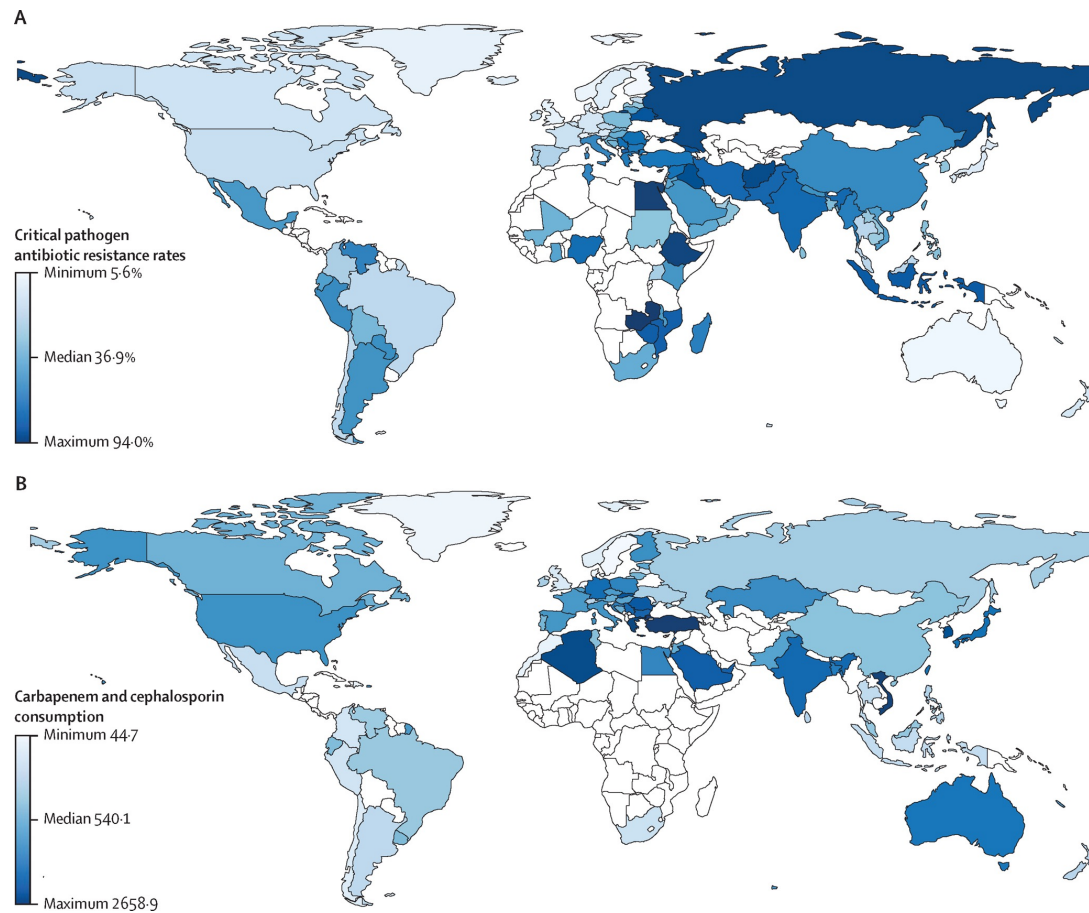


Mitigating Anti-microbial Resistance by Innovative Solutions in AI (MARISA)

Hutan Ashrafian
Lead for AI and Big Data, IGHI
hutan@ic.ac.uk

Global Risk



Consensus Priority Settings

Phase I

- Objective: Gather uncertainties (questions insufficiently addressed by current research)
- Method: Survey World Experts and identify supporting literature

Phase II

- Objective: Develop a short list of uncertainties
- Method: Interim prioritization survey of stakeholders

Phase III

- Objective: Arrive at a top list of research priorities
- Method: Remote/Email prioritisation process

Evidence Gaps and Uncertainties in AMR

- (i) Antibiotic/Drug Design
- (ii) Novel/non-classical-drug solutions, eg biologics and other technologies
- (iii) Combination solutions
- (iv) Biomarker design (population)
- (v) POC tests
- (vi) Antibiotic/Drug re-purposing
- (vii) Precision medicine/individual prediction
- (viii) Population prediction/identification of high-risk individuals (genomics/EHR)
- (ix) Behavioural modification
- (x) AMR Surveillance/epidemic surveillance
- (xi) Economic Resource allocation
- (xii) Health policy development
- (xiii) Big Data Analytics and Real World Evidence
- (xiv) Communication of AMR