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## **FTY720, a novel oral therapy in development for MS, shows sustained benefits for the majority of patients after three years of treatment**

- *Phase II study extension shows 68-73% of patients with multiple sclerosis remained relapse-free after three years of treatment with oral FTY720<sup>1</sup>*
- *New data demonstrate 89% of patients free from active brain lesions – the injury caused by MS – three years after starting treatment<sup>1</sup>*
- *MS, a devastating disease causing progressive disability, affects 2.5 million people worldwide including many young adults<sup>2</sup>*
- *FTY720 regulatory filings planned before end of 2009 in US and EU*

**Basel, April 15, 2008** — The investigational oral therapy FTY720 (fingolimod) continues to demonstrate sustained benefits in patients with multiple sclerosis (MS) after three years of treatment, according to new clinical data presented today from an ongoing Phase II study extension<sup>1</sup>.

Results showed that 73% of patients who began the study on FTY720 5 mg remained free from relapses after three years, and 68% of those who began the study on FTY720 1.25 mg remained relapse-free<sup>1</sup>. The figures after two years of treatment were 77% and 75% respectively<sup>3</sup>. On the basis of comparable efficacy and a better safety profile, all patients have been transferred to FTY720 1.25 mg in the study extension.

The 36-month data also showed an average annualized relapse rate of 0.20<sup>1</sup>, equivalent to one relapse in five years, while 89% of patients were free of the active brain lesions characteristic of MS as measured by magnetic resonance imaging (MRI)<sup>1</sup> three years after starting treatment.

The results were presented at the 60th annual meeting of the American Academy of Neurology (AAN) in Chicago, USA.

“These new data demonstrate the exciting potential for FTY720 to reduce relapse rates in MS patients with a convenient once-daily pill,” said Professor Giancarlo Comi, Professor of Neurology at the University Vita-Salute San Raffaele in Milan, Italy. “An effective oral treatment would be a significant breakthrough in the management of MS. That is why these results are encouraging – because we are seeing substantial benefits of FTY720 maintained over time in this clinical trial.”

FTY720 is a novel, once-daily, oral treatment in worldwide Phase III clinical development for the treatment of relapsing-remitting MS, the form of the disease that affects approximately 85% of people diagnosed with MS<sup>4</sup>.

More than 2.5 million people worldwide are affected by MS<sup>2</sup>, the most common non-traumatic cause of neurological disability in young people<sup>5</sup>. Regulatory filings for FTY720 are expected in the US and EU before the end of 2009.

“The FTY720 Phase III program is the largest conducted in MS to date, and demonstrates our long-term commitment to the field of MS therapy,” said Trevor Mundel, MD, Head of Global Development Functions at Novartis Pharma AG. “It is especially encouraging to see that FTY720 continues to demonstrate sustained efficacy by helping the majority of patients to remain free of relapses as the study progresses.”

FTY720 has the potential to be the first in a new class of therapies for MS that act on inflammation by modulating sphingosine-1-phosphate receptors (S1P-R), reducing the number of inflammatory immune cells, called lymphocytes, from reaching the brain. In addition, FTY720 reaches the brain and S1P-Rs are present on central nervous system (CNS) tissue, so FTY720 may have a direct beneficial effect on MS within the CNS. This additional potential mechanism of action is supported by new preclinical data being presented at AAN<sup>6,7</sup>.

The Phase II study presented at AAN began with a six-month placebo-controlled phase in which 281 patients with relapsing MS received placebo, FTY720 1.25 mg or FTY720 5 mg once-daily. This was followed by a long-term extension in which all patients took FTY720. At the end of three years, 173 patients were in the extension, which is still ongoing. The study has been conducted in Canada and 10 European countries.

Results from the six-month placebo-controlled trial showed that FTY720 reduced relapse rates by more than 50% compared to placebo<sup>5</sup>. Current first-line therapies for MS reduced relapse rates by 30-35% on average in two-year studies<sup>5</sup>.

Among patients originally on placebo who converted to active therapy in the extension, 51% were free of relapses at three years<sup>1</sup>. The figure at two years was 57%<sup>3</sup>.

FTY720 has been generally well tolerated throughout the three years of the Phase II study and its extension, with the most common adverse events being nasopharyngitis, headache, fatigue and influenza<sup>1</sup>. Increases in alanine aminotransferase (liver enzymes) were observed in 16% of patients. Dermatological screening of patients was implemented in the extension after a small number of cases of localized skin malignancies were reported.

Novartis continues to study FTY720 in an ongoing, blinded Phase III clinical trial program. This program includes comprehensive monitoring that will further assess and characterize the safety profile of FTY720.

MS is caused by the destruction of myelin, which helps neurons carry electrical signals in the brain<sup>8</sup>. The disease causes problems with muscle control and strength, vision, balance, sensation and mental function<sup>8</sup>. MS typically presents in relapsing forms involving acute self-limiting attacks of neurological dysfunction (or “relapses”) followed by complete or partial restoration of functions.

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The foregoing release contains forward-looking statements that can be identified by terminology such as “planned”, “potential”, “would”, “encouraging”, “expected”, “commitment”, “may”, “continues”, “will”, or similar expressions, or by express or implied discussions regarding potential future regulatory filings or marketing approvals for FTY720 or regarding potential future revenues from FTY720. Such forward-looking statements reflect the current views of the Company regarding future events, and involve known and unknown risks, uncertainties and other factors that may cause actual results with FTY720 to be materially different from any future results, performance or

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## **Novartis Media Relations**

### **Beatrix Benz**

Novartis Global Media Relations  
+41 61 324 7999 (direct)  
+41 79 618 7748 (mobile)  
beatrix.benz@novartis.com

### **Julie Morrow**

Novartis Pharma Communications  
+41 61 324 1135 (direct)  
+41 79 596 4636 (mobile)  
julie.morrow@novartis.com

e-mail: media.relations@novartis.com

## **Novartis Investor Relations**

**Ruth Metzler-Arnold** +41 61 324 9980  
**Katharina Ambuehl** +41 61 324 5316  
**Pierre-Michel Bringer** +41 61 324 1065  
**John Gilardi** +41 61 324 3018  
**Jason Hannon** +41 61 324 2152  
**Thomas Hungerbuehler** +41 61 324 8425  
**Isabella Zinck** +41 61 324 7188

### **North America Office**

**Richard Jarvis** +1 212 830 2433  
**Jill Pozarek** +1 212 830 2445  
**Edwin Valeriano** +1 212 830 2456

Central phone no: +41 61 324 7944  
Fax no: +41 61 324 8444  
e-mail: investor.relations@novartis.com

Fax no: +1 212 830 2405  
e-mail: investor.relations@novartis.com