a lower but increasing number of palliative cases are being reviewed. Overall, RTPPR represents an important, though time consuming and costly process. Radical plan review rates were consistently higher in more regimented, higher attendance, higher opportunity cost RTPPR groups, but it remains unclear if error detection rates are superior. Opportunities to measure and increase actionable event detection should be explored. Human health resource time and opportunity costs have been increasing, despite stable or decreasing overall proportion of cases being reviewed. Increasing volumes, and complexity within the case mix of palliative cases (IMRT, SRS for brain metastases, SBRT for oligometastatic disease) will continue to elevate demands on timely and purposeful RTPPR, opening the door for innovation.

170 PREVALENCE OF OLIGOMETASTATIC DISEASE BASED ON THE 2019 INTERNATIONAL CONSENSUS STATEMENT

Alysa Fairchild, Paul Li, David Ma, Sunita Ghosh, Sharon Watanabe, Brita Danielson, Ann Huot, Karen Chu, Fleur Huang, Diane Severin, Brock Debenham
University of Alberta, Edmonton, AB

Purpose: Increased attention to the oligometastatic state has resulted from improvements in, and availability of, staging modalities, systemic therapy, and ablative treatment approaches. However, what exactly comprises oligometastases (OM) has been inconsistently described, making interpretation of published data challenging and the exact prevalence unknown. A 2019 international consensus statement proposed a definition of a maximum of five metastases involving three organs. We aimed to describe the prevalence of the OM state in an otherwise unselected population according to this definition.

Materials and Methods: Consecutive patients referred to our tertiary cancer centre’s Palliative Radiation Oncology and/or Palliative Care programs were included in an IRB-approved prospectively maintained database within a larger study of survival prediction (06/2010-12/2014). Patient, disease, and treatment information, including number and sites of metastases, were retrospectively reviewed. Stereotactic radiotherapy for OM was not administered. Summary statistics were calculated.

Results: Within this cohort, 980 patients had 9,186 metastases. Median patient age was 65.1 years (range 18.9-91.9 years); 58.2% were male; 36.2% had a lung and 28.2% a genitourinary primary. 50.6% for whom Karnofsky Performance Status was available had a value of >70. The median number of metastases was eight (range 1-105), with 58/980 patients having “innumerable” lesions radiologically. Median number of organ sites involved was two (range 1-10). 255/980 (26.0%) had five or fewer total metastases, and 660/980 (67.3%) had three or fewer organ sites involved. Just over one-third (34.2%) had malignant involvement of an OM exclusion site, such as the bone marrow, leptomeninges, or a pleural effusion. Overall, 209/980 (21.3%) met the International Consensus definition for OM.

Conclusions: Within a historic cohort treated with palliative intent, in retrospect just over 20% had an oligometastatic disease burden based on a recent international consensus statement.

171 THE ROLE OF SOCIOECONOMIC STATUS (SES) IN DISEASE OUTCOMES IN PEDIATRIC CANCER PATIENTS RECEIVING PROTON THERAPY

Laura Burgess1, Daniel J. Indelicato2, William F. Hartsell3, Christine Hill-Kayser4, Arnold C. Paulino5, Stephanie Perkins6, Sara L. Galotto7, Elizabeth A. Weyman7, Torunn I. Yock7
1University of Ottawa, Ottawa, ON

Purpose: Social factors are known to play a critical role in disease burden and socioeconomic status (SES) has been associated with several health conditions and outcomes. There is strong evidence that SES plays an important role in the incidence, morbidity and mortality of cancer within the adult population, but the impact of SES within the pediatric cancer population is still under debate due to conflicting results. Here we use the large multicenter Pediatric Proton/Photon Consortium Registry (PPCR) to investigate how SES can affect disease control and other outcomes in patients treated for pediatric cancers at proton therapy centers across the United States.

Materials and Methods: All patients were enrolled in the PPCR from October 2012 to August 2015 and received radiation. Home addresses, progression free survival (PFS) and overall survival (OS) were extracted from the PPCR for socioeconomic analysis. Their zip code (ZC) and census tract (CT), two different enumeration areas, were established using their home address and zip code, if provided. CT is much smaller than ZC. The American Community Survey from the US Bureau of Labor Statistics was used to extract median income, attainment of high school diploma, and percentage of population below the poverty line for the enumeration area corresponding to the patient’s address and zip code. All data was analyzed using SAS. Two-sided hypothesis testing was used, where p-value <0.05 was considered significant. Correlation between data at ZC and CT level was assessed using Spearman and Pearson correlations.

Results: Eight hundred and seventy-six patients with pediatric cancer were enrolled in the PPCR during this time. International patients and those with no address were excluded, leaving 637 patients for analysis. Mean median income was $67,639 at ZC level and $70,906 at CT level. Mean rate of high school graduation was 89.0% at ZC level and 89.1% at CT level. There was no significant difference between data obtained at ZC and CT levels for all metrics. No significant difference was found in OS or PFS (p-value 0.49 and 0.65) as a function of median income, or by poverty status (p-value 0.94 and 0.88). There is no significant difference in OS or PFS with attainment of high school diploma (p-value 0.51 and 0.65). Additional analysis demonstrated no significant difference between OS and PFS with insurance type (p-value 0.59 and 0.73).

Conclusions: Within the population of patients with pediatric cancer treated with proton therapy, population socioeconomic factors including median income, attainment of high school diplomas, rate of poverty and insurance type have not been shown to significantly impact OS or PFS. Importantly, results do not vary when taken at two different enumeration areas.

172 TOWARDS GENDER EQUALITY AND EQUITY IN RADIATION ONCOLOGY: GENDER REPRESENTATION TRENDS IN CANADIAN TRAINEES AND RADIATION ONCOLOGISTS FROM 1994 TO 2019

Jaime K. Kwok, Nina Samson, Corinne M. Doll, Lisa Barbera, Shaun K. Loewen
University of Calgary, Calgary, AB

Purpose: To describe gender trends in the Canadian radiation oncology (RO) trainee and staffing workforce.