

INNATE PHARMA MOVES FORWARD ANTI-KIR MONOCLONAL ANTIBODY IPH 2101 DEVELOPMENT WITH STUDY EXTENSION IN ACUTE MYELOID LEUKEMIA

- Other Phase I/II or IIa trials are planned with this drug candidate
- In the context of the French new "anti-cancer plan" announcement, IPH 2101 was presented to government officials

Marseilles, France, November 2, 2009

Innate Pharma (the "Company" - Euronext Paris: FR0010331421 - IPH) announces today that it has received approval from AFSSaPS (the French regulatory authorities) to start an extension of the Phase I clinical trial with IPH 2101, a monoclonal antibody potentiating NK cells antitumoral activity, in patients with acute myeloid leukemia ("AML").

This trial extension calls for the enrolment of an additional cohort of twelve patients in complete remission after their first-line treatment for AML. The Phase I study has shown very good results in terms of safety and pharmacodynamic activity with repeated administration of IPH 2101. Based on these encouraging results, the objective of the trial extension is to confirm these data in a larger cohort of patients, as well as to document disease-free survival ("DFS") in this population and is part of Innate Pharma's plan to obtain early efficacy results for IPH 2101 in AML.

The Phase II program in multiple myeloma ("MMy") with this agent has recently started with the previously announced Phase IIa trial evaluating IPH 2101 as a single agent in maintenance of response for MMy patients. The Company intends to initiate additional Phase I/II or IIa trials with IPH 2101, including one in patients with relapsed myeloma, in combination with the standard of care, and one in smoldering myeloma, the early stage of the multiple myeloma disease ("pre-myeloma").

"We believe that IPH 2101 could extend the duration of remission without increasing the toxicity in AML patients" said Hervé Brailly, CEO of Innate Pharma. He added: "IPH 2101 program should generate data by 2011-2013, potentially leading Innate Pharma to start registration trials in 2013."

"Acute myeloid leukemia is a devastating disease, notably for elderly patients, with a 5-year survival rate of 5%-15%," said Dr. Norbert Vey (Hematology Department, Paoli Calmettes Institute, Marseille, France), lead investigator of the trial. He added: "If IPH 2101 shows an improvement of disease-free survival in the extension trial, it could rapidly be evaluated in a registration trial".

The French President, Mr. Nicolas Sarkozy, presented today the new French "cancer plan" and visited the Paoli-Calmettes Institute, one of France leading anti-cancer centres. During this visit, IPH 2101 was presented by representatives from Paoli-Calmettes Institute as a case study of a collaborative work between an anti-cancer centre, academic labs and an industry player (Innate Pharma), leading to the acceleration of therapeutic innovation in oncology.



About the Phase I trial in acute myeloid leukemia (IPH 2101-101 and extension IPH 2101-102):

IPH 2101-101 was a Phase I trial evaluating the safety, tolerability and pharmacological profile of single dose IPH 2101 in elderly AML patients in complete remission after first induction and consolidation treatment. The trial featured a dose-escalation protocol with seven dose levels (from 0.0003 to 3 mg/kg with 3 patients per dose level). The objective was to determine a safe and pharmacologically active dose.

Twenty-three patients were enrolled in the study. Preliminary data for these patients revealed good tolerance at all tested doses of IPH 2101, with rare, transient and moderate adverse events. Drug-related adverse events were mostly fever, rash and pruritus. The Maximum Tolerated Dose has not been reached.

A clear relationship between dose/ blood concentration/ receptor occupancy was observed, in accordance with preclinical models and with low inter-patient variability. The full receptor occupancy objective was met. These results were presented at the 2009 ASCO meeting (the poster is available on the company's website - www.innate-pharma.com, in the IPH 2101/AML section).

Patients from the Phase I trial who have not relapsed at the end of their treatment cycle can enter an extension study with repeated administrations (IPH 2101-102).

IPH 2101-102 is now being extended with an additional cohort of 12 patients who will receive repeated administration of IPH 2101 at a dose of 1mg/kg dose. The objective of this trial extension is to confirm on a larger AML patient population the safety and the pharmacodynamic properties of repeated doses of IPH 2101. The trial could also provide activity data on remission duration.

Safety and pharmacodynamic data from the Phase I trial in AML were reported at the 2009 ASCO meeting last June. New data from this trial will be reported at the upcoming American Society of Hematology ("ASH") meeting (New Orleans, USA, 5-8 December 2009), in an oral presentation by Dr. Norbert Vey (Hematology Department, Paoli Calmettes Institute, Marseille, France), lead investigator of the trial. Two other scientific presentations (posters) on IPH 2101 will also be made during this meeting.

About IPH 2101:

IPH 2101 is a fully human anti-KIR monoclonal antibody which potentiates NK cells' anti-tumoral activity by blocking their inhibitory receptors.

This cancer therapeutic approach has been indirectly validated by the work of Professor Andrea Velardi's research group at the University of Perugia in Italy (first published in 2002 and regularly updated since then). The work shows that in bone marrow transplantation for patients suffering from myeloid leukemia or multiple myeloma, grafted NK cells lacking functional KIR (inhibitory) receptors demonstrate high anti-tumoral activity - resulting in significantly higher patient survival rates (for more details, see www.innate-pharma.com, in the IPH 2101 section and in the $\rm I^2$ section of the newsletter to shareholders n°5 available in the document center of the company website).)

IPH 2101 was listed as one of the 30 most promising cancer investigational drugs by R&D Directions magazine (2008).



About acute myeloid leukemia ("AML"):

Acute myeloid leukemia is one of the most common types of leukemia in adults in the United States and Europe. 13,290 new cases of AML were diagnosed in the United States in 2008, accounting for more than 30% of all leukemias (source: American Cancer Society). The incidence of AML is low below the age of 40 but increases progressively with age, from approximately 1 per 100,000 at 40 to more than 15 per 100,000 at 75 and over. Most patients are diagnosed with AML after the age of 65 (Source: SEER Cancer Statistics Review, 2003).

In elderly patients, the prognosis for AML is very unfavorable, with a 5-year survival rate of about 5%-15%. Although the complete treatment response rate is 50 to 60%, most patients relapse rapidly.

At present, the usual induction therapy (aimed at reducing the leukemic cell burden) is chemotherapy. One of the post-remission therapies is stem cell transplantation.

Successful treatment is far less frequent in elderly AML patients than in younger patients. Therefore, there is a need for an efficient drug with a better safety profile than existing AML treatment regimens - especially for elderly patients.

About natural killer (NK) cells:

Natural killer cells are a type of white blood cell from the lymphocyte family, which also includes T cells and B cells.

These NK cells are present in large numbers in the bloodstream (accounting for up to 10% of circulating lymphocytes) and form part of the so-called innate immune system - the body's first line of defense against pathogens.

Natural killer cells are controlled by stimulatory and inhibitory signals received by surface receptors and can kill both malignant and virally-infected cells. They also play a key role in the control of inflammatory reactions and in the triggering and regulation of long-term adaptive immune responses.



About Innate Pharma:

Innate Pharma S.A. ("the company") is a clinical-stage biopharmaceutical company developing first-in-class immunotherapy drugs for cancer and other severe diseases. The company was incorporated in 1999 and listed on NYSE-Euronext in Paris in 2006. It currently has seven proprietary drug candidates in development (two of which are in Phase II clinical trials) and two programs out-licensed to Novo Nordisk A/S.

Innate Pharma is based in Marseilles, France, and had 84 employees as at September 30, 2009.

Learn more about Innate-Pharma at www.innate-pharma.com.

Practical Information about Innate Pharma shares:

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