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FORM 6-K

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Novartis AG

(Name of Registrant)

Lichtstrasse 35

4056 Basel

Switzerland

(Address of Principal Executive Offices)

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Novartis International AG

Novartis Global Communications

CH-4002 Basel

Switzerland

http://www.novartis.com

- Investor Relations Release -

Phase III trial of Novartis drug Afinitor® met primary endpoint of reducing SEGA tumor size in patients with tuberous sclerosis

- *Largest Phase III study in tuberous sclerosis complex (TSC) showed 35% of patients treated with everolimus had a 50% or greater reduction in SEGA volume versus 0% on placebo(1)*

- *Subependymal giant cell astrocytomas (SEGAs) are non-cancerous brain tumors that can cause life-threatening brain swelling in children and adults with TSC(1),(2),(3),(4)*

- *Study showed clinically meaningful results in secondary endpoints including time to SEGA progression and improvement in skin lesions(1)*

- *This study supports the findings from a separate Phase II study of everolimus which now provides data on some patients up to three years(5)*

Basel, July 8, 2011 Novartis announced today Phase III trial results that showed more than one-third of patients taking Afinitor® (everolimus) tablets* experienced a 50% or greater reduction in the size of their subependymal giant cell astrocytomas (SEGAs), non-cancerous brain tumors associated with tuberous sclerosis complex (TSC)(1),(2),(6). This study, the largest prospective clinical trial to date in this patient population, is being presented on Saturday, July 9 at the International TSC Research Conference in Washington, D.C.

Tuberous sclerosis complex affects approximately one to two million people worldwide and is associated with a variety of resulting disorders including seizures, swelling in the brain (hydrocephalus), developmental delays and skin lesions(2),(6). Also known as tuberous sclerosis (TS), TSC is a genetic disorder that may cause non-cancerous tumors to form in vital organs and can affect many different parts of the body, most commonly the brain and kidney(6),(7). Signs and symptoms of TSC vary depending on which system and which organs are involved(6). SEGAs occur in up to 20% of patients with TSC. In countries where everolimus is not approved, brain surgery is the only treatment option for patients with growing SEGAs(2).

The 117-patient, randomized, placebo-controlled Phase III EXIST-1 (EXamining everolimus In a Study of TSC) trial met its primary endpoint of SEGA response rate, with 35% of patients (27 of 78) receiving everolimus experiencing a 50% or greater reduction in SEGA volume (sum of volumes of all target SEGAs) relative to baseline versus 0% of patients (0 of 39) on placebo ($p<0.0001$)(1).

This study, which included SEGA patients from infancy to adulthood, provides compelling evidence of the impact of everolimus in reducing SEGA size with a tolerability profile consistent with the previous everolimus trial in this treatment setting, said Dr. Sergiusz Jozwiak, a lead EXIST-1 investigator and Professor, Department of Child Neurology, The Children s Memorial Health Institute, Warsaw, Poland. This is very good news for patients and caregivers in many countries who currently may face brain surgery as the only treatment option for growing SEGAs.

Everolimus targets mTOR, a protein that acts as an important regulator of tumor cell division, blood vessel growth and cell metabolism(8). Tuberous sclerosis complex is caused by defects in the *TSC1* and/or *TSC2* genes. When these genes are defective, mTOR activity is increased, which can cause uncontrolled tumor cell growth and proliferation, blood vessel growth and altered cellular metabolism, leading to the formation of non-cancerous tumors throughout the body, including the brain. By inhibiting mTOR activity in this signaling pathway, everolimus may reduce cell proliferation, blood vessel growth and glucose uptake related to SEGA associated with TSC(2),(6).

The positive results seen in the Phase III trial point to the important role of everolimus and mTOR inhibition in SEGA associated with TSC, said Hervé Hoppenot, President, Novartis Oncology. This outcome is welcome news as we continue our research efforts to fully understand the potential of this important treatment option across the wide range of disorders associated with TSC.

The Phase III study supports the findings of the Phase II study used for registration in several countries(1),(5). The extension phase of the Phase II study, which is also being presented at the conference, provides data to support the treatment of patients with SEGA associated with TSC for a duration of up to three years(5).

Regulatory approvals for everolimus have been granted for this patient population as Afinitor in the United States, Canada, Brazil, Guatemala, the Philippines, Columbia and Korea, and as Votubia® in Switzerland. In June, the Committee for Medicinal Products for Human Use (CHMP) adopted a positive opinion for the approval of everolimus for this use in the European Union (EU).

About the EXIST-1 Phase III trial

EXIST-1 is a Phase III randomized, placebo-controlled, double-blind, parallel group, international, multicenter study examining the efficacy and safety of everolimus versus placebo for the treatment of patients with SEGA associated with TSC. Trial patients (median age=9.46, range 0.8-26.6) were randomized to receive either everolimus (n=78) or placebo (n=39) at a daily starting dose of 4.5 mg/m2. By the cut-off date of March 2, 2011, the median treatment duration was 9.6 months (range 5.5-18.1 months) in the everolimus arm and 8.3 months (range 3.2-18.3 months) in the placebo arm. The trial met the primary endpoint of overall SEGA response rate versus placebo(1).

Three key secondary endpoints were also assessed: change in seizure frequency, time to SEGA progression and skin lesion response rate. The analysis of the first secondary endpoint, the change in seizure frequency, was inconclusive. This may have been due to the method of assessment (single 24-hour video electroencephalograms, or EEGs) and a very limited number of patients with evaluable seizures at study entry. In this trial, the impact on seizure frequency was not demonstrated. Another study specifically designed to examine the efficacy of everolimus on seizure response in patients with TSC as the primary endpoint is ongoing(1).

Given the results of the first secondary endpoint, the statistical plan did not provide for a formal analysis of subsequent secondary endpoints(1).

Clinically meaningful differences were observed in time to SEGA progression. Of those patients receiving everolimus, 0% of patients (0 of 78) experienced disease progression (defined as increase in SEGA volume, worsening of non-target SEGAs, appearance of new lesions or new hydrocephalus), while 15% of patients (6 of 39) on placebo progressed(1).

Clinically meaningful differences were also observed in skin lesion response rate. A partial clinical response in skin lesions (corresponding to a 50% or greater improvement) was observed by

Physician Global Assessment in 42% of patients (30 of 72) receiving everolimus, compared with 11% of patients (4 of 38) receiving placebo. No complete responses were observed(1).

Additionally, a subset of patients (n=44) in this trial had angiomyolipomas, non-cancerous kidney tumors associated with TSC(1),(6). As an exploratory endpoint, an angiomyolipoma response (corresponding to a volume reduction of 50% or greater) was observed in 53% of patients (16 of 30) receiving everolimus compared to 0% of patients (0 of 14) on placebo(1).

No adverse event (AE) leading to study drug discontinuation was observed during the study. The most common AEs in the everolimus versus the placebo arm (with an incidence of at least 20% in the everolimus arm) included mouth ulceration (32% vs. 5%), stomatitis (31% vs. 21%), convulsion (23% vs. 26%) and fever (22% vs. 15%). The most common Grade 3 AEs in the everolimus versus placebo arm (with an incidence of at least 5%) were stomatitis (8% vs. 3%), fever (6% vs. 0%) and convulsion (5% vs. 5%). One Grade 4 event of gastroenteritis was reported in the everolimus arm. Adverse events were mostly mild in severity (Grade 1/2) and were largely consistent with the known safety profile of everolimus. The most clinically notable AEs were infections and infestations, which were observed in 72% of patients on everolimus and 67% of patients on placebo(1).

EXIST-1 enrolled 117 patients in 10 countries, including the US, Poland, Russia, Germany, Belgium, Canada, Australia, Italy, the Netherlands and the UK(1),(9).

About the Phase II study

In this prospective, open-label, single-arm study, 28 patients aged three years and above (median age=11, range 3-34) with evidence of SEGA growth received a median daily dose of 5.29 mg/m2. The median treatment duration was 34.2 months (range 4.7-47.1 months). Of the 28 patients in the initial study, 27 were enrolled in the extension phase and 25 were still receiving everolimus at the extension phase cut-off date (December 31, 2010). No patients discontinued due to disease progression, adverse events or study drug use(5).

During this extension phase, reduction in SEGA volume was maintained over time and no patients required surgery or other therapy for SEGA or hydrocephalus. In the study, 78% of patients (7 of 9) who took everolimus for at least three years and 79% of patients (19 of 24) who took everolimus for at least two years experienced a reduction of 30% or greater in the size of their largest SEGA relative to baseline. Additionally, 56% of patients (5 of 9) who took everolimus for at least three years and 50% of patients (12 of 24) who took everolimus for at least two years experienced a reduction of 50% or greater in the size of their largest SEGA relative to baseline(5). These findings were consistent with those previously recorded at six months relative to baseline(2),(5).

The most common AEs (all grades with an incidence of at least 20%) included: stomatitis or mouth sores (86%), upper respiratory tract infection (86%), sinusitis (47%), middle ear infection (36%), diarrhea (32%), fever (32%), cellulitis or acute infection of the deep tissues of skin or muscle (29%), convulsion (29%), gastroenteritis or inflammation of the gastrointestinal tract (29%), allergic rhinitis (29%), acne-like skin inflammation (25%), pharyngitis or inflammation of the pharynx (25%), vomiting (25%), abnormal behavior (21%), cough (21%), dry skin (21%), scratching of the skin (21%), external ear infection (21%) and skin infection (21%). The most common Grade 3 AEs (with an incidence of at least 5%) were stomatitis or mouth sores, convulsion and decreased neutrophil count. In addition, single cases of Grade 3 sinusitis, pneumonia, viral bronchitis, gastroenteritis or inflammation of the gastrointestinal tract, limb abscess, aspiration, cyclic neutropenia, post lumbar puncture syndrome, sleep apnea syndrome and dizziness were reported. A single case of Grade 4 convulsion was reported. Adverse events were mostly Grade 1 (mild) or Grade 2 (moderate) in severity and were consistent with those previously reported at six months(10).

About everolimus

Everolimus is approved in Switzerland as Votubia® (everolimus) tablets for the treatment of patients three years of age and older, with SEGA associated with TS, for whom surgery is not a suitable option. Should everolimus be approved in the EU, the trade name will be Votubia. In the US, Afinitor® (everolimus) tablets is approved to treat patients with SEGA associated with TS who require therapeutic intervention but are not candidates for curative surgical resection. The effectiveness of everolimus is based on an analysis of change in SEGA volume. Clinical benefit such as improvement in disease-related symptoms or increase in overall survival has not been shown.

Afinitor is approved in the EU for the treatment of patients with advanced renal cell carcinoma (RCC) whose disease has progressed on or after treatment with vascular endothelial growth factor (VEGF)-targeted therapy and also in the US and Switzerland for the treatment of patients with advanced RCC after failure of treatment with sunitinib or sorafenib.

Afinitor is approved in the US for the treatment of progressive neuroendocrine tumors of pancreatic origin in patients with unresectable, locally advanced or metastatic disease. The US Food and Drug Administration (FDA) determined that the safety and effectiveness of Afinitor in the treatment of patients with carcinoid tumors have not been established.

In the EU, everolimus is available in different dosage strengths for the non-oncology patient population under the trade name Certican® for the prevention of organ rejection in heart and kidney transplant recipients. In the US, everolimus is available in different dosage strengths under the trade name Zortress® for the prophylaxis of organ rejection in adult patients at low-moderate immunologic risk receiving a kidney transplant.

Everolimus is exclusively licensed to Abbott and sublicensed to Boston Scientific for use in drug-eluting stents.

Not all indications are available in every country. Access to everolimus outside of the approved indications has been carefully controlled and monitored in clinical trials designed to better understand the potential benefits and risks of the compound. Because of the uncertainty of clinical trials, there is no guarantee that everolimus will become commercially available for SEGAs anywhere else in the world.

Important Safety Information about Afinitor

Afinitor can cause serious side effects including lung or breathing problems, infections, and renal failure which could be fatal. Mouth ulcers and mouth sores are common side effects. Afinitor can affect blood cell counts, kidney and liver function, and blood sugar and cholesterol levels. Afinitor may cause fetal harm in pregnant women. Women taking Afinitor should not breast feed.

The most common adverse drug reactions (incidence $\geq$15%) are mouth ulcers, diarrhea, feeling weak or tired, skin problems (such as rash or acne), infections, nausea, swelling of extremities or other parts of the body, loss of appetite, headache, inflammation of lung tissue, abnormal taste, nose bleeds, inflammation of the lining of the digestive system, weight decreased and vomiting. The most common Grade 3-4 adverse drug reactions (incidence $\geq$2%) are mouth ulcers, feeling tired, low white blood cells (a type of blood cell that fights infection), diarrhea, infections, inflammation of lung tissue and diabetes. Cases of hepatitis B reactivation and blood clot in the lung have been reported.

Disclaimer

The foregoing release contains forward-looking statements that can be identified by terminology such as is being presented, may, can, will, potential, ongoing, or similar expressions, or by express or implied discussions regarding potential new indications or labeling for everolimus or regarding potential future revenues from everolimus. You should not place undue reliance on

these statements. Such forward-looking statements reflect the current views of management regarding future events, and involve known and unknown risks, uncertainties and other factors that may cause actual results with everolimus to be materially different from any future results, performance or achievements expressed or implied by such statements. There can be no guarantee that everolimus will be submitted or approved for any additional indications or labeling in any market, or at any particular time. Nor can there be any guarantee that everolimus will achieve any particular levels of revenue in the future. In particular, management s expectations regarding everolimus could be affected by, among other things, unexpected regulatory actions or delays or government regulation generally; unexpected clinical trial results, including unexpected new clinical data and unexpected additional analysis of existing clinical data; the company s ability to obtain or maintain patent or other proprietary intellectual property protection; government, industry and general public pricing pressures; competition in general; the impact that the foregoing factors could have on the values attributed to the Novartis Group s assets and liabilities as recorded in the Group s consolidated balance sheet, and other risks and factors referred to in Novartis AG s current Form 20-F on file with the US Securities and Exchange Commission. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those anticipated, believed, estimated or expected. Novartis is providing the information in this press release as of this date and does not undertake any obligation to update any forward-looking statements contained in this press release as a result of new information, future events or otherwise.

About Novartis

Novartis provides healthcare solutions that address the evolving needs of patients and societies. Focused solely on healthcare, Novartis offers a diversified portfolio to best meet these needs: innovative medicines, eye care, cost-saving generic pharmaceuticals, consumer health products, preventive vaccines and diagnostic tools. Novartis is the only company with leading positions in these areas. In 2010, the Group s continuing operations achieved net sales of USD 50.6 billion, while approximately USD 9.1 billion (USD 8.1 billion excluding impairment and amortization charges) was invested in R&D throughout the Group. Headquartered in Basel, Switzerland, Novartis Group companies employ approximately 119,000 full-time-equivalent associates and operate in more than 140 countries around the world. For more information, please visit http://www.novartis.com.

Novartis is on Twitter. Sign up to follow @Novartis at http://twitter.com/novartis.

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(10) Data on file.

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Novartis Media Relations

Central media line : +41 61 324 2200

Eric Althoff

Novartis Global Media Relations

+41 61 324 7999 (direct)

+41 79 593 4202 (mobile)

eric.althoff@novartis.com

Nicole Riley

Novartis Oncology

+1 862 778 3110 (direct)

nicole.riley@novartis.com

e-mail: media.relations@novartis.com

For Novartis multimedia content, please visit www.thenewsmarket.com/Novartis

For questions about the site or required registration, please contact: journalisthelp@thenewsmarket.com.

Novartis Investor Relations

Central phone:	+41 61 324 7944		
Susanne Schaffert	+41 61 324 7944	**North America:**	
Pierre-Michel Bringer	+41 61 324 1065	Richard Jarvis	+1 212 830 2433
Thomas Hungerbuehler	+41 61 324 8425	Jill Pozarek	+1 212 830 2445
Isabella Zinck	+41 61 324 7188	Edwin Valeriano	+1 212 830 2456

e-mail: investor.relations@novartis.com

e-mail: investor.relations@novartis.com

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Novartis AG

Date: July 8, 2011

By: /s/ MALCOLM B. CHEETHAM

Name: Malcolm B. Cheetham
Title: Head Group Financial Reporting and Accounting