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Targeted therapies offer hope against aggressive cancer

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Several new targeted therapies have shown promise against advanced cancers of the blood, lungs, ovaries, and thyroid, according to research released Saturday at a major US cancer conference.

Among them is an oral drug called ibrutinib, made by Pharmacyclics. It was found to be "highly active" against chronic lymphocytic leukemia and extended survival in some patients whose cancers did not respond to the standard treatment, chemotherapy.

The drug works by blocking the spread of cancer cells and encouraging them to self-destruct.

It was approved by the US Food and Drug Administration for CLL, the most common kind of leukemia, in February.

A randomized study of nearly 400 people, median age 67, with relapsed CLL showed for the first time a clear advantage of an oral drug over chemotherapy, according to the research presented at the American Society for Clinical Oncology meeting.

"With ibrutinib, about 80 percent of patients were still in remission at one year, twice as many as we would expect with standard therapy," said lead author John Byrd, professor of medicine at the Ohio State University.

"Although the follow up was short in this study, the data definitely

support the use of ibrutinib before anything else in this setting."

Another treatment that attacks numerous targets in a tumor has shown promise in shrinking thyroid tumors when compared to a placebo.

Lenvatinib, made by Eisa Pharmaceuticals, shrunk tumors in two-thirds of patients. When compared to a placebo, patients given the drug experienced a median 18 months of no advancement of the cancer, compared to 3.6 months in the placebo arm.

The phase III trial involved nearly 400 patients and was led by Martin Schlumberger, professor of oncology at University Paris Sud in France.

Gregory Masters, an ASCO expert, said the drug "offers an effective option with reasonable side effects," which included high blood pressure, diarrhea, loss of appetite, weight loss and nausea.

Relapse, resistance are daunting

A third clinical trial involved ramucirumab, made by Eli Lilly, which blocks the growth of new blood vessels in the non-small cell lung tumors.

A study of 1,253 patients with stage four non-small cell lung cancer found that the drug enabled patients to live a median 10.5 months after diagnosis, slightly longer than the 9.1 months in the placebo arm.

"This is the first treatment in approximately a decade to improve the outcome of patients in the second line setting," said lead author Maurice Perol, head of thoracic oncology at the Cancer Research Center of Lyon, France.

Finally, a trial using two experimental drugs that have not yet been approved by regulators showed a near doubling of healthy time in

patients with recurring ovarian cancer.

The agents olaparib and cediranib, made by the British laboratory AstraZeneca, showed a median 17.7 months of progression-free survival, compared to nine months in those who tool olaparib alone.

The trial marked the first study in ovarian cancer of a drug that inhibits an enzyme involved in DNA repair, known as PARP, which may cause cancer cells to die. More research is needed to determine whether the combination would be better than standard chemotherapy. More than 80 percent of women with high-grade serious ovarian cancer experience a recurrence after initially responding to chemotherapy.

"Cancer relapse and treatment resistance have always been the most daunting challenges in cancer care," said Gregory Masters, a medical oncologist at the Helen Graham Cancer Center.

"The good news is that genomics medicine is helping to overcome these challenges by revealing new ways to target a cancer cell's inner workings," added Masters, who moderated the press briefing.

"The research highlighted today could lead to new treatment options."