

# Joint Statement Addresses Diabetes-Cancer Link

*Type 2 diabetes appears to increase risk of GI and breast cancer, but reduce risk of prostate cancer.*

BY MIRIAM E. TUCKER

FROM DIABETES CARE

A joint consensus statement from the American Diabetes Association and the American Cancer Society released June 16 reviews the current state of science regarding the complex relationship between diabetes and cancer.

Epidemiologic evidence suggests that people with diabetes—type 2 in particular—are at increased risk for cancer. The reasons for this association are poorly understood, but there is evidence to support roles for risk factors that are common to both disorders and medications used to treat diabetes, as well as possible direct causal links.

The American Diabetes Association and the American Cancer Society convened a consensus development conference to examine these associations in December 2009. The writing group independently developed a statement that solely represents the positions of the nine panel members and does not reflect official positions of either sponsoring organization (Diabetes Care 2010;33:1674-85).

The panel, which was chaired by Dr. Edward Giovannucci of the Harvard

School of Public Health, Boston, recommended that health care professionals strongly advise patients with diabetes to undergo appropriate cancer screenings as advised for all people in their age and sex categories. Promotion of healthful diets, physical activity, and weight management is encouraged for all patients to reduce risk and improve outcomes of type 2 diabetes and some forms of cancer.

The statement also recommended that



**Diabetic patients should undergo cancer screenings as advised for all people in their age and sex categories.**

DR. GIOVANNUCCI

cancer risk not be a major factor in choosing between available diabetes therapies for the average patient, but that for selected patients at very high risk for cancer occurrence—or for recurrence of specific cancer types—these issues may require more careful consideration.

The statement was organized around answers to four basic questions:

► **Is there a meaningful association between diabetes and cancer incidence or prognosis?** Cancer and diabetes are diagnosed within the same individual more frequently than would be expected by chance, even after adjustment for age. However, the association appears to be limited to certain types of cancer, while other cancers appear to be less common among people with diabetes. Specifically, type 2 diabetes is associated with an increased risk for cancers of the liver, pancreas, endometrium, colon/rectum, breast, and bladder, but with a reduced risk of prostate cancer. For some other cancer sites there appears to be no association or the evidence is inconclusive.

► **What factors are common to both cancer and diabetes?** The association between diabetes and some cancers may be due in part to shared risk factors between the two diseases, such as aging, obesity, diet, and physical inactivity. Smoking appears to be an independent risk factor for the development of diabetes and diabetes complications, in addition to cancer. Evidence for the role of alcohol is mixed. Even moderate alcohol consumption increases the risk for certain types of cancer and excess alcohol consumption is also a risk factor for diabetes. However, moderate alcohol consumption is linked with a reduced incidence of diabetes.

► **What are the possible biologic links between diabetes and cancer risk?** The

document provides detailed summaries of the evidence pertaining to the potential roles of the insulin/insulin-like growth factor receptor axis, hyperglycemia, hyperinsulinemia, and inflammatory cytokines/inflammation.

► **Do diabetes treatments influence cancer risk or cancer prognosis?** The evidence for specific drugs affecting cancer risk is limited, and observed associations may have been confounded by indications for specific drugs, effects on other cancer risk factors such as body weight and hyperinsulinemia, and the complex progressive nature of hyperglycemia and pharmacotherapy in type 2 diabetes.

Although still limited, early evidence suggests that metformin is associated with a lower risk of cancer and that some exogenously administered insulin is associated with an increased cancer risk. Further research is needed to clarify these issues and evaluate if insulin glargine is more strongly associated with cancer risk, compared with other insulins.

The statement also highlights numerous remaining research questions.

The consensus development conference was supported by an unrestricted grant from Amylin Pharmaceuticals Inc., Lilly USA, Merck & Co. Inc., Novo Nordisk A/S, and Sanofi-Aventis. Five of the eight study authors reported financial ties with these and other pharmaceutical companies. ■

## DXA Access Concerns Remain Despite Payment Increase

BY MARY ELLEN SCHNEIDER

Medicare officials have temporarily increased payments for performing dual-energy x-ray absorptiometry, but osteoporosis experts say the boost isn't likely to make much of a difference in the number of physicians offering the service.

Under the health reform law—formally known as the Affordable Care Act—Congress instructed officials at the Centers for Medicare and Medicaid Services to increase DXA payments to 70% of the rate paid by Medicare in 2006. For example, nonfacility fees for CPT code 77080 increased from about \$45 to \$98. The same service was paid at about \$143 in 2006, according to estimates from the American College of Rheumatology.

While the increased payments began on June 1 and are retroactive to Jan. 1, 2010, they also expire at the end of 2011. In the meantime, Congress has called on the Institute of Medicine to study the impact of past DXA payment reductions on patient access.

The American College of Rheumatology hailed the increase as a victory for physicians. But even with the additional reimbursement, physicians aren't likely to get back into the DXA business if they have already gotten out, said Dr. David Goddard, a rheumatologist in Brooklyn, N.Y., and a member of the ACR's government affairs committee. However, it could motivate others who were on the fence to continue to offer the service. One of the big determinants going forward is likely to be the cost of the equipment, he said. The average lifespan of a DXA scanner is about 8-10 years, depending on usage, and physicians will be faced with the question of whether the payment level makes it worthwhile to purchase a new machine.

Steep cuts to DXA services began in 2007, after Con-

gress included bone densitometry among a group of other imaging services that were slashed as part of the Deficit Reduction Act of 2005.

Since then, physicians have been struggling to cover their costs as reimbursement steadily declined from around \$140 in 2006 to about \$45 in the first half of this year. Adding to the problem is that private insurers have largely followed the lead of Medicare and have been ratcheting down their rates over the years as well, Dr. Goddard said.

Patient access to the bone densitometry services depends in large part on geography, Dr. Goddard said. Generally, patients who live near large urban centers will have little difficulty finding bone densitometry testing in either a medical center or a specialist's office. However, patients in rural areas are likely to have a harder time accessing the same services, he said.

"The whole thing is nonsensical anyway because it's a very low cost test with a reasonably high predictive value," Dr. Goddard said. "So in terms of identification of people at risk, it's very cost effective."

At this point, it is physicians' concern for patients, not the payment, that motivates them to continue to offer bone densitometry services, said Dr. Steven Petak, immediate past president of the American College of Endocrinology and director of the Osteoporosis and Bone Densitometry Unit at the Texas Institute for Reproductive Medicine and Endocrinology in Houston.

Dr. Petak said a reasonable number of physicians will continue to perform DXA studies, but that number is

likely to drop dramatically if Congress allows payment cuts again in 2012.

The problem that the medical community has had in advocating for higher payments for DXA studies is that the government isn't considering the full potential for savings from prevention of fractures, Dr. Petak said. For example, when estimating the cost of DXA payments in legislation, the Congressional Budget Office will consider the cost of utilization of DXA in Medicare Part

B, but won't count potential savings to Medicare's Part A, which includes hospitalization costs.

"You can't look at the cost outlay in isolation. You have to look at how it's going to impact the preventive health care of the population," Dr. Petak said. "That's something that the government has failed to do."

The outlook for gaining a permanent payment increase for DXA services is pretty bleak, at least for now. It's difficult to convince Congress to spend money on anything in the current political environment, Dr. Petak said, even if it will result in savings down the line. "I think [Congress will] play politics with it and any kind of cost outlay will be met with resistance."

Dr. Goddard agreed, citing the failure of Congress to come to consensus on how to address the impact of the Sustainable Growth Rate (SGR) formula on Medicare physician payments.

"If we can't get something fundamental like [the SGR] fixed, osteoporosis and bone densitometry is sort of, for them, a little blip on the radar," Dr. Goddard said. ■

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