Kidney Cancer News

Pfizer Inc. announced in June that it had asked European Union regulators to approve axitinib as a treatment for advanced kidney cancer. According to Bloomberg Businessweek, Pfizer is seeking to market the drug to patients who have not had good results with other therapies for advanced kidney cancer. Many pharmaceutical business analysts are calling axitinib one of Pfizer’s top drug candidates.

Designed to be orally administered, the candidate drug works by blocking receptors that influence cancer in several ways. The drug works to affect tumor growth, blood vessel growth, and cancer spread (metastasis). In May, Pfizer said that axitinib met its primary goal in a late-stage clinical trial of 723 patients, inasmuch as patients who were treated with axitinib survived longer without disease progression than did patients who were treated with Nexavar, a different cancer drug manufactured by Bayer Pharmaceuticals and Onyx Pharmaceuticals. A report in Bloomberg News said that the group taking axitinib lived a median time of 6.7 months before their tumors grew, compared with 4.7 months for patients who received Nexavar. The data were presented at the American Society for Clinical Oncology annual meeting. The company said that it is working with other regulatory agencies on filings for approval of axitinib in other regions. It is also running other clinical trials of the drug in cases of kidney cancer and liver cancer.

The New York drugmaker said that about 210,000 people worldwide are diagnosed with advanced renal cell carcinoma every year, just under half—102,000 individuals—die of the disease, and about 20 percent of patients survive at least 5 years.

Another kidney cancer study of axitinib shows progress in preventing tumor growth, and a new gene is emerging as a candidate for therapy against the disease. At a conference on nuclear medicine and imaging, a group from Radboud University Nijmegen Medical Centre in the Netherlands announced the results of a radioimmunotherapy agent, Lu-177-cG250, that may become another treatment option. A study of 20 patients showed that the compound works by locating the antigen associated with renal cell cancer and targets tissues with this antigen. It kills cancer cells while leaving healthy tissues intact. Each patient received a maximum of three doses, and at the 12-week posttreatment mark, the radioimmunotherapy had stabilized the cancer in 14 of 20 patients. The researchers found that the average decrease in tumor growth went from 28.5 percent growth in size before radioimmunotherapy to just 4.1 percent in the 3 months after the patients’ first treatment, reported Asia News International.

In the early phases of discovery, it is a gene that may play a role in kidney cancer and may help patients who do not respond to current therapies, reported Ivanhoe Newswire, a broadcasting service. Oregon Health & Science University (OHSU) Knight Cancer Institute researchers found a gene that may be the key to helping patients whose kidney cancer is unresponsive to current therapies. This discovery could also provide a “toolkit” to identify patients who most likely could benefit from drugs that block this gene from causing cancer cells to grow.

Published in the June 1 edition of Science Translational Medicine, the study identified a gene, Src, that helps certain kidney cancers grow. The investigators found the gene using a mass spectrometry approach that showed the Src pathway was activated, suggesting that it had a role in the growth of cancer cells. They then assessed the role of Src in tumor tissues from patients with renal cancer.

“We found that patients with tumors expressing high levels of Src had worse survival rates than those patients whose tumors had weak expression of Src,” said George Thomas, MD, senior author of the study and an OHSU surgical pathologist. “This suggested to us that Src played a role in kidney cancer and that it was a therapeutic target worth exploring.”

Affymax Moves for Approval

Affymax, a company based in Palo Alto, CA, and its partner, Takeda Pharmaceuticals of Osaka, Japan, are making a bid for U.S. Food and Drug Administration (FDA) approval of the drug peginesatide, used to treat anemia in patients with advanced chronic kidney disease.

The companies have submitted a new drug application to the FDA. The drug is a synthetic PEGylated peptidic compound that binds to and activates the erythropoietin receptor. It acts like an erythropoiesis-stimulating agent. This move won’t come without a fight, however. Johnson & Johnson may block that bid with a patent suit to protect its interests.

The Affymax drug was studied in patients with chronic kidney disease who were not receiving dialysis. Although the drug met its goals in that study, the side effects were more severe for patients who were not receiving dialysis.

According to Forbes magazine, the companies face a potential challenge from a relative giant, Johnson & Johnson, whose drug Procrit, another type of erythropoietin drug, is used to treat anemia in patients who are receiving dialysis for kidney failure or who are being treated for cancer. In October, an arbitrator ruled that Johnson & Johnson was the owner of a group of patents on those drugs.

Affymax said that it thinks the patent is invalid and does not apply to Procrit or peginesatide. Nevertheless, the ruling could allow the sole owner, Johnson & Johnson, to sue Affymax for patent infringement. If Affymax asks a federal court to overturn the decision, this could delay applications and applications in the United States, Canada, Australia, Japan, and Europe.

JASN’s Impact Factor Hits New High

On June 26, 2011, Thomson Reuters released new impact factor calculations for their 2010 Journal Citation Reports. The impact factor is an average composite measure of the frequency with which articles from a peer-reviewed journal are cited over a given two-year period; the journal’s impact factor has risen quickly under the leadership of its current editorial team.

Editor-in-chief Eric G. Neilson, MD, FASN, shared with ASN Kidney News his view of the value of this measure of journal performance. “Impact factor provides an easy way to rank order those journals publishing citable material over a discrete period of time. JASN has the good fortune of having a wonderful pool of authors submitting their best work to a superb group of associate editors who pick great papers relevant to nephrology that happily get cited more often.”

We asked Dr. Neilson what he tells young authors about choosing a journal to submit their manuscript to. “Before submitting a manuscript, they should read carefully through a group of journals to evaluate the quality of their published work and to get a sense of the selection criteria that might apply. The higher a journal’s impact factor, the more competitive and widely read it is likely to be.”

What does Dr. Neilson look for in a manuscript? He encourages authors to tell a compelling story, to try and fit their work into a larger theme, and to provide data that well supports a novel message. No doubt many more will try to do just that as JASN continues its impressive rise.