

**14390\_PR Paediatric radiation therapy across Europe: A European questionnaire survey supported by the SIOPE, ESTRO, PROS and several national paediatric hematology-oncology societies (NAPHOS)**

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**Background:** Increased focus has been made to improve the quality of care and access to European trials in paediatric oncology. Information about paediatric radiotherapy (Ped-RT) throughout Europe is not widely available. The aim of this study was to provide an overview of resources and organization for Ped-RT.

**Methods:** Experts in Ped-RT oncology were invited by email to complete a 21-point questionnaire.

**Results:** Sixty-nine answers from 24 countries (7 centres with proton) were collected and 16 centres were visited. A minority of radiation oncologists (11.74%) treat only children, which is in contrast with paediatric oncologists (93.44%) or surgeons (71.67%) who are more often dedicated. In 5 countries, ped-RT is centralized in one centre. Access to ped-RT formations is unequal throughout Europe even if everyone agrees with the fact that specific knowledges are needed. Regarding the techniques, 12% use sometimes, meaning for some patients, 2D- conventional radiotherapy, 4% still use Cobalt and 15% never or rarely use IMRT (Intensity Modulated Radiotherapy), 64% use hypofractionated treatments, defined as at least 3Gy per fraction and 32% when considering 5 Gy or more. Eighty-four percent have access to paediatric devices for personalized immobilization. Radiation treatments can be easily delivered under anaesthesia in 75% of the centres if necessary, or under hypnosis in 9% of centres (2 countries). The environment is mostly adapted to children, with dedicated waiting area (47%), patient information (83%), gifts (98%), the possibility to listen to music or songs (93%) or watch cartoons (12%).

**Conclusions:** This survey provides quantitative data demonstrating the current healthcare inequalities for children and adolescents who need radiotherapy in Europe. Nevertheless, an effort to guarantee a treatment of quality with the local environment has been pointed out.

**Legal entity responsible for the study:** C. Demoor-Goldschmidt

**Funding:** None

**Disclosure:** All authors have declared no conflicts of interest.