Pfizer in Anti-Infectives

Why do we need anti-infectives?

Anti-infectives underpin modern medicine as we know it,[1] helping to treat and cure many kinds of infection. Thanks to anti-infectives, we can:

- Treat minor infections and cure serious infectious diseases
- Perform routine procedures and complex surgery, which carry a risk of serious infection[1]
- Give vital immune-suppressive treatment to people with cancer[1]

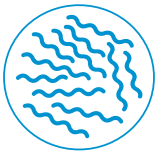
What causes infection?

Infectious diseases continue to be one of the biggest global public health concerns.[2] Infections are caused by different types of pathogens, including bacteria, viruses, fungi and parasites, and can be acquired in the community or in a hospital or healthcare setting (HAIs).

Multi-drug resistant infections

are the result of bacteria and other pathogens being able to change and develop resistance to many antimicrobials.[3] Those caused by **Gram-negative** bacteria are widely recognized as one of the biggest threats to global health today.[4,5] They are harder to treat due to their cell structure and their ability to develop resistance to commonly used antibiotics.[6]

Bacterial infections range from relatively minor such as skin or gastrointestinal infections, to serious and life-threatening, such as bloodstream infections or pneumonia.[7] Most bacteria are classified as Gram-positive or Gram-negative.[7]



Fungal infections range from athlete's foot or vaginal thrush[8] to life-threatening, invasive infections in immunocompromised patients, such as those with cancer.[9]

Viral infections range from common, self-resolving colds, to serious, long-term infections like hepatitis C.[10] Vaccination prevents some viral infections, like influenza and many childhood infections.[11]

Parasitic infections can affect anyone, anywhere, but are a particular burden on people living in the tropics and subtropics.[12] They are caused by an organism living on or in a host and include malaria, toxoplasmosis and intestinal worms.

Pfizer's commitment in anti-infectives

Pfizer recognizes the medical needs of people suffering from infectious diseases, and is committed to being a holistic provider of prevention and treatment solutions beyond just medicines.[13]

- We are proud of our longstanding heritage of partnering with the infectious disease community to address evolving and unmet medical needs across all four types of infection – bacterial, fungal, viral and parasitic.[14]
- Pfizer currently offers one of the industry's largest and most diverse portfolios of anti-infectives.[14]
- We also provide vaccines that help reduce the use of antimicrobials and help protect people from infections.[13]

References: 1. Review on Antimicrobial Resistance. Tackling drug-resistant infections globally: final report and recommendations. May 2016. Available at: https://amr-review.org/sites/default/files/160525_Final%20paper_with%20cover.pdf Last accessed August 2019. **2.** World Health Organisation. World Health Report: global health threats in the 21st century. 2007. Available at: http://www.who.int/whr/2007/overview/en/index1.html Last accessed August 2019. **3.** Review on Antimicrobial Resistance. Tackling a crisis for the health and wealth of nations. December 2014. Available at: https://amr-review.org/sites/default/files/AMR%20Review%20Paper%20-%20Tackling%20a%20crisis%20for%20the%20health%20and%20wealth%20of%20nations_1.pdf Last accessed August 2019. **4.** World Health Organization. WHO's first global report on antibiotic resistance reveals serious, worldwide threat to public health. April 30 2014. Available at: http://www.who.int/mediacentre/news/releases/2014/amr-report/en/ Last accessed August 2019. **5.** Vasoo S et al. Emerging issues in gram- negative bacterial resistance: an update for the practicing clinician. Mayo Clinic Proc. 2015;90:395-403. **6.** Schaalje J. Medical terminology: Gram positive vs. Gram negative bacteria. American College of Healthcare Sciences. Updated March 14 2018. Available at: http://info.achs.edu/blog/bid/282924/Medical-Terminology-Gram-Positive-vs-Gram-Negative-Bacteria Last accessed August 2019. **7.** Cox R. Bacterial infections 101. OnHealth. May 11 2016. Available at: https://www.onhealth.com/content/1/bacterial_infections Last accessed August 2019. **8.** NHS Choices. Antifungal medicines overview. August 14 2017. Available at: https://www.nhs.uk/conditions/antifungal-medicines/ Last accessed August 2019. **9.** Centers for Disease Control and Prevention: Cancer Patients and Fungal Infections. Available at: https://www.cdc.gov/fungal/infections/cancer-patients.html Last accessed August 2019. **10.** Cox R. Viral infections: types, treatment and prevention. OnHealth. July 1 2016. Available at: https://www.onhealth.com/content/1/viral_infections Last accessed August 2019. **11.** Public Health England. Pre-school immunisations: a guide to vaccinations from two years old until starting primary school. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/ attachment_data/file/796664/Immunisations_for_Preschool_children_A5_2019_.pdf Last accessed August 2019. **12.** Centers for Disease Control and Prevention. Parasites. 27 September 2017. Available at:https:// www.cdc.gov/parasites/about.html Last accessed August 2019. **13.** Pfizer policy position on antimicrobial resistance. January 2017. Available at: https://www.pfizer.com/files/about/Policy-Position-on-Antimicrobial-Resistance-8-17-17.pdf Last accessed August 2019. **14.** Pfizer 2016 Annual Report. Available at: https://www.pfizer.com/files/investors/financial_reports/annual_reports/2016/assets/pdfs/pfi2016ar-full-report.pdf. Last accessed August 2019.

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