NEW PRECLINICAL DATA FURTHER SUPPORTING THE DEVELOPMENT OF IPH4301 PRESENTED AT THE AACR MEETING

• First-in-class anti-MICA/B therapeutic antibody;
• New data demonstrate dual mechanism of action of IPH4301, including tumor antigen targeting and immunomodulation;
• IND-enabling studies starting in 2016.

Marseille, April 18, 2016

Innate Pharma SA (the “Company” - Euronext Paris: FR0010331421 – IPH) today presented a new set of preclinical data further validating the potential of its first-in-class anti-MICA/B antibody IPH4301 at the American Association for Cancer Research (AACR) Annual Meeting 2016 in New Orleans, Louisiana, USA.

Poster #1491 reports that IPH4301, a humanized antibody, binds with high affinity to MICA/B and is a potent cytotoxic antibody, inducing direct tumor cell killing by ADCC. Moreover, an additional mode-of-action of the same antibody was revealed, whereby the antibody has the potential to overcome immunosuppression in tumors.

Among the highly immune-suppressive cell types in cancer are tumor-associated macrophages or myeloid-derived suppressor cells (MDSC), which can reduce NK and T cell activities. In vitro, IPH4301 could overcome immunosuppression by macrophages, restoring NK cell antibody-mediated killing to levels seen in the absence of suppressor macrophages. In addition, IPH4301 blocked MICA/B-induced down-modulation of NKG2D receptors on NK and CD8 T cells, thus disrupting a second immuno-suppressive mechanism. Finally, treatment with IPH4301 restored NK cell infiltration, prevented tumor growth and improved survival in different in vivo tumor models.

Nicolai Wagtmann, CSO of Innate Pharma, said: “We are enthusiastic about IPH4301 as a therapeutic candidate because of its dual mode of action, combining potent ADCC-mediated tumor killing with interesting immuno-modulating properties. The ability of IPH4301 to interfere with these immune-suppressive pathways, while at the same time retaining high direct ADCC potency, makes for a novel, unique proposition in the immune-oncology landscape. IND-enabling studies will start in 2016”.

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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 IPH4301:
IPH4301 is a humanized antibody targeting MICA/B, which are highly polymorphic ligands of NKG2D, an activating receptor expressed on NK and CD8 T cells. MICA/B expression is specifically induced in several highly prevalent solid tumors and with a high frequency* and therefore may be considered as a specific tumor target. Chronic exposure to MICA/B down-regulates NKG2D at the surface of NK and T cells, suppressing NKG2D+ NK and CD8 T cell activity. Furthermore, MICA/B expression can be induced on tumor associated, immuno-suppressive macrophages. Hence, targeting MICA/B with an antibody that is both ADCC-inducing and blocking NKG2D binding to MICA/B can act by a dual mechanism of action: tumor antigen targeting and immunomodulation.
IPH4301 is currently in preclinical development.

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:

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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.

* Colon, kidney, endometrium, melanoma, lung, liver, ovarian, breast...
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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