Medical Xpress

Father and son to present their respective cancer research at ASCO

May 29 2013

What started as a dinner-table conversation between a teen and his father has become a bonafide cancer research study for Matthew Lara, a Davis High School sophomore and the son of UC Davis Comprehensive Cancer Center medical oncologist and researcher Primo (Lucky) Lara Jr.

Matthew, 16, will put on a suit and present his findings on non-small-cell lung cancer during a poster session in Chicago on Saturday at the annual meeting of American Society of Clinical Oncology (ASCO), a 30,000-member cancer research organization.

Matthew's poster, entitled "Predictors of survival for younger patients less than 50 years of age with non-small cell lung cancer (NSCLC): a California Cancer Registry analysis," describes his findings that younger people with lung cancer tend to have better survival rates than older patients with lung cancer. His poster represents the largest analysis of age-related survival in lung cancer ever conducted. The work was based on data from the California Cancer Registry, a massive, statewide repository for demographic and epidemiological cancer case data.

Primo Lara also will present research at ASCO on Saturday. His study—unrelated to Matthew's work—analyzed survival variables associated with small cell lung cancer patients who had previously been treated with platinum-containing chemotherapy.

Matthew's project was born at the dinner table.

"We were talking about lung cancer, and I asked my dad if young people get lung cancer and if they do better than older people," said Matthew. "My Dad said, 'Well, you can certainly try to find the answer to that yourself!' So we did."

The two enlisted the help of an analyst, statistician and epidemiologist as well as support from top lung cancer experts at the UC Davis Comprehensive Cancer Center. Matthew began with a database of 130,000 lung cancer cases diagnosed in California between 1998 and 2009. The cases were eventually narrowed to 108,062 cases of older patients (over 50 years of age) and 6,389 patients younger than 50.

After an epidemiological and demographic analysis, Matthew and his co-authors found a general decrease in the rate of lung cancer diagnoses in younger patients over time. Between 1998 and 2001, for example, 37 percent of lung cancers were found in young patients compared to 29 percent from 2006 to 2009. They also uncovered an 18 percent reduction in the risk of death in the patients who were diagnosed under age 50.

Because the Cancer Registry does not collect data on individual treatments or tumor phenotypes, Matthew said one can only speculate about why the rate of lung cancer among younger people has dropped and why younger patients tend to do better than older individuals. He and his co-authors hypothesized that decreasing smoking rates may be why there are fewer lung cancers in younger people over time, and that younger patients may have better outcomes because they are more likely to have lung-cancer types that respond well to treatment.

"We are learning about the important role of the immune system in fighting lung cancer," added Karen Kelly, associate director for clinical research at the cancer center, a lung cancer expert and a co-author on Matthew's poster. "Younger patients may have a more intact immune system."

Kelly called the 16-year-old "a bright student and budding researcher," adding "I am sure Matthew has already thought of several questions and is planning his next project."

After Matthew's research poster was accepted at ASCO, he received a $500 grant from the Davis High School Blue and White Foundation to support his trip to Chicago, where he will present his poster to other oncology researchers Saturday morning.

Not surprisingly, after high school and college, Matthew hopes to follow in his father's footsteps as an oncologist and cancer researcher.

"There are so many people who still die from cancer," he said. "I want to understand it better, how it works and how we can make it better for people."

Provided by UC Davis

Citation: Father and son to present their respective cancer research at ASCO (2013, May 29) retrieved 2 May 2024 from
https://medicalxpress.com/news/2013-05-father-son-respective-cancer-asco.html