



ANA598 DEMONSTRATES SVR12 IN 100% OF FIRST GROUP OF HCV PATIENTS RANDOMIZED TO STOP ALL TREATMENT AT WEEK 24

Benefit of ANA598 Post Therapy with IFN/RBV Persists in 6 of 6 Patients

Company to Review Data During Q2 Financial Results Call at 8:30 AM EDT Today

SAN DIEGO, July 29, 2010 -- Anadys Pharmaceuticals, Inc. (Nasdaq: ANDS) today announced that six of six patients (100%) in the ANA598 200 mg twice daily (bid) arm who were randomized to stop all treatment at Week 24 in an ongoing Phase II trial maintained undetectable levels of virus 12 weeks after stopping treatment, referred to as Sustained Virological Response 12, or SVR12.

The Company also reported that all available patients from the ANA598 200 mg arm who were previously reported to have undetectable levels of virus at Week 24 and continued on pegylated interferon and ribavirin (current standard of care, or SOC) also maintained undetectable levels of virus at Week 36. In addition, all patients from the ANA598 400 mg arm who were previously reported to have undetectable levels of virus at Week 12 and continued on SOC maintained undetectable levels of virus at Week 24. ANA598, Anadys' direct-acting antiviral or DAA, is being developed to treat hepatitis C and is in an ongoing Phase II trial in combination with pegylated interferon and ribavirin.

"The SVR12 data reported today for ANA598 are highly encouraging," said Steve Worland, Ph.D., President and CEO of Anadys. "These data illustrate the potential for HCV patients to be successfully treated with shortened courses of treatment, reflecting the continuing benefit of ANA598 post-therapy. We believe these data, coupled with the excellent barrier to resistance demonstrated in this trial as well as the favorable safety and tolerability, confirm ANA598's position as one of the most attractive agents in Phase II HCV development today."

The six patients who stopped all treatment at Week 24 were part of an investigation of response-guided treatment duration for ANA598 in which patients who had achieved undetectable levels of virus (<15 IU/mL) at Weeks 4 and 12 were randomized 1:1 to stop all treatment at Week 24 or Week 48. In addition to the six patients who stopped treatment at Week 24, six patients in the 200 mg bid arm are continuing to receive SOC alone through Week 48 for comparison purposes. Additionally, 14 patients from the ANA598 400 mg bid arm and 4 patients from the control arm (receiving placebo plus SOC) met the stopping criteria and have been randomized to stop all treatment at Week 24 or 48. The initial post-treatment results from these latter arms are expected later this year for those patients who stopped therapy at Week 24.

Conference Call Webcast and Slides

Anadys will hold a conference call and webcast today, Thursday, July 29, 2010 at 8:30 a.m. Eastern Daylight Time to discuss the post-treatment results from the ongoing Phase II combination study and Anadys' second quarter 2010 financial results. A live webcast of the call, including accompanying slides, will be available online at www.anadyspharma.com. A telephone replay with slides will also be available approximately one hour after completion of the call. To access the telephone replay, dial 888-286-8010 (domestic) or 617-801-6888 (international), passcode 28631163. The webcast and telephone replay will be available through August 12, 2010.

Phase II Combination Study

In the ongoing Phase II study, approximately 90 treatment-naïve genotype 1 HCV patients have received ANA598 or placebo in combination with Pegasys® (peginterferon alfa-2a) and Copegus® (ribavirin, USP) for 12 weeks at dose levels of 200 mg bid or 400 mg bid, each with a loading dose of 800 mg bid on day one. After week 12, patients are to continue receiving SOC. Patients who achieved undetectable levels of virus at weeks 4 and 12 were randomized to stop all treatment at week 24 or 48. The primary endpoint of the study is the proportion of patients who achieve undetectable levels of virus at week 12 (defined as complete Early Virological Response, or cEVR). Additional endpoints include safety and tolerability as well as the proportion of patients with undetectable levels of virus at week 4 (defined as Rapid Virological Response, or RVR). Patients will be followed for 24 weeks after stopping therapy to determine the rate of Sustained Virological Response, or SVR. Approximately 90 patients have been enrolled in this study – with approximately 30 patients receiving ANA598 plus SOC at each dose level and 30 patients receiving placebo plus SOC. The study is being managed by the Duke Clinical Research Institute (DCRI) and is being conducted at a number of clinical sites in the United States.

About ANA598

ANA598, a direct-acting antiviral or DAA, is a non-nucleoside inhibitor of the HCV RNA polymerase and is wholly owned by Anadys. In an ongoing Phase II study in which HCV patients received ANA598 at 200 mg bid or 400 mg bid in combination with interferon and ribavirin for twelve weeks, both dose levels showed comparable cEVR rates of 73-75% and a favorable safety profile. In a previous Phase I study, ANA598 demonstrated potent antiviral activity, including median end-of-treatment declines in viral load ranging from 2.4 to 2.9 log₁₀ in a three day monotherapy study in treatment-naïve genotype 1 patients. ANA598 has also demonstrated a very favorable resistance profile.

Anadys has completed two long-term chronic toxicology studies of ANA598 (26 weeks duration in rats and 39 weeks duration in monkeys). The No Observed Adverse Effect Level, or NOAEL, is 1000 mg/kg, the highest dose tested, in both the rat and monkey. The completed toxicology studies support the ongoing Phase II clinical study as well as future clinical studies of longer duration.

Anadys has presented *in vitro* data supporting the use of ANA598 in combination with interferon-alpha as well as with other anti-HCV agents currently in development that act through diverse mechanisms. In particular, data has shown that ANA598 is synergistic *in vitro* with interferon-alpha as well as representative HCV protease inhibitors, polymerase inhibitors, NS5A inhibitors and cyclophilin inhibitors. *In vitro* combination treatment at clinically relevant concentrations of ANA598 with interferon-alpha as well as DAAs from multiple classes results in clearance of HCV RNA from cells rather than selection of resistant isolates. Furthermore, ANA598 retains full activity *in vitro* against mutations conferring resistance to protease inhibitors, nucleoside polymerase inhibitors and non-nucleoside polymerase inhibitors that act at binding sites distinct from that of ANA598, while protease and nucleoside polymerase inhibitors retain full activity *in vitro* against mutations conferring resistance to ANA598.

ANA598 has received Fast Track Status from the FDA for the treatment of chronic hepatitis C.

Safe Harbor Statement

Statements in this press release that are not strictly historical in nature constitute "forward-looking statements." Such statements include, but are not limited to, references to (i) ANA598's initial SVR12 profile based on the results from the six patients in this first group; (ii) the potential for HCV patients to be successfully treated with shortened courses of treatment, reflecting the continuing benefit of ANA598 post-therapy; (iii) the belief that ANA598 is one of the most attractive agents in Phase II HCV development today; (iv) the expected timing for post-treatment

results from the other dose groups; and (v) the ability for patients to achieve an SVR in the Phase II combination study. Such forward-looking statements involve known and unknown risks, uncertainties and other factors, which may cause Anadys' actual results to be materially different from historical results or from any results expressed or implied by such forward-looking statements. For example, the results of preclinical and early clinical studies may not be predictive of future results, and Anadys cannot provide any assurances that ANA598 will not have unforeseen safety issues or will continue to have favorable results as the Phase II trial progresses. In addition, Anadys' results may be affected by competition from other biotechnology and pharmaceutical companies, its effectiveness at managing its financial resources, its ability to enter into transactions around its product candidates, its ability to successfully develop and market products, difficulties or delays in its preclinical studies or clinical trials, difficulties or delays in manufacturing its clinical trials materials, the scope and validity of patent protection for its products, regulatory developments and its ability to obtain additional funding to support its operations. Risk factors that may cause actual results to differ are more fully discussed in Anadys' SEC filings, including Anadys' Form 10-K for the year ended December 31, 2009, Form 10-Q for the quarter ended March 31, 2010 and Form 8-K filed on May 26, 2010. All forward-looking statements are qualified in their entirety by this cautionary statement. Anadys is providing this information as of this date and does not undertake any obligation to update any forward-looking statements contained in this document as a result of new information, future events or otherwise.

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