

Switching immunosuppressants reduces cancer risk in kidney

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Switching to a newer type of immunosuppressant drug may reduce the high rate of skin cancer after kidney transplantation, according to research being presented at the American Society of Nephrology's 42nd Annual Meeting and Scientific Exposition in San Diego, CA.

"In spite of the life-saving nature of [organ transplantation](#), the need for transplant recipients to continue treatment with drugs that suppress the immune system to prevent rejection of the organ is associated with a number of side effects, one of which is the development of cancer," said lead researcher Graeme Russ, MD (The Queen Elizabeth Hospital, Australia). "So the search for an immunosuppressive drug which prevents rejection effectively but is associated with lower rates of cancer will be of significant advantage to transplant recipients."

The study included 86 kidney transplant patients who previously had [skin cancer](#) (other than [melanoma](#))—placing them at particularly high risk of new skin cancers. In Australia, skin cancer is the most common type of cancer occurring post-transplant.

One group of patients remained on standard immunosuppressant drug treatment. The other group was switched to treatment with sirolimus—one of a newer class of immunosuppressants called mTOR inhibitors. "Previous studies have suggested that mTOR inhibitors are associated with less cancer than other commonly used agents," according to Russ.

Patients switched to sirolimus had a significantly lower rate of new skin cancers. Overall, new skin cancers developed in 56 percent of patients in the sirolimus group, compared to 81 percent of those who remained on the standard immunosuppressant. Most of the difference reflected a lower rate of one type of cancer, called squamous cell [carcinoma](#).

Nearly half of patients stopped taking sirolimus because of side effects. "In spite of this large dropout rate there was a significantly lower rate of skin cancer development in the sirolimus group," said Russ. Switching to sirolimus did not increase the risk of rejection of the transplanted kidney.

Switching immunosuppressants may offer a new option to reduce the high risk of skin cancer for transplant recipients, the researchers believe. Russ added, "This is the first randomized controlled trial to address whether patients treated with mTOR inhibitors after renal transplantation have less skin cancer."

Source: American Society of Nephrology ([news](#) : [web](#))

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