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President Barack Obama
The White House
1600 Pennsylvania Avenue NW
Washington, D.C. 20500

Prime Minister Fredrik Reinfeldt
On behalf of the EU Presidency
Swedish Government Offices
33 Stockholm, Sweden SE-103

Dear President Obama and Prime Minister Reinfeldt:

We write on behalf of the global Alliance for the Prudent Use of Antibiotics (APUA), established in 1981 to improve antibiotic access and contain antibiotic resistance. We wish to applaud the establishment of the new Transatlantic Task Force ("Task Force") to address antimicrobial resistance and look forward to the resulting concrete investments needed to make a real difference.

The Cost of Resistance

The cost of drug resistance is high in terms of morbidity, mortality and health care dollars. A recent APUA-initiated study at Cook County Hospital in Chicago documented a two-fold higher death rate for patients with resistant infections and an additional 6.4 – 12.7 hospital days for patients with resistant versus susceptible infections. The cost of resistance in US hospitals is estimated at greater than \$20 billion annually.

The global spread of drug resistant infections was mapped out in an APUA Report published in *Clinical Infectious Diseases* in 2005. Global penicillin resistance rates for *S. pneumoniae* were as high as 54%, and macrolide resistance for this organism up to 72%. The report characterized drug resistance as a "Shadow Epidemic" that is complicating treatment of all major infectious diseases worldwide and concluded: "After 25 years of calls for action, what is needed most is immediate leadership and substantial investments from governments around the world."

Need for Concrete Actions: Funding and Incentives

Your new Transatlantic Task Force could be a uniquely powerful vehicle to make a demonstrable impact. For over 30 years, the drug resistance problem has been the focus of studies by US and EU clinical and scientific organizations. It is now acknowledged by most government health agencies as one of the world's top public health threats. Compounding this problem is industry's steady abandonment of antibiotic discovery in favor of more lucrative drugs for chronic conditions. The exodus of large pharmaceutical companies from the antimicrobial discovery field, and the concomitant loss of institutional medicinal chemistry knowledge, has been a severe blow to identification of desperately needed new drugs.

Since 1998, only 10 new antibiotics have been approved, two of which are truly novel—i.e., defined as having a new target of action, with no cross-resistance to other antibiotics. In 2002, among 89 new medicines emerging on the market, none was an antibiotic. In

addition to the lack of effective market incentives, the technical hurdles in antibiotic development have led to reduced industry investment in antibiotic drug discovery programs.

An APUA-coordinated meeting of scientific leaders from the major antibiotic development companies found waning interest in antibiotic development among business leaders in the companies. This indicates a need for a business model that would make antimicrobial discovery an attractive field for investors. To protect the public from a potential vacuum in antibiotic supply, incentives for industry need to be provided.

Preserving Existing Agents while Promoting Development of Innovative Antibiotics

To ensure effective and affordable drugs for future generations, concrete action and government investments must be put in place with the following objectives: 1) improve knowledge of the mechanisms of resistance, and potential ways to circumvent resistance; 2) promote appropriate use of existing antimicrobials; 3) increase incentives and resources available to discover new drugs and rapid diagnostics and 4) promote infection control. It is clear that powerful investments and incentives are needed to keep pharmaceutical companies interested in discovery and development of new antibiotics so as to preserve our ability to treat infectious diseases.

Drug resistance threatens to catapult the world back to a pre-antimicrobial era. To date, governments and industry have paid little heed to continual calls for change to improve antibiotic access and use. As a uniquely powerful structure, the Transatlantic Task Force holds promise to reverse these trends.

As an independent global health organization dedicated to antibiotic resistance research and education for almost 30 years, we look forward to assisting the Task Force to ensure concrete results that will have a real impact in “preserving the power of antibiotics.”

We congratulate you for this initiative.

Sincerely,



Stuart B. Levy, MD
President, APUA



Kathleen T. Young
Executive Director, APUA

Attachments: APUA GAARD Report Summary, APUA Hospital Cost Study Press Release