

PRESS RELEASE

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INNATE PHARMA PRESENTS NEW CD73 CHECKPOINT INHIBITOR PROGRAM

- ***Novel antibodies identified that block the CD73 immune checkpoint for cancer immunotherapy;***
- ***Strengthens Innate's positioning in targeting the tumor microenvironment.***

Marseille, April 18, 2016

Innate Pharma SA (the "Company" - Euronext Paris: FR0010331421 – IPH) today presented data on a research program to develop a CD73 checkpoint inhibitor antibody in oncology at the American Association for Cancer Research (AACR) Annual Meeting 2016 in New Orleans, Louisiana, USA. This new anti-CD73 project complements Innate's first-in-class anti-CD39 program strengthening the Company's positioning in targeting the tumor microenvironment.

CD73 and CD39 are two enzymes which play a major role in promoting immunosuppression through the pathway degrading adenosine triphosphate (ATP) into adenosine. CD73 is active on the last step of the degradation pathway, where it is the enzyme that actually degrades AMP* into adenosine.

Poster #2344 presented a panel of newly generated antibodies that block CD73 function. They all bind with high affinity and specificity to the CD73 enzyme, but to distinct epitopes and display different mechanisms of inhibition, including direct blocking of CD73 enzymatic activity or down-modulation of CD73 membrane expression. All antibodies strongly reduce AMP catabolism and efficiently reverse adenosine-mediated T cell suppression in vitro. The antibodies displaying the most interesting features were humanized and further evaluation of their activity is ongoing.

Nicolai Wagtmann, CSO of Innate Pharma, said: *"This program adds to our innovative and diversified portfolio of checkpoint inhibitors. We are entering the very exciting and novel area of microenvironment checkpoint inhibition which complements other immuno-oncology approaches. Our anti-CD73 and anti-CD39 antibodies each have potential as single-agent therapeutics and for combination with other checkpoint blockers notably targeting T or NK cells".*

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**

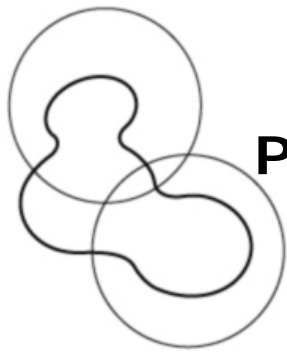
USA: 888 504 7963

International: +1 719 325 2452

Access code: 1890466

Webcast: <http://urlz.fr/3pxC>

* Adenosine monophosphate



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About the anti-CD73 antibody program:

CD73 is a membrane-bound extracellular enzyme overexpressed in several cancer types. Its expression has been linked to poor prognosis in melanoma, colorectal, gastric, triple negative breast cancer, and to a pro-metastatic phenotype in prostate cancer[†].

Together with CD39, it plays a major role in promoting immunosuppression through the pathway degrading adenosine triphosphate (ATP) into adenosine. Within the tumor microenvironment, ATP promotes immune cell-mediated killing of cancer cells. In contrast, adenosine accumulation causes immune suppression, dysregulation of immune cell infiltrates and stimulates angiogenesis resulting in tumor spreading. CD73 is active on the last step of the degradation pathway, where it is the enzyme that actually degrades AMP into adenosine. CD73-blockade promotes anti-tumor immunity by reducing adenosine accumulation. Accordingly, anti-CD73 mAbs stimulate anti-tumor immunity and reduce tumor metastasis in mouse tumor models, and could enhance the efficacy of treatment with anti-PD1 or anti-CTLA4 antibodies[‡].

Innate Pharma has generated a panel of new anti-CD73 antibodies. The antibodies displaying the most interesting features were humanized and further evaluation of their activity is ongoing.

This program is developed within the TumAdoR project[§] (www.tumador.eu), coordinated by Dr C. Caux (Centre Léon Bérard and Centre de Recherche en Cancérologie, Lyon, France), and funded under the European Community's seventh framework Program^{**}.

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.

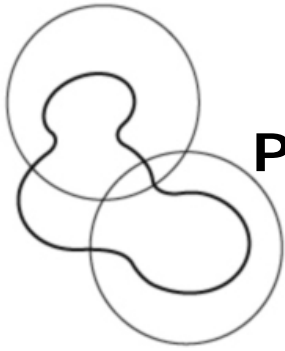
[†] Liu et al., 2012; Wu et al., 2012; Lu et al., 2013; Loi et al., 2013; Wang et al., 2012; Yang et al., 2013

[‡] Allard et al., 2013

[§] Another poster on CD73 will be presented by the consortium : Abstract #2338, *CD39+ Treg cooperate with a CD73-expressing TH&/Th17 subset for Adenosine-mediated immunosuppression in human breast tumors*, Dr. Caux (CLB)

^{**} European Community's Seventh Framework Program (FP7/2007-2013) under grant agreement n°602200.





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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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