Invivyd Announces Continued Neutralizing Activity of PEMGARDA™ (pemivibart) Against Dominant SARS-CoV-2 Variant XEC

January 10, 2025

- *New in vitro neutralization data show continued, consistent neutralizing activity of PEMGARDA™ (pemivibart) against XEC*
- *Centers for Disease Control reports XEC and KP.3.1.1 (previously disclosed as susceptible to PEMGARDA) together constitute the majority of national SARS-CoV-2 variants*
- *XEC data underscore continued pemivibart activity in the face of virus evolution including recently emerging types of structural changes to spike N-terminal domain*
- *Data submitted to FDA, with timely update to PEMGARDA™ Fact Sheet for Healthcare Providers anticipated*
- *Continued consistent activity for almost three years, with no meaningful change to pemivibart neutralization activity anticipated for the foreseeable future if the epitope pemivibart targets remains structurally intact, as it has since Omicron BA.1*

WALTHAM, Mass., Jan. 10, 2025 (GLOBE NEWSWIRE) -- Invivyd, Inc. (Nasdaq: IVVD), a biopharmaceutical company devoted to delivering protection from serious viral infectious diseases, today announced that new in vitro neutralization data show continued neutralizing activity of PEMGARDA™ (pemivibart) and pipeline candidate VYD2311 against dominant SARS-CoV-2 variant XEC. As anticipated based on the structural biology of pemivibart and VYD2311, the data are largely consistent with those previously reported for KP.3.1.1. The Centers for Disease Control (CDC) estimates that XEC and KP.3.1.1 accounted for an aggregate 69% of U.S. circulating variants of SARS-CoV-2 for the two weeks ended December 21, 2024. Invivyd generated these new data as part of its ongoing industrial virology effort, which leverages a consistent, high-quality, independent, third-party pseudoviral system that routinely tests authentic Invivyd-produced pemivibart and is supported by extensive structure-based and proprietary analytics.

Invivyd has demonstrated positive PEMGARDA neutralization activity against over 75% of currently circulating U.S. variants, and all prior variants, tested to date. Further, the company estimates that every clinical variant reported in the CDC COVID Tracker since the Omicron BA.1 lineage has been susceptible to pemivibart even if untested due to the consistent structural integrity of the pemivibart epitope. Therefore, Invivyd does not anticipate any meaningful change to pemivibart neutralization activity, aside from expected normal quantitative variation in assay output, for the foreseeable future if the epitope pemivibart targets remains structurally intact, as it has since Omicron BA.1.

“We designed pemivibart and our pipeline molecules to resist the effects of evolution,” said Robert Allen, Ph.D., Chief Scientific Officer. “Pemivibart has now demonstrated antiviral activity in neutralization assays representing thirty-nine distinct SARS-CoV-2 variants across almost three years of rapid virus evolution. The ongoing pemivibart activity, with minimal quantitative change in neutralization activity, especially as compared to predecessor medicines such as Evusheld™ (tixagavimab/cilgavimab), is incredibly reassuring and validating of our fundamental R&D engine and potentiates our ability to successfully drug this target for long periods of time despite evolutionary pressure.”

“Invivyd has worked to construct what we believe is the world’s most advanced and capable antibody discovery and virology platform designed to provide best-in-class molecules and virologic assessment,” noted Marc Elia, Chairman of Invivyd Board of Directors. “Therefore, we are pleased but not surprised by today’s robust data that confirm ongoing PEMGARDA™ (pemivibart) neutralizing activity against key current circulating viral lineages.”

“Amidst the continual mutations that characterize SARS-CoV-2, proactively monitoring viral evolution as Invivyd is doing is a necessity in order to continuously test PEMGARDA against emerging variants of SARS-CoV- 2,” noted Amesh Adalja, MD, FIDSA, FACP, FACEP, Senior Scholar, Johns Hopkins Center for Health Security. “It is reassuring that PEMGARDA continues to show neutralizing activity against XEC, the current dominant circulating variant in the U.S. As we see COVID-19 numbers continue to rise through the respiratory season, PEMGARDA offers a valuable tool for certain moderately to severely immunocompromised patients who need options.”

Data showing continued in vitro neutralizing activity of PEMGARDA™ (pemivibart) against XEC have been submitted to the U.S. Food and Drug Administration (FDA), with a timely update to the PEMGARDA Fact Sheet for Healthcare Providers anticipated.

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 a global Phase 2/3 clinical trial 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 VYD2311
VYD2311 is a novel monoclonal antibody (mAb) candidate being developed for COVID-19 to continue to address the urgent need for new therapeutic options for vulnerable populations, including immunocompromised people.

VYD2311 was engineered from adintrevimab, Invivyd's investigational mAb that has a robust safety data package and demonstrated clinically meaningful results in global Phase 3 clinical trials for both the prevention and treatment of COVID-19. The pharmacokinetic profile of VYD2311 may offer the ability to deliver clinically meaningful titer levels through more patient-friendly means such as an intramuscular route of administration.

About Invivyd
Invivyd, Inc. (Nasdaq: IVVD) is a biopharmaceutical company devoted to delivering protection from serious viral infectious diseases, beginning with SARS-CoV-2. The company's proprietary INVYMAB™ platform approach combines state-of-the-art viral surveillance and predictive modeling with advanced antibody engineering. INVYMAB is designed to facilitate the rapid, serial generation of new monoclonal antibodies (mAbs) to address evolving viral threats. In March 2024, Invivyd received emergency use authorization (EUA) from the U.S. FDA for its first mAb in a planned series 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 ongoing industrial virology effort, which leverages a consistent, high-quality, independent, third-party pseudoviral system that routinely tests authentic Invivyd-produced pemivibart and is supported by extensive structure-based analytics and proprietary analytics; the ongoing in vitro neutralizing activity of PEMGARDA against major SARS-CoV-2 variants; anticipated timely updates to the PEMGARDA Fact Sheet for Healthcare Providers; the company's expectations regarding the neutralization activity of pemivibart for the foreseeable future; the design of pemivibart and the company's pipeline molecules to resist the effects of evolution; the

company's beliefs regarding the potential of its fundamental R&D engine and ability to successfully drug its target for long periods of time despite evolutionary pressure; the company's beliefs regarding its antibody discovery and virology platform and its potential to provide best-in-class molecules and virologic assessment; 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 potential ability of VYD2311 to deliver clinically meaningful titer levels through more patient-friendly means such as an intramuscular route of administration; the company's devotion to delivering protection from serious viral infectious diseases, beginning with SARS-CoV-2; the design of the company's INVYMAB platform approach to facilitate the rapid, serial generation of new mAbs to address evolving viral threats; 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 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, VYD2311 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; 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; the company's ability to maintain and expand sales, marketing and distribution capabilities to successfully commercialize PEMGARDA; 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; changes in expected or existing competition; the complexities of manufacturing mAb therapies; the company's ability to leverage its INVYMAB platform approach to facilitate the rapid, serial generation of new mAbs to address evolving viral threats; 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.

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