

## **Abstract Title – Imaging studies during survivorship after lymphoma treated with curative intent**

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**BACKGROUND:** The majority of patients with relapsed aggressive lymphomas are detected outside of planned follow-up with scheduled imaging at fixed intervals. Relapses are generally accompanied by symptoms, physical examination or laboratory abnormalities. Surveillance imaging in asymptomatic patients in remission from lymphoma may be harmful through a small but cumulative risk of radiation and also by increasing the risk of unnecessary biopsies due to false positive findings. It is also costly and has not been demonstrated to improve survival. Due to a decreasing probability of relapse with the passage of time and a lack of proven benefit, imaging scans in asymptomatic patients more than 2 years beyond the completion of treatment are rarely advisable.

**HYPOTHESIS:** We hypothesize that the introduction of an automatic alert (Figure 1) generated within the electronic medical records (EMR) could remind clinicians to carefully weigh the anticipated benefits of post-treatment imaging scans against the potential harms of over scanning patients.

**METHODS:** We have introduced an electronic reminder in the EMR and we are in the process of accumulating data to measure the impact of our intervention. We will compare 2 years of data before and after the implementation of the automatic alert in the EMR. We will review all patients with ICD-10 codes for Burkitt lymphoma (C88.70), Hodgkin lymphoma (C81.90), and diffuse large B-cell lymphoma (C88.30) that underwent imaging studies during such period of time. We will review the charts to assess the appropriateness of requesting imaging studies in such setting and to document trends regarding number of imaging studies performed in this population of patients. The electronic reminder in the EMR reads “Limit surveillance PET or CT scans in asymptomatic patients following curative treatment for lymphoma.”

**RESULTS:** The electronic reminder in the EMR was implemented at BMDACC in October 2015. We are in the process of implementing the electronic reminder at all Banner sites and we will monitor and report the data once available. In the 8 months prior to implementing the reminder, the number of imaging studies was 387 for an average of 48.3 scans per month across the Banner system. In the 3 months since the reminder was implemented, the number of imaging studies decreased to 76 for an average of 25.3 scans per month across the Banner system. Our preliminary results (Figure 2) suggest that an automatic alert generated within the EMR may potentially decrease the use of imaging studies during survivorship after lymphoma treated with curative intent. We recommend follow-up without routine surveillance imaging and to transition our efforts from relapse detection to improved survivorship.

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