PRESS RELEASE

innate pharma

ICI CONFERENCE 2017: NEW PRECLINICAL DATA FURTHER STRENGTHEN THE RATIONALE OF IPH5401 AND MONALIZUMAB FOR CANCER TREATMENTS AND IN COMBINATION WITH ANTI-PD-1/PD-L1

- ***IPH5401, an anti-C5aR antibody, potentially reverses tumor immuno-suppressive microenvironment and overcomes tumor resistance; preclinical data suggest that combined C5aR and PD-1 blockade synergistically reduce tumor growth;***
- ***New preclinical data further reinforce the rationale for combination treatment with monalizumab (anti-NKG2A) and anti-PD-L1 checkpoint inhibitors;***
- ***Data were presented at the International Cancer Immunotherapy conference 2017 in Frankfurt.***

Marseille, France, September 11, 2017, 7:00 A.M. CEST

Innate Pharma SA (the "Company" - Euronext Paris: FR0010331421 – IPH) today announces that new preclinical data for its first-in-class clinical stage antibodies IPH5401 and monalizumab, were presented at the 3rd CRI-CIMT-EATI-AACR International Cancer Immunotherapy conference, September 6 – 9, 2017, in Frankfurt, Germany.

Poster #B184 shows the selective expression of C5aR on myeloid-derived suppressor cells (MDSC) and neutrophils. These cells accumulate within the tumor microenvironment and secrete pro-angiogenic factors which promote tumor progression. They also inhibit NK and T cells and suppress anti-tumor immunity.

In this poster, the data demonstrate that IPH5401 selectively inhibits the activation of neutrophils. Moreover, the data show that the combined administration of anti-C5aR with anti-PD-1 reduced tumor growth. Taken together, these data suggest that C5aR blockade may result in a more permissive environment for immune-mediated tumor killing and treatment with checkpoint inhibitors.

Poster #A130 demonstrates that blocking both NKG2A/HLA-E and PD-1/PD-L1 pathways enhance anti-tumor efficacy of $CD8^+$ T cells. The data show that the deletion of either NKG2A (Qa-1b) or PD-L1 significantly delays tumor growth, suggesting that both receptors are involved in the immune-escape of tumors. Combined PD-L1 and NKG2A blockade achieved a complete response of 82%, compared to 54% for anti-PD-L1 and 36% for anti-NKG2A alone. $CD8^+$ tumor infiltrated lymphocytes (TILs) expressing high levels of PD-1 co-expressed high levels of NKG2A, raising the possibility that NKG2A blockade may potentiate PD-1/PD-L1 blockers by directly enhancing $CD8^+$ T cell-mediated killing of tumors.

Yannis Morel, Executive Vice President Products Portfolio Strategy of Innate Pharma, said: "*We are encouraged by the preclinical data for IPH5401, which further support the development of this first-in-class anti-C5aR antibody especially in combination with PD-1/PD-L1 checkpoint inhibitors. We look forward to start clinical trials in oncology with IPH5401 in 2018.*

In addition, preclinical data indicate that NKG2A blockade in conjunction with PD-L1 blockade enhances anti-tumor efficacy of CD8$^+$ T cells and provide further evidence to support the ongoing clinical trial evaluating monalizumab, Innate's first-in-class NKG2A checkpoint inhibitor, in combination with durvalumab, AstraZeneca/Medimmune's PD-L1 checkpoint inhibitor."

Poster #B184 and Poster A#130 are available on Innate Pharma's website.

About IPH5401:

IPH5401 is a first-in-class therapeutic antibody that specifically binds and blocks C5a receptors (C5aR) expressed on subsets of myeloid-derived suppressor cells (MDSC) and neutrophils. Part of the innate immune system, these types of cells promote tumor growth by secreting inflammatory and angiogenic factors, and they potently suppress anti-tumor T and NK cells, and hamper the activities of PD-1/PD-L1 checkpoint blockers.

C5a, a factor in the complement cascade, is often overexpressed in tumors, where it attracts and activates MDSC and neutrophils in the tumor microenvironment.

IPH5401 is a fully human antibody that blocks the binding of C5a to C5aR, thereby reducing the accumulation and activation of MDSC and neutrophils in tumors. Treatment with IPH5401 may unleash anti-tumor activities of T cells and NK cells. Preclinical experiments support development of IPH5401 as single agent and in combination with PD-1/PD-L1 checkpoint blockers or other cancer immunotherapies.

Under the terms of the transaction, Innate Pharma acquired worldwide rights to anti-C5aR/IPH5401 in all indications from Novo Nordisk A/S.

About monalizumab:

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. Expression of HLA-E can protect cancer cells 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 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 (Imfinzi) 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 Innate Pharma:

Innate Pharma S.A. is a clinical-stage biotechnology company with a focus on discovering and developing first-in-class therapeutic antibodies that harness the innate immune system to improve cancer treatment and clinical outcomes for patients.

Innate Pharma specializes in immuno-oncology, a new therapeutic field that is changing cancer treatment by mobilizing the power of the body's immune system to recognize and kill cancer cells.

The Company's aim is to become a fully-integrated biopharmaceutical company in the area of immunotherapy and focused on serious unmet medical needs in cancer. Innate Pharma has pioneered the discovery and development of checkpoint inhibitors to activate the innate immune system. Innate Pharma's innovative approach has resulted in three first-in-class, clinical-stage antibodies targeting natural killer cell receptors that may address a broad range of solid and hematological cancer indications as well as additional preclinical product candidates and technologies. Targeting receptors involved in innate immunity also creates opportunities for the Company to develop therapies for inflammatory diseases.

The Company's expertise and understanding of natural killer cell biology have enabled it to enter into major alliances with leaders in the biopharmaceutical industry including AstraZeneca, Bristol-Myers Squibb and Sanofi.

Based in Marseille, France, Innate Pharma has more than 170 employees and is listed on Euronext Paris.

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

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 (http://www.amf-france.org) 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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