

Childhood Cancer Country Profile

CZECH REPUBLIC

1 – Epidemiology

NUMBER OF CASES: 258

In 2022, an estimate number of 258 patients aged 0 to 19 years were diagnosed with cancer: 124 girls and 134 boys.



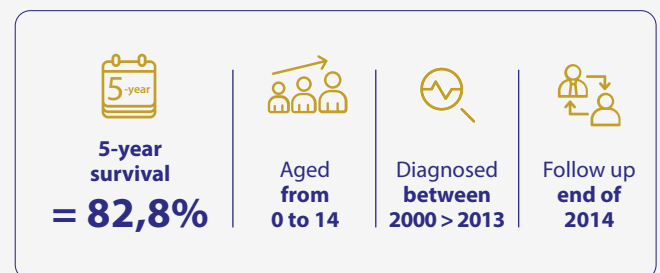
 13,800 new cases (6,241  – 7,559 ).

Warning: These are estimates provided by the European Cancer Information system. There are no data available on the incidence of each paediatric malignancy. <https://ecis.jrc.ec.europa.eu>, accessed on 19/March/2024 © European Union, 2024.

They may not match with data from population-based registration at the country level.

5 - YEAR OVERALL SURVIVAL: 82,8%

The survival of 5-year is 82,8% in children from 0 to 14 years diagnosed between 2000 – 2013 and followed up to the end of 2014, according to the EURO CARE-6¹ population based study.



EURO CARE-6 pool survival estimate = 83,1%.

(1) Botta, L., Gatta, G., Capocaccia, R., Stiller, C., Cañete, A., Dal Maso, L., & EURO CARE Working Group. (2022). Long-term survival and cure fraction estimates for childhood cancer in Europe (EURO CARE-6): Results from a population-based study. *The Lancet Oncology*. [https://doi.org/10.1016/S1470-2045\(22\)00637-4](https://doi.org/10.1016/S1470-2045(22)00637-4)

2 – Organisation of Care

This section focuses on the organization of care in Czech Republic. The country has two institutions treating children and young people with Cancer. These institutions were categorized as "other centers"; this includes paediatric university hospitals, paediatric general hospitals, university hospitals with paediatric units, or general hospitals with paediatric units that also provide treatment for children with other diseases. None of these institutions is considered a Cancer Center².



TREATMENTS:

	Chemotherapy Inpatient	✓
	Chemotherapy Outpatient	✓
	Surgery Solid Tumours	✓
	Surgery Central Nervous System	✓
	Autologous SCT ³	✓
	Allogeneic SCT ³	✓
	Photon Radiation Therapy	✓
	Proton Radiation Therapy	✓
	Brachytherapy	✓
	New Treatment (Phase I/II Trials)	✓
	Any Clinical Trials	✓
	Survivorship Care Clinic	✓
	Palliative Care	✓

- ✓ Available in the country for children and young people with cancer
- ✗ Not available in the country for children and young people with cancer
- ⊖ Missing information

University Hospital Motol in Prague is the designated ITCC⁴ Center in the Country.

All 13 infrastructural aspects and treatment modalities in the scope of the OCEAN project are available within the country.

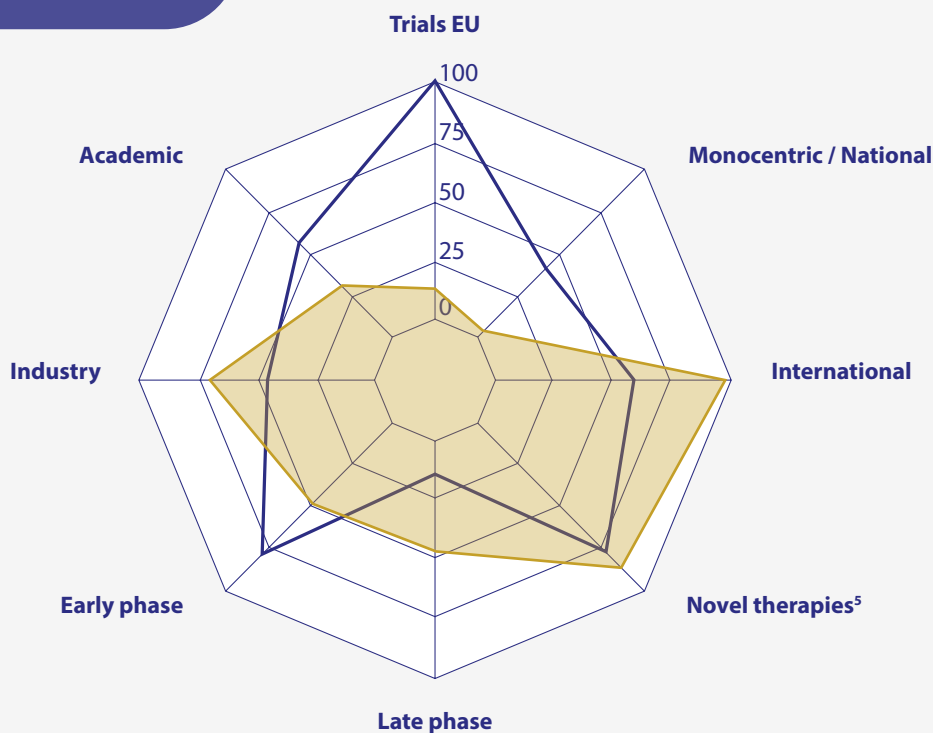
(2) Cancer centres were defined as hospitals treating cancer patients only; this can be for children only or both adults and children.

(3) Stem Cell Transplant

(4) The Innovative Therapies for Children and adolescents with Cancer Consortium. The ITCC Consortium is a collaborative network providing access to innovative therapies for children and young people with relapsed or refractory malignancies.
www.itcc-consortium.org

3 – Research

CLINICAL RESEARCH PROFILE:



Czech Republic
(n=59)

All Europe
(n=436)

Czech Republic

13,5%

From 2010 to 2022, 436 clinical trials enrolled children and young people in Europe: **59 (13,5 %) were running in Czech Republic**

Characteristics	Czech Republic		Europe	
› Number of available trials	59		436	
LOCATION TYPE				
› Monocentric / National	2	3%	181	42%
› International	57	97%	255	58%
› Use of novel therapies	50	85%	332	76%
PHASE ⁶				
› Early phase	28	47%	334	77%
› Late phase	27	46%	68	16%
SPONSOR				
› Academic	18	31%	239	55%
› Industry	41	69%	197	45%

(5) targeted, immune-, or cell therapies.

(6) The percentages of trials by phase do not sum up 100, as phase 4 and "other type" of trials such as feasibility trials are not included.

Disclaimer

The content of this document has undergone validation by the Czech Country Operating Team (COT).

The following information was obtained within the framework of the OCEAN project, which sought to describe the organization of Care and Research for children and adolescents across Europe. It does not provide information on the access or quality of care for children and adolescents with cancer at a particular care center.

The OCEAN project does not include details on whether a center is certified or accredited.

Members of the Project Steering Committee were from the SIOPE and CCI-Europe boards.

This work was performed as part of the Coordination and Support Action (CSA) "4.UNCAN.eu."



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Short Methodology

The OCEAN project studied 38 European countries, including all 27 EU member states plus 11 countries that are part of the SIOPE and/or CCI-E networks.

The epidemiological data were collected from the European Cancer Information System site <https://ecis.jrc.ec.europa.eu>, accessed on 19/march/2024 © European Union, 2024. These data are estimates and not crude population based data. They may differ from the population-based data available at the country level. There is a need for a comprehensive and accurate population based registration of cancer incidence and mortality in children and young people across Europe using ICCD.

Survival data are provided by the Eurocare 6 population based study analyzing 135 847 children, aged 0 – 14 years diagnosed between 2000 and 2013 and followed up to the end of 2014 from 80 population based registries from 31 countries. (Botta et al. Lancer Oncol 2022, 23, 1525;)

For the organization of care, a cross-sectional questionnaire-based survey was conducted. Country Operating Teams (COT) were formed, including a senior paediatric oncologist, Chair of the National Paediatric Hemato Oncology Society, a Young SIOPE member (representing an early career paediatric oncologist), and a patient or parent advocate from CCI-Europe. The survey consists of 29 questions across six thematic sections. The survey covered topics such as organizational and national care levels, care delivery, active treatment, care for adolescents and young adults (AYA) with cancer, follow-up care, and patient representatives/parents.

For the organization of research, the ClinicalTrials.gov database was searched to identify all European cancer clinical interventional studies that allowed inclusion of paediatric patients and adolescents (<18 years) and that started between 2010 and 2022. Only European trials (with open sites at ≥1 European countries) were included.

A quality review was performed by three investigators. The selected trials were subsequently reviewed by the SIOPE's European Clinical Trial Groups (ECTGs), which were asked to remove and/or propose additional trials if any were missing.

All European results are published (details and link when available)

- References of the papers when available



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