

## TTF and chemotherapy increase survival for patients with advanced non-small cell lung cancer

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Novocure reported today that patients with advanced non-small cell lung cancer (NSCLC) achieved a significant increase in survival time when tumor treating fields (TTF) therapy was added to chemotherapy, as compared to previously reported outcomes for patients receiving chemotherapy alone. Dr. Miklos Pless, head of medical oncology at the Winterthur Hospital Cancer center in Switzerland, presented the data at the European Society for Medical Oncology Congress (ESMO).

Physicians delivered TTF Therapy to patients in the study using the NovoTTF-100L—a portable, non-invasive medical device. Investigators conducted this single arm, phase II study at four centers in Switzerland, enrolling 42 patients with locally advanced and metastatic NSCLC (stage IIIb-IV) who had failed prior treatments with <u>chemotherapy</u>. Patients in the study received TTF Therapy for 12 hours a day in combination with pemetrexed (Alimta; Eli Lilly) until disease progression.

Advanced NSCLC is the second cancer in which TTF Therapy has shown clinical efficacy in human trials. Novocure reported a successful phase III clinical trial of TTF monotherapy in patients with recurrent glioblastoma, an aggressive form of brain cancer, at the American Society for Clinical <u>Oncology</u> Conference (ASCO) earlier this year. Results of this phase III trial have been filed with the U.S. Food and Drug Administration (FDA).



"We were pleased to report on the results of this multi-center trial of TTF Therapy in a non-brain tumor indication," said Dr. Pless. "We believe this study has shown TTF Therapy to be completely non-toxic and to have the potential to act as a significant adjunct to chemotherapy in the treatment of NSCLC and other solid tumor indications."

Patients treated with TTF Therapy in combination with pemetrexed had a median overall survival time of 13.8 months compared with the 8.3 months reported for pemetrexed alone. The one-year survival rate for the combination was 57 percent compared with the 30 percent reported for pemetrexed alone. Progression-free survival more than doubled when TTF Therapy was added to pemetrexed, to 22-28 weeks versus the 12 weeks previously reported for pemetrexed alone1. The only reported adverse event for TTF Therapy was mild to moderate skin irritation at the treatment site.

"These NSCLC data further validate TTF Therapy as a viable approach to treating deadly cancers," said Asaf Danziger, chief executive officer of Novocure. "We have seen positive clinical success in both phase II and phase III studies, alone and in combination with chemotherapy, and believe TTF Therapy has the potential to be effective in a range of solid tumors."

TTF Therapy slows and reverses tumor cell proliferation by inhibiting mitosis, the process by which cells divide and replicate themselves. The NovoTTF-100L device, which weighs about six pounds (three kilograms), creates a low-intensity, alternating electric field within the tumor that exerts physical forces on electrically charged cellular components, preventing the normal mitotic process and causing cancer cell death prior to division.

Novocure's NovoTTF-100A device has received its CE Mark and is approved for sale in six European countries as a treatment for



glioblastoma brain tumors. The NovoTTF-100L device has received its CE Mark as a treatment for NSCLC and will be launched in Europe in the near future. Novocure is also planning to file an investigational device application with the FDA for a phase III study of TTF Therapy in early stage NSCLC in the near future.

**More information:** Nasser Hanna et al; "Randomized Phase III Trial of Pemetrexed versus Docetaxel in Patients with Non-Small-Cell Lung Cancer Previously TreatedWith Chemotherapy," Journal of Clinical Oncology 22.9 (2004): pp 1589-1597

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