Ipsen receives FDA Fast Track designation for liposomal irinotecan (ONIVYDE®) as a first-line combination treatment for metastatic pancreatic cancer

– Final analysis of the Phase 1/2 clinical study to be presented as a late-breaking virtual presentation at the ESMO World Congress on Gastrointestinal Cancer (WCGI) on July 1, 2020 –

Paris (France), 17 June 2020 – Ipsen (Euronext: IPN; ADR: IPSEY) today announced the United States Food and Drug Administration (FDA) has granted the company Fast Track designation for the investigational use of liposomal irinotecan (ONIVYDE®) in combination with 5-fluorouracil/leucovorin (5-FU/LV) and oxaliplatin (OX) together, known as NALIRIFOX for patients with previously untreated, unresectable, locally advanced and metastatic pancreatic ductal adenocarcinoma (PDAC). The FDA’s Fast Track program facilitates the development and expedites the review of drugs that treat serious conditions and have the potential to address an unmet medical need.

The final analysis from the multicenter, open-label Phase 1/2 study will be presented as a late-breaking oral presentation at the first time ever virtual ESMO World Congress on Gastrointestinal Cancer on July 1, 2020 and will include data on primary and secondary endpoints. Ipsen has also initiated patient enrollment in the international Phase 3 NAPOLI-3 clinical study investigating the safety and efficacy of NALIRIFOX versus gemcitabine + nab-paclitaxel in the first-line setting (NCT04083235).

ONIVYDE® is approved in the United States and in Europe in combination with fluorouracil (5-FU) and leucovorin (LV) for the treatment of patients with metastatic adenocarcinoma of the pancreas after disease progression following gemcitabine-based therapy. ONIVYDE® is not indicated as a single agent for the treatment of patients with metastatic adenocarcinoma of the pancreas.

“Since the initial approval of ONIVYDE® in metastatic pancreatic cancer, we have continued to dedicate our research efforts to better understand the needs of pancreatic cancer patients. Through ongoing clinical investigations and exploratory real-world analyses, we have sought to determine whether patients who receive active treatment early have an improvement in survival,” said Howard Mayer, M.D., Executive Vice President, Head of Research and Development at Ipsen. “As we continue to enroll additional patients in the ongoing Phase 3 NAPOLI-3 clinical study, we look forward to working closely with the FDA to potentially bring ONIVYDE® to more pancreatic cancer patients earlier in the disease.”
Pancreatic cancer is a rare and deadly disease that accounts for about 3% of all cancer and 7% of all cancer deaths.\(^1\) Of the 57,600 people with pancreatic cancer in the United States, more than half are diagnosed with metastatic disease, which has an overall 5-year survival rate of three percent (3%).\(^1\)

Programs with Fast Track designation may benefit from early and frequent interactions with the FDA over the course of drug development. In addition, the Fast Track designation program allows for the eligibility for accelerated approval and priority review if relevant study criteria are met and enables a company to submit individual sections of a New Drug Application (NDA) for review on a rolling-submission basis.

**ABOUT ONIVYDE® (irinotecan liposome injection)**

Ipsen has exclusive commercialization rights for the current and potential future indications for ONIVYDE\(^\circledast\) in the U.S. Servier, an independent international pharmaceutical company with a strong international presence in 149 countries, is responsible for the commercialization of ONIVYDE\(^\circledast\) outside of the United States and Taiwan. PharmaEngine owns commercial rights to ONIVYDE\(^\circledast\) in Taiwan.

**INDICATION - UNITED STATES**

ONIVYDE\(^\circledast\) is approved by the U.S. FDA in combination with fluorouracil (5-FU) and leucovorin (LV) for the treatment of patients with metastatic adenocarcinoma of the pancreas after disease progression following gemcitabine-based therapy. Limitation of Use: ONIVYDE\(^\circledast\) is not indicated as a single agent for the treatment of patients with metastatic adenocarcinoma of the pancreas.

**IMPORTANT SAFETY INFORMATION - UNITED STATES**

<table>
<thead>
<tr>
<th>BOXED WARNINGS: SEVERE NEUTROPENIA and SEVERE DIARRHEA</th>
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<tr>
<td>Fatal neutropenic sepsis occurred in 0.8% of patients receiving ONIVYDE. Severe or life-threatening neutropenic fever or sepsis occurred in 3% and severe or life-threatening neutropenia occurred in 20% of patients receiving ONIVYDE in combination with 5-FU and LV. Withhold ONIVYDE for absolute neutrophil count below 1500/mm(^3) or neutropenic fever. Monitor blood cell counts periodically during treatment.</td>
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<tr>
<td>Severe diarrhea occurred in 13% of patients receiving ONIVYDE in combination with 5-FU/LV. Do not administer ONIVYDE to patients with bowel obstruction. Withhold ONIVYDE for diarrhea of Grade 2–4 severity. Administer loperamide for late diarrhea of any severity. Administer atropine, if not contraindicated, for early diarrhea of any severity.</td>
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**CONTRAINDICATION**

ONIVYDE is contraindicated in patients who have experienced a severe hypersensitivity reaction to ONIVYDE or irinotecan HCl.

**Warnings and Precautions**

**Severe Neutropenia: See Boxed WARNING.** In patients receiving ONIVYDE/5-FU/LV, the incidence of Grade 3/4 neutropenia was higher among Asian (18/33 [55%]) vs White patients (13/73 [18%]). Neutropenic fever/neutropenic sepsis was reported in 6% of Asian vs 1% of White patients.

**Severe Diarrhea: See Boxed WARNING.** Severe and life-threatening late-onset (onset >24 hours after chemotherapy [9%]) and early-onset diarrhea (onset ≤24 hours after chemotherapy [3%], sometimes with other symptoms of cholinergic reaction) were observed.
Interstitial Lung Disease (ILD): Irinotecan HCl can cause severe and fatal ILD. Withhold ONIVYDE in patients with new or progressive dyspnea, cough, and fever, pending diagnostic evaluation. Discontinue ONIVYDE in patients with a confirmed diagnosis of ILD.

Severe Hypersensitivity Reactions: Irinotecan HCl can cause severe hypersensitivity reactions, including anaphylactic reactions. Permanently discontinue ONIVYDE in patients who experience a severe hypersensitivity reaction.

Embryo-Fetal Toxicity: ONIVYDE can cause fetal harm when administered to a pregnant woman. Advise females of reproductive potential to use effective contraception during and for 1 month after ONIVYDE treatment.

Adverse Reactions
- The most common adverse reactions (≥20%) were diarrhea (59%), fatigue/asthenia (56%), vomiting (52%), nausea (51%), decreased appetite (44%), stomatitis (32%), and pyrexia (23%).
- The most common Grade 3/4 adverse reactions (≥10%) were diarrhea (13%), fatigue/asthenia (21%), and vomiting (11%).
- Adverse reactions led to permanent discontinuation of ONIVYDE in 11% of patients receiving ONIVYDE/5-FU/LV; The most frequent adverse reactions resulting in discontinuation of ONIVYDE were diarrhea, vomiting, and sepsis.
- Dose reductions of ONIVYDE for adverse reactions occurred in 33% of patients receiving ONIVYDE/5-FU/LV; the most frequent adverse reactions requiring dose reductions were neutropenia, diarrhea, nausea, and anemia.
- ONIVYDE was withheld or delayed for adverse reactions in 62% of patients receiving ONIVYDE/5-FU/LV; the most frequent adverse reactions requiring interruption or delays were neutropenia, diarrhea, fatigue, vomiting, and thrombocytopenia.
- The most common laboratory abnormalities (≥20%) were anemia (97%), lymphopenia (81%), neutropenia (52%), increased ALT (51%), hypoalbuminemia (43%), thrombocytopenia (41%), hypomagnesemia (35%), hypokalemia (32%), hypocalcemia (32%), hypophosphatemia (29%), and hyponatremia (27%).

Drug Interactions
- Avoid the use of strong CYP3A4 inducers, if possible, and substitute non-enzyme inducing therapies ≥2 weeks prior to initiation of ONIVYDE.
- Avoid the use of strong CYP3A4 or UGT1A1 inhibitors, if possible, and discontinue strong CYP3A4 inhibitors ≥1 week prior to starting therapy.

Special Populations
- Pregnancy and Reproductive Potential: See WARNINGS & PRECAUTIONS. Advise males with female partners of reproductive potential to use condoms during and for 4 months after ONIVYDE treatment.
- Lactation: Advise nursing women not to breastfeed during and for 1 month after ONIVYDE treatment.

Please see full U.S. Prescribing Information including Boxed WARNING for ONIVYDE.

About Ipsen
Ipsen is a global specialty-driven biopharmaceutical group focused on innovation and Specialty Care. The Group develops and commercializes innovative medicines in three key therapeutic areas – Oncology, Neuroscience and Rare Diseases. Its commitment to oncology is exemplified through its growing portfolio of key therapies for prostate cancer, neuroendocrine tumors, renal cell carcinoma and pancreatic cancer. Ipsen also has a well-established Consumer Healthcare business. With total sales over €2.5 billion in 2019, Ipsen sells more than 20 drugs in over 115 countries, with a direct commercial presence in more than 30
countries. Ipsen’s R&D is focused on its innovative and differentiated technological platforms located in the heart of the leading biotechnological and life sciences hubs (Paris-Saclay, France; Oxford, UK; Cambridge, US). The Group has about 5,800 employees worldwide. Ipsen is listed in Paris (Euronext: IPN) and in the United States through a Sponsored Level I American Depositary Receipt program (ADR: IPSEY). For more information on Ipsen, visit www.ipsen.com.

Ipsen’s Forward Looking Statement
The forward-looking statements, objectives and targets contained herein are based on the Group’s management strategy, current views and assumptions. Such statements involve known and unknown risks and uncertainties that may cause actual results, performance or events to differ materially from those anticipated herein. All of the above risks could affect the Group’s future ability to achieve its financial targets, which were set assuming reasonable macroeconomic conditions based on the information available today. Use of the words “believes”, “anticipates” and “expects” and similar expressions are intended to identify forward-looking statements, including the Group’s expectations regarding future events, including regulatory filings and determinations, and the outcome of this study or other studies. Moreover, the targets described in this document were prepared without taking into account external growth assumptions and potential future acquisitions, which may alter these parameters. These objectives are based on data and assumptions regarded as reasonable by the Group. These targets depend on conditions or facts likely to happen in the future, and not exclusively on historical data. Actual results may depart significantly from these targets given the occurrence of certain risks and uncertainties, notably the fact that a promising product in early development phase or clinical trial may end up never being launched on the market or reaching its commercial targets, notably for regulatory or competition reasons. The Group must face or might face competition from generic products that might translate into a loss of market share. Furthermore, the Research and Development process involves several stages each of which involves the substantial risk that the Group may fail to achieve its objectives and be forced to abandon its efforts with regards to a product in which it has invested significant sums. Therefore, the Group cannot be certain that favorable results obtained during preclinical trials will be confirmed subsequently during clinical trials, or that the results of clinical trials will be sufficient to demonstrate the safe and effective nature of the product concerned. There can be no guarantees a product will receive the necessary regulatory approvals or that the product will prove to be commercially successful. If underlying assumptions prove inaccurate or risks or uncertainties materialize, actual results may differ materially from those set forth in the forward-looking statements. Other risks and uncertainties include but are not limited to, general industry conditions and competition; general economic factors, including interest rate and currency exchange rate fluctuations; the impact of 6 pharmaceutical industry regulation and health care legislation; global trends toward health care cost containment; technological advances, new products and patents attained by competitors; challenges inherent in new product development, including obtaining regulatory approval; the Group’s ability to accurately predict future market conditions; manufacturing difficulties or delays; financial instability of international economies and sovereign risk; dependence on the effectiveness of the Group’s patents and other protections for innovative products; and the exposure to litigation, including patent litigation, and/or regulatory actions. The Group also depends on third parties to develop and market some of its products which could potentially generate substantial royalties; these partners could behave in such ways which could cause damage to the Group’s activities and financial results. The Group cannot be certain that its partners will fulfil their obligations. It might be unable to obtain any benefit from those agreements. A default by any of the Group’s partners could generate lower revenues than expected. Such situations could have a negative impact on the Group’s business, financial position or performance. The Group expressly disclaims any obligation or undertaking to update or revise any forward-looking statements, targets or estimates contained in this press release to reflect any change in events, conditions, assumptions or circumstances on which any such statements are based, unless so required by applicable law. The Group’s business is subject to the risk factors outlined in its registration documents filed with the French Autorité des Marchés Financiers. The risks and uncertainties set out are not exhaustive and the reader is advised to refer to the Group’s 2019 Universal Registration Document available on its website (www.ipsen.com).

For further information:

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