Study Analyzes Use of Thoracic Radiotherapy for Limited-Stage SCLC

Toronto, Canada – September 26, 2018 – A recent study demonstrated that using involved field radiotherapy (IFRT) and irradiating post-chemotherapy residual primary tumor volume for limited-stage small cell lung cancer (SCLC) did not result in increased recurrence of the cancer. Xiao Hu, M.D., Ph.D., Department of Thoracic Radiotherapy, Zhejiang Cancer Hospital, in Hangzhou, China, presented these findings today at the International Association for the Study of Lung Cancer’s (IASLC’s) 19th World Conference on Lung Cancer (WCLC) in Toronto, Canada.

While combined chemotherapy and thoracic radiotherapy (TRT) is the standard of care for most patients with SCLC, TRT target volumes of limited-stage SCLC have been controversial. Clinicians have been uncertain as to whether to treat the pre-chemotherapy tumor volume or the post-chemotherapy residual tumor volume. To date, this is the only prospective randomized study on these issues evaluating TRT for limited-stage SCLC. The study used three-dimensional conformal radiotherapy (3D-CRT) or intensity modulated radiotherapy (IMRT) to deliver radiotherapy to target volumes of the disease. Over the course of 15 years, 309 eligible patients were randomized to irradiate the post-chemotherapy (study arm) or pre-chemotherapy tumor volumes (control arm). IFRT was also used for both arms.

The results showed neither mediastinal lymph nodes, nor primary tumors developed out-field recurrence. At the one, three and five-year follow ups local/regional progression free probability were 79.4 percent, 60.1 percent and 60.1 percent, respectively, in the study arm versus 79.8 percent, 64.5 percent and 57.3 percent in the control arm. The median overall survival (OS) time was 22.1 months in the study arm and 26.9 months in the control arm. Additionally, treatment-related toxicities were reduced in patients who received radiotherapy to the post-chemotherapy tumor volume. Pathological and radiation dosimetric analysis further demonstrated that the routine use of IFRT and radiotherapy volumes could be limited to the post-chemotherapy residual primary tumor.

“Considering the high malignancy and easy metastasis of SCLC, chemotherapy remains the cornerstone of comprehensive treatment,” said Dr. Hu. “For patients having difficulty with full-dose intravenous chemotherapy, it could be administered safely by dose reduction or using single agent chemotherapy or oral chemotherapy, along with radiotherapy.”

About the WCLC
The World Conference on Lung Cancer (WCLC) is the world’s largest meeting dedicated solely to lung cancer and other thoracic malignancies, attracting over 7,000 researchers, physicians and specialists from more than 100 countries. The conference will cover a wide range of disciplines and unveil research studies and clinical
trial results. For more information, visit http://wclc2018.iaslc.org/. Follow the conference on social media with: #WCLC2018.

**About the IASLC**
The International Association for the Study of Lung Cancer (IASLC) is the only global organization dedicated solely to the study of lung cancer and other thoracic malignancies. Founded in 1974, the association’s membership includes more than 7,500 lung cancer specialists across all disciplines in over 100 countries, forming a global network working together to conquer lung and thoracic cancers worldwide. The association also publishes the *Journal of Thoracic Oncology*, the primary educational and informational publication for topics relevant to the prevention, detection, diagnosis and treatment of all thoracic malignancies. Visit www.iaslc.org for more information. You can also follow the IASLC on Twitter, Facebook, LinkedIn and Instagram.

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