# Gaslini



## O N C O L O G Y

### **Clinical activity**

For more than 40 years our Centre has been involved in the assistance and the research in paediatric oncology. Every year, approximately 90 children and adolescents with solid tumours, lymphomas and histiocytosis are diagnosed/treated in our Centre. Specifically, the diseases treated are:

- Neuroblastoma
- Soft tissue sarcomas (rhabdomyosarcomas and other soft sarcomas)
- Kidney tumours
- Liver Tumours
- Germ cell tumours
- Bone tumours
- Rare tumours (e.g. carcinomas, carcinoids, melanoma, gonadal tumours, pheochromocytoma, pleuropulmonary blastoma ...)
- Non-Hodgkin lymphoma
- Hodgkin lymphoma
- Histiocytosis

Since several years and in selected patients we have been using high doses treatments followed by autologous haematopoietic stem cell transplantation. More importantly, we have obtained special experience in in the use of experimental and/or innovative treatments for patients with relapsing or resistant tumours.

Thanks to the multidisciplinary structure completely dedicated to children as the Giannina Gaslini Institute, we can guarantee a "global care" to our patients. In fact, our multidisciplinary team can benefit of several professionals experienced in the field of paediatric oncology such as radiologist, pathologist, surgeon, radiotherapist, nuclear physician, infectivologist as well advanced research laboratories addressing biochemical, genetic and molecular aspects of childhood cancer. An area of recent development is the study of predisposing syndromes to paediatric cancer. Clinical activities are carried out by paediatric nurses experienced in oncology, supported by a staff including a psychologist, social workers, nursery, primary and secondary school teachers, educators, entertainers, volunteers.

Special attention is given to supportive care, prevention and treatment of infectious complications, as well to palliative care for the unfortunate ones with aggressive and resistant disease. Besides supporting families in general, we also pay particular attention to adolescents fighting they battle against cancer. We are also very active in the study and possible prevention of the early and late effects of cancer treatments. At our late effects clinic we follow-up of more than 1000 long term survivors after a solid tumour during childhood. Follow-up is organized in the so called DOPO clinic (acronym for Diagnosis, Observation, Prevention after (dopo) Oncologic treatment). The follow-up continues well into adulthood with about 50% of our survivors having already entered or entering adulthood. Our survivors receive the Survivorship Passport with a complete treatment summary and personalized

recommendations for follow-up. Among several international projects in which we are involved, we are also addressing the issue of the treatment of lymphoproliferative syndromes after organ transplantation.



## 0 N C 0 L 0 G Y

#### The area of excellence are:

- Diagnosis and therapy of neuroblastoma.
- Testing of new and innovative drugs.
- Support therapy, palliative care and home care.
- Prevention and screening for long-term complications in childhood cancer survivors.

#### **Research Lines**

The scientific research, carried out at our Unit is made possible thanks to the close cooperation with several research laboratories of our Institute like Experimental Oncology, Molecular Biology, Immunology and Pathology. Main focus is a better understanding of biological and molecular characteristics of paediatric malignancies and in particular of neuroblastoma. This allows the identification of increasingly precise prognostic factors and the development of new drugs or therapeutic strategies for solid tumours in children.

#### NATIONAL AND INTERNATIONAL COLLABORATIONS

The Oncology Unit is part of the network of European Reference Centres (ERN) and actively collaborates with:

- ITTC: Innovative therapy children with cancer. It is an international consortium that aims to identify and test, in certified structures, new drugs for the treatment of paediatric oncological diseases.
- SIOPEN: European neuroblastoma group. In 1994 Gaslini Institute was one of the promoters of the establishment of the European Clinical and Biological Group, which promotes research and treatment protocols for neuroblastoma in major European centres.
- AIEOP: Italian Association of Haematology and Paediatric Oncology with its 51 centres of onco-haematology scattered throughout the national territory. Since 1979, Gaslini Institute's Oncology Unit has established itself as a reference centre in Italy for the treatment of neuroblastoma by developing therapeutic and clinical and biological research programmes for this disease.
- Oncological and reconstructive orthopaedic surgery, University of Pisa.
- Pausilipon Hospital, Naples Department of Haematology and Paediatric Oncology.
- Neuroblastoma Foundation Laboratory.
- Galliera Hospital of Genoa Nuclear Medicine: diagnostic and therapy centre.
- USMI, Genoa Paediatric Radiotherapy Unit.

#### Director

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