




ALMA MATER STUDIORUM  
UNIVERSITÀ DI BOLOGNA

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## CANCER

*Cancer research, prevention and therapy: from molecular and cellular oncology to clinical trials.*

A vertical pink awareness ribbon is positioned on the left side of the page, partially overlapping the text area. It has a textured, woven appearance and is tied in a loop at the top.

At the University of Bologna cancer studies are developed in collaboration with the **St. Orsola-Malpighi Hospital**, a general hospital housing the **School of Medicine** and the **Interdepartmental Center for Cancer Research**; the **Bellaria Hospital**, with a center of excellence for neurological sciences; and the **Rizzoli Orthopedic Institute**, a world-class center in the field of bone diseases.

Altogether, several thousand oncological patients, from the Emilia-Romagna region, from other Italian Regions and from European and African countries, are diagnosed and treated each year. Large clinical series are being accrued for what concerns frequent cancers and also for many types of rare tumors.

- **Preclinical research** is developed within university laboratories and in collaboration with clinicians, in areas ranging from subcellular organelles of tumor cells (mitochondria, ribosomes), to cancer vaccines, to cancer predisposition genes, to the use of cancer genomics and transcriptomics to discover and target novel cancer genes, to studies of preventive components of the diet
- **The clinical oncologists** coordinate and participate in numerous clinical trials, in particular for what concerns pediatric oncohematology, cancer immunotherapy, leukemias and lymphomas, bone tumors and gastroenterological tumors

## HIGHLIGHTS

**Pediatric oncohematology:** the University of Bologna is **a Reference Center** at National (GITMO - Italian Group for Bone Marrow Transplantation) and European ([EBMT](#)) level, for autologous and donor hematopoietic stem cell transplantation, with a leading role in the national networks that coordinate clinical trials in pediatric acute leukemias and solid tumors.

**Hematology:** The University of Bologna is at the forefront of experimental and clinical hematology, with [a wide portfolio of clinical studies](#) and several EU projects (eg. [HARMONY](#), [HARMONY PLUS](#) and [GenoMed4All](#)) on neoplastic hematological disorders.

**Cancer immunology and immunotherapy:** ongoing studies range from the preclinical design of preventive vaccines for non-infectious tumors to clinical studies exploring predictive biomarkers in lung cancer and other solid tumors.

**Gastrointestinal cancer:** the University of Bologna is at the forefront of gastrointestinal oncology, leading to a sizeable number of clinical cases even for such rare tumors as gastrointestinal sarcomas (GIST) and cholangiocarcinomas. Since 2009, the Medical Oncology Unit is certified as European Centre of Excellence for the integration of cancer therapy and palliative care.