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IJC
International Journal of Cancer

Survival of European patients with central nervous system tumors

Milena Sant[1], Pamela Minicozzi[1], Susanna Lagorio[2], Tom Børge Johannesen[3], Rafael Marcos-Gragera[4], Silvia Francisci[2,5] and the EUROCARE Working Group[6]

[1] Analytical Epidemiology Unit, Department of Preventive and Predictive Medicine, Fondazione IRCCS Istituto Nazionale dei Tumori, Via Venezian 1, Milan, Italy

[2] National Centre for Epidemiology, Surveillance and Health Promotion, Istituto Superiore di Sanità, Viale Regina Elena 299, Rome, Italy

[3] Cancer Registry of Norway, Department of Clinical and Registry-based Research, Institute of Population-based Cancer Research, Fridj of Nansens vei 19, Majorstuen, Oslo, Norway

[4] Epidemiology Unit and Girona Cancer Registry, Oncology Coordination Plan, Department of Health and Catalan Institute of Oncology, Girona, Spain

[5] Department of Cancer Epidemiology, Istituto Superiore di Sanità, Viale Regina Elena 299, Rome, Italy

[6] See Appendix for EUROCARE Working Group members

We present estimates of population-based 5-year relative survival for adult Europeans diagnosed with central nervous system tumors, by morphology (14 categories based on cell lineage and malignancy grade), sex, age at diagnosis and region (UK and Ireland, Northern, Central, Eastern and Southern Europe) for the most recent period with available data (2000–2002). Sources were 39 EUROCARE cancer registries with continuous data from 1996 to 2002. Survival time trends (1988 to 2002) were estimated from 24 cancer registries with continuous data from 1988. Overall 5-year relative survival was 85.0% for benign, 19.9% for malignant tumors. Benign tumor survival ranged from 90.6% (Northern Europe) to 77.4% (UK and Ireland); for malignant tumors the range was 25.1% (Northern Europe) to 15.6% (UK and Ireland). Survival decreased with age at diagnosis and was slightly better for women (malignant tumors only). For glial tumors, survival varied from 83.5% (ependymoma and choroid plexus) to 2.7% (glioblastoma); and for non-glioma tumors from 96.5% (neurinoma) to 44.9% (primitive neuroectoderm tumor/medulloblastoma). Survival differences between regions narrowed after adjustment for morphology and age, and were mainly attributable to differences in morphology mix; however UK and Ireland and Eastern Europe patients still had 40% and 30% higher excess risk of death, respectively, than Northern Europe patients (reference). Survival for benign tumors increased from 69.3% (1988–1990) to 77.1% (2000–2002); but survival for malignant tumors did not improve indicating no useful advances in treatment over the 14-year study period, notwithstanding major improvement in the diagnosis and treatment of other solid cancers.