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Tarceva® in Advanced Non-Small Cell Lung Cancer and Advanced Pancreatic Cancer

Tarceva® (erlotinib), a once-a-day pill, was one of the first targeted treatments approved by the U.S. Food and Drug Administration (FDA) specifically designed to target the epidermal growth factor receptor (EGFR) pathway. Tarceva has been shown to help some people with advanced NSCLC and advanced pancreatic cancer live longer.

Tarceva in Advanced Non-Small Cell Lung Cancer

Tarceva is approved for use in people with advanced NSCLC in two settings:

- As a treatment for people whose lung cancer has not spread or grown after initial treatment with certain types of chemotherapy (maintenance therapy).
- As a treatment for people whose lung cancer has spread or grown after receiving at least one chemotherapy regimen (second- and third-line therapy).

Tarceva is not intended to be used at the same time as chemotherapy for advanced NSCLC.

First-Line Maintenance Therapy

In April 2010, Tarceva became the first oral maintenance therapy approved by the FDA for people with advanced NSCLC and the only maintenance therapy approved for people with squamous NSCLC, as well as those with non-squamous NSCLC. The approval was based on results of the pivotal Phase III SATURN clinical trial that showed Tarceva helped some people live longer, compared to placebo.¹

The goal of maintenance therapy, a new approach in lung cancer, is to provide an active treatment earlier, before the cancer worsens. Unfortunately, once the cancer grows or spreads, many people are unable to receive further treatment because, among other reasons, it spreads so rapidly and their symptoms get worse.^{2,3} Before this approval, people had the option of continuing with infusion therapy, or stopping treatment and waiting for the cancer to grow or spread again before starting a new treatment. The SATURN clinical trial showed that:

- People treated with Tarceva had a 23 percent improvement in overall survival (OS), compared to placebo (hazard ratio=0.81; 95% CI: 0.70-0.95; p=0.0088).¹
 - Half of the people who received Tarceva lived at least a year (median OS 12.0 months for Tarceva vs. 11.0 months for placebo).¹
- People treated with Tarceva had a 41 percent improvement in the likelihood of living without tumors growing or spreading (progression-free survival [PFS]) based on investigator's assessment compared to placebo (hazard ratio=0.71; 95% CI: 0.62-0.82; p<0.0001; median PFS 2.8 months vs. 2.6 months).¹

Second- or Third-Line Treatment

Tarceva was approved by the FDA in November 2004 for people whose disease has worsened after receiving one or more courses of chemotherapy based on results of the pivotal Phase III study BR.21. This study showed Tarceva helped some people live longer, compared to placebo.¹

- People treated with Tarceva had a 37 percent improvement in OS compared to placebo (hazard ratio=0.73; 95% CI: 0.61-0.86; p<0.001; median OS 6.7 months vs. 4.7 months).¹
- Thirty-one percent of people treated with Tarceva survived at least one year compared to 21.5 percent treated with placebo.¹
- People who benefited from Tarceva in the study lived longer, compared with placebo, regardless of the physical or genetic characteristics of the tumors.

Tarceva in Advanced Pancreatic Cancer

Tarceva, used with gemcitabine chemotherapy, was also FDA-approved in November 2005 for treating people with advanced pancreatic cancer who had not received prior chemotherapy (first-line treatment). Tarceva was the first FDA-approved medicine in more than a decade for advanced pancreatic cancer and is the only targeted therapy approved for this devastating disease with few treatment options.

In the pivotal Phase III study PA.3, some people with advanced pancreatic cancer who received Tarceva plus chemotherapy, compared to chemotherapy alone, lived longer.¹

- People treated with Tarceva and chemotherapy had a 23 percent improvement in OS compared with those who received chemotherapy alone (hazard ratio=0.81; 95% CI: 0.68-0.97; p=0.028; median OS 6.4 months vs. 6.0 months).¹
- Twenty-four percent of people treated with Tarceva plus chemotherapy survived at least one year compared to 19 percent treated with chemotherapy alone.¹

How Tarceva Works (Proposed Mechanism of Action)

- Tarceva works inside the tumor cell by inhibiting the tyrosine kinase activity of the EGFR pathway, which is one of the critical growth factors in NSCLC and pancreatic cancer.^{4,5}
- By blocking this activity, it is thought that Tarceva may help slow or stop the growth of tumors.¹
- The way Tarceva works to treat cancer is not fully known.

Important Tarceva Safety Information

There have been reports of serious Interstitial Lung Disease (ILD)-like events including deaths in patients taking Tarceva. Serious side effects (including deaths) in patients taking Tarceva include liver and/or kidney problems; gastrointestinal (GI) perforations (the development of a hole in the stomach, small intestine, or large intestine); and severe blistering skin reactions including cases similar to Stevens-Johnson syndrome. Patients taking Tarceva plus gemcitabine were more likely to experience bleeding and clotting problems such as heart attack or stroke.

Eye irritation and damage to the cornea have been reported in patients taking Tarceva. Bleeding and clotting problems, including gastrointestinal and non-gastrointestinal bleeding, have been reported in clinical studies. Women should avoid becoming pregnant and avoid breastfeeding while taking Tarceva. Patients should call their doctor right away if they have these signs or symptoms: new or worsening skin rash; serious or ongoing diarrhea, nausea, loss of appetite, vomiting, or stomach pain; new or worsening shortness of breath or cough; fever; eye irritation. Rash and diarrhea were the most common side effects associated with Tarceva in the NSCLC clinical studies. Fatigue, rash, nausea, loss of appetite, and diarrhea were the most common side effects associated with Tarceva plus

gemcitabine therapy in the pancreatic cancer clinical study.

For full prescribing information, please call 1-877-TARCEVA or visit <http://www.tarceva.com>.

Tarceva is co-developed in the United States by Genentech, a wholly owned member of the Roche Group and OSI Oncology. Tarceva and OSI Oncology are trademarks of OSI Pharmaceuticals, Inc.

References

1. Tarceva [package insert]. OSI Pharmaceuticals, Inc.; 2010.
2. Fidias PM, Dakhil SR, Lyss AP, et al. Phase III study of immediate compared with delayed docetaxel after front-line therapy with gemcitabine plus carboplatin in advanced non-small-cell lung cancer. *J Clin Oncol*. 2009;27(4):591-598.
3. Stinchcombe TE, Socinski MA. Treatment paradigms for advanced stage non-small cell lung cancer in the era of multiple lines of therapy. *J Thorac Oncol*. 2009;4(2):243-250.
4. Prenzel N, Fischer OM, Streit S, Hart S, Ullrich A. The Epidermal Growth Factor Receptor Family As A Central Element For Cellular Signal Transduction And Diversification. *Endocrine-Related Cancer*. 2001;8:11-31.
5. Britten CD. Targeting ErbB Receptor Signaling: A Pan-ErbB Approach To Cancer. *Mol Cancer Ther*. 2004;3:1335-1342.

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