

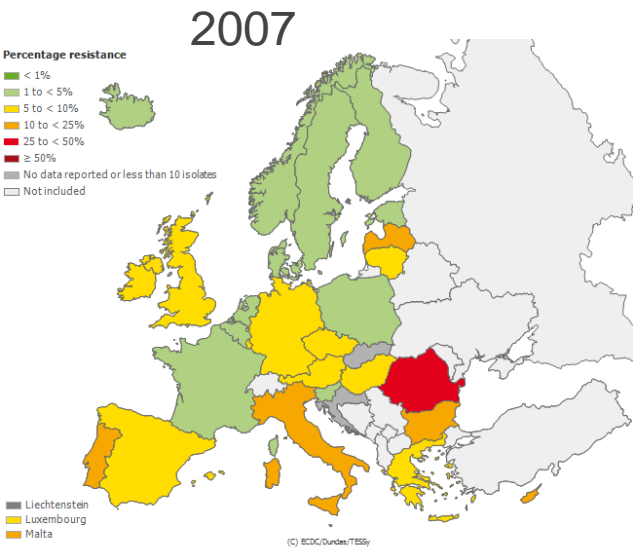
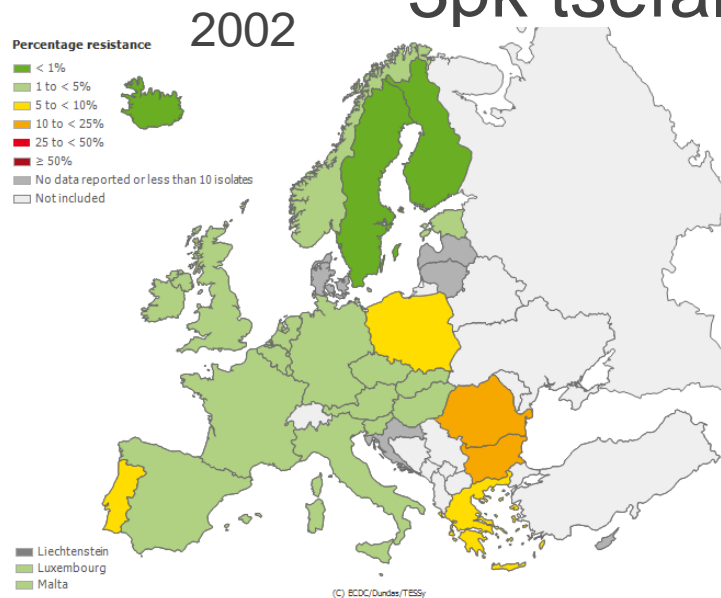
A close-up photograph of a hand holding a petri dish. The petri dish contains a red agar medium. Several small, white, circular markers are placed on the surface of the agar. The markers are arranged in a roughly circular pattern. The background is a plain, light-colored surface.

BEEP, ARMMD ja uued AMR projektid

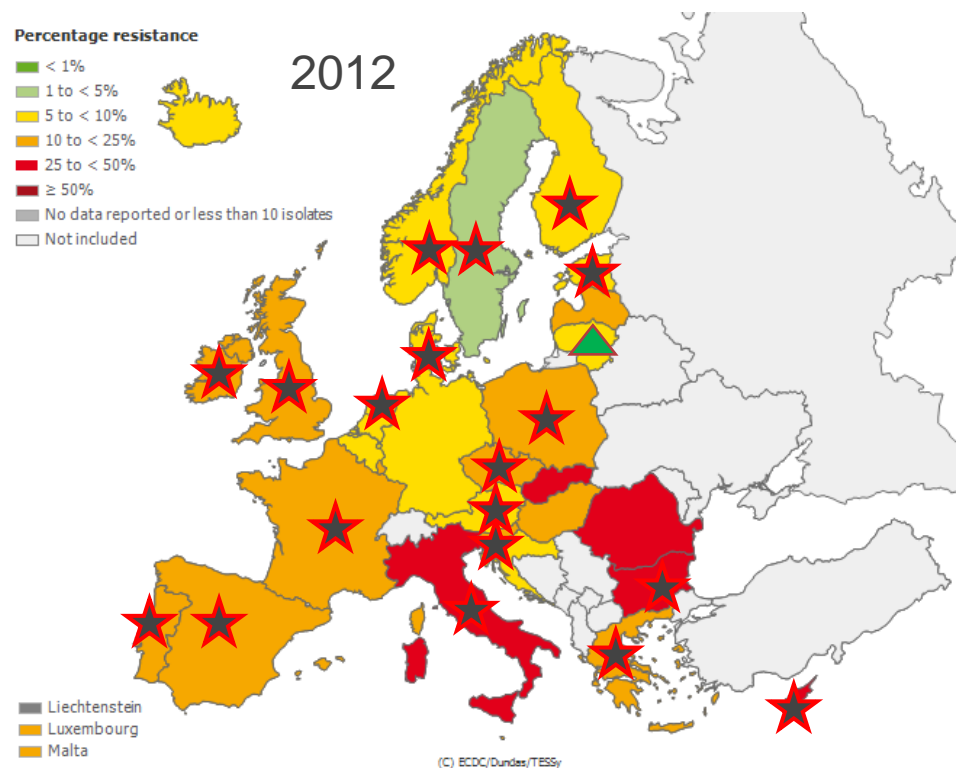
Oktoober 2014

Paul Naaber
Marina Ivanova

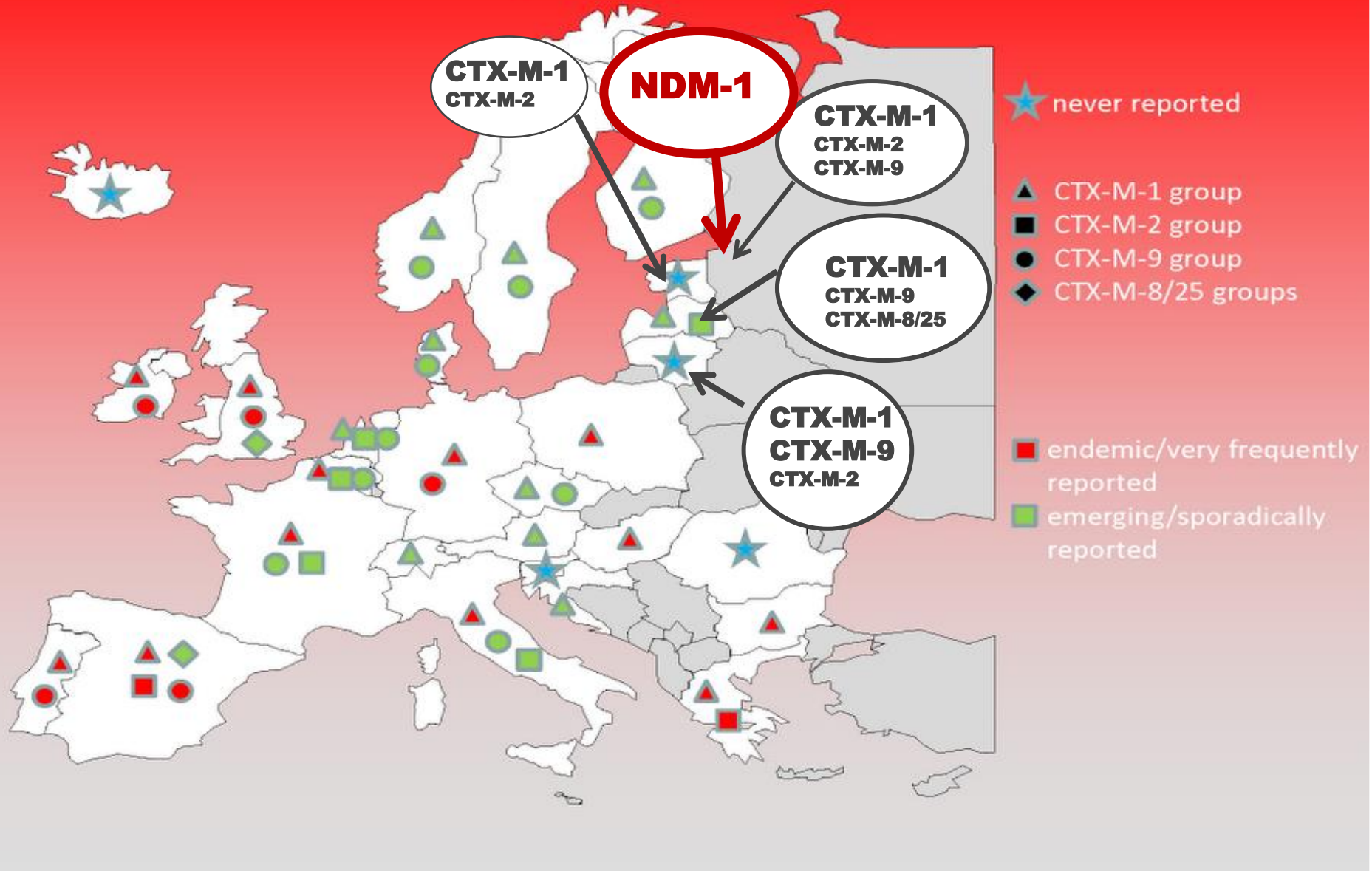
3pk tsefalosporiinidele mittetundlik *E.coli*



- Statistiliselt oluline trend 2009-2012
- ★ - Resistentsuse tõus
 - ▲ - Resistentsuse langus

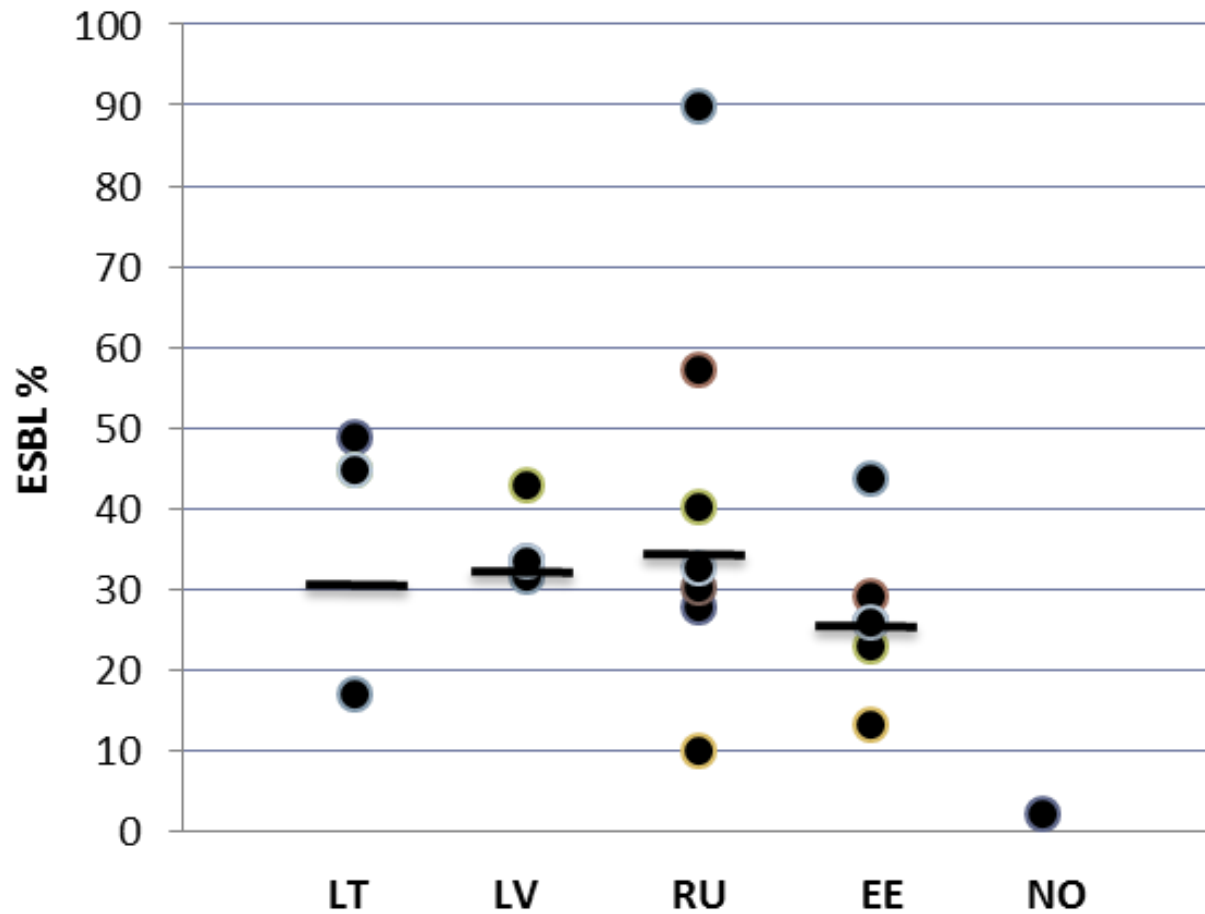


CTX-M type ESBL in *Enterobacteriaceae*



Tulemused. *E. coli* ja *K. pneumoniae*: ESBL, CARBA esinemissagedus, levimus

K. pneumoniae, inpatients



$p \leq 0.015$: NO vs. others; $p \leq 0.02$: EE vs. LT, LV and RU

Research Article

Detection of Carbapenemase-Producing Enterobacteriaceae in the Baltic Countries and St. Petersburg Area

Anastasia Pavelkovich,^{1,2} Arta Balode,³ Petra Edquist,⁴ Svetlana Egorova,⁵ Marina Ivanova,² Lidia Kaftyreva,⁵ Irina Konovalenko,⁶ Siiri Kõljalg,¹ Jana Lillo,¹ Lidia Lipskaya,⁷ Jolanta Miciuleviciene,⁸ Kristiine Pai,¹ Kristel Parv,¹ Katri Pärna,¹ Tiiu Rööp,¹ Epp Sepp,¹ Jelena Štšepetova,¹ and Paul Naaber^{1,9}

Research Article

Differences in Extended-Spectrum Beta-Lactamase Producing *Escherichia coli* Virulence Factor Genes in the Baltic Sea Region

Jana Lillo,¹ Kristiine Pai,¹ Arta Balode,² Mariia Makarova,³ Kristi Huik,¹ Siiri Kõljalg,¹ Marina Ivanova,⁴ Lidia Kaftyreva,³ Jolanta Miciuleviciene,⁵ Paul Naaber,^{1,6} Kristel Parv,¹ Anastasia Pavelkovich,⁴ Tiiu Rööp,¹ Karolin Toompere,¹ Ludmila Suzhaeva,³ and Epp Sepp¹

ШТАММЫ ЭНТЕРОБАКТЕРИЙ, ПРОДУЦИРУЮЩИЕ БЕТА-ЛАКТАМАЗЫ РАСШИРЕННОГО СПЕКТРА И МЕТАЛЛО- β-ЛАКТАМАЗУ NDM-1, ВЫДЕЛЕННЫЕ В СТАЦИОНАРАХ В СТРАНАХ БАЛТИЙСКОГО РЕГИОНА

С.А. Егорова¹, Л.А. Кафтырева¹, Л.В. Липская², И.Б. Коноваленко³, М.Ф. Пясетская⁴, Т.С. Курчикова⁵, Н.Б. Ведерникова⁶, О.Т. Морозова⁷, М.В. Смирнова⁸, Л.Н. Попенко⁹, М.И. Любушкина⁹, Ю.А. Савочкина¹⁰, М.А. Макарова¹, Л.В. Сужаева¹, Ю.В. Останкова¹, М.Н. Иванова¹¹, А.М. Павелкович¹¹, П. Наабер¹², Э. Сепп¹², С. Кыльялг¹², И. Мицюлявичене¹³, А. Балодэ¹⁴

ECCMID 2013, 2014

P1203

Abstract (poster session)

The molecular epidemiology of extended-spectrum beta-lactamases-producing *Escherichia coli* and *Klebsiella pneumoniae* in the Baltic Sea region

K. Pai, A. Balode, S. Egorova, K. Huik, M. Ivanova, L. Kaftyreva, S. Kõljalg, J. Lillo, J. Miciuleviciene, P. Naaber, K. Parv, A. Pavelkovich, T. Rööp, E. Sepp* (Tartu, EE; Riga, LV; St. Petersburg, RU; Vilnius, LT)

P1204

Abstract (poster session)

Epidemiology of extended-spectrum beta-lactamases-producing *Escherichia coli* and *Klebsiella pneumoniae* in the Baltic Sea region

P. Naaber, A. Balode, T. Djundika, S. Egorova, K. Huik, L. Kaftyreva, N. Kamõnina, K. Kirs, S. Kõljalg, I. Konovalenko, T. Kurchikova, J. Lillo, L. Lipskaya, K. Lõivukene, M. Makarova, G. Makstutis, J. Miciuleviciene, O. Morozova, K. Pai, K. Parv, A. Pavelkovich, M. Paysetchkaya, T. Rööp, S. Rudenko, D. Rudzite, E. Sepp, M. Smirnova, L. Suzhaeva, N. Vedernikova, M. Ivanova* (Tartu, EE; Riga, Liepaja, LV; St. Petersburg, RU; Kohtla Järve, Tallinn, EE; Siauliai, Vilnius, LT)

P1429

Abstract (poster session)

Differences in virulence factors of *Escherichia coli* isolated from the Baltic Sea region

J. Lillo, A. Balode, S. Egorova, K. Huik, M. Ivanova, L. Kaftyreva, M. Makarova, J. Miciuleviciene, P. Naaber, K. Pai, K. Parv, A. Pavelkovich, T. Rööp, E. Sepp, L. Suzhaeva, S. Kõljalg* (Tartu, EE; Riga, LV; St. Petersburg, RU; Vilnius, LT)

P1154

Poster Session IV

Resistance in Enterobacteriaceae

DETECTION AND MOLECULAR CHARACTERIZATION OF EXTENDED-SPECTRUM BETA-LACTAMASE-PRODUCING *ESCHERICHIA COLI* SEQUENCE TYPE ST131 FROM THE BALTIC REGION

k¹, M. Ivanova², S. Kõljalg¹, A. Pavelkovich², K. Parv¹, T. Rööp¹, E. Sepp¹, P. Naaber³,

R2641

Abstract (publication only)

Detection of carbapenem-non-susceptible *Escherichia coli* and *Klebsiella pneumoniae* in the Baltic Sea region

A. Pavelkovich*, A. Balode, P. Edquist, S. Egorova, M. Ivanova, L. Kaftyreva, S. Kõljalg, J. Lillo, L. Lipskaya, J. Miciuleviciene, K. Pai, E. Sepp, K. Sparbier, P. Naaber (Tartu, EE; Riga, LV; Stockholm, SE; St. Petersburg, RU; Vilnius, LT; Bremen, DE)

P1015

Poster Session IV

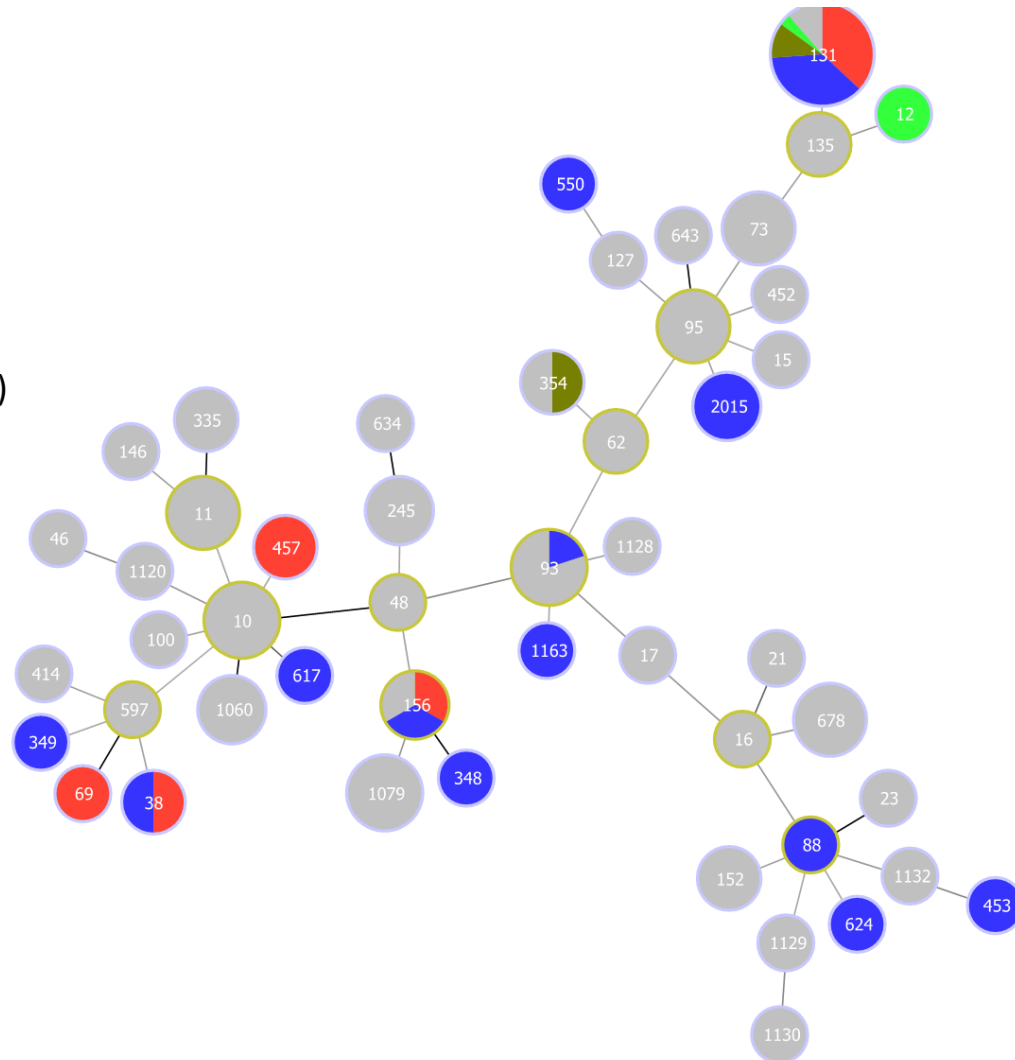
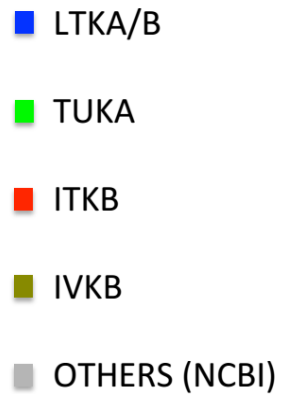
Molecular epidemiology of MDR Enterobacteriaceae

DETECTION OF CLASS 1, 2, AND 3 INTEGRONS AMONG EXTENDED-SPECTRUM BETA-LACTAMASE PRODUCING *KLEBSIELLA PNEUMONIAE* ISOLATED FROM BALTIC SEA REGION

K. Põrna¹, A. Balode A- Edquist P- Egorova S- Kaftyreva L - Miciuleviciene J², M. Ivanova³, S. Kõljalg¹, K. Pai¹, A. Pavelkovich¹, T. Rööp¹, E. Sepp¹, P. Naaber⁴, **J. Stsepetova¹**

BEEP, ARMMD tegevus jätkub

- Tüvede sekveneerimine: MLST geenid, Res geenid



Täname



St-Petersburg Pasteur Institute



European Union
Regional Development Fund



Investing in your future

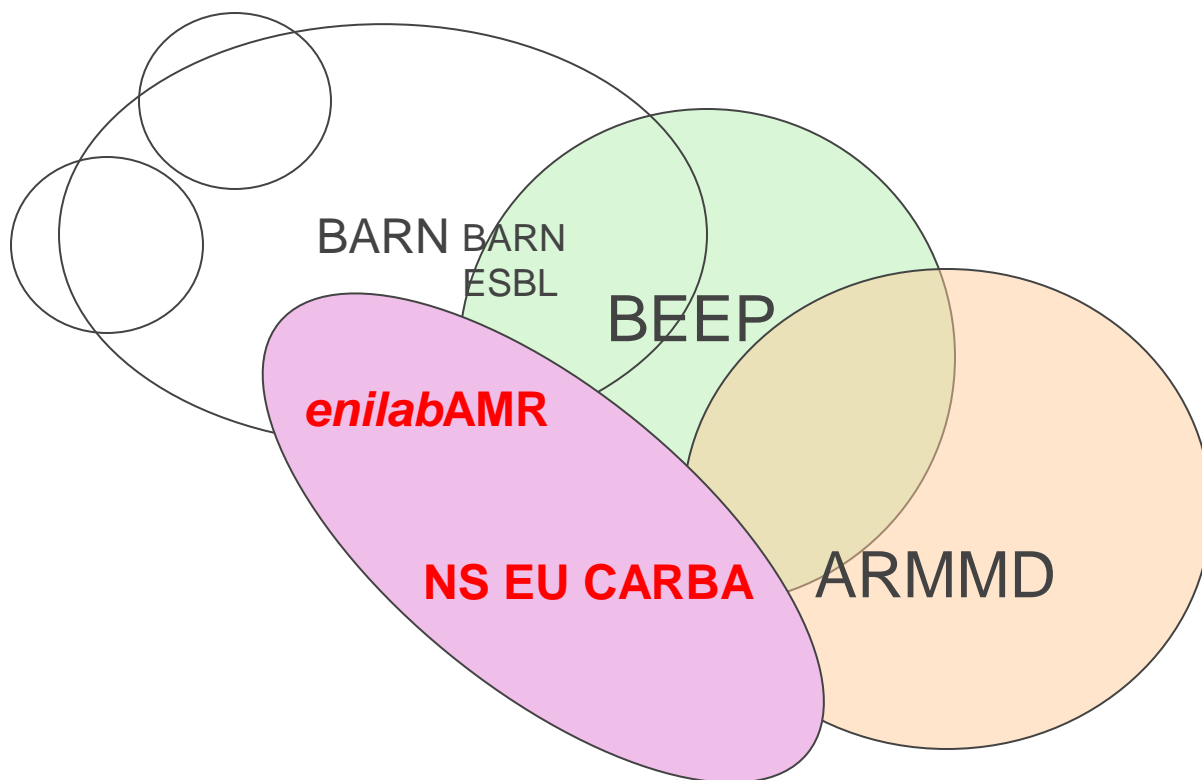
R. Ambrazaitiene, A. Balode,
T. Djundika, S. Egorova, K. Huik,
M. Ivanova, L. Kaftyreva,
N. Kamõnina, K. Kirs, S. Kõljalg,
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G. Makstutis, J. Miciuleviciene,
O. Morozova, P. Naaber, K. Pai,
K. Parv, A. Pavelkovich,
M. Piasetckaia, T. Rööp,
S. Rudenko, D. Rudzite, E. Sepp,
M. Smirnova, L. Suzhaeva,
N. Vedernikova

*enilab*AMR, NS EU CARBA plaan

- 2013 Varssavis BARN miiting, EUCAST Eestis tutvustus
- 2014 suvi Esialgne projekt lükati tagasi Swedish Institute poolt
- 2014 sept/okt Koosolekud Barbroga, uue taotluse esitamine

- 2015 jaan- dets Eeldatav projektiperiood
- 2015 aprill - juuni Carba res tüvede (Enterobacteriaceae, P. aeuginosa) kogumine

ARMMD, BEEP it projektid



BARN -

Baltic Antimicrobial Resistance
Collaborative Network

ARMMD

Antimicrobial Resistance Multiplex
Diagnostics (EU, biotechnology)

BEEP

Baltic ESBL Epidemiology Project

NS EU CARBA

North-South European
Carbapenemases Epidemiology
Project

enilabAMR

Expansion of network and
improvement of lab capacity
for better AMR surveillance

BEEP koostöö

21 asutust

6 riiki: Eesti, Läti, Leedu, Norra,
Rootsi, Venemaa (St. Peterburi)

13 130 tüve skriinitud ESBL suhtes

1047 tüve kogutud

enilabAMR/NS EU CARBA

lisaks kaasatavad riigid

+ 6 riiki: Soome, Valgevene, Poola,
Ukraina, Moldova, Gruusia

