Dear Chairman Alexander,

As organizations representing health care providers, scientists, public health, patients, industry and advocates, we write to thank you for issuing a white paper entitled, "Preparing for the Next Pandemic" and to emphasize the importance of addressing antimicrobial resistance (AMR) as a key component of our nation's pandemic preparedness. As recently as the Pandemic and All Hazards Preparedness and Innovation Act (PAHPAI), Congress has reaffirmed the intersection of pandemic preparedness and AMR, but our nation's AMR efforts contain significant gaps that threaten our preparedness capabilities for a wide range of pandemic threats that may be complicated by AMR.

While the exact impacts of AMR on the COVID-19 pandemic are not yet fully understood, we do know that high antibiotic use has been reported among patients with COVID-19. Multiple studies have also indicated that secondary bacterial infections contribute to morbidity and mortality in patients with COVID-19.¹²³ As we look forward to preparing for future pandemics, it is critical that the U.S. strengthen our approach to antibiotic stewardship and surveillance and increase our antibiotic arsenal. Below we offer recommendations in areas identified in your white paper.

Tests, Treatments and Vaccines

A strong pipeline of antibiotics is critical to preparedness efforts, but the antibiotics market is on the verge of collapse. Because antibiotics are typically used for a short duration and must be used judiciously to preserve their effectiveness, it is extremely difficult for innovators to earn a return on investment in new antibiotic research and development. As a result, most large pharmaceutical companies are no longer engaged in antibiotic R&D, and the small companies responsible for the vast majority of current antibiotic innovation are struggling to remain in business. Two such companies filed for bankruptcy in 2019. While funding from NIH and BARDA have been critical to bring new antibiotics to market, they are insufficient to spur the thriving antibiotics market necessary to ensure our nation's preparedness capacity. We recommend that preparedness legislation specifically include post-market incentives to help antibiotic innovators earn a fair and reasonable return on investments. We also emphasize the importance of diagnostic tests to guide optimal antibiotic use and of vaccines to prevent infections and obviate the need for antibiotic use.

Disease Surveillance

While the AMR threats we know about are deeply concerning, the threats we cannot see coming can be the most dangerous of all. AMR surveillance has improved since the 2015 launch of the National Action Plan for Combating Antibiotic Resistant Bacteria, but still falls short of needs. Additional resources are needed to expand public health capacity to track more resistant pathogens and to do so in real time.

¹ <u>https://www.thelancet.com/action/showPdf?pii=S0140-6736%2820%2930183-5</u>

² <u>https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)30211-7/fulltext</u>

³ <u>https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)30566-3/fulltext#tbl2</u>

Public Health Capabilities

Federal, state and local public health capacity must be increased to support appropriate antibiotic use in partnership with healthcare facilities. The Medicare Condition of Participation requiring antibiotic stewardship programs in hospitals, and similar requirements for long term care facilities, are important steps forward. But new grant opportunities must be made available to support robust implementation of stewardship programs at these facilities, as well as at outpatient facilities. A report issued by CDC in 2018 estimated that about 30% of antibiotics prescribed in U.S. doctors' offices and emergency departments are unnecessary. The same report found that antibiotic prescribing declined nationally by 5% from 2011-2016.⁴ The overuse and misuse of antibiotics are driving the development of resistant bacteria that complicate pandemic response and limit our arsenal of effective antibiotics.

We thank you for your leadership on the critical issue of pandemic preparedness and urge you to be sure that measures to address AMR are a key component of our nation's preparedness efforts.

Sincerely,

Alliance for Aging Research American Association of Bovine Practitioners American College of Clinical Pharmacy American Society for Microbiology American Society of Hematology American Society of Tropical Medicine and Hygiene Association for Professionals in Infection Control and Epidemiology Association of American Veterinary Medical Colleges Association of Public and Land-grant Universities Association of Public Health Laboratories Association of State and Territorial Health Officials Center for Disease Dynamics, Economics & Policy **CommonSpirit Health** Cystic Fibrosis Foundation Infectious Diseases Society of America Kevin Outterson, Social Innovation on Drug Resistance, Boston University Making-A-Difference in Infectious Diseases National Association of Pediatric Nurse Practitioners National Athletic Trainers' Association ONCORD. Inc. Pediatric Infectious Diseases Society **Qpex Biopharma** Research!America Sepsis Alliance Small World Initiative

⁴ <u>https://www.cdc.gov/antibiotic-use/stewardship-report/pdf/stewardship-report-2018-508.pdf</u>

Society for Healthcare Epidemiology of America

Spero Therapeutics

The American Thoracic Society

The Antimicrobials Working Group

(Amplyx Pharmaceuticals, Cidara Therapeutics Inc., Entasis Therapeutics Inc., Iterum Therapeutics Ltd., Nabriva Therapeutics US Inc., Paratek Pharmaceuticals Inc., Qpex Biopharma Inc., SCYNEXIS Inc., Summit Therapeutics plc, VenatoRx Pharmaceuticals Inc. and X-Biotix)

The Emory Antibiotic Resistance Center

The Foundation to Combat Antimicrobial Resistance

The Gerontological Society of America

The Pew Charitable Trusts

The Society of Critical Care Medicine

Trust for America's Health

Tufts Center for Integrated Management of Antimicrobial Resistance