

# UC San Diego

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### Title

MP01-07 IMPACT OF CHEMOTHERAPY ON ANXIETY, DEPRESSION, AND SUICIDALITY AMONGST TESTICULAR CANCER SURVIVORS

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**MP01-07**  
**IMPACT OF CHEMOTHERAPY ON ANXIETY, DEPRESSION, AND SUICIDALITY AMONGST TESTICULAR CANCER SURVIVORS**

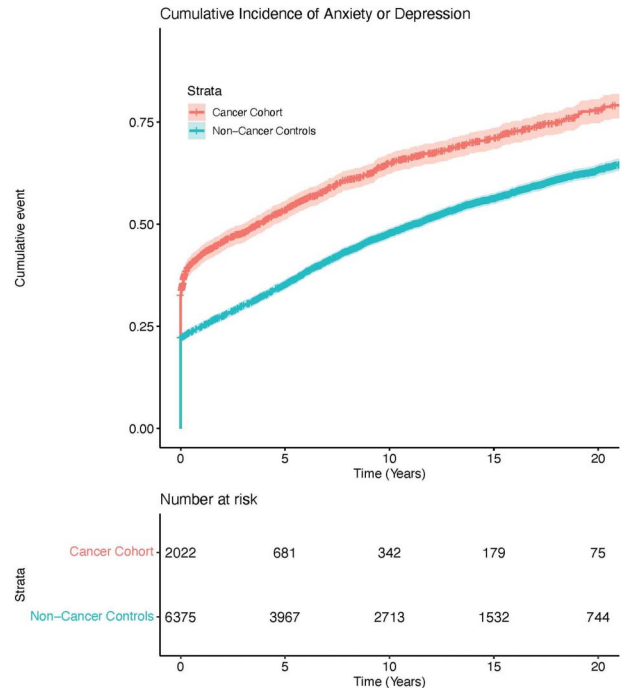
Margaret F. Meagher\*, Tyler Nelson, Paul Riviere, Austin Leonard, Isabella Dolendo, Kylie Morgan, Luke Wang, San Diego, CA; Jacob Taylor, Dallas, TX; Daniel Herchenhorn, Tyler Stewart, Juan Javier-Desloges, Amirali Salmasi, Rana McKay, Frederick Millard, Brent Rose, Aditya Bagrodia, San Diego, CA

**INTRODUCTION AND OBJECTIVE:** Chemotherapy for testicular cancer (TC) is highly effective yet associated with significant consequences on long-term health-related quality of life. We evaluated the impact of chemotherapy on anxiety, depression, and suicidality amongst TC survivors.

**METHODS:** We conducted a retrospective cohort study of US veterans diagnosed with TC from 1990-2016. These were compared to a age-matched control group of US veterans without diagnosis of TC. De novo anxiety or depression was a composite endpoint comprised of diagnosis codes for anxiety, depression, or administration of medications used to treat these diagnoses. Incident suicidality was defined as a diagnosis code for suicidal ideation. Time to event was defined as time from diagnosis to event or censor at the time of last follow-up. Rates of outcomes were reported through cumulative incidences. Associations between outcomes and receipt of chemotherapy were assessed through multivariable Cox regression models.

**RESULTS:** 2022 patients were compared to 6,920 controls. Median follow up time was 7.67 years for surviving patients. 685 patients received chemotherapy. At 5 years, cumulative incidence of anxiety, depression or administration of medications used to treat these was 30% in the control group versus 50% in the cancer cohort ( $p < 0.001$ ). On multivariable Cox regression, factors associated with a higher risk of anxiety or depression were divorced status (HR 1.15,  $p = 0.045$ ), unemployment (HR 1.68,  $p < 0.001$ ), and receipt of chemotherapy (HR 1.19,  $p = 0.015$ ). In the cancer cohort, cumulative incidence of anxiety or depression varied by treatment: 67% chemotherapy alone, 52% chemotherapy and surgery, 37% surgery and radiation.

**CONCLUSIONS:** Psychosocial morbidity is high among TC survivors. Despite being effective and necessary for maintaining excellent oncologic outcomes, chemotherapy appears to increase the rates of psychosocial morbidity. Clinicians should be proactive in identifying support systems for these TC survivors.



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**MP01-08**  
**MICRORNA-371A-3P (MIR371A) SERUM LEVELS TO PREDICT THE PRESENCE OF METASTATIC LYMPH NODES IN MARKER NEGATIVE CLINICAL STAGE IIA/B SEMINOMA**

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**INTRODUCTION AND OBJECTIVE:** Nerve sparing retroperitoneal lymph node dissection (RPLND) has emerged as a treatment alternative in marker negative CS IIA/B seminomas. However, about 10-15% of all patients harbour nonmetastatic lymph nodes at time of RPLND so that reliable biomarkers are of importance to stratify treatment. miR371a represents a new biomarker with diagnostic and predictive properties. The aim of our study was to evaluate the predictive accuracy of miR371a to identify metastatic lymph nodes.

**METHODS:** 50 patients with marker negative CS IIA/B seminomas underwent primary RPLND with a modified template dissection. Blood specimens were drawn on the day immediately prior to surgery. For single institution measurements, cubital vein blood was placed on ice and processed within 30 minutes for extraction of miR371a. The extracted miR371a was transcribed into cDNA using cDNA Solution, Reverse Transcriptase and RNase Inhibitor. Subsequently, this cDNA was amplified. Using qPCR, the miR371a was quantified using Roche Lightcycler 480 II. The median Cp (CP=Crossing Points) of the triplicates is calculated and converted into a RQ value (RQ=Relative Frequency), which indicates whether the sample is positive or negative.

**RESULTS:** Median age was 35.3 (21-52) years. At time of RPLND, 38 (76%) and 12 (24%) pts presented in CS IIA and CS IIB, resp. Median number of dissected lymph nodes was 27.3 (14-63), median number of positive nodes was 1.2 (1-4). A total of 4 (8%) and 46 (92%) pts had benign lymph node pathology or seminomatous metastases, resp. The median size of positive lymph nodes was 24.2 (2.5-45) mm. miR371 was negative in 4/4 (100%) pts with negative nodes and it was positive in 38/46 (82.6%) metastatic lymph nodes. Sensitivity and

