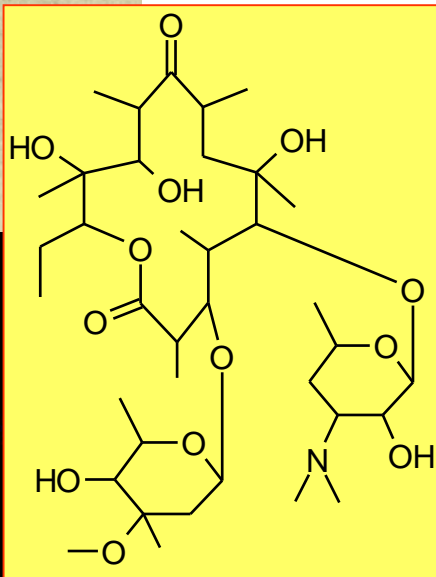
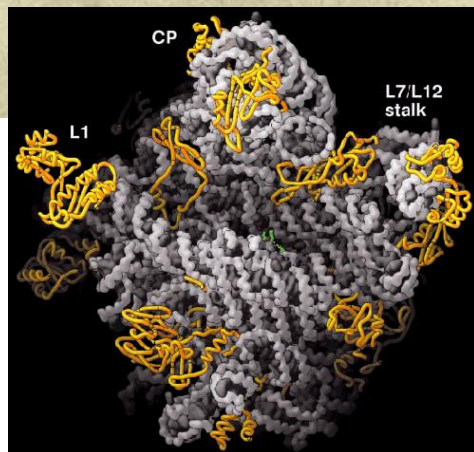
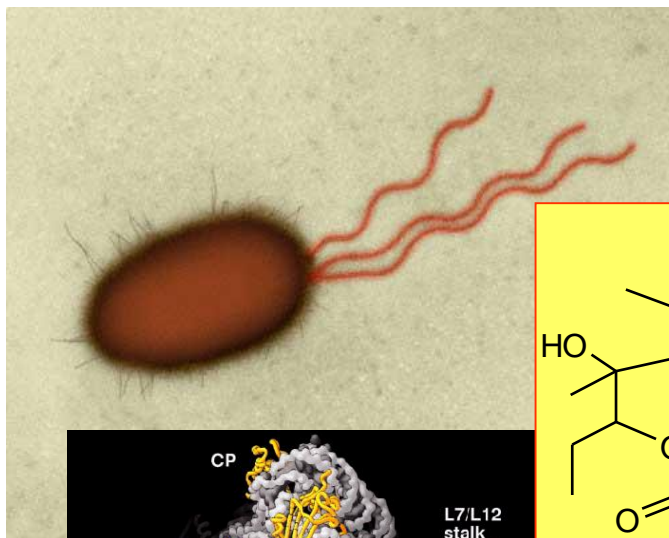


Antibiootikumide kasutamine inimeste ravis

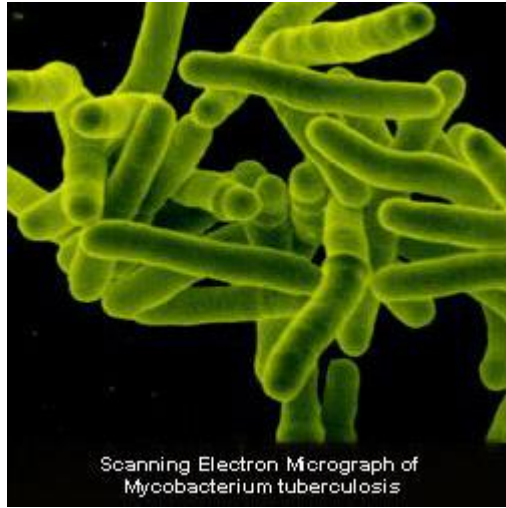


Tanel Tenson

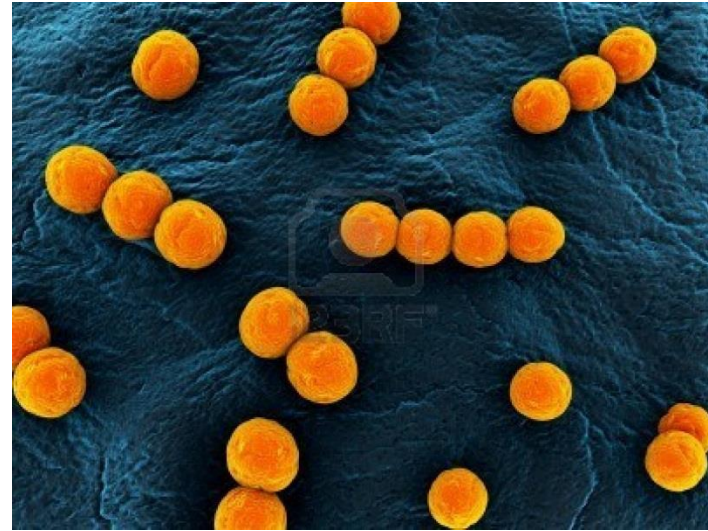
Tartu Ülikool

Tanel.Tenson@ut.ee





Scanning Electron Micrograph of
Mycobacterium tuberculosis



Chris Bjorner/Photo Researchers, Inc.



ESIMESED ANTIBIOOTIKUMID: Penitsilliin



Alexander Fleming

Textbook of Medical Microbiology

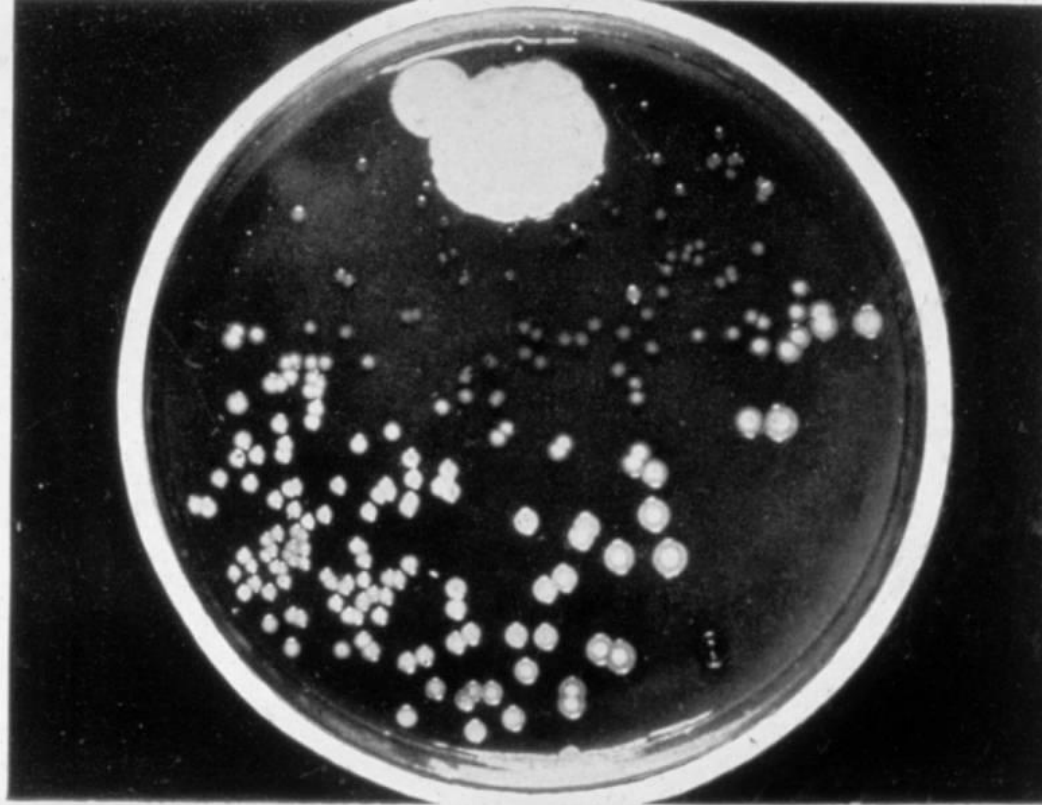
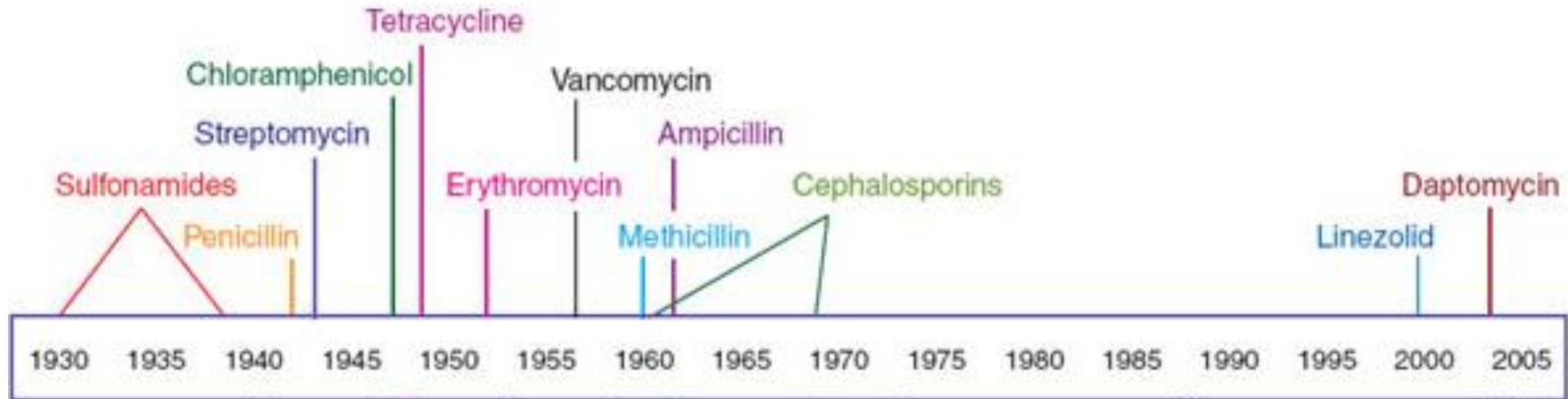


FIG. 30 (from Fleming, 1929). A photograph of the original plate on

Algne avastus (1929)

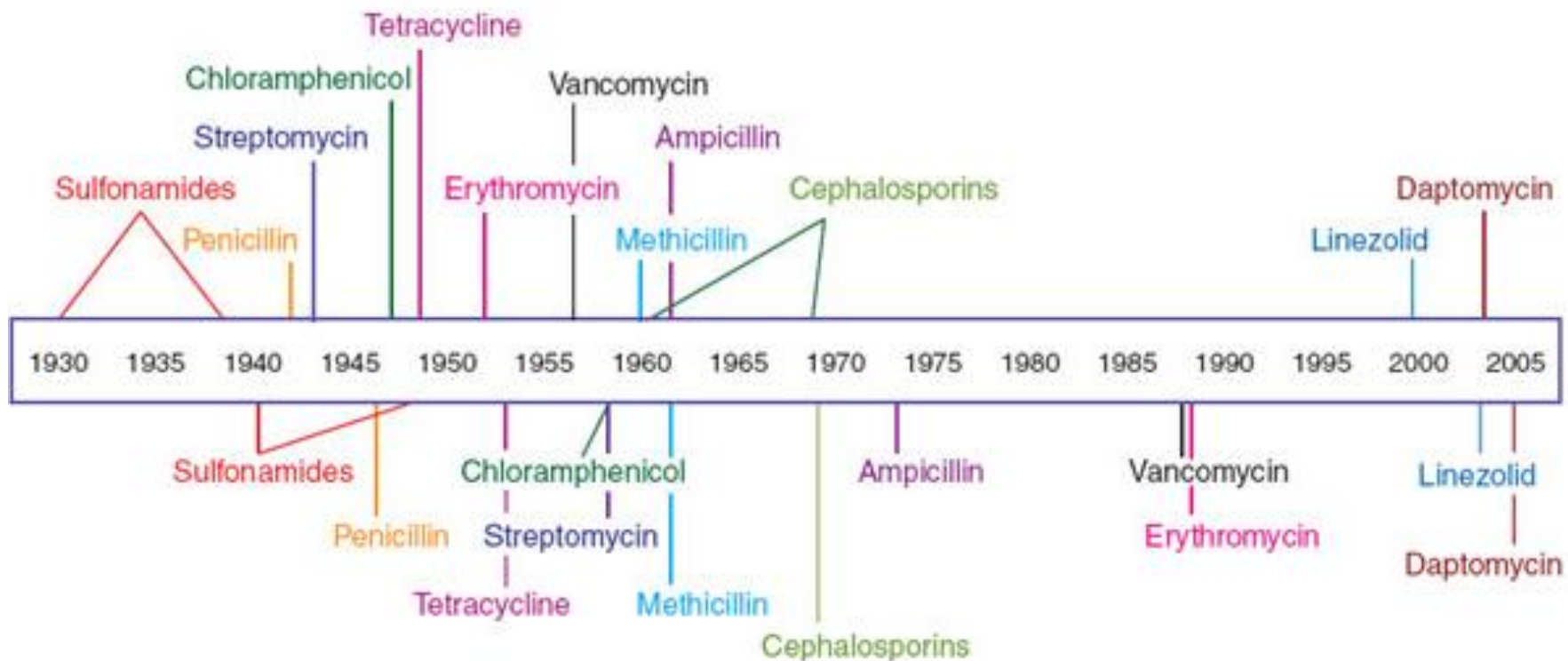
ANTIBIOOTIKUMIDE VÄLJATÖÖTAMINE



Clatworthy et al, Nature Chemical Biology

RESISTENTSUSE TÕUS

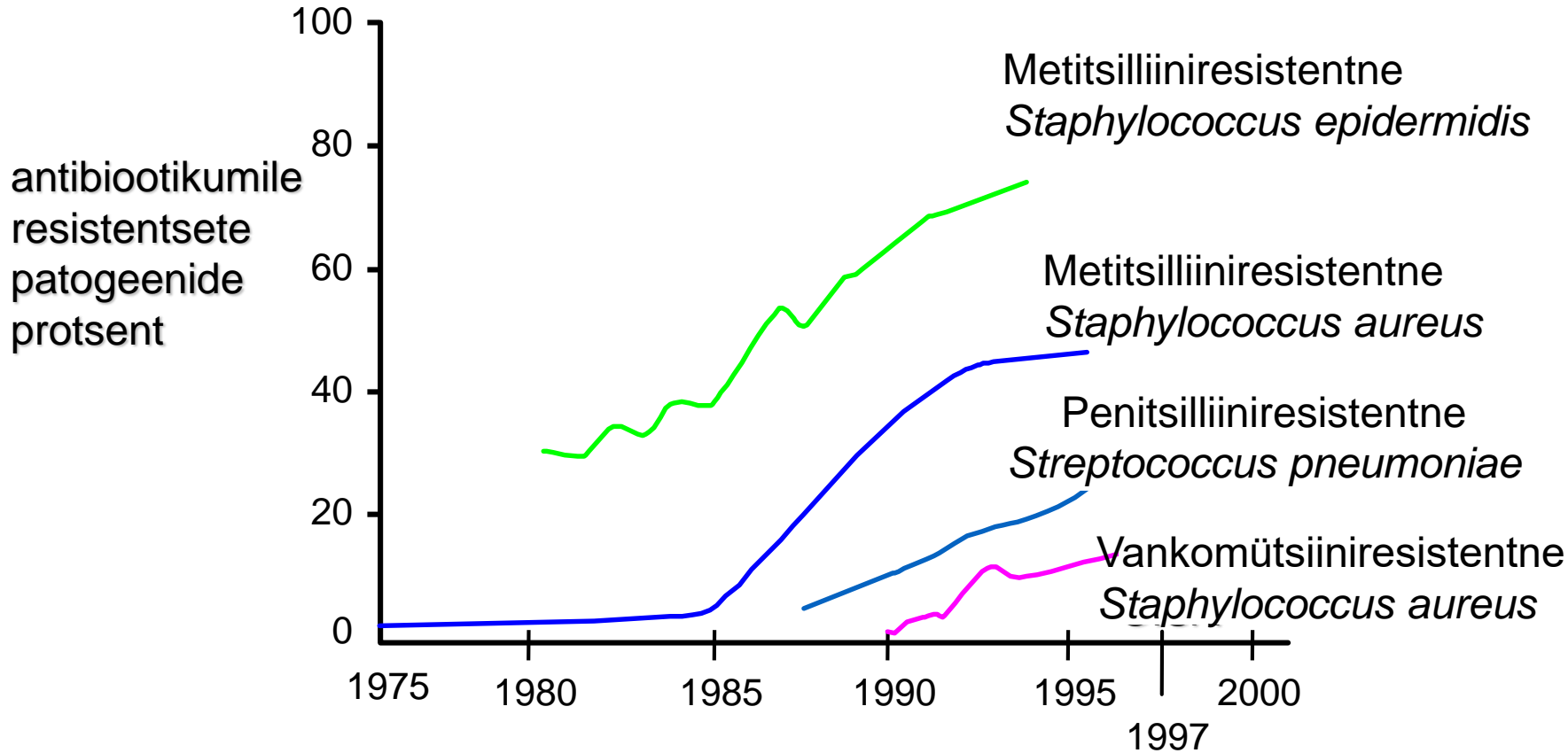
Antibiootikumi kasutusele võtmine



Resistentsuse teke

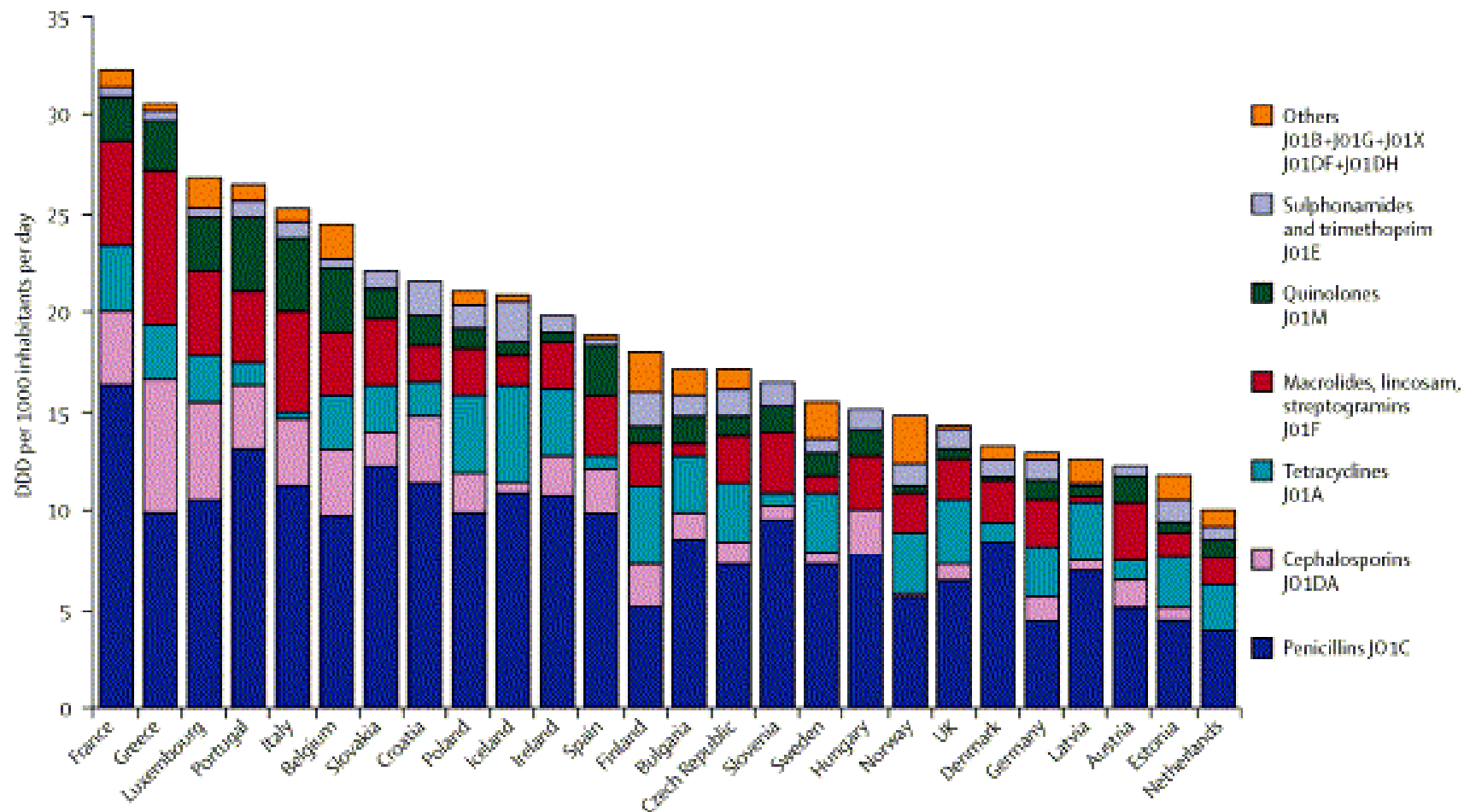
Clatworthy et al, Nature Chemical Biology

ANTIBIOOTIKUMIRESISTENTSUSE LEVIK (USA)



FDA

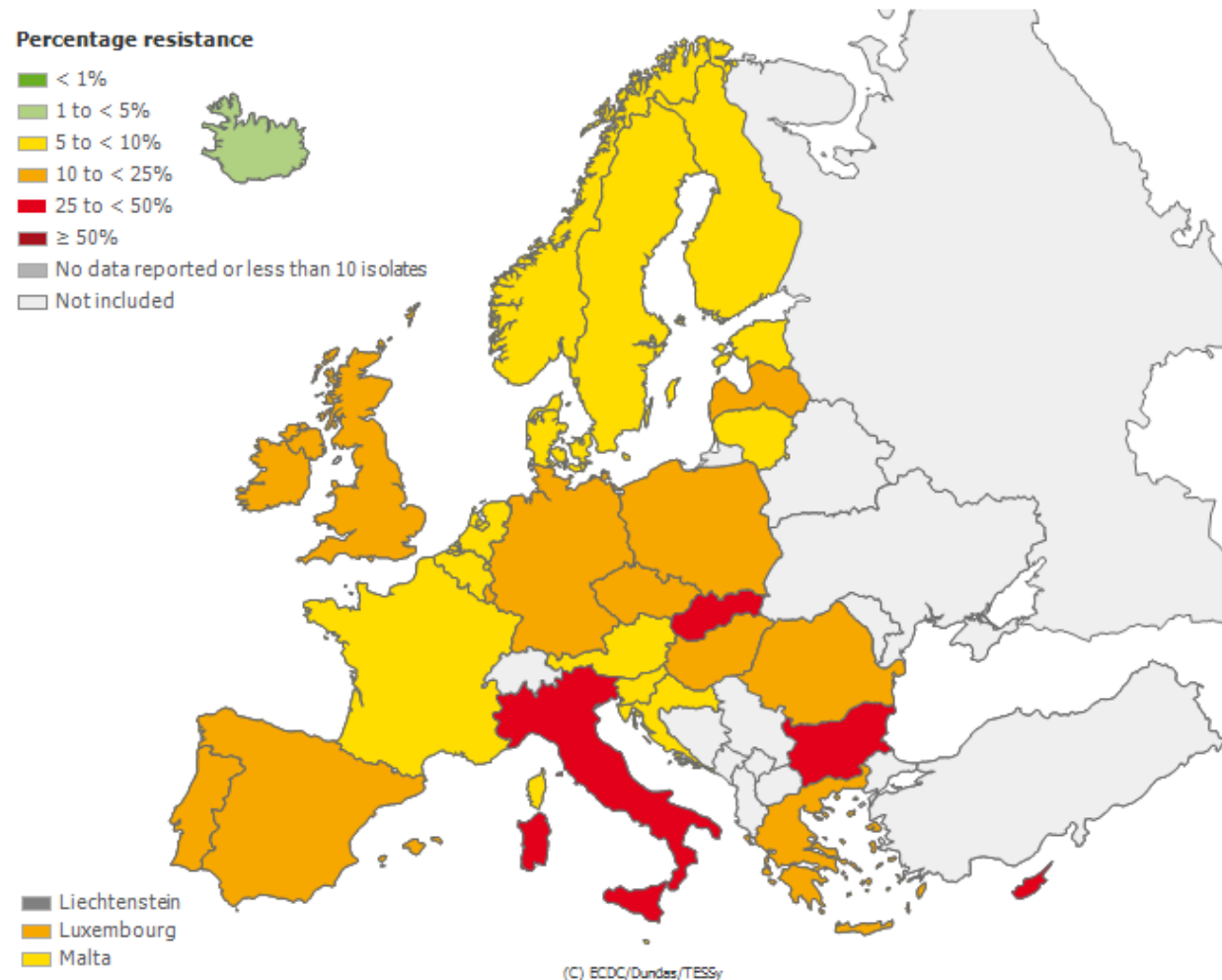
ANTIBIOOTIKUMIDE KASUTAMIST ON VÕIMALIK VÄHENDADA – KASUTUSES ON RIIGITI SUURED ERINEVUSED



Lancet 2005; 365: 579-587

E. coli resistentsus 3 põlvkonna cefalosporiini suhtes 2013

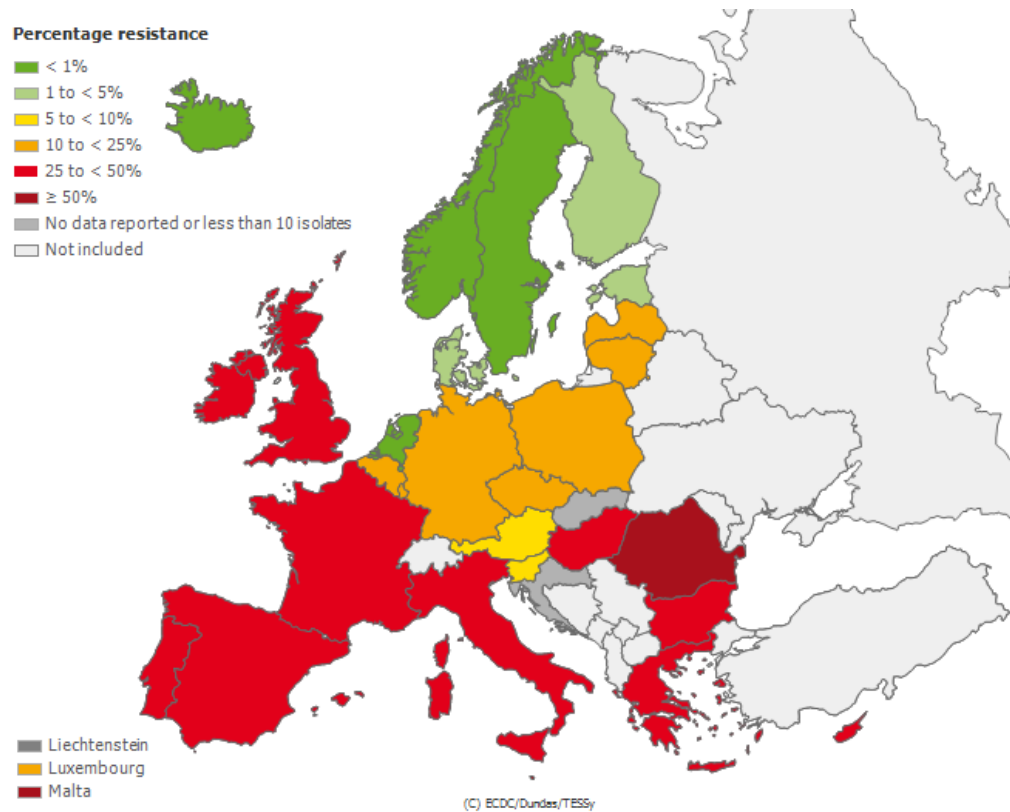
RESISTENTSUS JÄRGIB KASUTAMIST



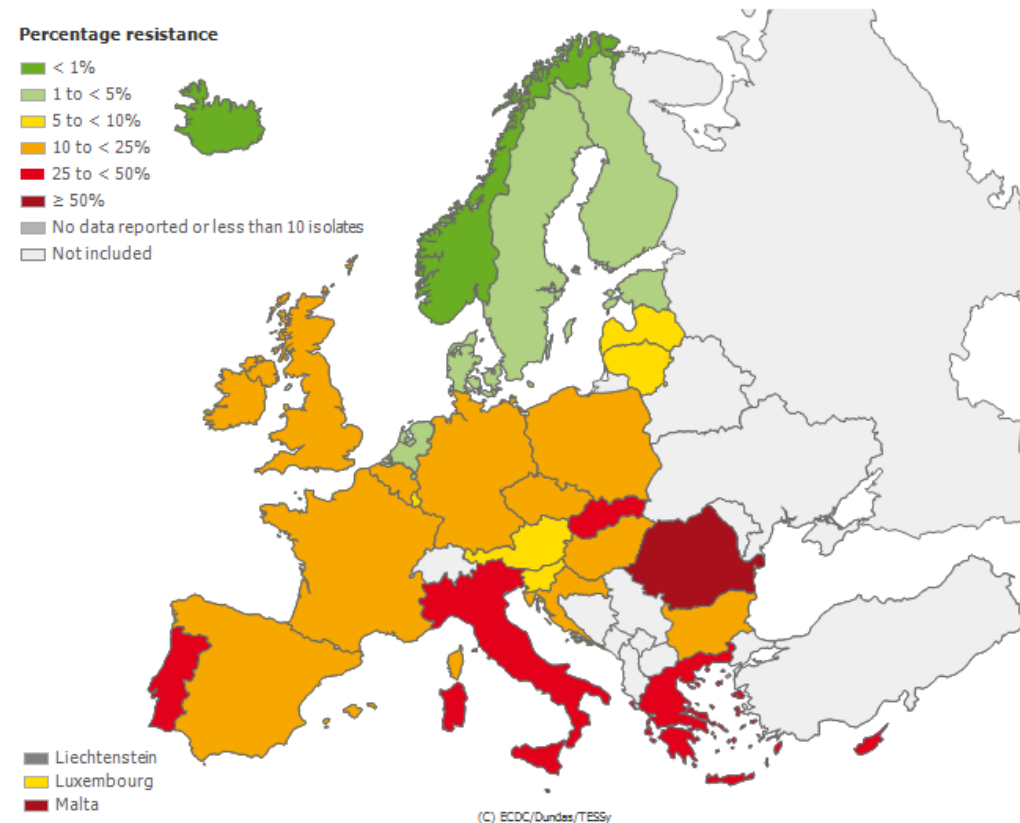
EDULUGU HÜGIEENI MÕJU

Staphylococcus aureus, MRSA

2006



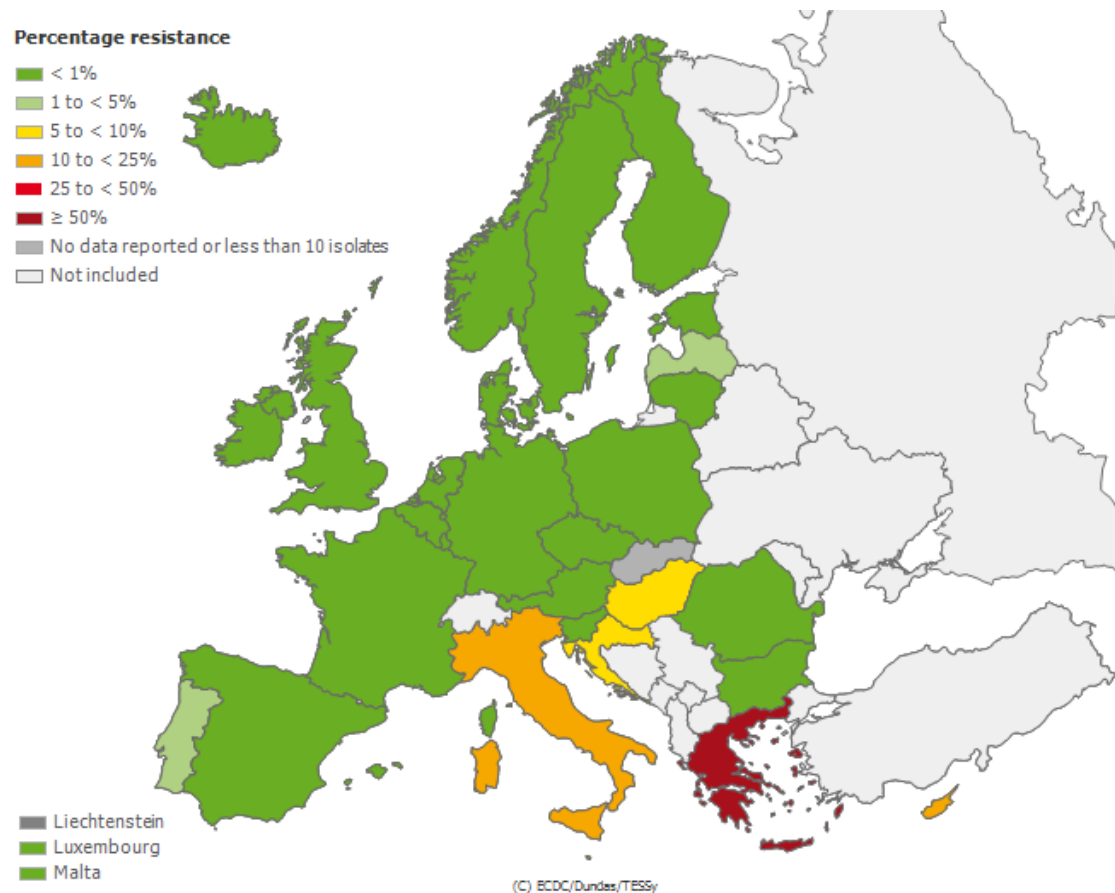
2013



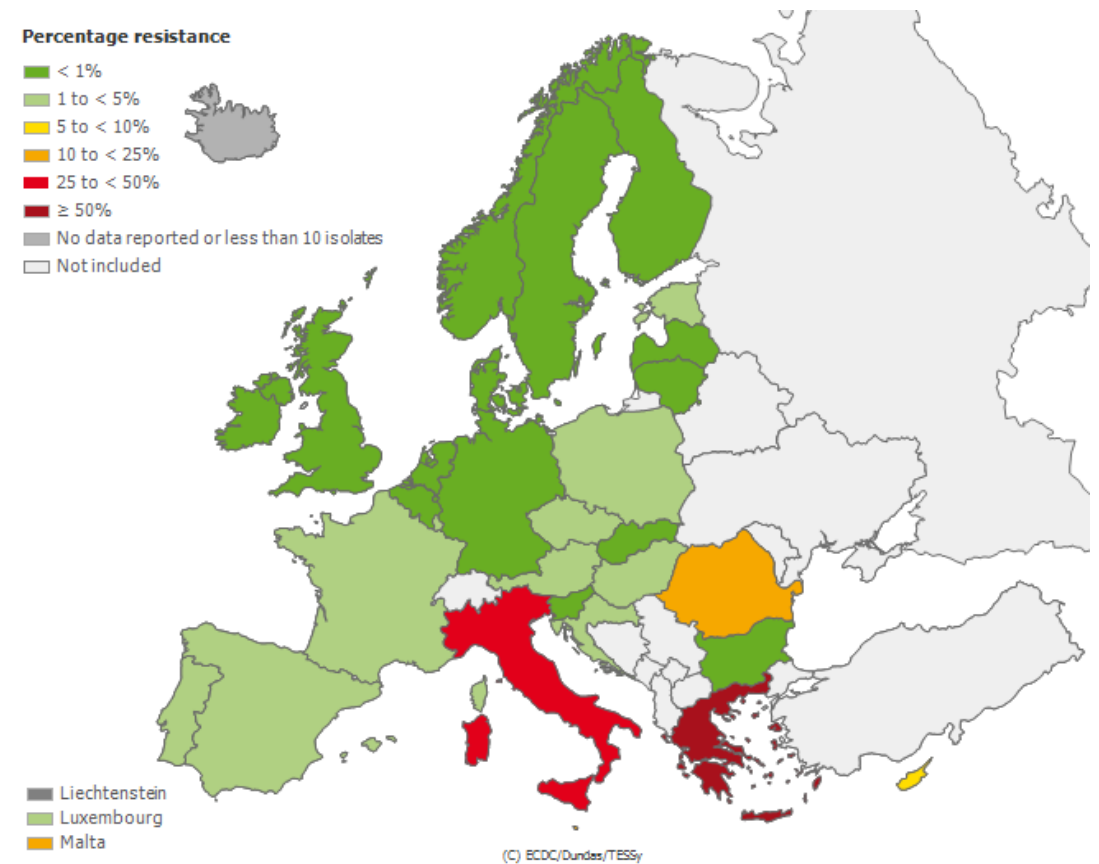
UUED VÄLJAKUTSED: KARBAPENEEMIRESISTENTSUS JA ESBL

K.pneumoniae karpapeneemiresistentsus

2010



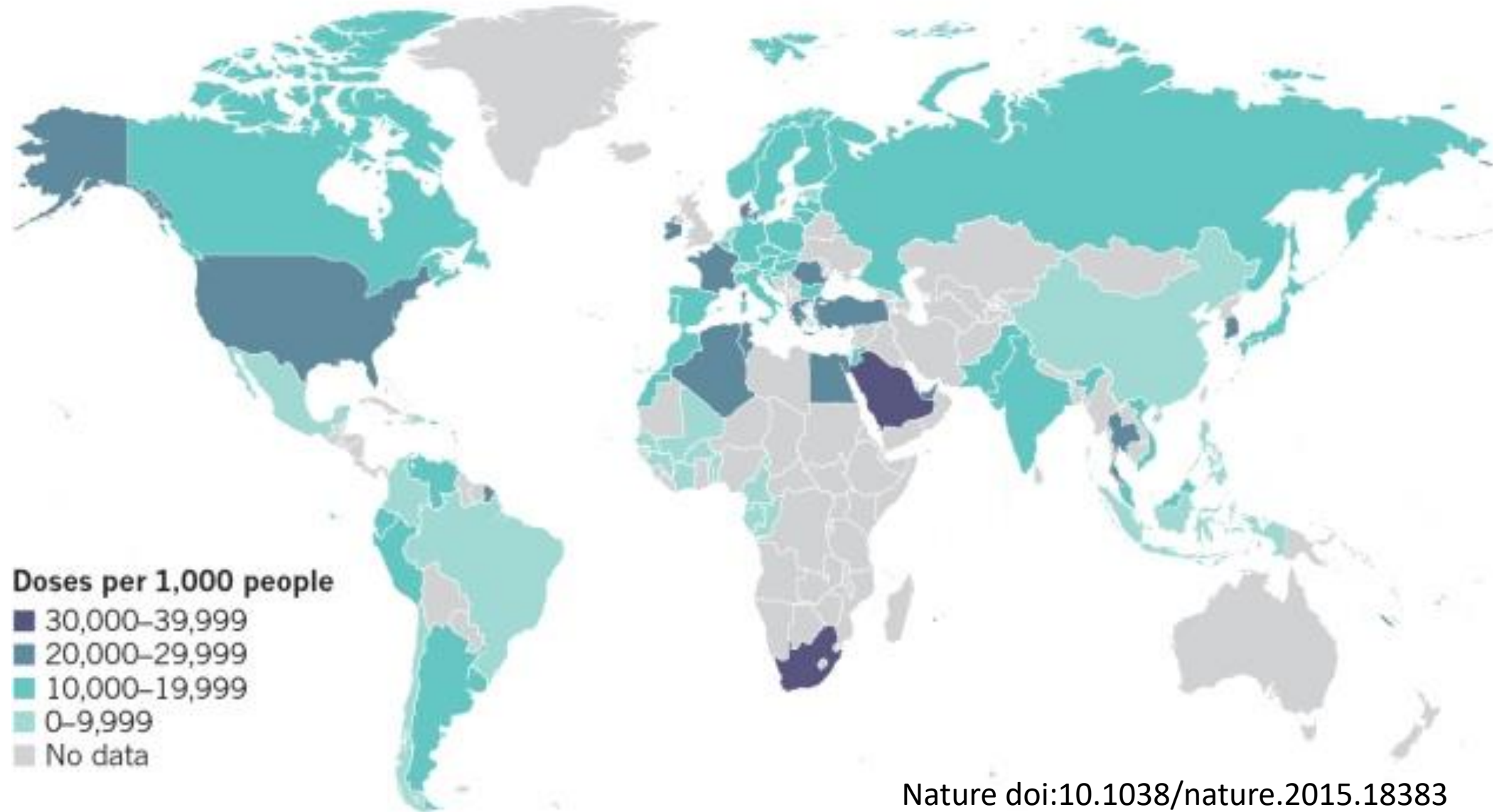
2013



ME EI OLE PLANEEDIL MAA ÜKSI...

TREATMENT TRENDS

The first comprehensive, global report on antibiotic use shows that the drugs are increasingly popular in low- and middle-income countries.



REISIMINE, KAUBAD jne



2012.a miljard reisijat
Proгноositav reisijate arv 2020.aastaks 1.6 miljardit

KAS ME PEAKSIME MURETSEMA?

MILLAL OLUKORD KONTROLI ALT VÄLJUB?



MIDA ME SAAME TEHA?

KASUTAME VÄHEM

KASUTAME MÕISTLIKUMALT

ME VAJAME UUSI ANTIBIOOTIKUME