



Bayer AG  
Investor Relations  
51368 Leverkusen  
Germany  
[www.investor.bayer.com](http://www.investor.bayer.com)

## Investor News

**Not intended for U.S. and UK Media**

---

### **Bayer Receives Approval for Nexavar<sup>®</sup> (sorafenib) in Japan for Treatment of Differentiated Thyroid Cancer**

Approval based on positive data from Phase III DECISION trial, in which sorafenib significantly extended progression-free survival

---

**Leverkusen, June 20, 2014** – Bayer HealthCare announced today that the Ministry of Health, Labor and Welfare (MHLW) in Japan has approved the oral multi-kinase inhibitor Nexavar<sup>®</sup> (sorafenib) for the treatment of patients with unresectable differentiated thyroid carcinoma. The MHLW granted Nexavar orphan drug status for thyroid carcinoma in September 2013.

“The approval of Nexavar in Japan for the treatment of unresectable differentiated thyroid carcinoma fills a significant unmet need for patients who previously lacked therapeutic options for this type of thyroid cancer,” said Dr. Joerg Moeller, Member of the Bayer HealthCare Executive Committee and Head of Global Development. “This is the third indication for Nexavar, which is already approved in more than 100 countries worldwide for hepatocellular carcinoma and advanced renal cell carcinoma, and we are pleased that this cornerstone treatment continues to reach cancer patients across the globe.”

Nexavar was approved for the treatment of progressive, locally advanced or metastatic differentiated thyroid cancer that is refractory to radioactive iodine in the United States in November 2013 and in May 2014 in the European Union.

The approval in Japan is based on data from the Phase III DECISION (stuDy of sorafEnib in loCally advanced or metastatic patientS with radioactive Iodine refractory thyrOid caNcer) trial. In the study, sorafenib significantly extended progression-free survival (PFS), the primary endpoint of the study, compared to placebo (HR=0.59 [95% CI, 0.46-0.76]; p<0.001), which represents a 41 percent reduction in the risk of disease progression or death for patients who received sorafenib compared to placebo-treated

patients. The median PFS was 10.8 months in patients treated with sorafenib, compared to 5.8 months in patients receiving placebo.

The safety and tolerability profile of sorafenib in patients in the trial was generally consistent with the known profile of sorafenib. The most common treatment-emergent adverse events in the sorafenib arm were hand-foot skin reaction, diarrhea, alopecia, weight loss, fatigue, hypertension and rash.

### **DECISION Trial Design**

DECISION was an international, multicenter, placebo-controlled study. A total of 417 patients with locally advanced or metastatic, progressive, RAI-refractory, differentiated thyroid cancer (papillary, follicular, Hürthle cell and poorly differentiated) who had received no prior chemotherapy, tyrosine kinase inhibitors, monoclonal antibodies that target VEGF or VEGF receptor, or other targeted agents for thyroid cancer were randomized to receive 400 mg of oral sorafenib twice daily (207 patients) or matching placebo (210 patients). Ninety-six percent of randomized patients had metastatic disease.

### **About Thyroid Cancer**

Thyroid cancer is the most common endocrine malignancy. There are more than 298,000 new cases of thyroid cancer annually and nearly 40,000 people die from thyroid cancer worldwide each year.

Papillary, follicular (including Hürthle cell) and poorly differentiated types of thyroid cancer are classified as “differentiated thyroid cancer” and account for approximately 94 percent of all thyroid cancers. While the majority of differentiated thyroid cancers are treatable, RAI-refractory locally advanced or metastatic disease is more difficult to treat and is associated with a lower patient survival rate.

### **About Nexavar<sup>®</sup> (sorafenib)**

Nexavar<sup>®</sup> (sorafenib), an oral anti-cancer therapy, is currently approved in more than 100 countries worldwide. In Europe, it is approved for the treatment of hepatocellular carcinoma (HCC); for the treatment of patients with advanced renal cell carcinoma (RCC) who have failed prior interferon-alpha or interleukin-2 based therapy or are considered unsuitable for such therapy; and for progressive, locally advanced or metastatic, differentiated (papillary/follicular/Hürthle cell) thyroid carcinoma, refractory to radioactive iodine.

In preclinical studies, Nexavar has been shown to inhibit multiple kinases thought to be involved in both cell proliferation (growth) and angiogenesis (blood supply) - two important processes that enable cancer growth. These kinases include Raf kinase, VEGFR-1, VEGFR-2, VEGFR-3, PDGFR-B, KIT, FLT-3 and RET.

Nexavar is also being evaluated by Bayer and Onyx, international study groups, government agencies and individual investigators in a range of other cancers.

Nexavar is co-developed by Onyx Pharmaceuticals, Inc., an Amgen subsidiary, and Bayer, except in Japan where Bayer manages all development. The companies co-promote Nexavar in the U.S. Outside of the U.S. Bayer has exclusive marketing rights, and Bayer and Onyx share profits globally, excluding Japan.

### **About Oncology at Bayer**

Bayer is committed to delivering *science for a better life* by advancing a portfolio of innovative treatments. The oncology franchise at Bayer now includes three oncology products and several other compounds in various stages of clinical development. Together, these products reflect the company's approach to research, which prioritizes targets and pathways with the potential to impact the way that cancer is treated.

### **About Bayer HealthCare**

The Bayer Group is a global enterprise with core competencies in the fields of health care, agriculture and high-tech materials. Bayer HealthCare, a subgroup of Bayer AG with annual sales of EUR 18.9 billion (2013), is one of the world's leading, innovative companies in the healthcare and medical products industry and is based in Leverkusen, Germany. The company combines the global activities of the Animal Health, Consumer Care, Medical Care and Pharmaceuticals divisions. Bayer HealthCare's aim is to discover, develop, manufacture and market products that will improve human and animal health worldwide. Bayer HealthCare has a global workforce of 56,000 employees (Dec 31, 2013) and is represented in more than 100 countries. More information is available at [www.healthcare.bayer.com](http://www.healthcare.bayer.com).

Bayer AG, Investor Relations contacts:

Dr. Alexander Rosar (+49-214-30-81013)

Dr. Jürgen Beunink (+49-214-30-65742)

Peter Dahlhoff (+49-214-30-33022)

Judith Nestmann (+49-214-30-66836)

Constance Spitzer (+49-214-30-33021)

Dr. Olaf Weber (+49-214-30-33567)

**Forward-Looking Statements**

This release may contain forward-looking statements based on current assumptions and forecasts made by Bayer Group or subgroup management. Various known and unknown risks, uncertainties and other factors could lead to material differences between the actual future results, financial situation, development or performance of the company and the estimates given here. These factors include those discussed in Bayer's public reports which are available on the Bayer website at [www.bayer.com](http://www.bayer.com). The company assumes no liability whatsoever to update these forward-looking statements or to conform them to future events or developments.