

Supplemental Information

Biosensors for detecting viral and bacterial infections using host biomarkers: a review

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Introduction

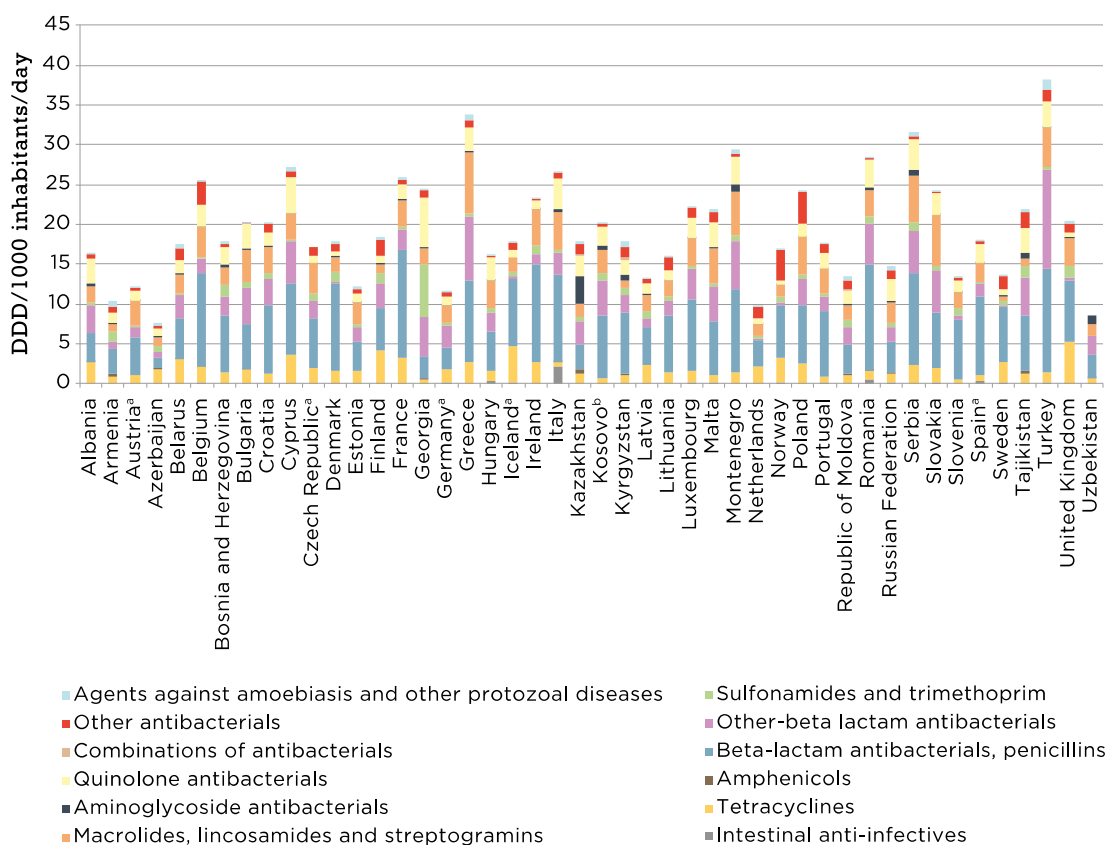


Fig. S1. Consumption of antibiotics (DDD per 1000 inhabitants per day) and pharmacological subgroup in 45 countries including WHO European Region (2015).¹

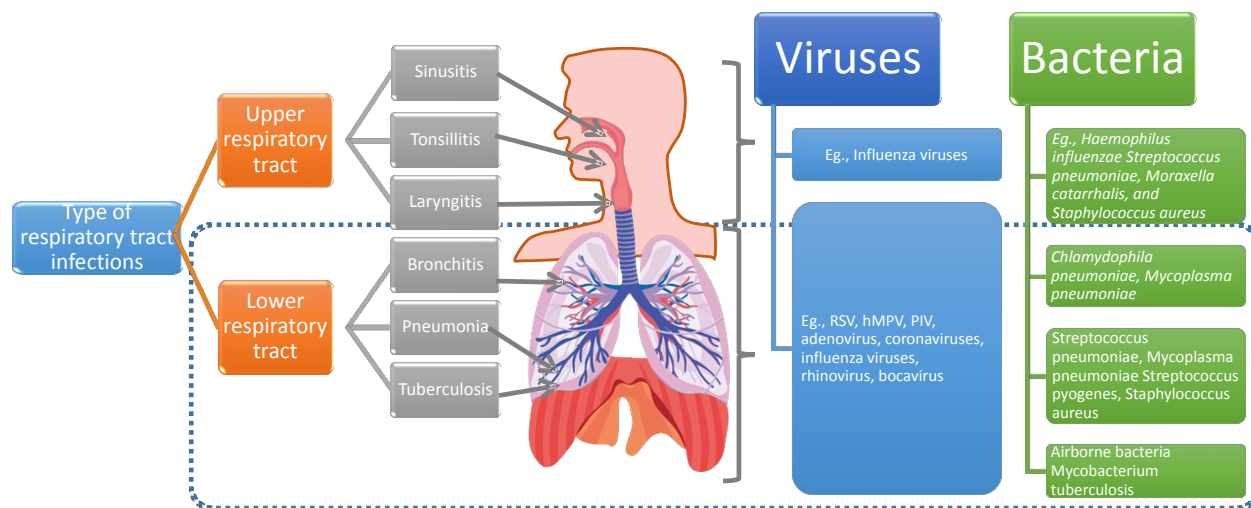


Fig. S2. Type of respiratory tract infections, infections and implicated pathogens in URTIs and LRTIs.

Table S1. Type of respiratory tract infections, symptoms, infections, involved pathogens and other causes in URTIs and LRTIs. Other causes include smoking, exposure of dust, chemicals vapors and fumes allergens and air pollution.²

Type of respiratory tract infection	Symptoms	Develop Infectious disease	Related pathogens in blood/Etiologic agents		Ref.
			Viruses	Bacteria	
Lower respiratory tract	Runny nose, cough, fever, sore throat, headache, difficulty in breathing, wheezing, chest pain ³	Bronchitis	RSV, hMPV, PIV, adenovirus, coronaviruses, influenza viruses, rhinovirus, bocavirus	<i>Chlamydophila pneumoniae</i> , <i>Mycoplasma pneumoniae</i>	3-6
		Pneumonia	Influenza, , PIV, adenovirus, RSV, hMPV	<i>Streptococcus pneumoniae</i> , <i>Mycoplasma pneumoniae</i> , <i>Streptococcus pyogenes</i> , <i>Staphylococcus aureus</i>	
		Tuberculosis		Airborne bacteria <i>Mycobacterium tuberculosis</i>	
Upper respiratory	Sneezing, headaches, sore throats, body	Common colds	Influenza viruses	<i>Haemophilus influenzae</i> , <i>Streptococcus pneumoniae</i> (<i>pneumococcus</i>), <i>Moraxella</i>	3, 7

tract	ache and flu ³	Sinus infections Tonsillitis Laryngitis Flu	<i>catarrhalis</i> , and <i>Staphylococcus aureus</i>
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References

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