Invivyd Provides Another Positive SARS-CoV-2 Variant Data Analysis to Satisfy U.S. FDA's Gating Request for Completing Its Review of EUA Request for PEMGARDA™ (pemivibart) for the Treatment of Mild-to-Moderate COVID-19 in Certain Immunocompromised Patients

January 27, 2025

- *Treatment immunobridging analysis, routinely updated for contemporary SARS-CoV-2 variants, compares pemivibart antiviral titers to adintrevimab antiviral titers from the company's previous Phase 2/3 clinical trial of adintrevimab for the treatment of COVID-19 (STAMP), in which adintrevimab conferred a 66% to 74% reduction in risk of hospitalization or death from COVID-19 compared to placebo depending on time of therapy start*
- *Most recent updated analysis provided to FDA, incorporating current dominant SARS-CoV-2 variant XEC neutralization data, demonstrated substantially higher pemivibart titers in the critical early phase post-dosing (Days 0-5) as compared to adintrevimab*
- *Data provided to FDA includes supportive data showing attractive comparison of antiviral activity between pemivibart and monoclonal antibodies previously authorized for treatment of COVID-19*
- *Pemivibart safety profile demonstrated in the company's CANOPY Phase 3 clinical trial supports the EUA amendment request; further, no additional reports of anaphylaxis have been identified during post-authorization use of PEMGARDA for COVID-19 pre-exposure prophylaxis (PrEP) to date*
- *Updated analysis builds upon multiple comparable analyses submitted to the FDA beginning July 2024 for prior SARS-CoV-2 variants, all showing consistent antiviral titer relationships and a favorable risk-benefit profile*

WALTHAM, Mass., Jan. 27, 2025 (GLOBE NEWSWIRE) -- Invivyd, Inc. (Nasdaq: IVVD), a biopharmaceutical company devoted to delivering protection from serious viral infectious diseases, today announced the submission to the U.S. Food and Drug Administration (FDA) of an updated immunobridging analysis of pemivibart as ongoing support of a potential amendment to the Emergency Use Authorization (EUA) for pemivibart, a half-life extended investigational monoclonal antibody (mAb), to include the treatment of mild-to-moderate symptomatic COVID-19 in certain immunocompromised patients for whom alternative COVID-19 treatment options are not accessible or clinically appropriate. PEMGARDA™ (pemivibart) received an EUA from the FDA in March 2024 for pre-exposure prophylaxis (PrEP) of COVID-19 in certain adults and adolescents with moderate-to-severe immune compromise.

This updated treatment immunobridging analysis, incorporating dominant SARS-CoV-2 variant XEC neutralization data, is similar to the approach and data that supported the PEMGARDA PrEP EUA. The updated analysis is in line with the prior, positive treatment immunobridging analyses of pemivibart versus its parent molecule, adintrevimab, and other comparator mAbs based on prior virus variants, previously submitted to the FDA in mid-2024 and late-2024 in support of the company's EUA amendment request for COVID-19 treatment.

The comparison between pemivibart and adintrevimab illustrates serum virus neutralizing antibody (sVNA) titers, the clinical measure of antiviral activity, conferred by pemivibart substantially exceed those of adintrevimab for the first four days post dosing, after which titers fall modestly below. As a long-acting mAb, pemivibart would be expected to exert meaningful antiviral activity for many months following a single dose. In the STAMP clinical trial, adintrevimab conferred the majority of its maximum antiviral effect by Day 5 and demonstrated a viral load reduction generally in line with PAXLOVID®[1]. Because pemivibart is dosed intravenously, higher serum drug concentration and corresponding antiviral activity are delivered immediately, compared to the slower distribution of intramuscularly administered adintrevimab. Pemivibart's pharmacodynamic profile therefore may have some benefit in modifying viral infection and associated clinical outcomes as compared to adintrevimab. Prior randomized control trials of COVID-19 mAbs have underscored the benefit of deploying maximum antiviral activity as early as possible in the treatment of active infection in avoiding hospitalization and adverse morbid/mortal outcomes[2]. If an EUA amendment for COVID-19 treatment is granted, Invivyd intends to assess the virologic profile of pemivibart in a clinical study designed in collaboration with the FDA.

The standing treatment EUA request supporting pemivibart for the treatment of COVID-19 in certain immunocompromised patients for whom alternative COVID-19 treatment options, such as PAXLOVID® (nirmatrelvir) therapy, are not accessible or clinically appropriate, relies on the safety profile and sVNA titers of PEMGARDA demonstrated in the CANOPY Phase 3 clinical trial. Following the four cases of anaphylaxis seen in the CANOPY clinical trial, no reports of anaphylaxis have been identified to date during post-authorization use of PEMGARDA across potentially thousands of PEMGARDA doses administered in clinical practice.

"Current therapies for COVID-19 have significant limitations, for example the drug-drug interaction complications imposed by nirmatrelvir create clinical circumstances in which standard of care may not be possible or appropriate for patients in need. Patients – particularly the millions of Americans who are immunocompromised – desperately need more and better therapeutic

options because COVID-19 is not going away. Monoclonal antibodies have been highly attractive therapeutic options in the past and the community would welcome the return of a therapeutic mAb," said Amesh Adalja, MD, FIDSA, FACP, FACEP, Senior Scholar, Johns Hopkins Center for Health Security.

The EUA process does not rely on a statutory timeline such as the timelines embedded into the Prescription Drug User Fee Act (PDUFA)-based regulatory actions such as New Drug Application (NDA) or Biologics License Application (BLA) approval processes. Invivyd initially submitted a package to the FDA in support of a COVID-19 treatment EUA amendment request in July 2024, and since has provided consistent, timely updates to the FDA as SARS-CoV-2 virus variation has presented and as Invivyd has generated data in its ongoing industrial virology effort. Of note, given robust and consistent generation of sVNA titers, the direct expression of antibody antiviral activity, and comparability across multiple antibodies, Invivyd believes that the performance of Invivyd antibodies based on sVNA titers represents a well-supported surrogate endpoint and should be considered for approval beyond EUA to enable pemivibart to remain a long-term option for vulnerable, immunocompromised persons.

About PEMGARDA
PEMGARDA™ (pemivibart) is a half-life extended investigational monoclonal antibody (mAb). PEMGARDA was engineered from adintrevimab, Invivyd's investigational mAb that has a robust safety data package and provided evidence of clinical efficacy in global Phase 2/3 clinical trials for the prevention and treatment of COVID-19. PEMGARDA has demonstrated in vitro neutralizing activity against major SARS-CoV-2 variants, including JN.1, KP.3.1.1 and XEC. PEMGARDA targets the SARS-CoV-2 spike protein receptor binding domain (RBD), thereby inhibiting virus attachment to the human ACE2 receptor on host cells.

PEMGARDA (pemivibart) injection (4500 mg), for intravenous use is an investigational mAb that has not been approved, but has been authorized for emergency use by the U.S. FDA under an EUA for the pre-exposure prophylaxis (prevention) of COVID-19 in adults and adolescents (12 years of age and older weighing at least 40 kg) who have moderate-to-severe immune compromise due to certain medical conditions or receipt of certain immunosuppressive medications or treatments and are unlikely to mount an adequate immune response to COVID-19 vaccination. Recipients should not be currently infected with or have had a known recent exposure to an individual infected with SARS-CoV-2.

PEMGARDA is not authorized for use for treatment of COVID-19 or post-exposure prophylaxis of COVID-19. Pre-exposure prophylaxis with PEMGARDA is not a substitute for vaccination in individuals for whom COVID-19 vaccination is recommended. Individuals for whom COVID-19 vaccination is recommended, including individuals with moderate-to-severe immune compromise who may derive benefit from COVID-19 vaccinations, should receive COVID-19 vaccination. In individuals who have recently received a COVID-19 vaccine, PEMGARDA should be administered at least 2 weeks after vaccination.

Anaphylaxis has been observed with PEMGARDA and the PEMGARDA Fact Sheet for Healthcare Providers includes a boxed warning for anaphylaxis. The most common adverse events (all grades, incidence ≥2%) observed in participants who have moderate-to-severe immune compromise treated with PEMGARDA included systemic and local infusion-related or hypersensitivity reactions, upper respiratory tract infection, viral infection, influenza-like illness, fatigue, headache, and nausea. For additional information, please see the PEMGARDA full product Fact Sheet for Healthcare Providers, including important safety information and boxed warning.

To support the EUA for PEMGARDA, an immunobridging approach was used to determine if PEMGARDA may be effective for pre-exposure prophylaxis of COVID-19. Immunobridging is based on the serum virus neutralizing titer-efficacy relationships identified with other neutralizing human mAbs against SARS-CoV-2. This includes adintrevimab, the parent mAb of pemivibart, and other mAbs that were previously authorized for EUA. There are limitations of the data supporting the benefits of PEMGARDA. Evidence of clinical efficacy for other neutralizing human mAbs against SARS-CoV-2 was based on different populations and SARS-CoV-2 variants that are no longer circulating. Further, the variability associated with cell-based EC50 value determinations, along with limitations related to pharmacokinetic data and efficacy estimates for the mAbs in prior clinical trials, impact the ability to precisely estimate protective titer ranges. Additionally, certain SARS-CoV-2 viral variants may emerge that have substantially reduced susceptibility to PEMGARDA, and PEMGARDA may not be effective at preventing COVID-19 caused by these SARS-CoV-2 viral variants.

The emergency use of PEMGARDA is only authorized for the duration of the declaration that circumstances exist justifying the authorization of the emergency use of drugs and biological products during the COVID-19 pandemic under Section 564(b)(1) of the Federal Food, Drug, and Cosmetic Act, 21 U.S.C. § 360bbb-3(b)(1), unless the declaration is terminated or authorization revoked sooner. PEMGARDA is authorized for use only when the combined national frequency of variants with substantially reduced susceptibility to PEMGARDA is less than or equal to 90%, based on available information including variant susceptibility to PEMGARDA and national variant frequencies.

About Invivyd
Invivyd, Inc. (Nasdaq: IVVD) is a biopharmaceutical company devoted to delivering protection from serious viral infectious diseases, beginning with SARS-CoV-2. Invivyd deploys a proprietary integrated technology platform unique in the industry designed to assess, monitor, develop, and adapt to create best in class antibodies. In March 2024, Invivyd received emergency use authorization (EUA) from the U.S. FDA for a monoclonal antibody (mAb) in its pipeline of innovative antibody candidates. Visit https://invivyd.com/ to learn more.

Cautionary Note Regarding Forward Looking Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Words such as “anticipates,” “believes,” “could,” “expects,” “estimates,” “intends,” “potential,” “projects,” and “future” or similar expressions (as well as other words or expressions referencing future events, conditions or circumstances) are intended to identify forward-looking statements. Forward-looking statements include statements concerning, among other things, the company’s ongoing research and development activities, as well as future potential research and development efforts; the company’s emergency use authorization (EUA) amendment request for PEMGARDA™ (pemivibart) for the treatment of mild-to-moderate COVID-19 in certain immunocompromised patients, and the company’s beliefs regarding data supportive thereof; expectations regarding the duration of antiviral activity of pemivibart, and the potential benefits of pemivibart’s pharmacodynamic profile; the company’s intention to assess the virologic profile of pemivibart in a clinical study, if an EUA amendment for COVID-19 treatment is granted; expectations regarding the COVID-19 landscape, limitations of current therapies for COVID-19, and the potential of mAbs as a therapeutic option for COVID-19; the company’s beliefs about possible regulatory pathways for Invivyd antibodies, and the potential for pemivibart as a long-term option for vulnerable, immunocompromised patients; the company’s ongoing industrial virology effort; the potential of PEMGARDA as a mAb for pre-exposure prophylaxis (prevention) of COVID-19 in certain adults and adolescents who have moderate-to-severe immune compromise; the company’s devotion to delivering protection from serious viral infectious diseases, beginning with SARS-CoV-2; and other statements that are not historical fact. The company may not actually achieve the plans, intentions or expectations disclosed in the company’s forward-looking statements and you should not place undue reliance on the company’s forward-looking statements. These forward-looking statements involve risks and uncertainties that could cause the company’s actual results to differ materially from the results described in or implied by the forward-looking statements, including, without limitation: the outcome of the company’s EUA amendment request for pemivibart for treatment of mild-to-moderate COVID-19 in certain immunocompromised patients, and the timing thereof; how long the EUA granted by the FDA for PEMGARDA will remain in effect and whether the EUA is revised or revoked by the FDA; uncertainties related to the regulatory authorization or approval process, and available development and regulatory pathways for authorization or approval of the company’s product candidates; the ability to maintain a continued acceptable safety, tolerability and efficacy profile of any product candidate following regulatory authorization or approval; changes in the regulatory environment; the timing and progress of the company’s discovery, preclinical and clinical development activities; the risk that results of nonclinical studies or clinical trials may not be predictive of future results, and interim data are subject to further analysis; unexpected safety or efficacy data observed during preclinical studies or clinical trials; the predictability of clinical success of the company’s product candidates based on neutralizing activity in nonclinical studies; potential variability in neutralizing activity of product candidates tested in different assays, such as pseudovirus assays and authentic assays; the company’s reliance on third parties with respect to virus assay creation and product candidate testing and with respect to its clinical trials; variability of results in models and methods used to predict activity against SARS-CoV-2 variants; whether the epitope that pemivibart targets remains structurally intact; whether pemivibart or any other product candidate is able to demonstrate and sustain neutralizing activity against major SARS-CoV-2 variants, particularly in the face of viral evolution; the company’s ability to maintain and expand sales, marketing and distribution capabilities to successfully commercialize PEMGARDA; changes in expected or existing competition; the company’s ability to continue as a going concern; and whether the company has adequate funding to meet future operating expenses and capital expenditure requirements. Other factors that may cause the company’s actual results to differ materially from those expressed or implied in the forward-looking statements in this press release are described under the heading “Risk Factors” in the company’s Annual Report on Form 10-K for the year ended December 31, 2023 and the company’s Quarterly Report on Form 10-Q for the quarter ended September 30, 2024, each filed with the Securities and Exchange Commission (SEC), and in the company’s other filings with the SEC, and in its future reports to be filed with the SEC and available at www.sec.gov. Forward-looking statements contained in this press release are made as of this date, and Invivyd undertakes no duty to update such information whether as a result of new information, future events or otherwise, except as required under applicable law.

This press release contains hyperlinks to information that is not deemed to be incorporated by reference in this press release.

Contacts:

Media Relations
(781) 208-1747
media@invivyd.com

Investor Relations
(781) 208-1747
investors@invivyd.com

[1] Hammond et al NEJM 2022;386:1397-1408
[2] Ison et al Open Forum Infect Dis. 2023 May 24;10(6):ofad279