

Public release date: 17-Sep-2010



Contact: Nicole Engler

[engler.nicole@mayo.edu](mailto:engler.nicole@mayo.edu)

507-284-5005

[Mayo Clinic](#)

# Targeted therapy decreases progression rate in thyroid cancer

## Given potential side effects, patients with slow-growing thyroid cancer should not use pazopanib

ROCHESTER, Minn. -- The drug [pazopanib](#) may help revolutionize the care of patients with metastatic, rapidly progressive differentiated thyroid cancers, say researchers at [Mayo Clinic](#) who are publishing findings of a phase II clinical trial in The [Lancet Oncology](#).

VIDEO ALERT: Additional audio and video resources, including excerpts from an interview with Dr. Keith Bible describing the research, are available on the [Mayo Clinic News Blog](#). Password: bible.

The researchers studied 37 patients with the most aggressive form of this cancer -- developing in less than 5 percent of patients with differentiated thyroid cancer -- and found that about half (18) patients had a long-lasting response to pazopanib. Of that group, 12 are still alive without disease progression. The median progression-free survival time was 11.7 months, with an overall survival rate of 81 percent at one year.

The researchers say that, to their knowledge, these findings represent by far the highest response rate yet reported in such aggressive cases of differentiated thyroid cancer. They caution however, that this drug is not meant to be used in slow-growing differentiated thyroid cancers and that they cannot assess the survival advantage pazopanib offers to the patients studied.

Determining survival benefit would require a randomized clinical trial testing the agent, which inhibits all three vascular endothelial growth factor (VEGF) receptors, compared to other treatments or a placebo.

"In this group of patients, we would have expected the cancer to have progressed in everyone within six months, but instead the median time to progression was almost a year in response to pazopanib therapy," says [Keith Bible, M.D., Ph.D.](#), a medical oncologist and researcher who led the [multicenter clinical trial](#),

funded by the [National Cancer Institute](#). Most of the patients treated were enrolled at Mayo Clinic campuses in Minnesota and Florida.

But as encouraging as this response is, it does not come without the potential for significant side effects, Dr. Bible says. The drug dose used in 16 patients had to be lowered because side effects were judged by oncologists to become potentially threatening or debilitating, and two patients experienced significant bleeding. Further, although two patients died in association with pre-existing disease while enrolled in the study, the agent could have contributed in some way, he says.

"Further studies of pazopanib in advanced thyroid cancer remain ongoing at Mayo Clinic and associated cancer centers to continue to learn more about how best to use the drug in these cancers," Dr. Bible says. "Such clinical trials also may provide patients access to this drug, which otherwise may be unobtainable due to cost, given that it is not yet approved for use in thyroid cancers."

Plans are underway for a larger phase III clinical trial with aggressive differentiated thyroid cancer patients that will be centered in Europe, with some sites to be opened in the U.S.

The authors declare no conflicts of interest. The manufacturer of pazopanib (GlaxoSmithKline) did not provide funding or other material support to the researchers and did not have access to the data.

###

For more information on Mayo Clinic Cancer Center clinical trials, call 507-538-7623 or visit <http://clinicaltrials.mayo.edu/>.

