

Cystic Fibrosis Research News

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Title:

Cancer Risk among Lung Transplant Recipients with Cystic Fibrosis

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What was your research question?

Among lung transplant recipients, do people with cystic fibrosis (CF) have a greater risk for developing cancer than those who do not have CF? Does the risk depend on the type of cancer?

Why is this important?

Drugs given to individuals to suppress their immune systems after transplant can increase the risk of some types of cancers. Given that this potential higher risk of cancer is known, better monitoring and screening for cancer should be undertaken. Previous research suggests that people with CF have a higher risk of developing cancer, especially colorectal cancer; however, these studies lacked complete data on transplants and cancer diagnoses.

What did you do?

We used data from the Transplant Cancer Match Study. This study combined data from the Scientific Registry of Transplant Recipients (a database of all transplants conducted in the United States) with data from 16 state cancer registries (which include a listing of all cancers diagnosed within each state). We determined the number of transplant recipients

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diagnosed with cancer, both with and without CF, compared to what we would expect in the general population.

What did you find?

People with CF who received a lung transplant had a much higher risk of developing any cancer compared to the general population and also compared to those without CF who received a lung transplant. The most commonly diagnosed cancers were non-Hodgkin lymphoma and colorectal cancer. Individuals with CF younger than 50 years of age had a higher risk of developing colorectal cancer than the general population after age 50, when regular colorectal cancer screening is recommended.

What does this mean and reasons for caution?

Individuals with CF may be a high-risk population for certain cancer types following transplant. Current screening and follow-up recommendations may need to be adjusted for people with CF after transplant, for example by starting screening at younger ages or occurring more frequently. . . The number of cancer diagnoses included in the study was small, so we may have missed increased risks for some other cancers.

What's next?

The results of this study and others will be used to develop colorectal cancer screening recommendations for individuals with CF after transplant.

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