creating linked collections and databases, both at local level and as part of multi-centre networks.

COORDINATION OF TUMOUR BANKS

The scientific contribution of the 58 tumour banks, as calculated by analysing activity reports from 2009, led to a readjustment of the 2012 MERRI budget (Education, Research, Information and Innovation Programme, a component of the allocation from MIGAC (the Mission of General Interest and Contract Support)). The new procedure for calculation and distribution of MERRI support credits takes particular account of the volume of activity declared in activity reports, i.e. inward flow (number of new patient files), outward flow (number of samples used for research projects), and weighting for quality certification. This reassessment, the criteria for which will be refined over the years to come, has helped to make managers of tumour banks more aware of the scientific purposes of

<table>
<thead>
<tr>
<th>Year of selection</th>
<th>Coordinator</th>
<th>Organ pathology</th>
<th>Name of CBD network (BCB in French)</th>
<th>Number of partner centres</th>
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<tbody>
<tr>
<td>2011</td>
<td>Françoise DEGOS APHP Hôpital Beaujon-Clichy</td>
<td>Liver</td>
<td>Réseau CRB Foie</td>
<td>9</td>
</tr>
<tr>
<td>2011</td>
<td>Jean-Christophe BERNHARD CHU de Bordeaux</td>
<td>Kidney</td>
<td>UroCCR</td>
<td>13</td>
</tr>
<tr>
<td>2011</td>
<td>Céleste LEBBE APHP Hôpital Saint-Louis</td>
<td>Melanoma</td>
<td>MELBASE</td>
<td>27</td>
</tr>
<tr>
<td>2011</td>
<td>Françoise GALATEAU-SALLÉ CHU de Caen</td>
<td>Mesotheliomas</td>
<td>MESOBANK</td>
<td>9</td>
</tr>
<tr>
<td>2011</td>
<td>Christine LASSET Centre Léon Bérard - Lyon</td>
<td>Lynch syndrome colon and rectum</td>
<td>FR3LyS</td>
<td>3</td>
</tr>
<tr>
<td>2012</td>
<td>Christophe MARIETTE Hôpital Claude Huriez-Lille</td>
<td>Gastro-oesophageal carcinomas</td>
<td>FREGAT</td>
<td>39</td>
</tr>
<tr>
<td>2012</td>
<td>Jean-Michel COINDRE Institut Bergonié-Bordeaux</td>
<td>Sarcomas and connective tissue</td>
<td>BCB sarcomes</td>
<td>6</td>
</tr>
<tr>
<td>2012</td>
<td>Barbara BOURNET CHU de Toulouse</td>
<td>Pancreas</td>
<td>BACAP</td>
<td>12</td>
</tr>
<tr>
<td>2012</td>
<td>Philippe MENEI CHU d’Angers</td>
<td>Glioblastomas Central nervous system</td>
<td>BCB Glioblastomes</td>
<td>19</td>
</tr>
</tbody>
</table>
CREATION OF NATIONWIDE CLINICAL-BIOLOGICAL DATABASES

Initiated in 2011, the objective of this call for proposals, renewed in 2012, is to encourage the different players to join forces to create clinical-biological databases linked with biological samples, for a single pathology. These databases (BCB in French) should enable the collection of information and its cross-disciplinary exploitation in different areas of research (epidemiological, basic, translational, clinical) to be optimised. This call for proposals strengthens the structuring of specialised networks, the governance of which INCa will help to organise, in order to develop a “model” for fostering the sharing of data and biological resources for projects conducted on a nationwide scale. The 2012 call for proposals led to the submission of 14 applications, 4 of which were selected for funding for 3 years. In total, 9 BCBs were thus supported by INCa in 2012. The call for proposals is due to be repeated in 2013.
SUPPORT FOR CLINICAL RESEARCH IN HEALTHCARE FACILITIES

Working in close collaboration with the Division of Health, INCa provides financial, methodological and logistic support for clinical trials organised in the various hospitals.

NATIONAL CALLS FOR PROPOSALS

The Directorate General for Healthcare Provision (DGOS) has delegated management of the annual calls for cancer-related proposals for the Hospital Clinical Research Programme (PHRC in French) and Programme for Supporting Innovative and Costly Techniques (STIC) to INCa. Both of these programmes are designed to support academic clinical research programmes in hospitals. In 2012, 56 PHRC projects were selected and funded for up to €20.25 million, and 3 STIC projects were funded for up to €500,000. These projects were hosted by 29 different hospitals or hospital groups. Comprehensive cancer centres hosted 28 projects, university hospitals hosted 26 projects, a hospital hosted one project, and a hospital federation hosted one project. Academic clinical research projects funded by PHRC and PSTIC in cancer in 2012 are devoted to both the advancement of medical knowledge and to the quality of care. Most PHRC projects on cancer are devoted to categories of procedures normally used in current treatment. Fifty-six of the 59 PHRC (56) and PSTIC (3) projects funded were led by doctors from different specialities, namely medical oncology, onco-haematology, neuro-oncology, onco-dermatology, paediatric oncology, radiotherapy, nuclear medicine, obstetrics and gynaecology, endocrinology, respiratory medicine, cancer surgery, hepatic surgery and transplantation, radiology, etc.

MAIN FEATURES OF PHRC AND PSTIC IN CANCER IN 2012

<table>
<thead>
<tr>
<th>Funding institution</th>
<th>Division of Health (DGOS)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PHRC</strong></td>
<td><strong>PSTIC</strong></td>
</tr>
<tr>
<td><strong>Objectives</strong></td>
<td>To validate new medical or scientific knowledge in the clinical area To improve the quality of care by evaluating new methods for diagnosis and treatment</td>
</tr>
<tr>
<td><strong>Funding</strong></td>
<td>€20.25 million</td>
</tr>
<tr>
<td><strong>Results:</strong> Projects submitted</td>
<td>226</td>
</tr>
<tr>
<td>Projects selected</td>
<td>56</td>
</tr>
<tr>
<td>Selection rate</td>
<td>24.7%</td>
</tr>
</tbody>
</table>
THE NETWORK OF MOBILE CLINICAL RESEARCH TEAMS

Established in 2006 by INCa and the Department of Health in order to encourage the participation of hospital researchers (public or private) in clinical trials, the 26 Mobile Clinical Research Teams (EMRC in French) comprise about 70 FTE clinical research assistants and clinical trial technicians based in over 170 different types of healthcare facilities (CLCCs, CHUs, AP-HP, CHs, PSPHs, private facilities) in nearly 135 towns and cities in France. In 2012, following an assessment of the EMRCs’ activity by INCa, the Department of Health increased their funding by 13%, to €3.4 million.

LOGISTIC AND METHODOLOGICAL HELP PROVIDED BY THE DATA PROCESSING CENTRES

In 2007, the National Cancer Institute designated 11 data processing centres (DPCs) throughout the territory, to strengthen and provide financial support to existing bodies carrying out clinical cancer research, in order to optimise the quality of data processing, and provide monitoring for cancer clinical trials. The DPCs fulfil the following roles in whole or in part:

- provide logistic support with data processing to help guarantee the quality of data collected (up to date, free of errors) including the design of case report forms, data input and data input controls, traceability and safety of data, and long-term follow-up of patient data;
- contribute expertise to the management of projects, i.e. ensure that patients are randomly assigned to treatment arms, and coordinate data collection, verification and any necessary correction.
- provide methodological expertise for the design of protocols, case report forms and data formats, and statistical expertise for the analysis of results and drafting of publications.

The DPCs are physically located in university hospital healthcare facilities (CLCCs and CHUs).

Assessment of the DPCs by INCa in 2012 showed that up to 100% of research projects that they handled were clinical trials sponsored by the healthcare facility in which the DPC was located in the majority of cases.

In 2012, INCa designated the following 6 French cooperative intergroups doing work with an international dimension in the area of cancer: IFCT (Lung) LYSAR LYSARC (Haematology), JFM (Haematology), ARCAGY-GINECO (Gynaecology), GORTEC-GETTEC-GERCOR (Head and neck), and FFCD-GERCOR (Digestive).

The cooperative groups are academic in nature, independent and non-profit, and include physicians and medical research professionals who collaborate to develop and conduct study protocols (clinical trials of new treatments, quality of life, biological studies, etc.). They act as operational structures for academic clinical research, in the design, promotion and execution of projects. The cooperative groups recruited nearly 10,000 patients to clinical trials in 2011. The clustering of these bodies into cooperative intergroups should encourage large-scale collaborative clinical trials, including many patients in all types of healthcare facilities.
FOSTERING THE CONTINUUM BETWEEN RESEARCH AND PUBLIC HEALTH

MONITORING OF PATIENT RECRUITMENT TO CLINICAL TRIALS

In addition to providing support measures to clinical research, INCa assesses growth in the number of patients recruited to clinical trials, and encourages the sharing of knowledge of availability in this area.

A GREATER NUMBER OF PATIENTS ELIGIBLE FOR EXISTING TREATMENTS RECRUITED TO CLINICAL RESEARCH PROJECTS

Each year, INCa carries out a survey to evaluate the recruitment of patients to clinical trials. The 2012 survey showed a continued significant increase in the number of patients recruited to clinical trials: over 35,000 patients were recruited during 2011, i.e. a 63% increase between 2008 (reference year) and 2011 (+84% for academic trials and +6% for industrial trials).

GROWTH, ANALYSIS AND OPTIMISATION OF THE CLINICAL TRIALS REGISTRY

Through a collaboration with INCa, ANSM (French Medicine Agency) and sponsors of clinical trials, the clinical trials registry features 1,490 trials as of 31 December 2012, almost half of which are ongoing trials. A good proportion of these clinical trials employ drugs that already have MA (marketing authorisation), and are developing new treatment strategies or wish to apply these treatments to new pathologies. The redesigned registry can now be accessed from the INCa website, and a multi-criteria search engine is available on the INCa web page to help users to target their search for clinical trials by using additional search criteria (organ, sponsor, phase, age group, department/region, etc.), together with a geolocation module (to select clinical trials within a given geographic area, and, where applicable, to plan a route to a clinical investigation site).

Moreover, a module for subscription to an email alert system enables users to directly receive lists of clinical trials corresponding to their own selection criteria.

MORE INFORMATION ON www.e-cancer.fr
PHARE, a clinical trial bringing together all centres treating breast cancer

In 2006, INCa set up the PHARE trial, which aimed to optimise the duration of adjuvant treatment with trastuzumab for HER2+ breast cancer, and to reduce its adverse effects on the heart. The question asked was: is 6 months of treatment no less effective than 12 months in terms of prevention of recurrence in patients presenting with HER2+ breast cancer? The trial was an undeniable success for the French investigators: 350 investigators, in 156 centres, recruited 3,382 female patients. Statistical analysis of data from the PHARE trial, presented at the end of 2012 at two international conferences, was inconclusive regarding the hypothesis of non-inferiority for the 6-month treatment arm compared with the standard treatment. Analysis of subgroups showed that patients with a tumour that did not overexpress oestrogen receptors, who received trastuzumab after chemotherapy (sequentially) had a greater risk of recurrence if they received trastuzumab for only 6 months. This group represents 9% of patients recruited to the PHARE trial. On the other hand, for all other patient groups, there was no significant difference between 6 months and 12 months of treatment with trastuzumab, regardless of how the latter was administered in relation to chemotherapy.
Since 2006, INCa has had in place a specific programme to organise somatic genetic testing for tumours through the development of cancer molecular genetics platforms. This scheme includes a guarantee of optimal access to targeted therapy by allowing prescription of a treatment only to those patients likely to benefit from it.

Twenty-eight centres, with dedicated funding, carry out innovative molecular tests for all patients in their region, irrespective of the healthcare facility where the patients are being treated. A report on the nationwide activity for 2011 was published in December 2012. This national summary provides access to both qualitative and quantitative data. A specific report on tests that determine access to targeted therapies was also published.

In 2010, INCa set up a programme to support the 28 hospital molecular genetics platforms for routine detection of a biomarker panel determining access to targeted therapies undergoing clinical validation. For lung cancer patients who require screening for the EGFR mutation, this involves additional screening for mutations in the KRAS, PI3KCA, BRAF and HER2 genes, together with translocations of the ALK gene. In colorectal cancer, apart from mutations in the KRAS gene, screening for mutations in the BRAF gene and microsatellite instabilities (MSI) is also carried out. For melanoma, systematic screening...
for mutations in the BRAF and KIT genes is performed. Funding of €3 million was allocated to the platforms in 2012 to continue the programme.

In 2012, two targeted therapies directly affected by the tests in this programme obtained marketing authorisation (MA):

- vemurafenib obtained MA for patients with a melanoma expressing a BRAF mutation;
- crizotinib obtained MA for the treatment of patients with a lung cancer with translocation of the ALK gene.

The “emerging biomarkers” programme has made it possible to make these tests immediately accessible once the drugs have obtained MA. Moreover, preliminary performance of these tests has also allowed many patients to benefit from early access to these therapies as part of a temporary authorisation for use (ATU).

**CREATION OF DATABASES**

For lung cancer, INCa supports the “BIOMARKERS France” project, led by IFCT (French Intergroup for Thoracic Oncology), in close association with representatives from the molecular genetics platforms. The objective is to carry out a descriptive analysis of the prevalence and associated clinical features of molecular abnormalities that have been analysed under the “emerging biomarkers” programme. This project involves the compilation of these data for all patients screened for EGFR mutations and associated biomarkers in a given year.

Similarly, the MELBASE project, led by the GMFmel group, was established to create a prospective cohort of patients with non-resectable stage III melanoma with lymph-node involvement, and metastatic patients. The objective is to link a database that includes the clinical, biological and radiological follow-up of these patients to a virtual tumour bank. This database also includes molecular results obtained by the molecular genetic platforms. The objective is to compile data on factors associated with tumour progression, therapeutic interventions and molecular markers, and relate them to an assessment of the response to treatment, the impact on quality of life and a general assessment of psychological and socioeconomic aspects.

**Implementation of new sequencing techniques**

The list of biomarkers used in clinical practice is set to increase steadily to reflect the growing number of targeted therapies being developed. New sequencing technologies (NGS for Next Generation Sequencing) that allow the simultaneous examination of a large number of molecular targets should meet these needs in the near future. In this perspective, INCa began an assessment in 2012 of the needs and constraints associated with the arrival of NGS in laboratories.
Fostering the Continuum Between Research and Public Health

Research Programmes in Human and Social Sciences, Epidemiology and Public Health

In 2012, INCa continued its coordination and organisational efforts with a view to mobilising research teams in these areas, and stimulating them to carry out large-scale projects. The development of research programmes is also based on financial support provided through the organisation of calls for proposals.

**Investigator-Driven Calls for Proposals and Cross-Disciplinary Themes in the Cancer Plan**

These calls for proposals are known as “investigator-driven,” i.e. the subject is chosen at the researchers’ initiative. However, projects that concern as yet underexplored questions are encouraged. In the area of human and social sciences, epidemiology and public health, INCa wished to give specific attention to cross-disciplinary themes in the 2009-2013 Cancer Plan in 2012, such as:

- reducing inequalities in relation to cancer;
- characterising behavioural and environmental risk factors implicated in cancer;
- analysing trends in socio-spatial disparities regarding cancer;
- characterising nutritional risks and care for cancer patients;
- analysis of factors that determine participation in and adherence to prevention, screening and early detection of cancer;
- study of the ergonomics of organising a care plan and follow-up for cancer patients, and representation of the roles of the different players, especially that of the GP.

**Cancer and Work: Collaborative Programmes**

Since 2006, INCa and ARC French Foundation for Cancer Research have been committed to joint support for exploration of the consequences of the illness and its treatment for the career prospects and work situations of people with cancer. A report was published in 2012 to present the results of six projects funded on returning to work after cancer. INCa and ARC Foundation wished to expand available knowledge on improvements in retention of employment and returning to work for people with cancer, and launched a new joint call for proposals in October 2011: “Cancer, Retention in Employment and Returning to Work,” which led to funding for three new projects from 2012. It is aimed at refining the observation of the impact of cancer on the professional lives of active individuals, both during and after their illness, with due

<table>
<thead>
<tr>
<th>Unrestricted Calls for Proposals in Social and Human Sciences, Epidemiology and Public Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Funding</td>
</tr>
<tr>
<td>Assessment and results</td>
</tr>
<tr>
<td>Priority themes:</td>
</tr>
<tr>
<td>Treatment methods, innovations, and social inequalities (9 projects)</td>
</tr>
<tr>
<td>Epidemiology: prevention, risk factors and mortality (7 projects)</td>
</tr>
</tbody>
</table>
regard for the potential variety of situations, working arrangements and health status.

The 2009-2013 Cancer Plan made combating health inequalities a priority. In 2010, INCa launched a call for proposals to encourage researchers in human and social sciences, epidemiology and public health to develop and assess interventions aimed at reducing cancer-related inequalities. A specific assessment and monitoring procedure was established to provide methodological and technical support to the setting up of intervention research projects by shortlisted teams. The latter were selected in three stages as follows: shortlisting based on a letter of intent, presentation of proposals at an internal seminar, and monitoring of investigators until submission of the final proposal for review.

In 2012, the projects selected mainly concern actions for prevention (eating habits, local strategy for reducing inequalities); screening (breast and/or colon) and care (individuals with an intellectual disability).

### CALLS FOR PROPOSALS ON “INTERVENTION RESEARCH”

<table>
<thead>
<tr>
<th>Year</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objectives</td>
<td>To stimulate the research community to develop multidisciplinary intervention research in population health in order to reduce social inequalities in health.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Letters of intent submitted</td>
<td>8</td>
<td>37</td>
<td>19</td>
</tr>
<tr>
<td>Projects selected</td>
<td>3</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Selection rate</td>
<td>25%</td>
<td>8%</td>
<td>26%</td>
</tr>
<tr>
<td>Funding</td>
<td>€0.6 million</td>
<td>€1.5 million</td>
<td>€2.1 million</td>
</tr>
</tbody>
</table>

### DEVELOPMENT IN SUPPORT PROVIDED TO INTERVENTION RESEARCH

The new avenues for development proposed in the report prepared by this group should help to initiate coordination between public health players in two directions—on the one hand, between agencies supporting research, to consolidate funding and attract researchers on a path less travelled at the moment, and on the other hand, between players in research and public health, in order to develop an integrated approach that best meets the hopes of the former and the needs of the latter. Several areas of development and levers for action were thus identified:

- development of fundamental research into behavioural change;
- development of intervention research into behavioural change;
- provide public health players with better tools to assist decision making.

This strategy of medium- and long-term planning (2-5 years) for preventive research is organised into the following 6 areas:

1. Training, to increase research competence
2. Promotion of preventive research to funders
3. Support (financial, human and logistic) for projects
4. Technology transfer: increase recognition for research
5. Coordination of research methods and tools (linking INCa with ITMO Public Health)
6. Transfer of knowledge to players working in public health
In its role as coordinator of the players involved in cancer control, INCa provides monitoring for the 2009-2013 Cancer Plan on behalf of the inter-ministries steering committee, and by liaising with all partners involved in the implementation and funding of actions.

**PROGRESS OF THE PLAN**

At the end of 2012, of 119 planned actions, 20 have been completed, 79 are progressing according to schedule, and 20 have shown delayed progress.

**STATUS REPORTS**

Two status reports submitted to the President of France in 2012, and two quarterly interim reports.
“At national level, management of the Plan is based on an extensive monitoring scheme”

Midterm assessment of the 2009-2013, Cancer Plan, French High Council for Public Health
PROGRESS OF THE CANCER PLAN AND OPTIMISATION OF MANAGEMENT TOOLS

As a national public health plan and presidential project, the 2009-2013 Cancer Plan is monitored on a quarterly basis established by INCa, in order to report progress, and any problems encountered, to the President of France, to the relevant government departments, and to all citizens.

PREPARATION OF STATUS REPORTS FOR THE PRESIDENT OF FRANCE

The mobilisation of leaders and the cross-disciplinary organisation put in place have enabled all information required to monitor the measures in the Plan (indicators of results, progress of actions, budget implementation) to be compiled on a quarterly basis, and analysed and summarised to prepare reports for the interdepartmental steering committee, i.e. two status reports for the President of France on the progress of the Cancer Plan, in June 2012 and January 2013, and two quarterly interim reports, in March and October 2012.

THE REFLECTION AND DISCUSSION SEMINAR

Consultation between the players involved in combating cancer on the implementation of measures contained in the Plan takes place at annual seminars that bring together the advisory bodies representing users and health professionals, and members of INCa's Board of Directors. In 2012, seminars were held on the 27th and 29th of June. Observations and recommendations from the assessment of the Plan Cancer at the midway point were presented by the French High Council for Public Health. Discussions also dealt with two thematic foci, namely innovation and clinical research, and individualised care plans for patients during and after cancer.

The 2009-2013 Cancer Plan: a 3-dimensional monitoring system

- Milestones to measure the achievement of actions:
  In order to follow progress in achieving the actions contained in the Plan in an ongoing manner, and to identify any delays that need to be notified to the steering committee, milestones have been defined. They correspond to the main phases in achieving the actions.

- Achievement of measures, with the help of indicators:
  Indicators have been selected for each of the 30 measures – based on 3-4 indicators per measure – to help appraise their achievement in relation to the objectives set by the Plan.

- Budget implementation:
  Expenditure committed or carried out by each funder in achieving actions is monitored, and is subject to an annual implementation review.

INCa compiles these parameters on a quarterly basis, with all action leaders, and provides analysis through the use of data processing tools.

Cross-disciplinary coordinated project management by all leaders

The Cancer Plan monitoring manager relies on a project-team bringing together representatives from the financial services, and information and communication systems to interact with:

- over 30 contact people for the different actions throughout INCa’s hubs and operational divisions,
- selected representatives from each partner organisation managing actions from the Cancer Plan.
Governance of the 2009-2013 Cancer Plan

Management of the Cancer Plan is provided by an interdepartmental steering committee, chaired by the Director General for Health, and comprising all relevant management from the departments responsible for health, solidarity, labour, and employment and finance, Health Insurance, the French Inter-Association Collective on Health, the French National Cancer League, together with Professor Jean-Pierre Grünfeld in his capacity as a qualified individual, and the Chairperson of INCa. Representatives of national health agencies are also associated, as are the national operators, managers or joint managers of actions. Monitoring of the Cancer Plan is carried out by INCa on behalf of the steering committee.

OPTIMISATION OF MONITORING AND MANAGEMENT TOOLS

Provisions for monitoring the Cancer Plan issued by the inspection bodies (the French court of auditors; audit by the Social Affairs Inspectorate-General) and by the French High Council for Public Health in its midway assessment report have been implemented by:

- development of a management scorecard to provide managers and decision makers with an overview of the implementation of the Cancer Plan. It identifies indicators for achievement and results in relation to the targets set. Presented to the steering committee in 2012, it will be used in the preparation of the final report for the 2009-2013 Cancer Plan;
- the compilation of parameters used to monitor the Cancer Plan actions through the use of customised liaison forms for each Plan leader.

UPDATING THE CANCER PLAN WEBSITE

The government website devoted to the 2009-2013 Cancer Plan aims to provide regular information to the public and to professionals on the implementation of actions. INCa has been entrusted with updating the content of the site, which has been accessible online since October 2010, on behalf of all those managing the actions contained in the Plan:

- after each quarterly meeting of the steering committee, the management data for the 30 measures have been updated, and progress reports for the Cancer Plan made available online.
- 29 news items related to the Plan’s actions were posted on the site during 2012;
- 35 new publications—“deliverables”—resulting from the Cancer Plan were posted online in 2012, and include reports, guides or guidelines as provided for by the Plan and intended for patients, professionals, and the general public.

SITUATION AT THE END OF 2012

The Plan’s progress is generally on schedule, thanks to the involvement of all players and the mobilisation of planned resources. At the end of 2012, most of the Plan’s measures have progressed on schedule (Of the 119 actions contained in the Plan, 79 are underway and 20 actions are already completed), but 20 actions are showing delayed progress. With €879 million implemented in 2009-2011, nearly 90% of the resources provided for the period have been mobilised by the funders.

The Cancer Plan has already enabled important advances in the areas of cancer research, observation and information, and on improvements in patient care. However, the objectives for prevention and screening have not yet been achieved, and some measures aimed at social and professional rehabilitation have faced obstacles to their implementation.

The final report on the Cancer Plan will be produced by the steering committee in 2013. Assessment of the Plan has been entrusted to the High Council for Public Health.

MORE INFORMATION ON www.plan-cancer.gouv.fr
APPENDICES

85—Appendix 1. INCa's finances in 2012
86—Appendix 2. Organization chart
88—Appendix 3. Calls for proposals managed by INCa in 2012
90—Appendix 4. Publications
92—Appendix 5. Scientific articles
95—Appendix 6. Glossary
APPENDIX 1
INCA’S FINANCES IN 2012

**INCOME**

Income for 2012 comes to €103.9 million. It mainly comprises State grants (Departments of Health and Research), totalling €93 million. INCa also benefited from contributions by other members of the INCa GIP (Public Interest Group) of up to €6.2 million, to support its activities in research (PAIR, CLIP²), public information (information campaigns on screening, Cancer Info) and care (recommendations for health professionals). Finally, funding from the pharmaceutical industry of up to €1.3 million was received under programmes to develop the molecular genetics platforms.

**EXPENDITURE**

Expenditure for 2012 was €97.4 million, of which over two-thirds was allocated to partners in the form of grants. Thus €67.1 million was devoted to grant payments, of which €45.4 million was paid under grants awarded prior to 2012. Concerning grant agreements signed in 2012, the main sources of expenditure were the Investigator-driven research projects in cancer biology and sciences (€4.7 million), the designation of six new SIRICs (€3.1 million), support for the development of the molecular genetics platforms (€3 million), the call for proposals in translational research (€1.7 million), the call for proposals for local accommodation (€1.1 million) and the PAIR for gynaecological cancers (€1 million). Other running costs totalled €17.1 million, of which €4.4 million was directly related to public information campaigns (production and dissemination), €2.1 million for genotyping services, €1.5 million for other cancer-related studies, and €0.7 million for services of external experts (fees and travel expenses). Expenditure related to the Institute’s own operation (rent and lease expenses, maintenance, information technology, telecommunications, etc.), amounted to €6.1 million.
APPENDIX 2
ORGANIZATION CHART AS OF 31 DECEMBER 2012
# APPENDIX 3

## CALLS FOR PROPOSALS MANAGED BY INCA IN 2012

<table>
<thead>
<tr>
<th>CALLS FOR PROPOSALS</th>
<th>PROJECTS</th>
<th>TOTAL AMOUNT OF MULTI-YEAR FUNDING</th>
<th>EXPERTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of proposals/letters of intent submitted</td>
<td>Number of projects funded</td>
<td>Members of review committee</td>
</tr>
<tr>
<td>Hospital Clinical Research Programme – Cancer</td>
<td>226</td>
<td>54</td>
<td>€19,296,000</td>
</tr>
<tr>
<td>Programme for Supporting Innovative Techniques – Cancer</td>
<td>12</td>
<td>3</td>
<td>€585,000</td>
</tr>
<tr>
<td>Investigator-driven Translational Research Projects in Oncology</td>
<td>164</td>
<td>26</td>
<td>€8,946,762</td>
</tr>
<tr>
<td>Investigator-driven research projects in human and social sciences, public health and epidemiology</td>
<td>41</td>
<td>16</td>
<td>€3,885,547</td>
</tr>
<tr>
<td>Research projects in social and human sciences on the theme of “Retention in employment and returning to work”</td>
<td>9</td>
<td>3</td>
<td>€485,180</td>
</tr>
<tr>
<td>Health intervention research projects aimed at reducing social inequalities related to cancer</td>
<td>20</td>
<td>5</td>
<td>€2,180,462</td>
</tr>
<tr>
<td>Investigator-driven research projects in cancer biology and sciences</td>
<td>191</td>
<td>32</td>
<td>€15,887,703</td>
</tr>
<tr>
<td>Creation of nationwide multi-centre clinical-biological databases in cancer</td>
<td>14</td>
<td>4</td>
<td>€2,579,712</td>
</tr>
<tr>
<td>Designation of Integrated Cancer Research Sites (SIRIC)</td>
<td>9</td>
<td>6</td>
<td>€44,650,000</td>
</tr>
<tr>
<td>Designation of cooperative intergroups for clinical research</td>
<td>10</td>
<td>6</td>
<td>€600,000</td>
</tr>
</tbody>
</table>
Grants – figures for 2012:

- 220 new grant agreements signed
- 605 scientific reports handled

<table>
<thead>
<tr>
<th>CALLS FOR PROPOSALS</th>
<th>PROJECTS</th>
<th>TOTAL AMOUNT OF MULTI-YEAR FUNDING</th>
<th>EXPERTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of projects/letters of intent submitted</td>
<td>Number of projects funded</td>
<td>Members of review committee</td>
</tr>
</tbody>
</table>

- **CLIP² – Early phase clinical trials of PI3 kinase inhibitor BEZ235**
  - 18 Ongoing
  - Members of review committee: 12
  - Number of French experts: -
  - Number of international experts: -

- **CLIP² – Early phase clinical trials of PI3 kinase inhibitor BKM120**
  - 4 1
  - Total Amount: €787,547
  - Members of review committee: 12
  - Number of French experts: -
  - Number of international experts: -

- **CLIP² – Early phase clinical trials of PD-0332991, an inhibitor of cyclin-dependent kinases 4 and 6 (CDK4/6)**
  - 7
  - Total Amount: €2,671,350
  - Members of review committee: 13
  - Number of French experts: -
  - Number of international experts: -

- **CLIP² – Early phase clinical trials of PF-04691502, a PI3 kinase and mTOr inhibitor**
  - 13
  - Total Amount: €1,106,354
  - Members of review committee: 15
  - Number of French experts: -
  - Number of international experts: -

- **Emerging Biomarkers Programme**
  - 18
  - Total Amount: €2,671,350
  - Members of review committee: 12
  - Number of French experts: -
  - Number of international experts: -

- **Non-profit organisations and quality of life**
  - 34
  - Total Amount: €729,722
  - Members of review committee: 7
  - Number of French experts: 8
  - Number of international experts: -

- **Supporting policies for cancer prevention and screening**
  - 34
  - Total Amount: €1,063,254
  - Members of review committee: 16
  - Number of French experts: 24
  - Number of international experts: 1

- **Development of accommodation near medical centres**
  - 14
  - Total Amount: €1,194,640
  - Members of review committee: 8
  - Number of French experts: -
  - Number of international experts: -

- **Rare cancers in adult: organisation through expert centres**
  - 6
  - Total Amount: €2,060,770
  - Members of review committee: 6
  - Number of French experts: -
  - Number of international experts: 3

- **National deployment of oncogeriatric coordination units**
  - 14
  - Total Amount: €2,060,770
  - Members of review committee: 6
  - Number of French experts: -
  - Number of international experts: 5
APPENDIX 4
PUBLICATIONS

ACTIVITY REPORTS AND ASSESSMENTS (17)
- Report on pilot experiments for the multidisciplinary care of people with an inherited predisposition for cancer
- National report on clinical research activity, 2003-2010
- Rare adult cancers: organisation into expert centres (French and English versions)
- Organisation of care for adult patients with rare cancers – Activity report for 2011
- National summary of implementation of cancer treatment authorisations: status as of June 2010
- National Radiotherapy Monitoring Committee 2008-2011: final report
- Pathology recording: minimum data set for a primary tumour
- Summary report of oncogenetics activity in 2010
- Summary of activity in the cancer molecular genetics hospital platforms in 2011
- Molecular genetic tests for access to targeted therapies in France in 2012 (French and English versions)
- INCa/ONDPS report on occupations associated with cancer
- Results from testing of the individualised patient care plan during and after cancer (full report and 2 summaries)
- Summary of activity reports from the tumour banks
- The situation of cancer in France in 2012
- Report on “Mars bleu” campaign 2011
- Report on “Octobre rose” campaign 2011
- Report on the 2011 National Day of Prevention and Screening for Skin Cancers

REVIEWS OF STATUS AND KNOWLEDGE (6)
- The situation of radiotherapy in 2011
- The situation of chemotherapy in 2011
- From diagnosis to first treatment: waiting times for cancer treatment recorded by the FRANCIM network of specialised registries 1999-2008
- Ethics and organised screening for breast cancer (full report and summary)
- Work situations and career prospects for employees with cancer
- Changes in cancer risk behaviours and their individual and collective determinants

PROCEEDINGS OF COLLOQUIA AND SEMINARS (1)
- Social inequalities in cancer: detection and intervention (7 October 2010)

STUDIES AND SURVEYS (4)
- Summary of the 2010 national survey on pain management for adult cancer patients
- Survey on waiting times for an MRI appointment in 2011
- Study on waiting times for treatment of cancers of the breast and lung
- Study on informing patients of a cancer diagnosis and analysis of patient experiences in 2011

REFERENCE SHEETS (3)
- Physical Activity and Cancer
- Occupational cancers (update)
- Asbestos and malignant pleural mesothelioma (update)
GUIDELINES FOR SPECIALISTS (3)
- Non-metastatic invasive breast cancer – topical issues (full report + summary + appendices)
- Hodgkin’s lymphomas – topical issues (full report + summary + appendices)
- Guidelines for urological oncology

ALD (LONG-TERM CONDITIONS)

GP GUIDES (4)
- Non-Hodgkin’s lymphomas (update)
- Colorectal cancer (update)
- Cutaneous melanoma (update)
- Prostate cancer (update)

RESOURCES FOR GOOD PRACTICE (3)
- The proctologist/gastroenterologist, a player in the prevention of anal cancer in HIV-infected patients
- Skin cancers: occupational risks
- Oncodage, a geriatric oncology screening tool

PATIENT CANCER INFO GUIDES (3)
- Social provisions and cancer (update)
- Treatments for cancers of the upper aerodigestive tract
- Treatments for pancreatic cancer

COMMUNICATION MATERIALS FOR THE GENERAL PUBLIC (5)
- Leaflet, Cancer and HIV – Preventing anal cancer
- Leaflet, Preventing anal cancer – Gay men living with HIV
- Mini-poster, Octobre rose 2012
- Postcard, Octobre rose 2012
- Information leaflet in foreign languages on organised breast cancer screening

INSTITUTIONAL DOCUMENTS (7)
- Activity report 2011 (French and English versions)
- Scientific report 2011-2012 (French and English versions)
- 2009-2013 Cancer Plan – 4th and 5th status reports for the President of France
- Institutional brochure

ALD (LONG-TERM CONDITIONS)

PATIENT GUIDES (5)
- The management of stomach cancers
- The management of oesophageal cancers
- The management of adult acute leukaemias
- The management of chronic lymphoid leukaemias
- The management of adult non-Hodgkin’s lymphomas of the lymph nodes
APPENDIX 5
SCIENTIFIC ARTICLES

List of articles published and posters presented at conferences by teams from INCa in 2012

ARTICLES

Biomarker discovery, development, and implementation in France: a report from the French National Cancer Institute and cooperative groups

L’exposition aux ultraviolets artificiels en France (Exposure to artificial UV radiation in France)

Évaluation de l’impact sanitaire de l’exposition aux ultraviolets délivrés par les appareils de bronzage artificiel sur le mélanome cutané en France (Health impact assessment of artificial ultraviolet radiation from sunbeds on cutaneous melanoma in France)

Retour sur les idées reçues qui motivent le recours au bronzage en cabine UV (Reflections on misconceptions that are developed to justify sunbed use)

La réglementation actuelle permet-elle de protéger la santé des utilisateurs d’appareils de bronzage utilisant des rayonnements ultraviolets ? (Do current regulations protect users of UV tanning devices from health risks?)

État des lieux des sources d’information sur la prévention primaire des cancers d’origine professionnelle pour les médecins du travail: besoins et perspectives (Inventory of information sources for occupational physicians on the prevention of occupational cancers: Needs and expectations)

Recommandations nationales INCa-SPLF sur le bilan initial d’un cancer du poumon (Diagnosis and staging of lung cancer: the INCa-SPLF guidelines)

Tumour molecular profiling for deciding therapy—the French initiative
Nowak F, Soria JC, Calvo F. Nature Reviews Clinical Oncology, July 2012

Integrated analysis of somatic mutations and focal copy-number changes identifies key genes and pathways in hepatocellular carcinoma

Connaissances, perceptions, attitudes et comportements des femmes et des médecins vis-à-vis du dépistage du cancer du sein, France, 2010 (Women and health professionals’ knowledge, perceptions, attitudes and behaviors related to breast cancer screening, France, 2010)
Lançon F, Sannino N, Viguier J. Bulletin Épidémiologique Hebdomadaire, 35,36,37, 26 September 2012
Radiothérapie du cancer du sein infiltrant: recommandations nationales françaises
(Radiotherapy of invasive breast cancer: French national guidelines)
Cancer et Radiothérapie, September 2012

Spécificités et perspectives du programme français de dépistage organisé du cancer du sein
(Specificities and perspectives of the French breast cancer screening programme)
Ancelle-Park R, Séradour B, Viguier J, Salines E.
Bulletin Épidémiologique Hebdomadaire. 26 Sept 2012; (No. 35-36-37): 391-394

Comparison between a guaiac and three immunochemical faecal occult blood tests in screening for colorectal cancer

World Health Organization Guidelines: Use of cryotherapy for cervical intraepithelial neoplasia

Toward standardizing and reporting colorectal cancer screening indicators on an international level: The International Colorectal Cancer Screening Network

CONTRIBUTION TO WORKS
Y a-t-il une augmentation des mastectomies totales ?
Évolution des pratiques de chirurgie pour cancer du sein en France entre 2005 et 2009 (Is there an increase in total mastectomies?)
Gathion S, Lançon F, Viguier J, Mazeau-Woynar V.

Les métiers liés au cancer, leur répartition et ses déterminants (Occupations associated with cancer—their distribution and its determinants)
Baubeau D, Burdillat M, Dudézert MJ, Ferrari C.
Report for 2010-2011, volume 2, ONDPS-INCa

POSTERS
Propositions pour la mise en place du Programme personnalisé de l’après-cancer (PPAC) (Proposals for the establishment of the Post-cancer Individualised Care Plan (PPAC))
Pourcel G.
Congrès annuel de la Médecine Générale
Nice, 21-23 June 2012

Rôle des professionnels de santé dans le dépistage du cancer du sein (Role of health professionals in breast cancer screening)
Lançon F, Sannino N, Viguier J
Journées Françaises de Radiologie
Paris, 19-23 October 2012

Enquête sur la mammographie dans le cadre du dépistage organisé du cancer du sein (Survey of mammography in organised breast cancer screening)
Lançon F, Viguier J
Journées Françaises de Radiologie
Paris, 19-23 October 2012

Registres et surveillance des cancers: optimiser les données des registres dans un programme de travail partenarial (Cancer registries and surveillance: a collaborative work programme to optimise registry data)
Thuret A, Bossard N, Bousquet P-J, Colonna M, Remontet L, Danzon A, Grosclaude P and members of the Partnership Programme Monitoring Committee
Colloque du Comité National des Registres
4 and 5 December 2012
APPENDIX 6
GLOSSARY

- AcSé: Agence nationale pour la cohésion sociale et l’égalité des chances (French National Agency for Social Cohesion and Equal Opportunities)
- AFU: Association française d’urologie (French Association of Urology)
- ALD: Affection longue durée (Long-term illness)
- ALL: Acute lymphoblastic leukaemia
- ANAP: Agence nationale d’appui à la performance des établissements de santé et médico-sociaux (National Agency for Supporting Medical Institutions’ Performance)
- ANR: Agence nationale de la recherche (French National Research Agency)
- ANSES: Agence nationale de sécurité sanitaire de l'alimentation, de l'environnement et du travail (French Agency for Food, Environmental and Occupational Health Safety)
- ANSM: Agence nationale de sécurité du médicament (French Medicine Agency)
- AORTIC: African Organisation for Research and Training in Cancer
- AP-HP: Assistance publique - Hôpitaux de Paris (Public Assistance - Paris Hospitals)
- ARIS: Alliance pour la recherche et l'innovation des industries de santé (Alliance for Research and Innovation in Health Industries)
- ARS: Agences régionales de santé (French Regional Health Agencies)
- ASCO: American Society of Oncology
- ASN: Autorité de sûreté nucléaire (French Nuclear Safety Authority)
- ATIH: Agence technique de l’information sur l’hospitalisation (French Agency for Information on Hospital Care)
- ATU: Autorisation temporaire d’utilisation (Temporary Authorisation for Use)
- AVIESAN: Alliance pour les sciences de la vie et de la santé (French National Alliance for Life and Health Sciences)
- BCB: Bases clinico-biologiques (clinical-biological databases)
- BEH: Bulletin Épidémiologique Hebdomadaire (Weekly Epidemiological Bulletin)
- BRCa: Breast cancer
- CASA: Comité d’animation du système d’agences (French Agency Network Facilitation Committee)
- CCPS: Comité consultatif des professionnels de santé (Advisory Committee of Health Professionals)
- CECOS: Centres d’étude et de conservation des œufs et du sperme humains (Centres for the Study and Conservation of Human Ova and Sperm)
- CeNGEPS: Centre national de gestion des essais de produits de santé (French National Centre for Management of Trials on Health Industry Products)
- Cespharm: Comité d’éducation sanitaire et sociale de la pharmacie française (Health and Social Education Committee for French Pharmacy)
- CHU: Centre hospitalier universitaire (University Hospital)
- CISS: Collectif interassociatif sur la santé (Inter-Association Health Collective)
- CLCC: Centre de lutte contre le cancer (comprehensive cancer care centre)
- CLCV: Consommation, Logement et Cadre de Vie (Consumer Affairs, Housing and Quality of Life)
- CLIP²: Centres de recherche clinique labellisés (Designated Early-Phase Clinical Trial Centres)
- CML: Chronic myeloid leukaemia
- CMPU: Comité des malades, des proches et des usagers (Committee of Patients, Friends and Family and Users)
- CNAMTS: Caisse nationale de l’assurance maladie des travailleurs salariés (French National Health Insurance Fund for Salaried Workers)
- CNGE: Collège national des généralistes enseignants (French National College of Teachers in General Practice)
- CNRS: Centre national de la recherche scientifique (French National Centre for Scientific Research)
- CNSA: Caisse nationale de solidarité pour l’autonomie (National Solidarity Fund for Autonomy)
- COMUP: Comité des usagers et des professionnels (Users’ and Professionals’ Committee)
- COP: Contrat d’objectif et de performance (Contract of Objectives and Performance)
- CPD: Continuing Professional Development
- CPRC: Comité des patients pour la recherche clinique (Patients’ Clinical Research Committee)
- CSO: Centre de sociologie des organisations (Centre for the Sociology of Organisations)
- CVT: Consortium de valorisation thématique (Specialist Technology Transfer Consortium)
- DCC: Dossier communiquant en cancérologie (Cancer Communication Record)
- DES: Diplôme d’études spécialisées (Diploma in Specialised Studies)
- DESC: Diplôme d’études spécialisées complémentaires (Diploma in Specialised Complementary Studies)
- DGCCRF: Direction générale de la concurrence, de la consommation et de la répression des fraudes (French Directorate-General for Competition, Consumer Affairs and Fraud Repression)
- DGCS: Direction générale de la cohésion sociale (French Directorate-General for Social Cohesion)
- DGEFP: Délégation générale à l’emploi et à la formation professionnelle (French General Delegation for Employment and Vocational Training of the Ministry for Employment)
- DGOS: Direction générale de l’offre de soins (French Directorate General for Healthcare Provision)
- DGRi: Direction générale pour la recherche et l’innovation (French Directorate-General for Research and Innovation)
- DGSP: Direction générale de la santé (French General Healthcare Directorate)
- DGT: Direction générale du travail (French Directorate-General for Labour)
- DGTPE: Direction générale du trésor et de la politique économique (Directorate-General of the Treasury)
- DMP: Dossier médical personnel (Personal medical file)
- DNA: Deoxyribonucleic acid
- DPC: Data processing centre
- EMRC: Mobile clinical research teams
- EN: Ear nose and throat
- EPAAC: European Partnership for Action Against Cancer
- ESPO: European Society for Medical Oncology
- FCTC: Framework Convention on Tobacco Control
- FHF: Fédération hospitalière de France (French Hospital Federation)
- FHP: Fédération des cliniques et hôpitaux privés de France (French Private Hospital Federation)
- FICHCOMP: file for recording the consumption of expensive molecules
- FNORS: Fédération nationale des observatoires régionaux de santé (French National Federation of Regional Health Observatories)
- FNS2O: Fédération nationale des spécialistes d’organes en oncologie (French National Federation of Organ Specialists in Oncology)
- FRANCIM: Réseau français des registres des cancers (French Cancer Registry Network)
- FTE: Full-time equivalent
- GIPSI: Gestion Intégrée des projets suivis par l’INCa (Integrated Management of Projects Monitored by INCa)
- GIP: Groupement d’Intérêt Public (Public interest group)
- GIST: Gastrointestinal stromal tumour
- GRED: Groupe de réflexion sur l’éthique du dépistage (Ethical think-tank)
- HAS: Haute autorité de santé (French National Authority for Health)
- HCC: Hepatocellular carcinoma
- HCL: Hospices civils de Lyon (Lyon General Hospitals)
- HCSP: Haut Conseil de la santé publique (French High Council for Public Health)
- Helios: Health Investments Observatory
- HIV: Human Immunodeficiency Virus
- HPST: Hôpital, patients, santé et territoires (Hospital, Patients, Health and Territories)
- HPV: Human papillomavirus
- AEA: International Atomic Energy Agency
- ICGC: International Cancer Genome Consortium
- IDEC: Infirmiers coordonnateurs hospitaliers (Hospital Care Coordinators)
- IDS: Institut des données de santé (French Health Data Institute)
- IFCT: Intergroupe français de cancérologie thoracique (French Intergroup for Thoracic Oncology)
- IGAS: Inspection générale des affaires sociales (Social Affairs Inspectorate-General)
- IGR: Institut Gustave-Roussy
- INCa: Institut national du cancer (French National Cancer Institute)
- INPES: Institut national de prévention et d’éducation pour la santé (French National Institute for Prevention and Health Education)
- INSERM: Institut national de la santé et de la recherche médicale (French National Institute of Health and Medical Research)
- InVS: Institut de veille sanitaire (French Institute for Public Health Surveillance)
- iReSP: Institut de recherche en santé publique (French Public Health Research Institute)
- ITC: International Tobacco Control
- ITMO Cancer: Institut thématique multi-organismes dédié au cancer (Multi-organisation Thematic Institute dedicated to Cancer)
- LFSS: Loi de financement de la sécurité sociale (Social Security Finance Act)
- MA: Marketing Authorisation
- MERRI: Missions d’enseignement, de recherche, de référence et d’innovation (Education, Research, Information and Innovation Programme)
- MESOCLI: réseau national des centres experts pour le mésothéliome (French National Network of Expert Centres for Mesothelioma)
- **MESONAT**: registre national de surveillance du mésothéliome (French National Registry for Mesothelioma Surveillance)
- **MESOPATH**: Collège des anatomopathologistes experts (French College of Anatomic Pathologists Specialised in Mesothelioma)
- **MOSAIC**: Mise en oeuvre du suivi des actions de l’INCa (Implementation of INCa Activity Monitoring)
- **MRI**: Magnetic Resonance Imaging
- **MSI**: microsatellite instabilities
- **NCI**: National Cancer Institute (US)
- **NGS**: Next generation sequencing
- **Oncodage**: A geriatric oncology screening tool
- **ONDPS**: Observatoire national de démographie des professions de santé (French National Observatory on the Demography of Health Professions)
- **ORS**: Observatoire régional de santé (Regional Health Observatory)
- **PAIR**: Programme d’actions intégrées de recherche (Integrated Research Action Programme)
- **PDI**: Public declaration of interests
- **PET**: Position emission tomography
- **PHRC**: Réunion de concertation pluridisciplinaire (multidisciplinary consultative meeting)
- **RENAPE**: Centre national de référence des tumeurs rares du péritoine (French National reference Centre for Rare Peritoneal tumours)
- **RIR**: Rencontres internationales de recherche (International R&D Dating)
- **RRCT**: Réseau régional de cancérologie (Regional Cancer Network)
- **RTU**: Recommandation temporaire d’utilisation (Temporary Recommendation for Use)
- **SDSI**: Schéma directeur des systèmes d’information (Master Plan for the Information Systems)
- **SFPM**: Société française des physique médicale (French Society of Medical Physics)
- **SFRO**: Société française de radiothérapie oncologique (French Society of Radiation Oncology)
- **SHS**: Sciences humaines et sociales (social and human sciences)
- **SIRIC**: Sites de recherche intégrée sur le cancer (Integrated Cancer Research Sites)
- **SNRO**: Syndicat national des radiologistes oncologues (French National Union of Radiation Oncologists)
- **SPSI**: Schéma pluriannuel de stratégie immobilière (multi-year real estate strategy plan)
- **TGIR**: Très grandes infrastructures de recherche (Very Large Research Infrastructures)
- **TRANSCAN**: Translational Cancer Research
- **UCOG**: Unités de coordination en oncogériatrie (Oncogeriatric Coordination Units)
- **UMR**: Unité mixte de recherche (Mixed Research Unit)
- **UNCASS**: Union nationale des centres communaux et intercommunaux d’action sociale (National Union of Social Action Community Centres)
- **UADT**: Upper aerodigestive tract
- **VAE**: Validation des acquis de l’expérience (Approval of Experiential Skills)