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## Investor News

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### **Regorafenib from Bayer Recommended for Approval in the European Union for the Treatment of Gastrointestinal Stromal Tumors**

Final decision from European Commission expected in the third quarter of 2014

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**Leverkusen, Germany, June 27, 2014** – The oncology compound regorafenib (Stivarga®) from Bayer has been recommended for approval by the European Committee for Medicinal Products for Human Use (CHMP) for the treatment of adult patients with unresectable or metastatic gastrointestinal stromal tumors (GIST) who progressed on or are intolerant to prior treatment with imatinib and sunitinib. The decision of the European Commission on the approval is expected in the third quarter of 2014. Stivarga is already approved in the EU for the treatment of patients with metastatic colorectal cancer (mCRC).

“The recommendation by the CHMP for Stivarga brings us one step closer to fulfilling a serious unmet medical need for patients suffering from this rare but aggressive cancer” said Dr. Joerg Moeller, Member of the Bayer HealthCare Executive Committee and Head of Global Development. “As an oral multi-kinase inhibitor that targets multiple tumor pathways, Stivarga would provide a new option for those patients with GIST who have no other approved treatment alternatives. At Bayer, we are committed to developing treatments that truly make a difference for patients battling the toughest of cancers.”

The CHMP decision is based on the results of the pivotal Phase III GRID trial which showed that regorafenib plus best supportive care (BSC) significantly improved progression-free survival (PFS) compared to placebo plus BSC (HR=0.268 [95% CI 0.185-0.388],  $p < 0.0001$ ) in patients with metastatic and/or unresectable GIST who were previously treated with imatinib and sunitinib. The median PFS was 4.8 months in the regorafenib arm versus 0.9 months in the placebo arm ( $p < 0.0001$ ). The increase in PFS

was consistent independent of patient age, sex, geographic region, prior lines of treatment or ECOG performance status.

The most frequently reported drug-related adverse events in regorafenib-treated patients versus placebo-treated patients, respectively, were: asthenia/fatigue, hand-foot skin reaction (HFSR) / palmar-plantar erythrodysesthesia (PPE), diarrhea, decreased appetite and food intake, hypertension, mucositis, dysphonia, infection, pain (not otherwise specified), decreased weight, gastrointestinal and abdominal pain, rash, fever and nausea. The most serious adverse drug reactions in patients receiving Stivarga are hepatotoxicity, hemorrhage, and gastrointestinal perforation.

Results from the study were presented at the Annual Meeting of the American Society of Clinical Oncology (ASCO) in June 2012 and published in November 2012 in the journal *The Lancet*.

Regorafenib is approved under the brand name Stivarga® in several countries worldwide, including the U.S., Europe and Japan, for the treatment of patients with mCRC. In several countries, including the U.S. and Japan, the product has also been approved for the treatment of GIST.

### **About the GRID Study**

GRID (GIST – Regorafenib In Progressive Disease) was a randomized, double-blind, placebo-controlled, multi-center Phase III study of regorafenib for the treatment of GIST. It randomized 199 patients whose disease had progressed despite prior treatment with imatinib and sunitinib.

Patients were randomized in a 2:1 ratio to receive either regorafenib plus BSC or placebo plus BSC to evaluate efficacy and safety. Treatment cycles consisted of 160 mg regorafenib (or matching placebo) once daily for three weeks on / one week off plus BSC. The primary endpoint was PFS, and secondary endpoints included OS, time to progression, disease control rate, tumor response rate, and duration of response. The safety and tolerability of the two treatment groups were also compared.

### **About Gastrointestinal Stromal Tumors (GIST)**

GIST is the most common form of sarcoma arising from the muscle wall of the gastrointestinal tract. GIST represents a life-threatening malignancy if the disease has spread to other parts of the body (metastasized) or is unable to be surgically removed

with curative intent. GIST affects an estimated 11-20 patients per million per year worldwide.

The discovery of oncogenic KIT kinase mutations in GISTs and the introduction of kinase inhibitor therapies have led to a rapid evolution in the understanding of these tumors. It is now established that 70–80% of GISTs harbor a KIT gene mutation, that these mutations lead to the continued activation of the kinase and that mutant KIT is a clinically important therapeutic target in GIST.

### **About Stivarga® (Regorafenib)**

Stivarga® (regorafenib) is an oral multi-kinase inhibitor that inhibits various kinases within the mechanisms involved in tumor growth and progression – angiogenesis, oncogenesis and the tumor microenvironment. In preclinical studies, Stivarga inhibits several angiogenic VEGF receptor tyrosine kinases that play a role in tumor neoangiogenesis (the growth of new blood vessels). In addition to VEGFR 1-3 it also inhibits various oncogenic and tumor microenvironment kinases including TIE-2, RAF-1, BRAF, BRAFV600, KIT, RET, PDGFR, and FGFR, which individually and collectively impact upon tumor growth, formation of a stromal microenvironment and disease progression.

Stivarga is a compound developed by Bayer. In 2011, Bayer entered into an agreement with Onyx Pharmaceuticals, Inc., an Amgen subsidiary, under which Onyx receives a royalty on all global net sales of Stivarga in oncology.

### **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).

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