Cancer Research in the EU Framework Programmes for RTD

Action against cancer: European platform

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1980’s: the start of activities on cancer at EU level

- Prevention
- Screening
- Education & Training

Co-ordination of research efforts in the medical field

1986

Europe against Cancer Programme

1988

Co-ordinated Actions

4th Medical and Health Research Programme

Cancer identified as a target
<table>
<thead>
<tr>
<th>Programme</th>
<th>Duration</th>
<th>N° of projects</th>
<th>Teams involved</th>
<th>ECU (million)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Medical &amp; Health Research</strong></td>
<td>1987 - 1990</td>
<td>135</td>
<td>4500</td>
<td>65 (18)</td>
</tr>
<tr>
<td><strong>BIOMED 1</strong></td>
<td>1990 - 1994</td>
<td>400</td>
<td>6600</td>
<td>150 (22)</td>
</tr>
<tr>
<td><strong>BIOMED 2</strong></td>
<td>1994 - 1998</td>
<td>600</td>
<td>6100</td>
<td>368 (35)</td>
</tr>
<tr>
<td><strong>QUALITY OF LIFE</strong></td>
<td>1998-2002</td>
<td>290</td>
<td>4000</td>
<td>€ 483 (100)</td>
</tr>
</tbody>
</table>

**Co-ordination support**

**Shared-cost support**
2000: where do we stand?

Merits

- Research on cancer is well supported at national level. Good know-how and skills
- Comprehensive action in the fight against tobacco
- European Code Against Cancer, European Network of Cancer registries, breast cancer national screening programs
- Member States aware of the need to devise comprehensive national cancer plans to ensure optimization of care and research efforts
- Strong EU research networks established as a result of past decade investment

Deficits

- Cancer research efforts are still fragmented bringing duplication
- Barriers between fields and disciplines
- Weak links between basic, clinical and translational research
- Implementation of most activities in a national framework and context
Since 2000: How to go about

**Member States**

- Establishment of the first National Cancer Plans and/or National Cancer Institutes
  - NCRI (UK) 2001
  - INCA (FR) 2003
  - et al.

- Reinforcement of support for translational research and public-private partnerships

**European Union**

- Launch of the European Research Area (ERA), with Cancer as a primary target of the Life Sciences, Genomics and Biotechnology Programme in FP6

- Strong support from the European Parliament
ERA and FP6: a major effort to structure cancer research

- Focusing efforts
  - €2,255 million
  - Life sciences, genomics & health
  - InfoSociety
  - Food safety and quality
  - Policy research

- Structuring ERA
  - Supports to projects
  - Training and mobility
  - Infrastructures
  - Science and society
  - R&D & innovation

- Strengthening ERA
  - Coordination of R&D & innovation activities/policies at national level
  - Mutual opening-up of programmes
  - Networking
Patient-oriented strategies: from prevention to diagnosis and treatment

- supporting translational research aimed at bringing basic knowledge through to applications in clinical practice and public health
- supporting clinical research (clinical trials)
- other issues related to cancer such as ageing and cancer, regional differences, psycho-social aspects, palliative care and guidance to support groups
- establishing facilities for the exploitation of research on cancer in Europe; development of evidence-based guidelines for good clinical practice and improved public health strategies

€ 450 m
Cancer Research in FP6

OUTCOME

- **108 projects** supported with € 485 m
- **1,500 institutions/laboratories** participate in this effort
- 64% (€ 255 m) of budget devoted to large-scale activities
- 35% (€168 m) of budget devoted to small and medium scale activities
Cancer Research in FP6

OUTCOME II

Table 1 – Funding allocation in EU FP6 Cancer area vs. US National Cancer Institute

<table>
<thead>
<tr>
<th>Relative budget per activity</th>
<th>FP6 % budget</th>
<th>NCI % budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cancer causation</td>
<td>19.6</td>
<td>23.0</td>
</tr>
<tr>
<td>Cancer biology</td>
<td>22.9</td>
<td>16.4</td>
</tr>
<tr>
<td>Treatment research</td>
<td>33.6</td>
<td>22.3</td>
</tr>
<tr>
<td>Detection and diagnosis</td>
<td>12.4</td>
<td>7.7</td>
</tr>
<tr>
<td>Prevention</td>
<td>3.9</td>
<td>10.7</td>
</tr>
<tr>
<td>Other</td>
<td>5.2</td>
<td>19.1</td>
</tr>
</tbody>
</table>

Percentage spending on cancer research according to different research activities by the European Commission in FP6 (2002–2006) compared to the spending by the NCI for fiscal year 2005. Total budget amounts referred to are: €485 million for cancer research spending by Directorate Health, European Commission, during the 4-year period of FP6; and €3.64 billion for the NCI for Fiscal Year 2005.

S. Jungbluth et al, Mol. Oncology 2006
Co-ordination of national cancer research activities

EUROCAN PLUS

OBJECTIVES

1. Identify fields where co-ordination of national activities would be of benefit
2. Explore potential support schemes in the FP to implement the co-ordination

PARTNERS

28 Major Cancer Institutes and Research Foundations

€ 3 m

2 years
MAIN QUESTIONS

1. What are the needs?
2. Which areas are lacking co-ordination and where is this detrimental to knowledge advancement?
3. What are the areas that would best advance by being coordinated?
4. How can this be done?

EUROCAN PLUS (2)

Mapping of activities

Priority setting

Reccomendations

End 2007
Cancer Research in FP6 Successes

- Good response from the scientific community to the proposed approach and areas tackled
- Involvement of many renowned leaders in the respective fields
- Good representation of academia and industry
- High visibility in scientific and lay media, with many references to the initiatives supported
Cancer Research in FP6
Successes (2)

• Concentration on translational research, by definition highly multidisciplinary, well in line with collaborative nature of the EU programmes

• The programme benefited from consensus in scientific community on the need of large interdisciplinary teams to tackle cancer research (genomics, treatment validation)
Clinical research, as well as epidemiological research less well covered

Need to scale up Pan-European approach

Lack of « large scale resources » that build up the necessary tools and technologies, such as:
- samples/tissues repositories
- animal model networks aimed at validating the most suitable models to study human cancers
2007 – 2013: The 7th Framework Programme

Cooperation

Ideas (European Research Council)

People

Capacities

New FP7

Euratom 4,061

JRC (EC) 1,751

Capacities 4,097

People 4,75

Ideas 7,51

Cooperation 32,413*

*of which Health € 6,1 billion

Total FP7 budget, including EUROATOM: € 54,582 billion
Three activity lines:

- Biotechnology, generic tools and technologies for human health
- Translating research for human health
- Optimising the delivery of health care to European citizens

Cancer can be addressed in all areas
FP 7 HEALTH Programme
Issues to be addressed in cancer research

- Pursue efforts on translational research by reinforcing clinical aspects
- Public health research aspects
- International cooperation activities

- 2 calls for proposals in 2007
- € 125 million
- Open in call 2009

- Reinforce cancer research portfolio on drug research and treatment strategies, particularly for prediction of suitability, safety and efficacy

- 1st Executive Board on 3 March
FP 7 HEALTH Programme

Issues to be addressed in cancer research

- Reinforcement of Infrastructures
- In 2007 opening for:
  - Translational Research Infrastructures
  - European Bio-banking
  - Infrastructures for Clinical Trials

- 2008 call for proposals on:
  - Human genotyping facilities
  - Hadron therapy facilities
  - Pursue coordination of national cancer programmes (ERA-net)
  - Coordination of national / regional cancer registries
Thank you for your attention