

innate pharma

FIRST PATIENT TREATED IN PHASE I/II TRIAL WITH IPH2201 IN OVARIAN CANCER

- Trial conducted in Canada under NCIC sponsorship
- Program rollout on track

Marseille, France, September 28, 2015

Innate Pharma SA (the "Company" - Euronext Paris: FR0010331421 - IPH) today announced that the first patient was treated in the Phase I/II trial testing IPH2201, a first-in-class NKG2A checkpoint inhibitor, as a single agent in platinum resistant or sensitive patients with high grade ovarian cancer. The trial is sponsored by NCIC Clinical Trials Group and conducted in Canada. Thirty-eight (38) patients are planned to be enrolled.

Pierre Dodion, Chief Medical Officer of Innate Pharma, said: "There is evidence to suggest that the immune system plays a key role in ovarian cancer. Furthermore, there is a body of data indicating that ovarian cancers may at least partly escape immune surveillance via expression of HLA-E, the ligand of NKG2A. Once a patient relapses after first line treatment, the disease is ultimately fatal in virtually all cases. In addition, the development of new active agents in ovarian cancer has been slow. We are therefore very enthusiastic to test IPH2201 in patients with such a high medical need".

This is the second out of four trials announced by Innate Pharma, included in the frame of the global co-development and commercialization agreement signed with AstraZeneca for IPH2201 in April 2015. The first trial (IPH2201-201) is an open label Phase II trial testing IPH2201 as a single agent in a pre-operative setting of squamous cell carcinoma of the oral cavity (OCSCC). The first patient was treated at the Charité Comprehensive Cancer Center (CCCC), Berlin, Germany, in December 2014.

As part of Innate's program, two further trials, testing IPH2201 in combination with ibrutinib in patients with Chronic Lymphocytic Leukemia, and with cetuximab in patients with Head and Neck cancer, will start in 2015. The initial development plan also includes Phase II combination clinical trials with IPH2201 and durvalumab (MEDI4736), an anti-PD-L1 immune checkpoint inhibitor, in solid tumors, which will be performed by AstraZeneca.

About the Phase I/II trial of IPH2201 in ovarian cancer (study IND.221):

This Phase I/II trial is an open-label, multicentre, dose ranging study of single agent IPH2201 administered i.v. every 2 weeks in patients with advanced/metastatic/recurrent platinum sensitive or resistant high-grade serous carcinoma of ovarian, fallopian tube or peritoneal origin. In the first part of the study, a total of 18 patients (6/dose level) will be randomized to one of 3 dose levels: 1 mg/kg, 4 mg/kg and 10 mg/kg. The recommended Phase II dose (RP2D) will be determined based on toxicity, pharmacokinetics and pharmacodynamics data. Thereafter, a total of 20 patients (10/cohort) will be registered to two cohorts (platinum sensitive or resistant) and will receive IPH2201 at the RP2D, as determined in Part 1 above.

The objectives of the second part of the trial are to perform a preliminary assessment of the efficacy (measured by the response rate) of IPH2201, as well as of its safety, pharmacokinetics, pharmacodynamics and immunogenicity. Many patients with ovarian cancer suffer from ascites, which will allow documentation of the pharmacological effects of IPH2201.



innate pharma

The rationale of the trial is based on the frequent (approximately 70 to 80% of the patients) upregulation of HLA-E, the ligand of NKG2A, in ovarian cancer (Gooden, OncoImmunol, 2012). Furthermore, HLA-E overexpression is a poor prognostic factor in gynecologic tumors (Gooden, PNAS, 2011). Additionally, the presence of tumor-infiltrating lymphocytes correlates with improved outcome (Zhang, N Engl J Med, 2003; Sato, PNAS, 2005) especially in those cancers with high HLA-E expression (Gooden, PNAS, 2011). Binding of IPH2201 to NGK2A blocks the HLA-E driven inhibition of NK and CD8+ cells. Thus, treatment with IPH2201 may stimulate both innate and acquired immunity that could lead to clinical and pharmacological antitumor activity. In a Phase I dose-escalation safety trial, IPH2201 was found to have a safe and well-tolerated profile.

About Ovarian Cancer:

Ovarian cancers represent around 4% of all cancers in women (overall incidence: 12/100,000; incidence in 65-69 years old women: 61/100,000). Ovarian cancer is the leading cause of death in gynecologic cancers and the fifth most common site of cancer. High Grade Serous Carcinoma ("HGSC") of the ovary is the most common subtype of all ovarian cancers representing nearly 60% of all cases. Given the absence of effective screening strategies, HGSC of the ovary is typically diagnosed in advanced stages (stages III and IV). While survival has been prolonged by multimodality treatment (extensive surgery and multiagent chemotherapy), cure remains elusive for the majority of patients with stage III and IV disease with an overall 5-year survival rate of around 30%.

Platinum resistant disease (defined as relapse within 6 months after platinum chemotherapy) is associated with a poor response to salvage therapy (response rate < 15%) and a particularly poor prognosis (median survival 12-18 months). Although the outlook is better for patients with disease which is considered to be platinum sensitive, eventually multiagent resistance develops. Overall, recurrent ovarian cancer remains a significant unmet medical need.

About IPH2201:

IPH2201 is a first-in-class immune checkpoint inhibitor targeting NKG2A receptors expressed on tumor infiltrating cytotoxic CD8 T lymphocytes and NK cells.

NKG2A is an inhibitory receptor binding HLA-E. By expressing HLA-E, cancer cells can protect themselves from killing by NKG2A⁺ immune cells. HLA-E is frequently up-regulated on cancer cells of many solid tumors or hematological malignancies. IPH2201, a humanized IgG4, blocks the binding of NKG2A to HLA-E allowing activation of NK and cytotoxic T cell responses. Hence, IPH2201 may re-establish a broad anti-tumor response mediated by NK and T cells. IPH2201 may also enhance the cytotoxic potential of other therapeutic antibodies.

IPH2201 is partnered with AstraZeneca and MedImmune, the Company's global biologics research and development arm, through a co-development and commercialization agreement. The initial development plan includes: Phase II combination clinical trials with durvalumab (MEDI4736) in solid tumors; multiple Phase II trials planned by Innate Pharma to study IPH2201 both as monotherapy and in combination with currently approved treatments across a range of cancers; and the development of associated biomarkers. As previously announced, under the terms of this agreement, Innate Pharma is eligible to cash payments of up to \$1.275 billion as well as double digit royalties on sales. In addition to the initial payment of \$250 million to Innate Pharma, AstraZeneca will pay a further \$100 million prior to initiation of Phase III development, as well as additional regulatory and sales-related milestones of up to \$925 million. AstraZeneca will book all sales and will pay Innate Pharma double-digit royalties on net sales. The arrangement includes the right for Innate Pharma to co-promote in Europe for a 50% profit share in the territory.



innate pharma

About the NCIC Clinical Trials Group (NCIC CTG)

The NCIC CTG is the only Canadian cooperative cancer trials group conducting the entire range of cancer trials from early phase studies to large international randomized controlled trials across all cancer types. Its primary mission is to assess the effectiveness of interventions to prevent the development of cancer or improve the care of those patients who do develop cancer. NCIC CTG trials have led to improved outcomes for cancer patients. It is a national research program of the Canadian Cancer Society. The NCIC CTG's Central Operations and Statistics Office is located at Queen's University in Kingston, Ontario, Canada.

About Innate Pharma:

Innate Pharma S.A. is a biopharmaceutical company discovering and developing first-in-class therapeutic antibodies for the treatment of cancer and inflammatory diseases.

Its innovative approach has translated into major alliances with leaders in the biopharmaceutical industry such as Bristol-Myers Squibb, AstraZeneca and Novo Nordisk A/S.

The Company has two clinical-stage programs in immuno-oncology, a new therapeutic field that is changing cancer treatment by enhancing the capability of the body's own immune cells to recognize and kill cancer cells. Innate Pharma's science also has potential in chronic inflammatory diseases.

Listed on Euronext-Paris, Innate Pharma is based in Marseille, France, and had 110 employees as at June 30, 2015.

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

Practical Information about Innate Pharma shares:

ISIN code FR0010331421

Ticker code IPH

Disclaimer:

This press release contains certain forward-looking statements. Although the company believes its expectations are based on reasonable assumptions, these forward-looking statements are subject to numerous risks and uncertainties, which could cause actual results to differ materially from those anticipated. For a discussion of risks and uncertainties which could cause the company's actual results, financial condition, performance or achievements to differ from those contained in the forward-looking statements, please refer to the Risk Factors ("Facteurs de Risque") section of the *Document de Reference* prospectus filed with the AMF, which is available on the AMF website or on Innate Pharma's website.

This press release and the information contained herein do not constitute an offer to sell or a solicitation of an offer to buy or subscribe to shares in Innate Pharma in any country.

For additional information, please contact:

Innate Pharma

Laure-Hélène Mercier Director, Investor Relations Tel.: +33 (0)4 30 30 30 87 investors@innate-pharma.com

ATCG Press

Céline Bouquerel (France) Mob: +33 (0)6 29 97 71 52 Jean-Medhi Grangeon (ROW) Mob: +33 (0)6 62 22 00 24 presse@atcg-partners.com