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### FURTHER CLINICAL DATA FOR LIRILUMAB AND IPH4102 PRESENTED AT ASH ANNUAL MEETING REINFORCING CONFIDENCE IN OUR PROGRAMS

- *Enrollment in the first-in-human trial of IPH4102 in relapsed/refractory cutaneous T-cell lymphomas (CTCL) is proceeding with no dose-limiting toxicities to date; Dose level 9 out of 10 is currently enrolling; Preliminary indications of objective clinical activity have already been reported in 38% of patients across all dosage levels.*
- *Early data from the combination of lirilumab with azacytidine show a good safety profile in patients with relapsed acute myeloid leukemia (AML).*

Marseille, France, December 5, 2016

Innate Pharma SA (the "Company" - Euronext Paris: FR0010331421 – IPH) today announces that clinical data for lirilumab and IPH4102 were presented in two posters at the American Society of Hematology's (ASH) 2016 Annual Meeting (December 3-6, 2016), San Diego, CA, U.S.:

- **Poster 1826 entitled "First-in-Human, Multicenter Phase I Study of IPH4102, First-in-Class Humanized Anti-KIR3DL2 Monoclonal Antibody, in Relapsed/Refractory Cutaneous T-Cell Lymphomas: Preliminary Safety, Exploratory and Clinical Activity Results"** was presented by Prof. Y. Kim from the Stanford Cancer Institute and investigator of the study. IPH4102 is Innate Pharma's wholly-owned first-in-class anti-KIR3DL2 antibody.

This poster presented preliminary results from the first seven dose levels of the dose-escalation part of the Phase I trial of IPH4102<sup>1</sup>. They showed that the drug candidate is well tolerated in patients with relapsed/refractory CTCL<sup>2</sup> and a preliminary global objective response rate (ORR) of 38% in the evaluable population across all dosage levels.

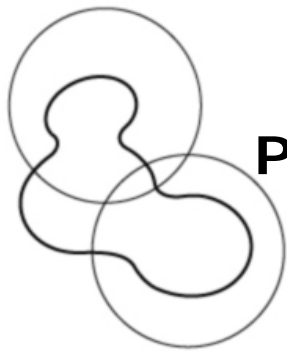
Explorative assessments show that clinical improvement in skin comes along with decreases of malignant cells and normalization of immune parameters in the tumor microenvironment. All responses were ongoing at the time of poster presentation.

Dose level 8 (3 mg/kg) has been completed without dose-limiting toxicity. Two further dose levels (6 and 10 mg/kg) remain to be explored in the dose-escalation part of this study.

- **Poster 1641 entitled "Phase IB/II Study of Lirilumab in Combination with Azacytidine in Patients with Relapsed Acute Myeloid Leukemia"** was presented by Dr N. Daver from the Department of Leukemia at the MD Anderson Cancer Center.

<sup>1</sup> Data were previously reported at the Third World Congress of Cutaneous Lymphomas on October 28, 2016.

<sup>2</sup> CTCL is an orphan disease with poor prognosis and few therapeutic options at advanced stages.



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Lirilumab is a first-in-class fully human monoclonal antibody that blocks inhibitory killer-cell immunoglobulin-like receptors (KIRs) expressed predominantly on natural killer (NK) cells to potentiate an anti-tumor immune response mediated by the latter. Lirilumab is licensed to Bristol-Myers Squibb Company by Innate Pharma.

In this Phase Ib/II study testing lirilumab in combination with azacytidine in a heavily pretreated patient population with relapsed AML, full doses of azacytidine and lirilumab<sup>3</sup> were well tolerated. No dose-limiting toxicities were observed. Preliminary efficacy data for 25 evaluable patients showed a response rate of 20% including two patients achieved a CR<sup>4</sup> or a CR with insufficient count recovery and three achieving hematologic improvement.

*"Preliminary results presented at ASH 2016 are encouraging, as they further reinforce the favorable safety profile of both lirilumab and IPH4102. The study of IPH4102 conducted in patients with CTCL is progressing very well and we look forward to the completion of the dose-escalation part of the trial to confirm the encouraging efficacy signal seen across dose levels to date," said Pierre Dodion, Chief Medical Officer of Innate Pharma. "The good safety profile of lirilumab in combination with azacytidine in patients with relapsed AML further supports the view that lirilumab is well tolerated in numerous combinations."*

### Posters Details

#### IPH4102

- Poster title: *"First-in-Human, Multicenter Phase I Study of IPH4102, First-in-Class Humanized Anti-KIR3DL2 Monoclonal Antibody, in Relapsed/Refractory Cutaneous T-Cell Lymphomas: Preliminary Safety, Exploratory and Clinical Activity Results"*
- Date: Saturday, December 3, 2016
- Time: 5:30 p.m. – 7:30 p.m. PST
- Presenter: Pr Youn Kim, Division of Oncology, Department of Medicine, Stanford Cancer Institute, Palo Alto, CA, U.S.
- Location: Hall GH, San Diego Convention Center, San Diego, CA, U.S.

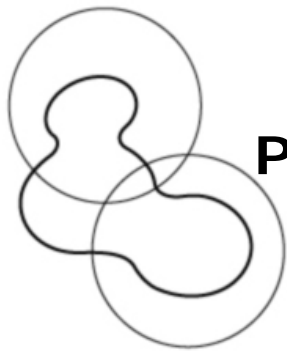
The poster #1826 is available on Innate Pharma's website.

#### Lirilumab

- Poster title: *"Phase IB/II Study of Lirilumab in Combination with Azacytidine (AZA) in Patients (pts) with Relapsed Acute Myeloid Leukemia (AML)"*
- Date: Saturday, December 3, 2016
- Time: 5:30 p.m. – 7:30 p.m. PST
- Presenter: Dr Naval Daver, Department of Leukemia, The University of Texas MD Anderson Cancer Center, Houston, TX, U.S.
- Location: Hall GH, San Diego Convention Center, San Diego, CA, U.S.

<sup>3</sup> 75 mg/m<sup>2</sup> and 3 mg/kg respectively

<sup>4</sup> Complete remission



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The poster #1641 will be soon available on Innate Pharma's website.

### **About trial NCT02399917 (lirilumab and azacytidine in patients with relapsed AML):**

This is an open-label Phase II study to assess the combination of lirilumab and azacytidine<sup>5</sup> to find the maximum tolerated dose of the combination that may be given to patients with refractory/relapsed acute myeloid leukemia (AML) or high-risk myelodysplastic syndromes (MDS).

Primary endpoints of this study include the evaluation of the safety and efficacy of the combination in this patient population.

Patients are eligible if they have AML and failed prior therapy (including prior therapy with a hypomethylating agent), have adequate performance status (ECOG  $\leq$  2), and organ function. Azacytidine was given at the dosage of 75mg/m<sup>2</sup> on days 1-7; lirilumab was given on Day 8 at the dosage of 1 and 3 mg/kg in 2 consecutive cohorts of 6 patients each. Courses were repeated approximately every 4-5 weeks. No dose-limiting toxicities were observed and lirilumab 3mg/kg was established as the recommended phase 2-dose (RP2D) in combination with azacytidine. 9 additional patients have been treated at the RP2D. Responses were evaluated at the end of 3 courses of therapy.

Conducted by the MD Anderson Cancer Center at the University of Texas in the United States, the trial began in April 2015 and is expected to enroll 64 patients.

### **About lirilumab (IPH2102/BMS-986015):**

Lirilumab is a fully human monoclonal antibody that is designed to act as a checkpoint inhibitor by blocking the interaction between KIR2DL-1,-2,-3 inhibitory receptors and their ligands. Blocking these receptors facilitates activation of NK cells and potentially some subsets of T cells, ultimately leading to destruction of tumor cells.

Lirilumab is licensed to Bristol-Myers Squibb Company. As part of the agreement with Innate Pharma, Bristol-Myers Squibb holds exclusive worldwide rights to develop, manufacture and commercialize lirilumab and related compounds blocking KIR receptors for all indications. Under the agreement, Innate Pharma conducts the development of lirilumab through Phase II in AML.

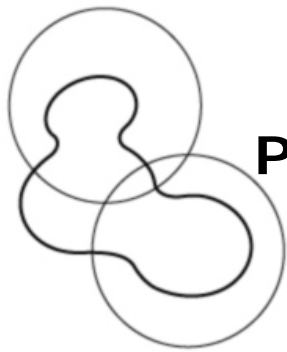
Innate Pharma is currently testing lirilumab in a randomized, double-blind, placebo-controlled Phase II trial as a maintenance treatment in elderly patients with AML in first complete remission (the "EffiKIR" trial). In addition, lirilumab is also being evaluated by Bristol-Myers Squibb in clinical trials in combination with other agents in a variety of tumor types.

### **About IPH4102 Phase I trial:**

The Phase I trial is an open label, multicenter study of IPH4102 in patients with relapsed/refractory CTCL which is performed in Europe (France, Netherlands, United Kingdom) and in the US (NCT02593045). Participating institutions include several hospitals with internationally recognized expertise: the Saint-Louis Hospital (Paris, France), the Stanford University Medical Center (Stanford, CA), the Ohio State University (Columbus, OH), the MD

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<sup>5</sup> While azacytidine has been approved in high risk myelodysplastic syndromes (US and EU), in palliative treatment of acute myeloid leukemia (EU) and in chronic myelomonocytic leukemia (EU), it has not been yet approved in relapsed acute myeloid leukemia.



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Anderson Cancer Center (Houston, Texas), the Leiden University Medical Center (Netherlands), and the Guy's and St Thomas' Hospital (United Kingdom). 45 to 60 patients with KIR3DL2-positive CTCL having received at least two prior lines of systemic therapy are expected to be enrolled in two sequential study parts:

- A dose-escalation part including 25 to 40 CTCL patients in 10 dose levels. The objective is to identify the Maximum Tolerated Dose and/or the RP2D; the dose-escalation follows an accelerated 3+3 design;
- A cohort expansion part with 2 cohorts of 10 patients each in 2 CTCL subtypes (transformed mycosis fungoides and Sézary syndrome) receiving IPH4102 at the RP2D until progression. The cohort design (CTCL subtype, number of patients) could be revisited based on the findings in the dose-escalation part of the study.

The primary objective of this trial is to evaluate the safety and tolerability of repeated administrations of single agent IPH4102 in this patient population. The secondary objectives include assessment of the drug's antitumor activity. A large set of exploratory analyses is aimed at identifying biomarkers of clinical activity. Clinical endpoints include overall objective response rate, response duration and progression-free survival.

### **About IPH4102:**

IPH4102 is a first-in-class anti-KIR3DL2 humanized cytotoxicity-inducing antibody, designed for treatment of CTCL, an orphan disease. This group of rare cutaneous lymphomas of T lymphocytes has a poor prognosis with few therapeutic options at advanced stages.

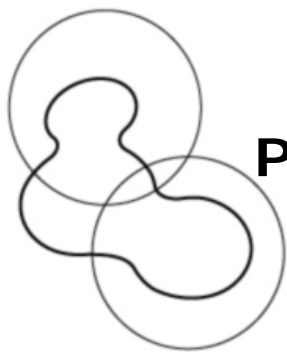
KIR3DL2 is an inhibitory receptor of the KIR family, expressed by approximately 65% of patients across all CTCL subtypes and expressed by up to 95% of certain aggressive CTCL subtypes, in particular, Sézary Syndrome and transformed mycosis fungoides. It has a restricted expression on normal tissues.

Potent antitumor properties of IPH4102 were shown against human CTCL cells *in vitro* and *in vivo* in a mouse model of KIR3DL2+ tumors, in which IPH4102 reduced tumor growth and improved survival. The efficacy of IPH4102 was further evaluated in laboratory assays using the patients' own natural killer (NK) cells against their primary tumor samples in the presence of IPH4102. These studies were performed in patients with Sézary Syndrome, the leukemic form of CTCL, which is known to have a very poor prognosis. In these experiments, IPH4102 selectively and efficiently induced killing of the patients' CTCL cells. These results were published in Cancer Research in 2014 (<http://www.ncbi.nlm.nih.gov/pubmed/25361998>). IPH4102 was granted orphan drug status in the European Union for the treatment of CTCL.

### **About Cutaneous T-Cell Lymphoma ("CTCL"):**

CTCL is a heterogeneous group of non-Hodgkin's lymphomas which arise primarily in the skin and are characterized by the presence of malignant clonal mature T-cells. CTCL accounts for approximately 4% of all non-Hodgkin's lymphoma cases and has a median age at diagnosis of 55-65 years.

Mycosis fungoides, and Sézary Syndrome, its leukemic variant, are the most common CTCL subtypes. The overall 5-year survival rate, which depends in part on disease subtype, is approximately 10% for Sézary Syndrome and less than 15% for transformed mycosis fungoides. CTCL is an orphan disease and patients with advanced CTCL have a poor prognosis with few therapeutic options and no standard of care. There are approximately 6,000 CTCL patients in Europe and the United States.



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### 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 commercial stage 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 140 employees and is listed on Euronext Paris.

Learn more about Innate Pharma at [www.innate-pharma.com](http://www.innate-pharma.com).

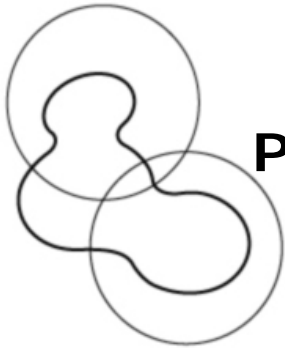
### About Innate Pharma shares:

<b>ISIN code</b>	FR0010331421
<b>Ticker code</b>	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.

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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](mailto:investors@innate-pharma.com)

**Press Contacts**

**ATCG Press (France)**  
Marie Puvieux  
Mob: +33 (0)6 10 54 36 72  
[presse@atcg-partners.com](mailto:presse@atcg-partners.com)

**Consilium Strategic Communications  
(ROW)**

Mary-Jane Elliott / Sue Stuart /  
Jessica Hodgson / Hendrik Thys

Tel.: +44 (0)20 3709 5700  
[InnatePharma@consilium-comms.com](mailto:InnatePharma@consilium-comms.com)