A study by The New England Journal of Medicine is calling a new drug "an entirely new way forward in cancer treatment," citing stunning results against breast and ovarian cancer associated with a particular gene mutation, and with none of the side effects of traditional chemotherapy.

**Keywords**
- Cancer
- Research
- Breakthrough
- New England Journal of Medicine
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- Drugs
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- Tumor
- Prostate
- Parp Inhibitor

**Citation**

MLA
Study Claims Breakthrough in Cancer Treatment

BRIAN WILLIAMS, anchor:
Now we turn to what some are calling the most important cancer treatment breakthrough in a decade. While we caution this is a small study, the New England Journal of Medicine tonight is saying it shows so much promise this could mean a whole new direction for cancer drugs, especially for those patients vulnerable to breast, ovarian and prostate cancer. With us now with the story tonight our chief science correspondent, Robert Bazell.
Bob, welcome.

ROBERT BAZELL reporting:
Good evening, Brian. For now the drugs have mostly treated people with those three diseases--breast, ovarian and cancer--and those that are caused by mutations called BRCA1 and 2. But there is evidence they could have much wider use and begin that new era of cancer treatment.
Patricia Buckles is a 29-year veteran of the battle with breast cancer, with all the suffering that surgeries and chemotherapy can bring. Almost out of options, she joined a trial of a new class of drugs, pills called PARP inhibitors.
Ms. PATRICIA BUCKLES: I went up there with growing cancer, measurable cancer, and I'm to the point now where the CAT scans show no evidence of disease.

BAZELL: Julian Lewis had prostate cancer that had resisted all treatments and spread throughout his body, until he got into a PARP inhibitor trial.
Mr. JULIAN LEWIS: My PSA level, which is a marker of the tumor, went right down to a very low level and it stayed low. And my bone metastases also seemed to have almost disappeared, judged from MRI scans.
Dr. STAN KAYE (Royal Marsden Hospital, London): This is a scan before treatment...
BAZELL: The trials of PARP inhibitors are in their earliest stages.

Today's study included only 60 patients. But many scientists have been shocked by how well they work.
Dr. KAYE: It's gone down 1.8 centimeters.
We were surprised and delighted. It's the kind of thing that you don't really think will happen.

Dr. SUSAN DOMCHEK (University of Pennsylvania): This actually is a truly exciting step forward and really should energize all of us towards what science can do for patients.

Mr. TOM BROKAW: (From September 13, 1994) We begin tonight with what appears to be one of the most important breakthroughs in breast cancer research.

BAZELL: The development of PARP inhibitors goes back to the early '90s when scientists discovered two genes, BRCA1 and 2, that put women like Patricia Buckles at high risk for breast and ovarian cancer, and men like Julian Lewis at high risk for prostate cancer. After years of study, researchers found that PARP inhibitors could actually combine with the defect that BRCA1 and 2 causes in cells to kill the tumors. Also exciting, the new pills cause none of the hair loss and little of the nausea brought on by typical chemotherapy.

Ms. BUCKLES: I have a full head of hair. I have strength, I have stamina.

BAZELL: As I said, many scientists believe these drugs could treat some people who don't have the genetic mutations, especially for ovarian cancer. Those studies are under way. But whatever else happens, these drugs look like they will eventually save thousand of lives.

WILLIAMS: On behalf of everybody watching, how long until people can actually take these medications?

BAZELL: Brian, they have to be tested further, but I would bet they'll be tested fast, and I'm saying one or two years they'll be on the market.

WILLIAMS: And that would be on the fast side. All right. Bob Bazell, thanks very much tonight.