

New Models of Lung Cancer Patient Experience

With non-small cell lung cancer (NSCLC) considered a major cause of cancer death, research into improved and novel treatment options are required. Combining surgery, radiation, and now targeted therapies, oncologist and patients have access to treatments that are efficacious and improve survival.

Currently, surgery with tissue sparing continues to be the first line treatment in stage I and II NSCLC. For patients who are not ideal candidates for surgery, stereotactic radiation is considered an effective alternative. As the degree of NSCLC worsens, oncologist may use platinum-based adjuvant regimens and chemoradiation.

However, recent advances in drug development have opened the door for novel and target treatment options in NSCLC. Specifically, anaplastic lymphoma kinase (ALK) and epidermal growth factor receptor (EGFR) targeting therapies. Likewise, immunotherapeutic agents that target checkpoint pathways involving CTLA-4, PD-1, and PD-L1 are showing clinical response in NSCLC. These novel therapies have shown efficacy but change the patient experience and side-effect expectations compared to the older regimens.

Epidermal growth factor receptor targeting treatments

EGF is estimated to be overexpressed in 80% of NSCLC diagnoses and the pathway involves tumor proliferation, invasion, and growth.

Three agents make up the EGRF class including, Erbitux (IV cetuximab), Tarceva (oral erlotinib), and Gilotrif (oral afatinib). The most common toxicities are diarrhea and rash. The rash is graded on a scale of severe to moderate to mild with symptoms ranging from whole-body inflammatory involvement to skin fissures to dryness. Interventions to improve comfort included topical hydrocortisone, humidifiers, and sunscreen on sun exposed areas. Furthermore, oral minocycline and doxycycline may provide anti-inflammatory benefits as well.

Gastrointestinal discomfort and upset is associated with EGFR inhibitors which may require adjusting the schedule of the drug to improve symptoms. Severe reactions may involve holding the medication, oral steroids, and possibly intravenous steroids for concomitant skin reactions of more than 70%.