News Release

Puma Biotechnology Presents Final Results from the Biliary Tract Cohort of the Phase 2 SUMMIT 'Basket' Trial of Neratinib at the ASCO 2022 Annual Meeting

LOS ANGELES, Calif., June 4, 2022 – Puma Biotechnology, Inc. (NASDAQ: PBYI), a biopharmaceutical company, presented final results from the Phase II SUMMIT 'basket' trial, assessing the efficacy of neratinib in treatment-refractory patients with metastatic biliary tract cancers with somatic *HER2* mutations at the 2022 American Society of Clinical Oncology (ASCO) Annual Meeting. The presentation entitled "Targeting *HER2* mutation-positive advanced biliary tract cancers with neratinib: Final results from the phase 2 SUMMIT 'basket' trial" was presented at the Gastrointestinal Cancer – Gastroesophageal, Pancreatic, and Hepatobiliary Poster Session (#4079) by James J. Harding, MD, Regional Director, Early Drug Development, Memorial Sloan Kettering Cancer Center, and Weill Cornell Medical College, an investigator of the trial. A copy of this poster presentation is available on the Puma website.

Neratinib is an irreversible, pan-HER, oral tyrosine kinase inhibitor. The Phase II SUMMIT trial is an open-label, single-arm, multi-cohort, 'basket' trial of neratinib in patients with solid tumors that harbor oncogenic somatic *HER2* mutations. The study included a cohort of treatment-refractory patients with metastatic biliary tract cancers (BTCs). While HER2 overexpression is associated with an increased risk of disease recurrence in patients with resected BTC, there is limited data on targeting *HER2* mutations in these patients.

Efficacy results from the BTC cohort of 25 patients (11 cholangiocarcinoma, 10 gallbladder, 4 ampullary cancers) demonstrated an overall response rate (ORR) of 16%, 95% CI 4.5-36.1%), median progression free survival (PFS) of 2.8 months and overall survival (OS) of 5.4 months. The most common *HER2* mutation was S310F. Co-occurring oncogenic alterations in *TP53* and *CDKN2A* appeared to associate with worse outcome. The most frequently observed toxicity was diarrhea (56% any grade).

"Patients with biliary tract cancers have poor survival and a paradigm of treatment is precision medicine," said Dr. James J. Harding, MD Memorial Sloan Kettering Cancer Center and Weill Cornell Medical College and an investigator of the trial. "In addition, *HER2*-mutant biliary cancers are uncommon and understudied. Results of the SUMMIT BTC cohort demonstrated that neratinib offers some respite for these underserved patients. However, additional studies are needed to determine if combining neratinib with other cancer therapies could significantly extend survival in patients and thereby improve their quality of life."

Alan H. Auerbach, Chief Executive Officer and President of Puma, added, "Previous findings indicate that neratinib has a promising role as a treatment option for rare cancers. With the results from this cohort and others in the SUMMIT trial, we can continue to identify new groups of patients who can benefit from neratinib."

About Puma Biotechnology

Puma Biotechnology, Inc. is a biopharmaceutical company with a focus on the development and commercialization of innovative products to enhance cancer care. Puma in-licenses the global development and commercialization rights to PB272 (neratinib, oral), PB272 (neratinib, intravenous) and PB357.

Neratinib, oral was approved by the U.S. Food and Drug Administration in 2017 for the extended adjuvant treatment of adult patients with early stage HER2-overexpressed/amplified breast cancer, following adjuvant trastuzumab-based therapy, and is marketed in the United States as NERLYNX® (neratinib) tablets. In February 2020, NERLYNX was also approved by the FDA in combination with capecitabine for the treatment of adult patients with advanced or metastatic HER2-positive breast cancer who have received two or more prior anti-HER2-based regimens in the metastatic setting. NERLYNX was granted marketing authorization by the European Commission in 2018 for the extended adjuvant treatment of adult patients with early stage hormone receptor-positive HER2-overexpressed/amplified breast cancer and who are less than one year from completion of prior adjuvant trastuzumab-based therapy. NERLYNX is a registered trademark of Puma Biotechnology, Inc.

Further information about Puma Biotechnology may be found at https://www.pumabiotechnology.com.

Important Safety Information Regarding NERLYNX® (neratinib) U.S. Indication

NERLYNX® (neratinib) tablets, for oral use

INDICATIONS AND USAGE: NERLYNX is a kinase inhibitor indicated:

- As a single agent, for the extended adjuvant treatment of adult patients with early stage HER2-positive breast cancer, to follow adjuvant trastuzumab-based therapy.
- In combination with capecitabine, for the treatment of adult patients with advanced or metastatic HER2-positive breast cancer, who have received two or more prior anti-HER2 based regimens in the metastatic setting.

CONTRAINDICATIONS: None

WARNINGS AND PRECAUTIONS:

- Diarrhea: Manage diarrhea through either NERLYNX dose escalation or loperamide prophylaxis. If diarrhea occurs despite recommended prophylaxis, treat with additional antidiarrheals, fluids, and electrolytes as clinically indicated. Withhold NERLYNX in patients experiencing severe and/or persistent diarrhea. Permanently discontinue NERLYNX in patients experiencing Grade 4 diarrhea or Grade ≥ 2 diarrhea that occurs after maximal dose reduction.
- Hepatotoxicity: Monitor liver function tests monthly for the first 3 months of treatment, then every 3 months while on treatment and as clinically indicated. Withhold NERLYNX in patients experiencing Grade 3 liver abnormalities and permanently discontinue NERLYNX in patients experiencing Grade 4 liver abnormalities.
- Embryo-Fetal Toxicity: NERLYNX can cause fetal harm. Advise patients of potential risk to a fetus and to use effective contraception.

ADVERSE REACTIONS:

The most common adverse reactions (reported in ≥ 5% of patients) were as follows:

- NERLYNX as a single agent: Diarrhea, nausea, abdominal pain, fatigue, vomiting, rash, stomatitis, decreased appetite, muscle spasms, dyspepsia, AST or ALT increased, nail disorder, dry skin, abdominal distention, epistaxis, weight decreased, and urinary tract infection.
- NERLYNX in combination with capecitabine: Diarrhea, nausea, vomiting, decreased appetite, constipation, fatigue/asthenia, weight decreased, dizziness, back pain, arthralgia, urinary tract infection, upper respiratory tract infection, abdominal distention, renal impairment, and muscle spasms.

To report SUSPECTED ADVERSE REACTIONS, contact Puma Biotechnology, Inc. at 1-844-NERLYNX (1-844-637-5969) or FDA at 1-800-FDA-1088 or https://www.fda.gov/medwatch.

DRUG INTERACTIONS:

- Gastric acid reducing agents: Avoid concomitant use with proton pump inhibitors. Separate NERLYNX by at least 2 hours before or 10 hours after H_2-receptor antagonists. Or separate NERLYNX by at least 3 hours with antacids.
- Strong CYP3A4 inhibitors: Avoid concomitant use.
- P-gp and moderate CYP3A4 dual inhibitors: Avoid concomitant use.
- Strong or moderate CYP3A4 inducers: Avoid concomitant use.
- Certain P-gp substrates: Monitor for adverse reactions of P-gp substrates for which minimal concentration change may lead to serious adverse reactions when used concomitantly with NERLYNX.

USE IN SPECIFIC POPULATIONS:

- Lactation: Advise women not to breastfeed.

Please see Full Prescribing Information for additional safety information.

To help ensure patients have access to NERLYNX, Puma has implemented the Puma Patient Lynx support program to assist patients and healthcare providers with reimbursement support and referrals to resources that can help with financial assistance. More information on the Puma Patient Lynx program can be found at https://www.NERLYNX.com or 1-855-816-5421.

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