

Earlier Lung Cancer Immunotherapy

The FDA recently approved Keytruda for the treatment of non-small-cell lung cancer before and after surgery.

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Immunotherapy, which has transformed treatment for metastatic non-small-cell lung cancer (NSCLC), may also be an option at earlier stages, according to studies presented at the European Society for Medical Oncology Congress. Around a third of NSCLC patients have tumors that can be surgically removed, but the risk of recurrence is high.

The Food and Drug Administration recently approved the immune checkpoint inhibitor Keytruda (pembrolizumab) for the treatment of Stage IIA to IIIB NSCLC before and after surgery. In the Phase III KEYNOTE-671 trial, participants were randomized to receive neoadjuvant (pre-surgery) Keytruda or a placebo plus chemotherapy before tumor removal; afterward, they received adjuvant (post-surgery) Keytruda or a placebo alone. Event-free survival (EFS) rates at two years were 62% in the Keytruda group and 41% in the placebo group, representing a 42% reduction in the risk of disease progression, recurrence or death. The median overall survival time was 52.4 months in the placebo group but was not reached in the Keytruda group because a majority were still alive.

Likewise, in the Phase III CheckMate-77T trial, a similar patient population was randomly assigned to receive another checkpoint inhibitor, Opdivo (nivolumab), or a placebo plus chemotherapy before surgery followed by adjuvant Opdivo or placebo alone. EFS rates at 18 months were 70% versus 50%—again, a 42% risk reduction. As in the Keytruda study, Opdivo recipients were five times more likely to have a pathological complete response, meaning no remaining cancer in the removed tissue. Overall survival data are not yet mature in this study, and follow-up is ongoing.

“These findings add to evidence that the perioperative immunotherapy path gives patients with operable lung cancer an opportunity to live longer without their cancer returning,” says Tina Cascone, MD, PhD, of MD Anderson Cancer Center.
