August 10, 2026

Acurx Pharmaceuticals

Acurx Announces Scientific Partnership with Leiden University Medical Center to Advance Development of Acurx's DNA Polymerase IIIC Inhibitor Antibiotics

- This new partnership builds on the previously reported successful results from the innovative research grant received in November 2025 from Health-Holland to Leiden University and Acurx
- This prior work included high-resolution elucidation of the interaction of ibezapolstat with its molecular target, DNA polymerase IIIC (pol IIIC, also known as PolC), with mechanistic findings that explain its properties of lacking cross-resistance with other antibiotics and not fostering the emergence of vancomycin-resistant *Enterococcus* strains, a unique differentiation among anti-CDI antibiotics
- The new research partnership aims to generate the first-ever 3D structure of PolC from methicillin-resistant *Staphylococcus aureus* (MRSA) in complex with DNA and an Acurx inhibitor to advance discovery of new antibiotics to treat infections caused by this high-priority pathogen
- This partnership will extend mechanistic research into PolC inhibition to accelerate the development of novel agents for the systemic treatment of infections caused by a range of Gram-positive pathogens resistant to currently available antibiotics

STATEN ISLAND, N.Y., Aug. 10, 2026 /PRNewswire/ -- Acurx Pharmaceuticals, Inc. (Nasdaq: ACXP) ("Acurx" or the "Company"), a clinical stage biopharmaceutical company developing a new class of antibiotics for difficult-to-treat bacterial infections, today announced a new scientific partnership with Leiden University Medical Center (LUMC) in the Netherlands.

Prior work under the November 2025 research grant from Health-Holland to Leiden University Medical Center and Acurx for DNA pol IIIC Inhibitors included detailed three-dimensional structures for three pol IIIC complexes from Enterococcus and was published in Nature Communications in 2025 [A unique inhibitor conformation selectively targets the DNA polymerase PolC of Gram-positive priority pathogens]* [https://rdcu.be/fxMVQ]. These results have yielded valuable insights into the structure-function relationship for the PolC class of inhibitors. This new partnership aims to generate the first-ever 3D structure of PolC from MRSA in complex with DNA and an Acurx inhibitor to advance discovery of new antibiotics to treat this high-priority clinical pathogen. This new partnership will extend mechanistic research into PolC inhibition to accelerate the development of novel new agents that are systemically active against a range of Gram-positive pathogens resistant to currently available antibiotics.

Wiep Klaas Smits, PhD, Associate Professor, LUMC Department of Medical Microbiology will l and Chemical Biology and Mia Urem, PhD, from Leiden University Medical Center in the

Netherlands.
Dr. Smits stated: "Whereas the previous work established a conserved mode of action for this novel class of antibiotics, the new project will allow us to investigate more subtle differences between PolC's from different Gram-positive organisms and will improve our understanding of how these different novel antibiotics interact with their target beyond their inhibitory group."

Robert J. DeLuccia, Executive Chairman of Acurx, stated: "This work is very important, when coupled with the recently reported initial data from laboratory experiments in MRSA-infected neutropenic mice at the University of Houston School of Pharmacy demonstrating that Acurx DNA pol IIIC antibiotics showed favorable gut-sparing effects to be a class effect while maintaining systemic antibacterial activity . It will pave the way for further rational design of novel DNA pol IIIC inhibitors based on new structure-activity relationships." He further stated: "Treating systemic infections, like those caused by MRSA, without promoting antibiotic-induced gut dysbiosis has the potential for a transformational shift in the treatment paradigm for antibacterial therapy."

The scientific poster presented at ESCMID Global in April 2026 is available on our website: www.acurxpharma.com

Acurx's portfolio of preclinical compounds includes clinical applications for infections caused by MRSA such as: ABSSI, Hospital Acquired and Ventilator Acquired Bacterial Pneumonia, bacteremia with or without sepsis and/or endocarditis, bone and joint and diabetic foot infections. Additionally, Acurx intends to leverage its preclinical development program for *S.aureus* infections for the treatment of post-exposure inhalational anthrax caused by *B. anthracis*, a Bioterrorism Category A Threat-Level pathogen. Acurx's DNA PolC inhibitor preclinical product candidates are FDA QIDP and Fast-Track eligible and target Gram-positive infections classified as Serious Threat priorities by CDC.

About the Prior Research Project, Leiden University Medical Center, the Research Consortium and the New Scientific Partnership between LUMC and Acurx
Antimicrobial resistant microorganisms are a major threat to global health and pose a significant economic burden. Increasing resistance to multiple agents and resistance to so called last-resort antibiotics underscore the necessity to develop therapeutics that have a novel mode of action. DNA replication is a process that can be successfully targeted by small molecules. Ibezapolstat, an inhibitor of the replicative DNA polymerase pol IIIC from Gram-positive bacteria identified by screening library of dGTP analogues, has shown promising results for the treatment of *Clostridioides difficile* Infection in a recently completed Phase 2 clinical trial and is ready to enter Phase 3 clinical trials. Prior work under the November 2025 research grant from Health-Holland to Leiden University Medical Center and Acurx for DNA pol IIIC Inhibitors included detailed three-dimensional structures for three pol IIIC complexes from Enterococcus and was published in Nature Communications [A unique inhibitor conformation selectively targets the DNA polymerase PolC of Gram-positive priority pathogens] [https://rdcu.be/fxMVQ]. These results have yielded valuable insights into the structure-function relationship for the PolC (pol IIIC) class of inhibitors. This new partnership builds on the previously reported successful results from the innovative research grant received in November 2025 from Health-Holland to Leiden University and Acurx. The partnership aims to generate the first-ever 3D structure of Pol C from methicillin-resistant *Staphylococcus aureus* (MRSA) in complex with DNA and an Acurx inhibitor to advance

discovery of new compounds to treat this high-priority clinical pathogen. This new partnership will extend mechanistic research into pol IIIC inhibition to accelerate the development of novel new agents that are systemically active against a range of Gram-positive pathogens resistant to currently available antibiotics.

Leiden University was the first university to be established in the Netherlands. Its motto is praesidium libertatis – bastion of freedom. The University wishes to create an increasingly attractive and challenging working climate for top academics and young researchers that is guided by quality and excellence. Leiden University Medical Center (LUMC) research aims to meet the highest international standards of quality and academic integrity. LUMC promotes excellent research through greater collaboration, both disciplinary and interdisciplinary; stronger positioning and greater scope for top talent; and better supervision and more support for young researchers.

About Acurx Pharmaceuticals, Inc.
Acurx Pharmaceuticals is a late-stage biopharmaceutical company focused on developing a new class of small molecule antibiotics for difficult-to-treat bacterial infections. The Company's approach is to develop antibiotic candidates with a Gram-positive selective spectrum (GPSS®) that blocks the active site of the Gram+ specific bacterial enzyme DNA polymerase IIIC (pol IIIC), inhibiting DNA replication and leading to Gram-positive bacterial cell death. Its R&D pipeline includes antibiotic product candidates that target Gram-positive bacteria, including Clostridioides difficile, methicillin- resistant Staphylococcus aureus (MRSA), vancomycin resistant Enterococcus (VRE), drug- resistant Streptococcus pneumoniae (DRSP) and B. anthracis (anthrax; a Bioterrorism Category A Threat-Level pathogen).

Acurx's lead product candidate, ibezapolstat, for the treatment of *C. difficile* Infection (CDI) is Phase 3 ready to advance to international clinical trials subject to obtaining appropriate financing. Acurx has received FDA guidance in meeting minutes from a July 13, 2026 Type C Meeting to discuss ibezapolstat's (IBZ) Phase 3 clinical program, including the potential to submit an NDA (New Drug Application) based on a single Phase 3 trial and a clinical trial design intended to support indications for both treatment and reduction of recurrence of *Clostridioides difficile* infection (CDI). FDA stated that it is open to further discussion on the totality of evidence from the clinical development program at a pre-NDA meeting after completion of a single Phase 3 trial and any other clinical trials conducted prior to the pre-NDA meeting, particularly if the clinical efficacy results are robust. Additionally, the Agency agreed that a successful clinical outcome from a single IBZ-ASPIRE Phase 3 trial, supported by the open-label IBZ-PATHFINDER Phase 2 trial in multiply-recurrent CDI (rCDI) will allow NDA filing for both the acute treatment and the reduction of recurrence of CDI.
Trial start-up activities for the IBZ-PATHFINDER ground-breaking clinical trial in patients with rCDI have been initiated with patient enrollment to begin in the next few months.

The Company's preclinical pipeline includes development of an oral product candidate for treatment of ABSSSI (Acute Bacterial Skin and Skin Structure Infections), upon which a development program for treatment of inhaled anthrax is being planned in parallel.

To learn more about Acurx Pharmaceuticals and its product pipeline, please visit www.acurxpharma.com.

About MRSA

While ibezapolstat for the treatment of *C. difficile* Infection (CDI) is ready to advance to Phase 3 international pivotal trials, Acurx's R&D platform has sustainability for additional new product candidates from its pipeline of systemic (oral and IV) antibiotics to treat infections caused by other susceptible and antimicrobial resistant bacteria, including infections caused by MRSA. The CDC estimates ~323,700 hospital cases of MRSA infections annually with ~10,600 deaths. In a recent CDC surveillance study in hospitalized patients in the US, MRSA accounted for 52% of all infections, almost twice as many as MDR Gram-negative infections.
Clinical applications for these infections include: ABSSI, Hospital Acquired and Ventilator Acquired Bacterial Pneumonia, bacteremia with or without sepsis and/or endocarditis, bone and joint, diabetic foot infections. Acurx's DNA pol IIIC inhibitor preclinical product candidates are FDA QIDP and Fast-Track eligible and target Gram-positive infections classified as Serious Threat priorities by CDC.

Forward-Looking Statements
Any statements in this press release about our future expectations, plans and prospects, including statements regarding our strategy, future operations, prospects, plans and objectives, and other statements containing the words "believes," "anticipates," "plans," "expects," and similar expressions, constitute forward-looking statements within the meaning of The Private Securities Litigation Reform Act of 1995. Actual results may differ materially from those indicated by such forward-looking statements as a result of various important factors, including: whether ibezapolstat will benefit from the QIDP designation; whether ibezapolstat will advance through the clinical trial process on a timely basis; whether the results of the clinical trials of ibezapolstat will warrant the submission of applications for marketing approval, and if so, whether ibezapolstat will receive approval from the FDA or equivalent foreign regulatory agencies where approval is sought; whether, if ibezapolstat obtains approval, it will be successfully distributed and marketed; and other risks and uncertainties described in the Company's annual report on Form 10-K for the year ended December 31, 2025 as filed with the Securities and Exchange Commission on March 12 2026, and in the Company's subsequent filings with the Securities and Exchange Commission. Such forward- looking statements speak only as of the date of this press release, and Acurx disclaims any intent or obligation to update these forward-looking statements to reflect events or circumstances after the date of such statements, except as may be required by law.

Investor Contact:
Acurx Pharmaceuticals, Inc.
David P. Luci, President & CEO
Tel: 917-533-1469
Email: davidluci@acurxpharma.com

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