Use of New Systemic Adjuvant Therapy in Gastrointestinal Tumors (GISTs) Increasing, Leading to Better Survival

Older patients, Minorities Less Likely to Receive Adjuvant Systemic Therapy

ATLANTA – March 2, 2015–A new American Cancer Society study finds that the use of adjuvant systemic therapy for localized gastrointestinal stromal tumors (GISTs) has significantly increased over time and that patients treated with the therapy have better survival than those treated with surgery alone. The study, which appears early online in the American Journal of Clinical Oncology, also finds that older patients and minorities are less likely to receive adjuvant therapy for GISTs.

Although rare, GISTs are the most common sarcomas of the gastrointestinal tract, with an estimated 4,000 to 5,000 cases per year in the United States. Treatment of GISTs has changed remarkably over the last decade, after studies showed a significant survival advantage with the use of imatinib (Gleevec) for the estimated 85 to 90 percent of tumors with the CD117 (KIT) proto-oncogene. In 2008, the U.S Food and Drug Administration (FDA) approved imatinib for the adjuvant systemic treatment of adult patients with the CD117 mutation after surgery. The National Comprehensive Cancer Network (NCCN) recommends adjuvant imatinib treatment for GISTs with tumor size ≥3 cm and with intermediate or high risk of recurrence.

To estimate contemporary use, researchers from the American Cancer Society led by Helmneh Sineshaw, MD, MPH, analyzed data from the National Cancer Data Base to identify 4,694 patients with localized GIST cases diagnosed between 2004 and 2011, and determined patterns of and factors associated with the use of adjuvant therapy.

They found the use of adjuvant systemic therapy more than doubled between 2006 (13.2%) and 2007 (30.5%), peaked to 37.9% in 2009, and then decreased to 25.6% in 2011. The use of adjuvant systemic therapy decreased with age, was higher in patients with larger tumor size (>10 cm), and was less likely in minorities than in non-Hispanic whites. Patients who received adjuvant systemic therapy had 46% lower risk of death than those who received surgery alone.

The authors conclude: "Adjuvant systemic therapy use in clinical practice has significantly increased over time with variation by certain factors such as age, race/ethnicity, and tumor size. As the systemic therapy of GISTs evolves, capturing more up-to-date and high-quality data, in addition to clear and consistent treatment guidelines, is very important to reliably demonstrate treatment patterns and survival outcomes associated with the adjuvant therapy use in clinical practice."

Additional co-authors on the study include: Ahmedin Jemal, DVM, PhD; Chun Chieh Lin, PhD, MBA; LaMar S. McGinnis, MD; and Elizabeth M. Ward, PhD

Article: Contemporary Patterns and Survival Outcome of Adjuvant Systemic Therapy for Localized Gastrointestinal Stromal Tumors, Am J Clin Oncol. 2015 Jan 16. [Epub ahead of print]