PRESS RELEASE

innate pharma

NEW DATA PRESENTED AT AACR SUPPORT THE RATIONALE FOR COMBINATION TREATMENT WITH MONALIZUMAB AND DURVALUMAB

- ***Preclinical data demonstrate enhanced anti-tumor efficacy by combining PD-1/PD-L1 pathway blockade and NKG2A checkpoint inhibitor;***
- ***Resistance to PD-1 pathway blockers is associated with upregulation of NKG2A;***
- ***Provides in vivo preclinical validation of the rationale for the ongoing clinical trial investigating this combination.***

Marseille, April 18, 2016

Innate Pharma SA (the "Company" - Euronext Paris: FR0010331421 – IPH) today presented data demonstrating enhanced anti-tumor efficacy and survival by combining anti-NKG2A with PD-1/PD-L1 pathway inhibitors in murine models at the American Association for Cancer Research (AACR) Annual Meeting 2016 in New Orleans, Louisiana, USA.

The NKG2A checkpoint receptor is expressed on a subset of NK cells. Similar to the PD-1 receptors, NKG2A can also be induced on tumor-infiltrating CD8 T cells. Therefore, PD-1 and NKG2A may both inhibit anti-tumor immune responses in situations where cancers express the ligands of both these checkpoint receptors. Conversely, anti-tumor immune responses might be enhanced by combined NKG2A and PD-1 pathway blockade.

Poster #2342 reports preclinical data based on an *in vivo* model of PD-L1 expressing solid tumors. In this model, treatment with either an antibody blocking PD-1 or NKG2A as single agents resulted in modest anti-tumor efficacy. The frequency of tumor-infiltrating NKG2A^{+} CD8 T cells was increased in anti-PD-1 resistant mice, suggesting that NKG2A is a pathway involved in adaptive PD-1 resistance. Treatment with combination of NKG2A and PD-1 checkpoint inhibitors resulted in significantly enhanced anti-tumor responses. Nearly twice as many mice achieved complete tumor cell regression compared to treatment with anti PD-1 alone.

Nicolai Wagtmann, CSO of Innate Pharma, said: *"We are very excited by these data showing that the NKG2A pathway acts as a major mechanism of tumor escape in this model. Considering the high frequency of patients who respond inadequately to PD-1 pathway blockade, we are intrigued by the observations that NKG2A expression on CD8 T cells was increased in PD-1 resistant mice".* He added: *"These data and the striking efficacy of the combination treatment in this model provide strong support for the clinical trial that was just initiated, testing the combination of monalizumab, Innate's first-in-class NKG2A checkpoint inhibitor, and durvalumab, AstraZeneca/Medimmune's investigational PD-L1 checkpoint inhibitor".*

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Reminder:

Nicolai Wagtmann, Chief Scientific Officer of Innate Pharma, will hold a **conference call** to the attention of analysts and portfolio managers to discuss the data published and Company's innovative pipeline.

Time and dial in: **Tuesday, April 19th 10:30am Eastern Time**
USA: 888 504 7963 International: +1 719 325 2452
Access code: 1890466
Webcast: http://urlz.fr/3pxC

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About monalizumab (IPH2201):

Monalizumab 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 and widely expressed on cancer cells of many solid tumors or hematological malignancies. In some cancers, HLA-E expression is associated with poor prognosis.

Monalizumab, a humanized IgG4, blocks the binding of NKG2A to HLA-E allowing activation of NK and cytotoxic T cell responses. By blocking the inhibitory NKG2A receptors, monalizumab may re-establish a broad anti-tumor response mediated by NK and T cells. Monalizumab may also enhance the cytotoxic potential of other therapeutic antibodies.

Monalizumab is partnered with AstraZeneca and MedImmune, AstraZeneca's global biologics research and development arm, through a co-development and commercialization agreement. The initial development plan includes a combination trial with durvalumab (MEDI4736) in solid tumors conducted by AstraZeneca as well as multiple Phase II trials conducted by Innate Pharma, to study monalizumab efficacy as a monotherapy and in combinations with currently approved treatments in several cancer indications. 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, AstraZeneca will pay Innate Pharma a further $100 million at the decision to go into 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.

About durvalumab:

Durvalumab is an investigational human monoclonal antibody directed against programmed death ligand-1 (PD-L1). PD-L1 expression enables tumours to evade detection from the immune system through binding to PD-1 on cytotoxic T lymphocytes. Durvalumab blocks PD-L1 interaction with both PD-1 and CD80 on T cells, countering the tumour's immune- evading tactics. Durvalumab is being developed alongside other immunotherapies to activate the patient's immune system to attack the cancer. Durvalumab is being investigated in an extensive clinical trial programme, as monotherapy or in combination with tremelimumab, in NSCLC, bladder, head and neck, gastric, pancreatic, HCC and blood cancers. In 2015, durvalumab received Fast Track Designation for the

treatment of patients with PD-L1–positive metastatic SCCHN, and in 2016, durvalumab was granted Breakthrough Therapy Designation by the U.S. Food and Drug Administration as a potential treatment for metastatic urothelial bladder cancer.

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.

Innate Pharma specializes 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.

The Company has pioneered the development of antibodies that block inhibitory checkpoint receptors on NK cells. Today, Innate Pharma has three first-in-class antibodies in clinical development in immuno-oncology and a pipeline of preclinical candidates to novel targets and mechanisms.

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

Based in Marseille, France, Innate Pharma had 118 employees as at December 31, 2015. The company is listed on Euronext-Paris.

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

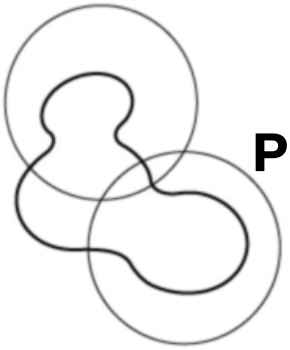
Practical Information about Innate Pharma shares:

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.



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