

Insulto gydymo centrų veiklos apžvalga

Daiva Rastenytė

2019-04-12

Trakai, LIA konferencija

Insulto gydymo centrų tinklas

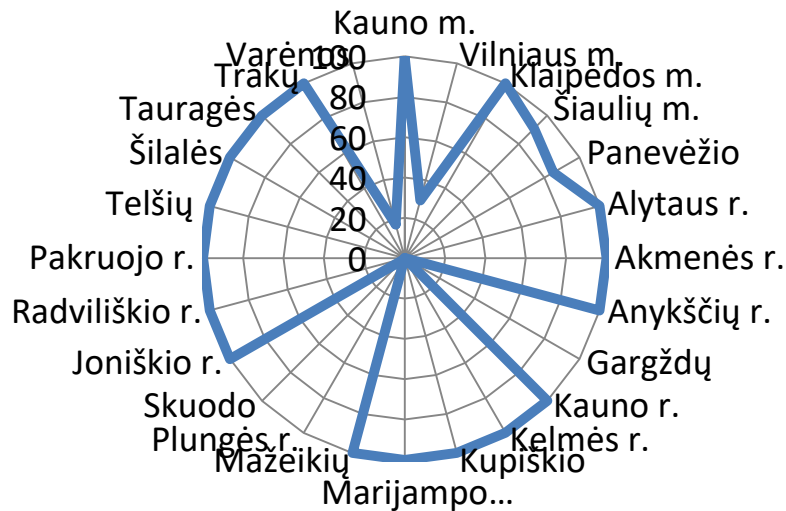


- Vieningos vertinimo skalės įdiegimas visų GMP dispečerinėse
- Pirmenybinis transportavimas į Tarpinės pagalbos ligoninę/Insulto gydymo centro (kuris arčiau)
- Paciento su įtariamu ūminiu GSI pervežimas į insulto gydymo centrą ne vėliau kaip per 1 val. nuo iškvietimo registravimo
- Laikas nuo atvykimo iki KT - < 30 min
- Laikas nuo atvykimo iki kraujagyslės punkcijos - <60 min (IVT)
- Mirštamumas <10 proc.

Ūminio GSI įtarimas naudojant standartizuotą klausimyną (FAST)

2017 m. I-III ketv.

2018 m. I-III ketv.

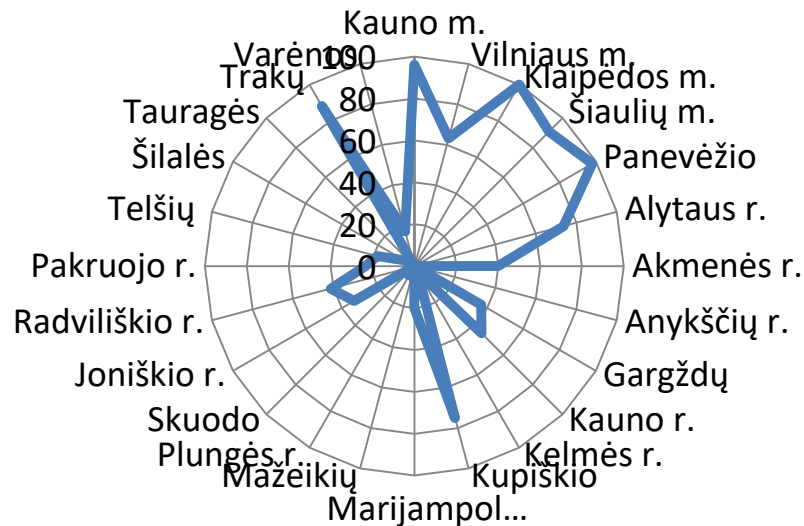


- Informaciją pateikė 33 ASPĮ
- Visos nurodė taikančios FAST 100 proc. atvejų, išskyrus Panevėžio GMPS (85 – 96 – 92 proc.)
- Vilniaus m. ir raj. - ? (VšĮ Sostinės SMP tarnyba” info nepateikė

Paciento su įtariamu ūminiu GSI pervežimas į insulto gydymo centrą ne vėliau kaip per 1 val. nuo iškvietimo registravimo

2017 m.

2018 m.



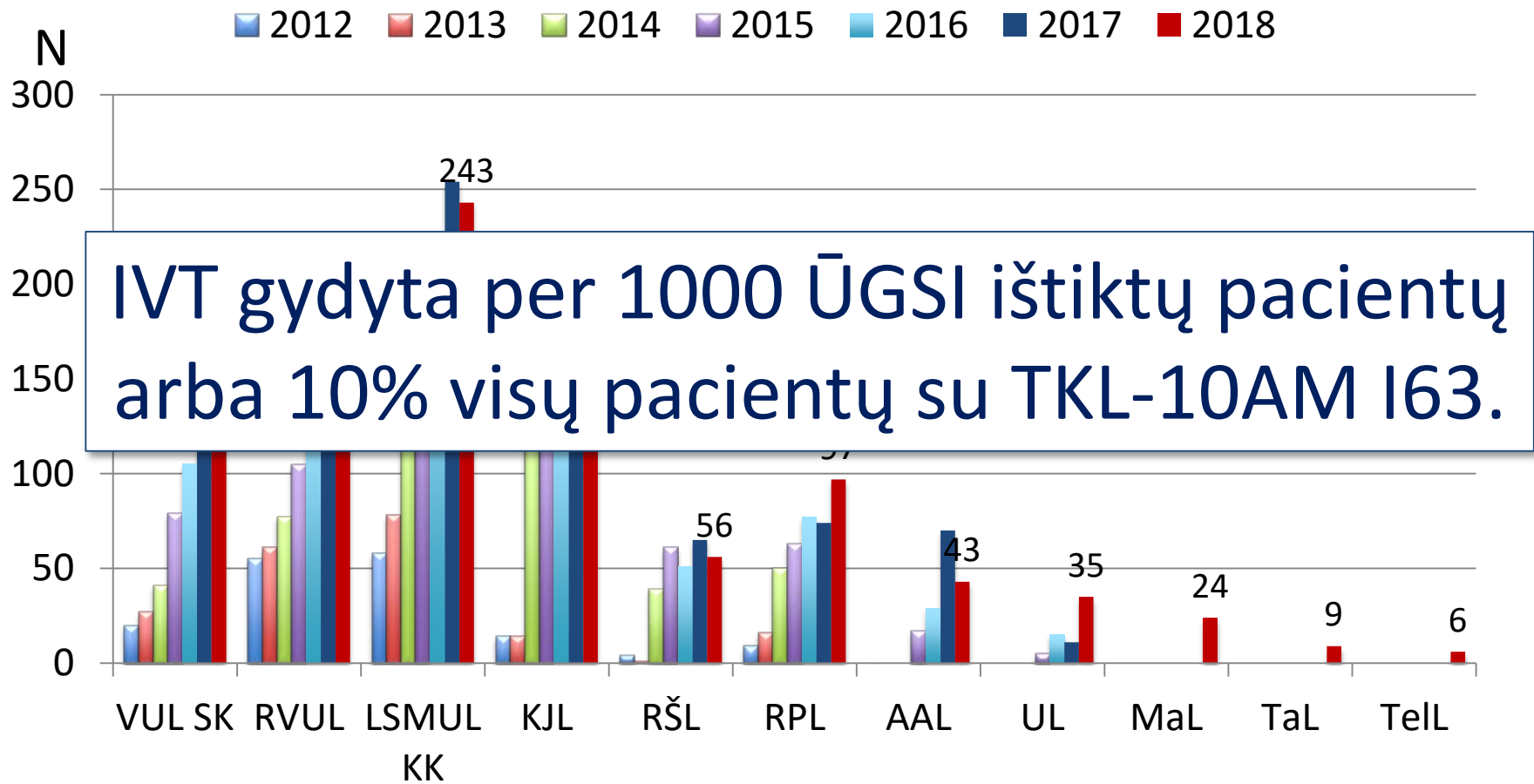
>80 proc.:

- Gargždų PSPSC
- Kauno m. GMPS
- Panevėžio m. GMPS
- Šiaulių m. GMPS
- Šilutės PSPC
- Trakų PSPC

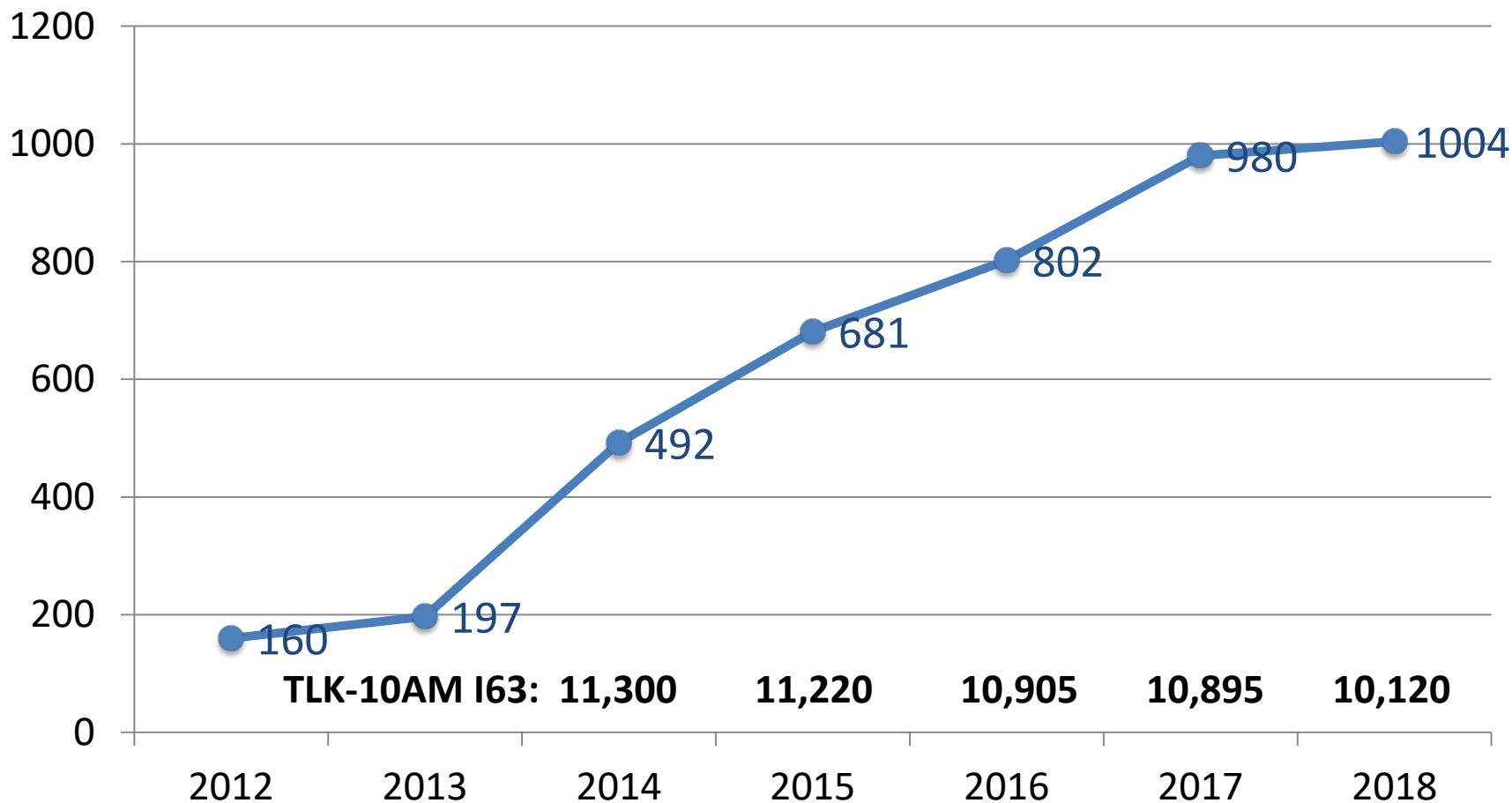
<20 proc.:

- Akmenės raj GMPC
- Anykščių raj. PSPC
- Kėdainių PSPC
- Raseinių raj GMPS

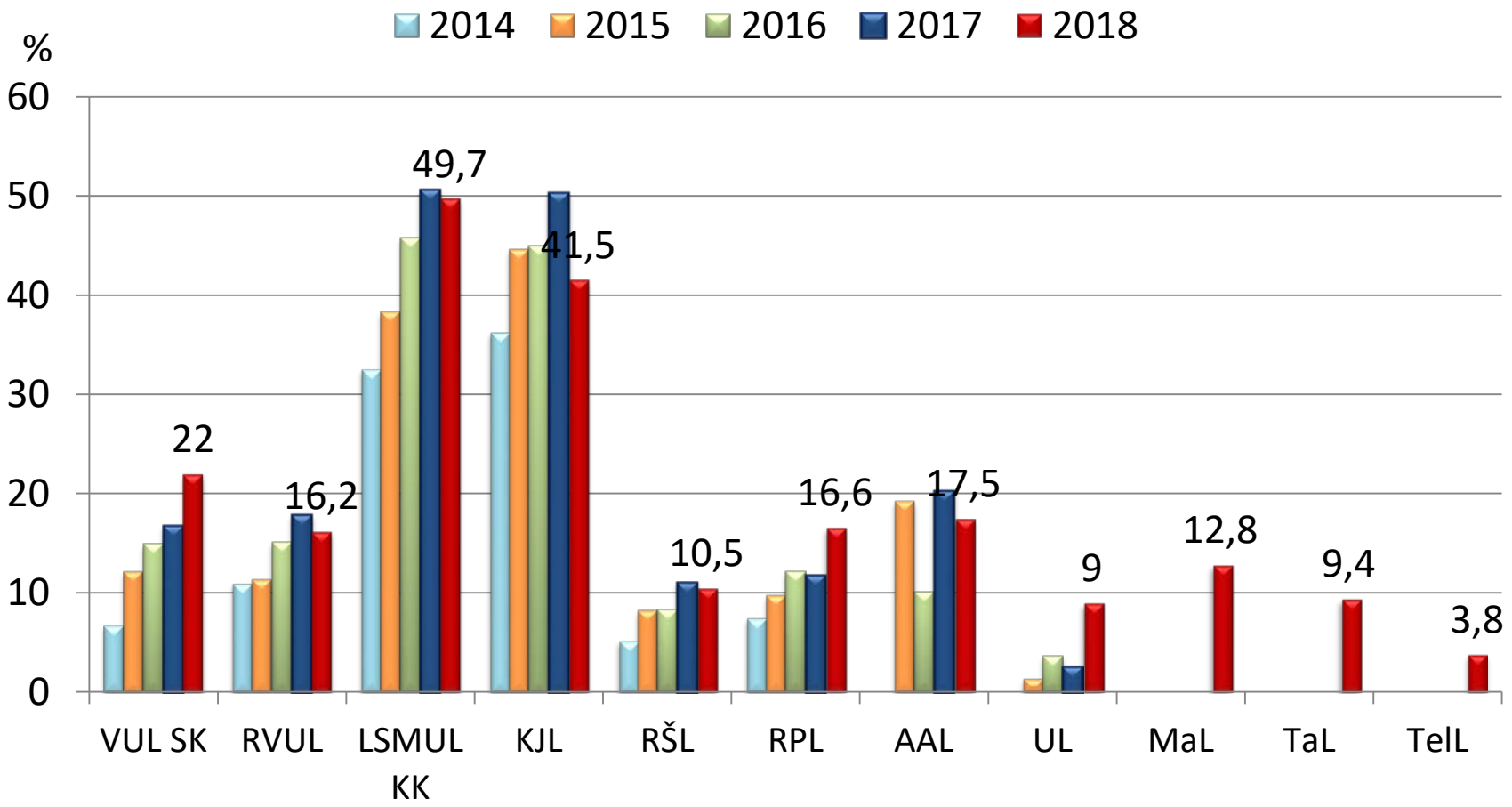
Išeminį insultą patyrę ir gydyti IVT pacientai (atv.sk.) 2012-2018 metais



Išeminį insultą patyrę pacientai ir gydyti IVT (atv.sk.) 2012-2017 metais

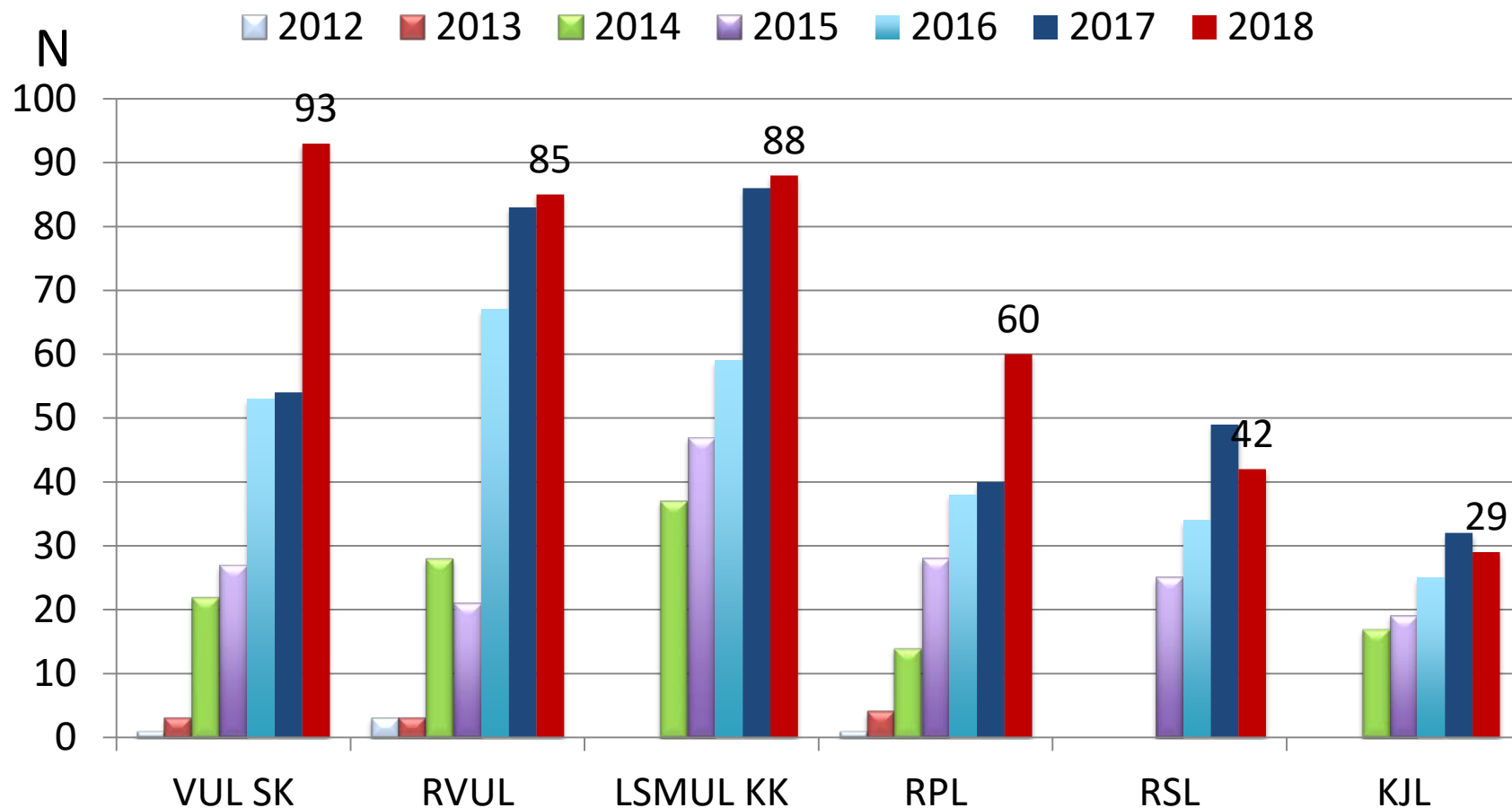


Išeminį insultą patyrusių ir gydytų IVT pacientų dalis (proc.)* nuo visų dėl išeminio insulto gydytų pacientų 2014 – 2018 m.

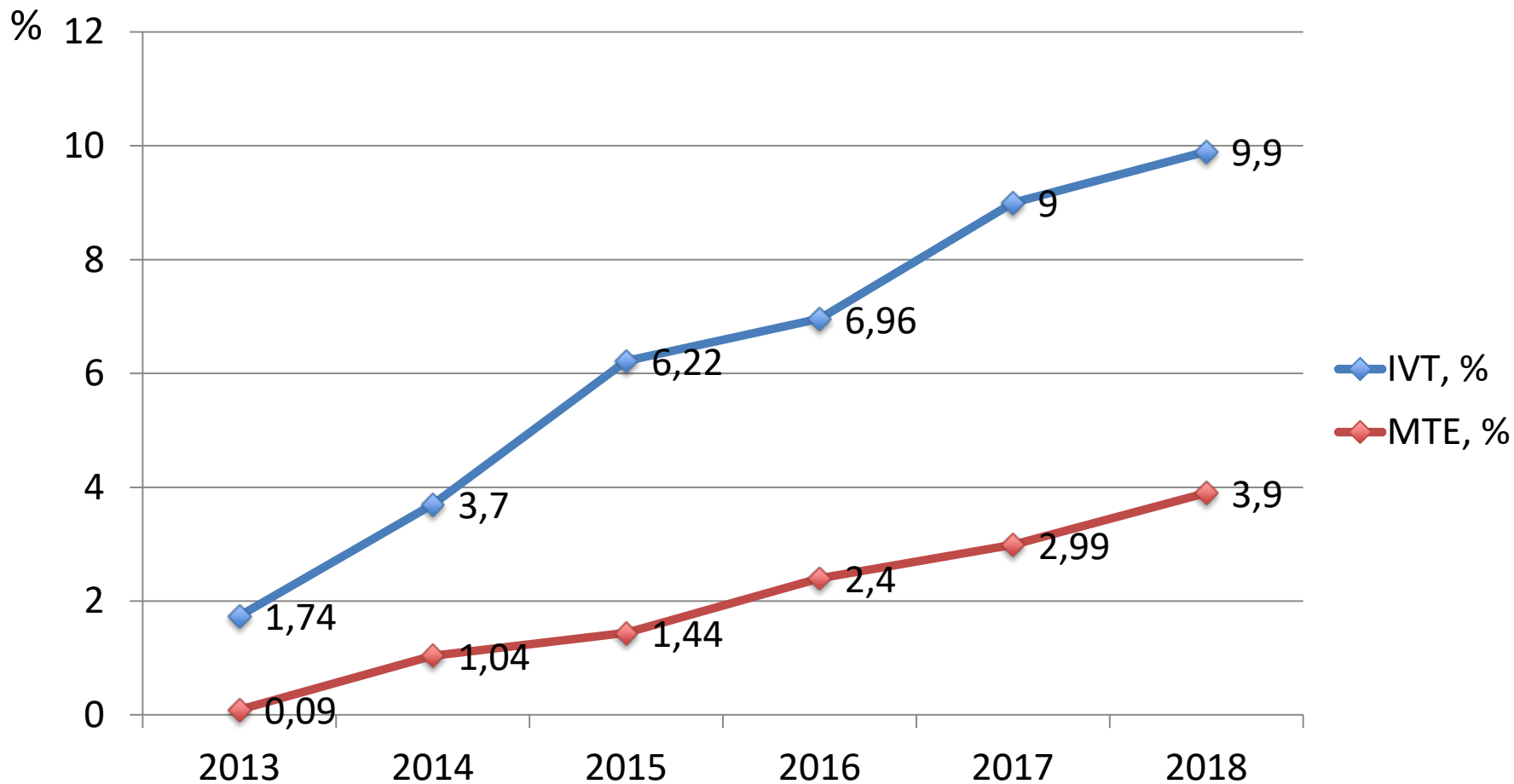


*Insulto centrų duomenys

Išeminį insultą patyrę pacientai gydyti mechanine trombektomija Insultų centrų duomenimis (atv.sk.) 2012 - 2018 m.



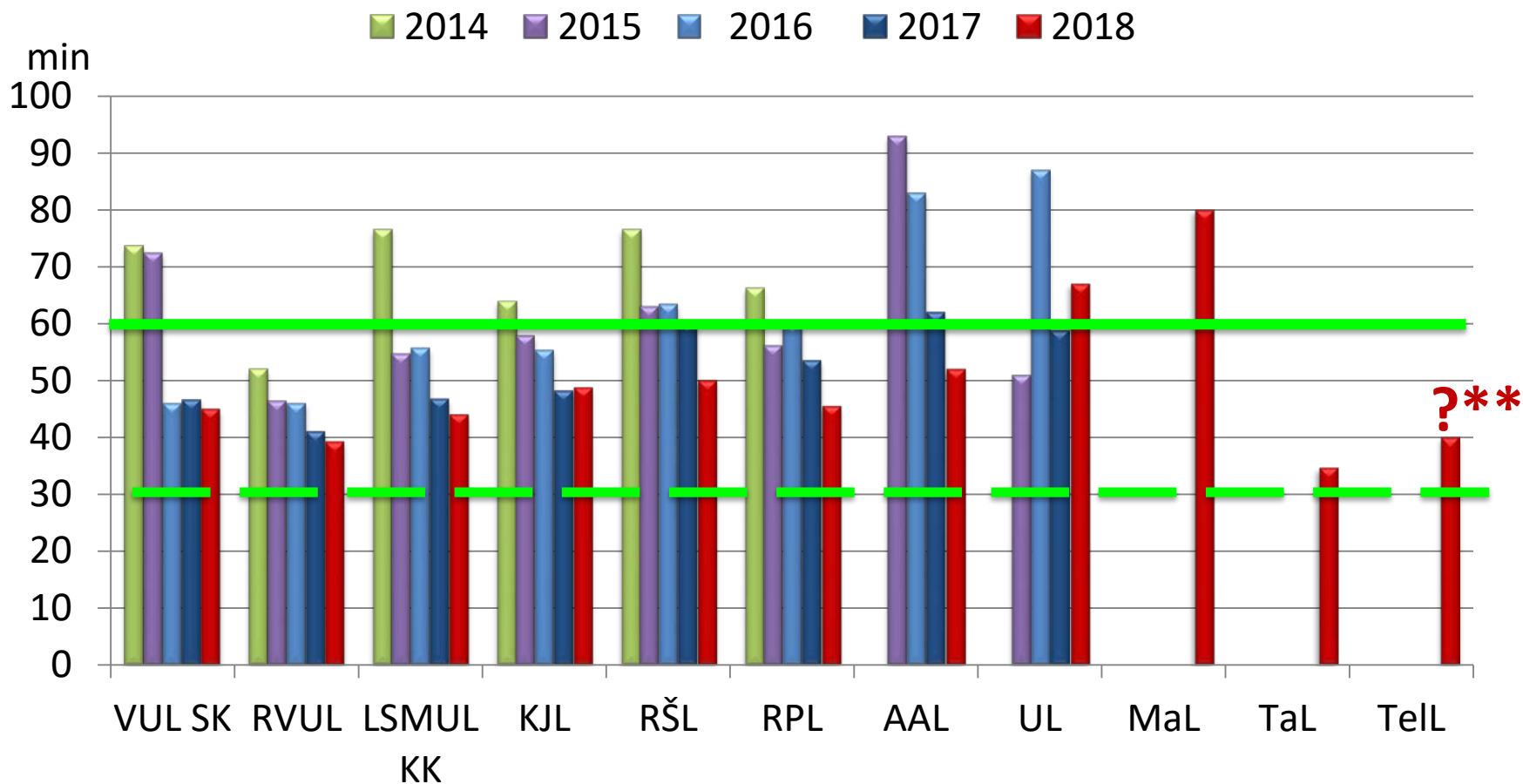
Pacientų, ištiktų ūminio išeminio galvos smegenų insulto (TLK-10-AM I63.-) ir gydytų IVT ir ar MTE, procentinė dalis Lietuvoje 2013-2018 m.



Klasterių iniciacija ir veiklos pradžia

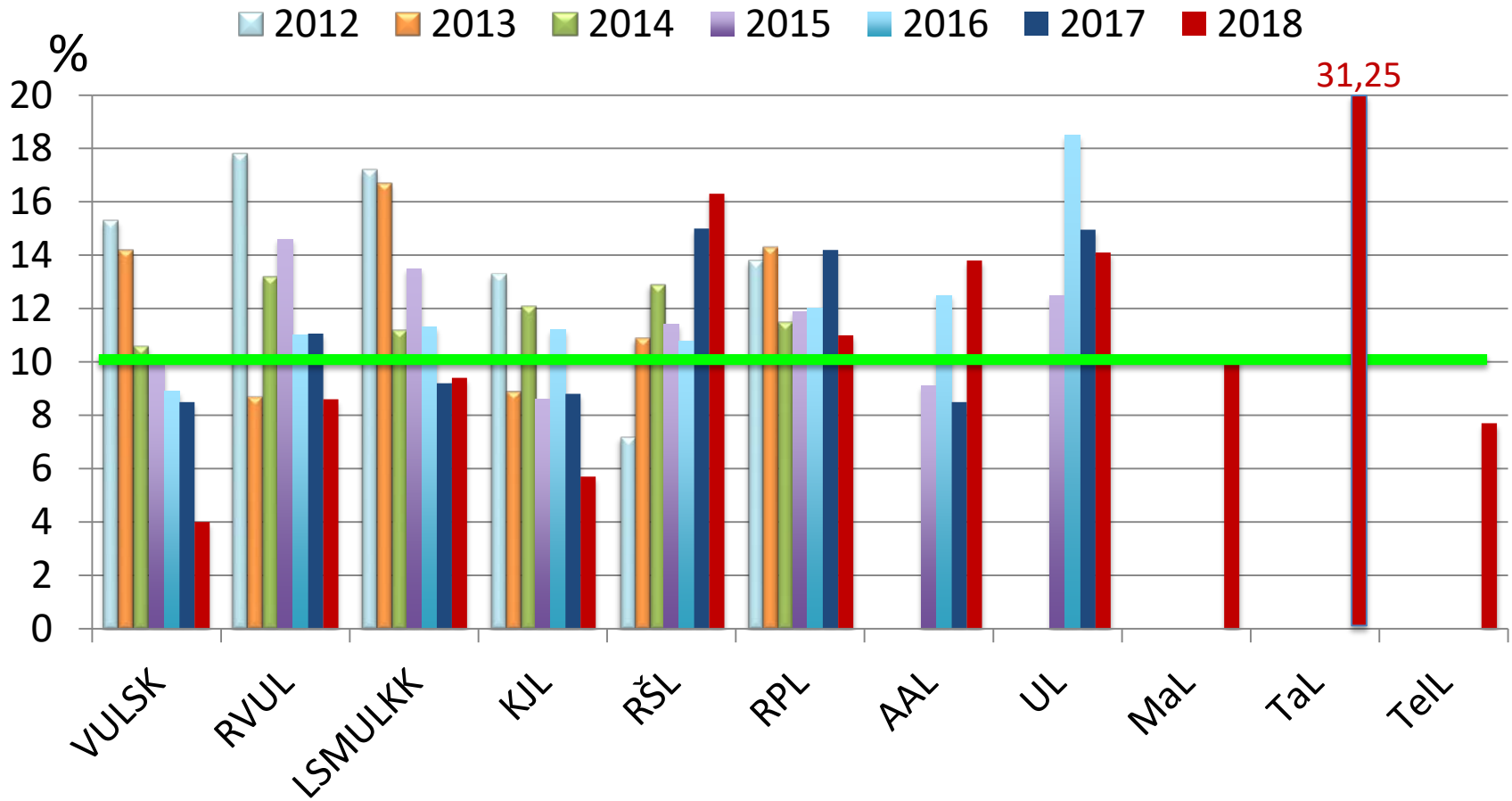
Skaičiuota visiems ištiktiems išeminio Insulto (visos ligoninės, ne tik centrai)

Vidutinis laikas nuo atvykimo į SPS iki IVT pradžios (DNT)* 2014 -2018 m.



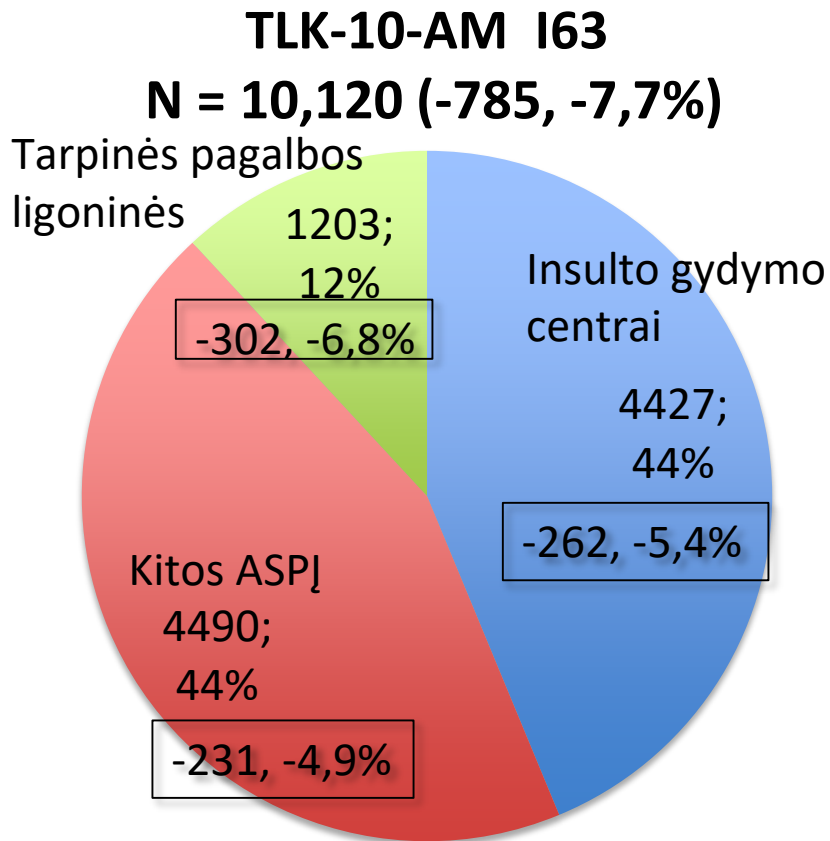
*Insulto centrų duomenys, **IV ketv. duomenimis

Mirštamumas nuo išeminio galvos smegenų insulto (I63.-) 2012-2018 m.

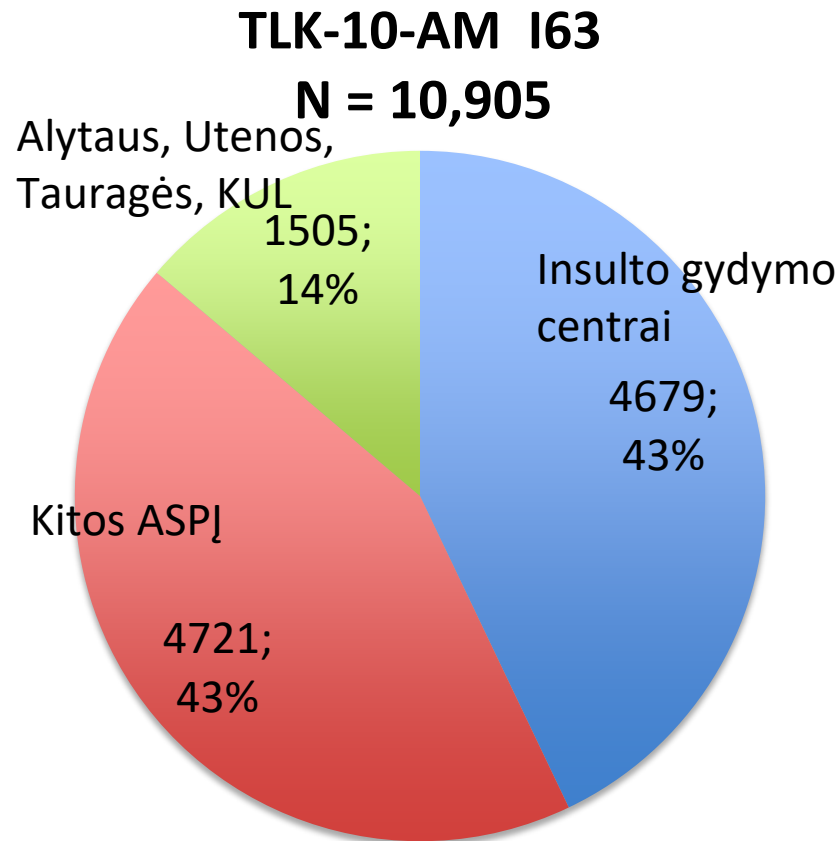


*Insulto centrų duomenys

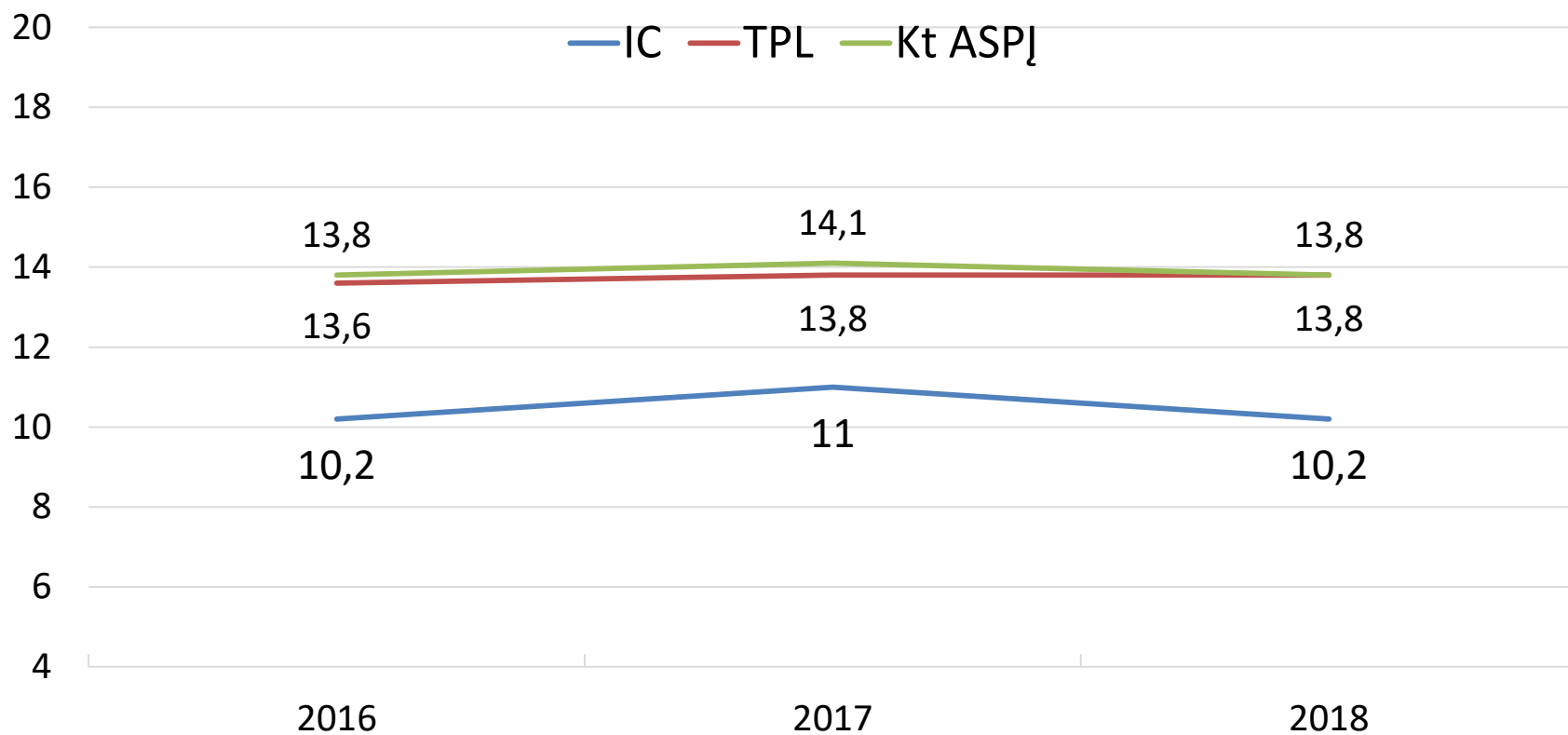
VLK informacija 2018 m.



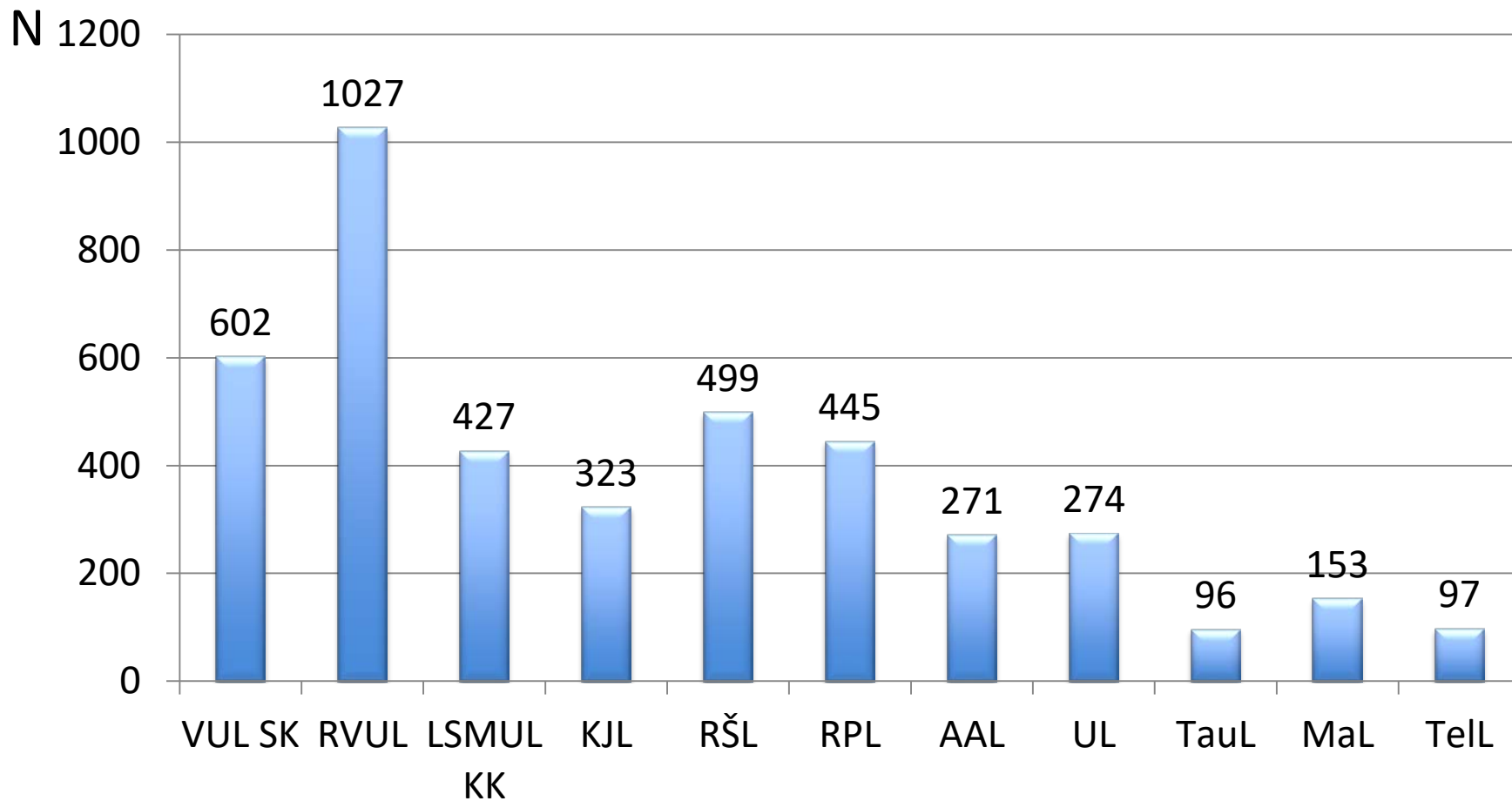
VLK informacija 2016 m.



Mirštamumas nuo išeminio insulto (TLK-10AB I63) - VLK

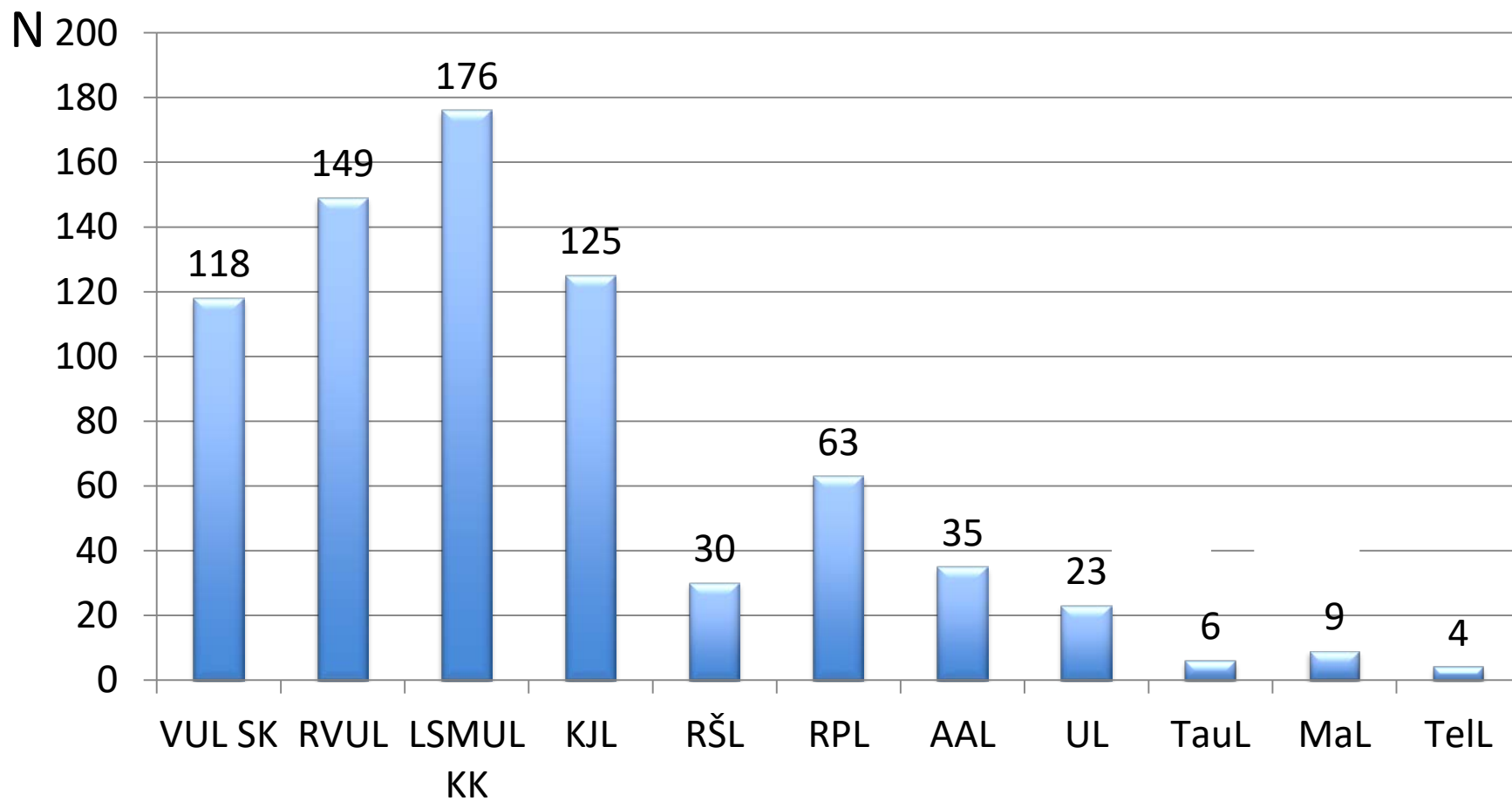


Išeminį insultą patyrę pacientai ir gydyti Insulto gydymo centruose bei Tarpinės pagalbos ligoninėse (atv.sk.) 2018 m. I-III ketvirtį VLK duomenimis

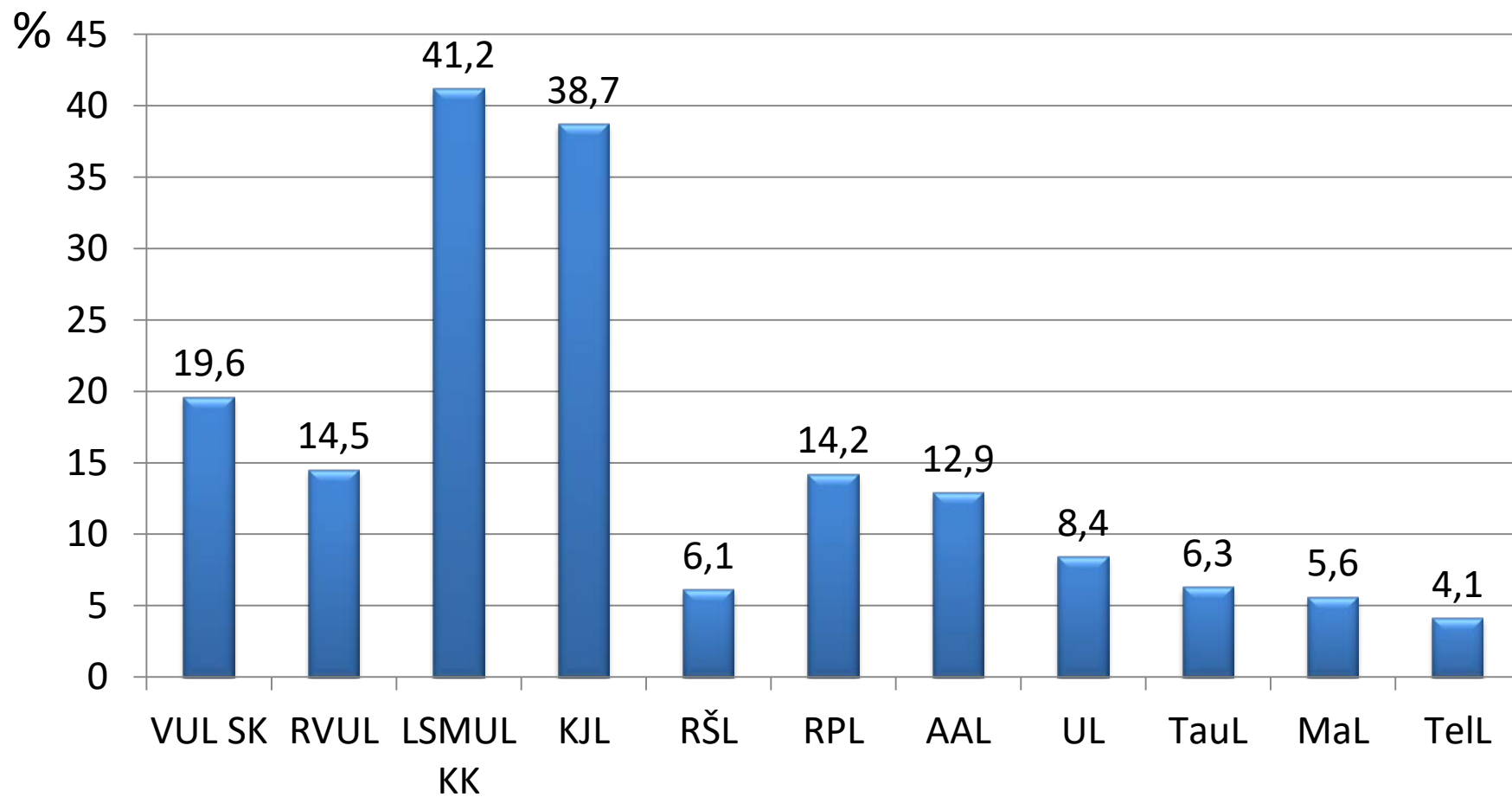


Unikalūs atvejai

Išeminį insultą patyrę pacientai ir gydyti IVT (atv.sk.) 2018 m. I-III ketvirtį VLK duomenimis

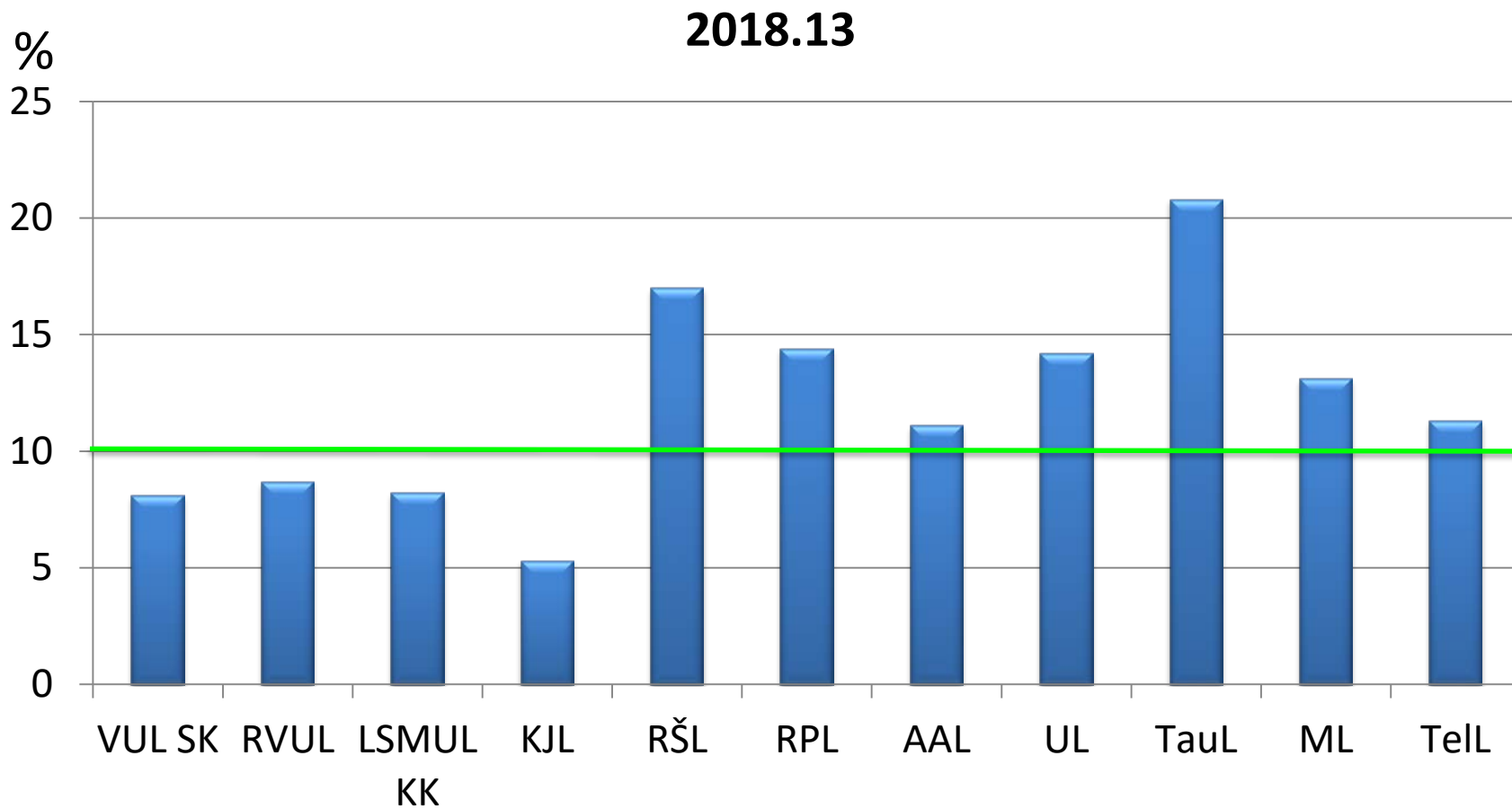


Išeminį insultą patyrusių ir gydytų IVT pacientų dalis (proc.)* nuo visų dėl išeminio insulto gydytų pacientų 2018 m. I-III ketvirtį VLK duomenimis





Unikalūs atvejai

Mirštamumas nuo išeminio insulto (proc.) 2018 m. I-III ketvirtį VLK duomenimis



Unikalūs atvejai

Access to and delivery of acute ischaemic stroke treatments: A survey of national scientific societies and stroke experts in 44 European countries

Diana Aguiar de Sousa*¹ , Rascha von Martial*²,
Sònia Abilleira³ , Thomas Gattringer⁴, Adam Kobayashi⁵,
Miquel Gallofré⁶, Franz Fazekas⁴, Istvan Szikora⁷,
Valery Feigin⁸, Valeria Caso⁹ and Urs Fischer²; on behalf of the
ESO ESMINT EAN SAFE Survey on Stroke Care collaborators[†]

European Stroke Journal

0(0) 1–16

© European Stroke Organisation
2018



Reprints and permissions:

sagepub.co.uk/journalsPermissions.nav

DOI: 10.1177/2396987318786023

journals.sagepub.com/home/eso



Abstract

Introduction: Acute stroke unit care, intravenous thrombolysis and endovascular treatment significantly improve the outcome for patients with ischaemic stroke, but data on access and delivery throughout Europe are lacking. We assessed best available data on access and delivery of acute stroke unit care, intravenous thrombolysis and endovascular treatment throughout Europe.

Methods: A survey, drafted by stroke professionals (ESO, ESMINT, EAN) and a patient organisation (SAFE), was sent to national stroke societies and experts in 51 European countries (World Health Organization definition) requesting experts to provide national data on stroke unit, intravenous thrombolysis and endovascular treatment rates. We compared both pooled and individual national data per one million inhabitants and per 1000 annual incident ischaemic strokes with highest country rates. Population estimates were based on United Nations data, stroke incidences on the Global Burden of Disease Report.

Results: We obtained data from 44 European countries. The estimated mean number of stroke units was 2.9 per million inhabitants (95% CI 2.3–3.6) and 1.5 per 1000 annual incident strokes (95% CI 1.1–1.9), highest country rates were 9.2 and 5.8. Intravenous thrombolysis was provided in 42/44 countries. The estimated mean annual number of intravenous thrombolysis was 142.0 per million inhabitants (95% CI 107.4–176.7) and 72.7 per 1000 annual incident strokes (95% CI 54.2–91.2), highest country rates were 412.2 and 205.5. Endovascular treatment was provided in 40/44 countries. The estimated mean annual number of endovascular treatments was 37.1 per million inhabitants (95% CI 26.7–47.5) and 19.3 per 1000 annual incident strokes (95% CI 13.5–25.1), highest country rates were 111.5 and 55.9. Overall, 7.3% of incident ischaemic stroke patients received intravenous thrombolysis (95% CI 5.4–9.1) and 1.9% received endovascular treatment (95% CI 1.3–2.5), highest country rates were 20.6% and 5.6%.

Conclusion: We observed major inequalities in acute stroke treatment between and within 44 European countries. Our data will assist decision makers implementing tailored stroke care programmes for reducing stroke-related morbidity and mortality in Europe.

Table 1. Absolute and relative numbers per million inhabitants of stroke units, annual number of intravenous thrombolysis treatments (IVT), number of IVT centres, annual number of endovascular treatments (EVT) and EVT centres per country.

| Country | No. of stroke units ^a | Stroke units per million | Annual no. of IVT ^b | Annual no. of IVT per million ^b | No. of IVT centres | IVT centres per million | Annual no. of EVT ^c | Annual no. of EVT per million ^c | No. of EVT centres | No. of EVT centres 24/7 | EVT centres per million |
|-------------------------------|----------------------------------|--------------------------|--------------------------------|--|--------------------|-------------------------|--------------------------------|--|--------------------|-------------------------|-------------------------|
| Albania | 1 | 0.3 | 0 | 0.0 | 0 | 0.0 | 6 | 2.1 | 1 | 0 | 0.3 |
| Austria | 38 | 4.4 | 3000 | 351.1 | 38 | 4.4 | 650 | 76.1 | 11 | 9 | 1.3 |
| Belarus | – | – | – | – | 12 | 1.3 | – | – | 1 | 1 | 0.1 |
| Belgium | – | – | 2250 | 199.1 | – | – | 706 | 62.5 | 17 | 12 | 1.5 |
| Bosnia and Herzegovina | 4 | 1.0 | 150 | 39.4 | 4 | 1.0 | 50 | 13.1 | 1 | 1 | 0.3 |
| Bulgaria | 30 | 4.2 | 296 | 41.4 | 28 | 3.9 | 34 | 4.8 | 4 | – | 0.6 |
| Croatia | 18 | 4.2 | 300 | 70.7 | 20 | 4.7 | 30 | 7.1 | 2 | 1 | 0.5 |
| Czech Republic | 45 | 4.3 | 3800 | 360.4 | 45 | 4.3 | 1063 | 100.8 | 15 | 15 | 1.4 |
| Denmark | 20 | 3.5 | 1632 | 287.9 | 10 | 1.8 | 280 | 49.4 | 3 | 3 | 0.5 |
| Estonia | 4 | 3.0 | 541 | 412.2 | 6 | 4.6 | 109 | 83.0 | 3 | 2 | 2.3 |
| Finland | 21 | 3.8 | 1600 | 290.7 | 21 | 3.8 | 407 | 74.0 | 5 | 5 | 0.9 |
| France | 140 | 2.2 | 8000 | 124.2 | 140 | 2.2 | 4589 | 71.3 | 37 | – | 0.6 |
| Georgia | 2 | 0.5 | 4 | 1.0 | 1 | 0.3 | 0 | 0.0 | 0 | 0 | 0.0 |
| Germany | 295 | 3.7 | 30,000 | 371.8 | 350 | 4.3 | 9000 | 111.5 | 135 | 110 | 1.7 |
| Greece | 5 | 0.4 | 225 | 20.5 | 18 | 1.6 | 40 | 3.7 | 6 | 1 | 0.5 |
| Hungary | 39 | 4.0 | 2000 | 202.9 | 39 | 4.0 | 265 | 26.9 | 6 | 3 | 0.6 |
| Iceland | 1 | 3.0 | 30 | 91.1 | 5 | 15.2 | 0 | 0.0 | 0 | 0 | 0.0 |
| Ireland | 22 | 4.7 | 550 | 117.3 | 24 | 5.1 | 210 | 44.8 | 2 | 1 | 0.4 |
| Israel | 10 | 1.2 | 1200 | 148.8 | 20 | 2.5 | 300 | 37.2 | 9 | 9 | 1.1 |
| Italy | 178 | 3.0 | 8000 | 133.8 | 182 | 3.0 | 1882 | 31.5 | 50 | 16 | 0.8 |
| Kyrgyzstan | 5 | 0.8 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 |
| Latvia | 7 | 3.6 | 540 | 274.0 | 7 | 3.6 | 95 | 48.2 | 2 | 1 | 1.0 |
| Lithuania | 8 | 2.8 | 699 | 242.8 | 10 | 3.5 | 276 | 95.9 | 6 | 3 | 2.1 |
| Luxembourg | 3 | 5.3 | 30 | 52.9 | 3 | 5.3 | 3 | 5.3 | 1 | – | 1.8 |
| FYROM | 1 | 0.5 | 60 | 28.9 | 1 | 0.5 | 2 | 1.0 | 1 | 0 | 0.5 |
| Malta | 1 | 2.4 | 40 | 95.5 | 2 | 4.8 | 30 | 71.7 | 1 | 1 | 2.4 |
| Montenegro | 0 | 0.0 | 20 | 32.0 | 3 | 4.8 | 0 | 0.0 | 0 | 0 | 0.0 |
| Netherlands | 85 | 5.0 | 4821 | 284.8 | 85 | 5.0 | 1088 | 64.3 | 20 | 20 | 1.2 |
| Northern Cyprus | 2 | 6.4 | 30 | 95.7 | 2 | 6.4 | 20 | 63.8 | 2 | 2 | 6.4 |
| Norway | 48 | 9.2 | 1100 | 211.1 | 49 | 9.4 | 150 | 28.8 | 5 | – | 1.0 |
| Poland | 171 | 4.4 | 6493 | 168.2 | 171 | 4.4 | 175 | 4.5 | 21 | 4 | 0.5 |
| Portugal | 25 | 2.4 | 1516 | 146.5 | 25 | 2.4 | 845 | 81.6 | 9 | 4 | 0.9 |
| Republic of Moldova | 2 | 0.5 | 45 | 11.1 | 2 | 0.5 | 20 | 4.9 | 0 | 0 | 0.0 |
| Romania | 10 | 0.5 | 200 | 10.3 | 10 | 0.5 | 15 | 0.8 | 2 | 0 | 0.1 |

(continued)

Table 1. Continued

| Country | No. of stroke units ^a | Stroke units per million | Annual no. of IVT ^b | Annual no. of IVT per million ^b | No. of IVT centres | IVT centres per million | Annual no. of EVT ^c | Annual no. of EVT per million ^c | No. of EVT centres | No. of EVT centres 24/7 | EVT centres per million |
|----------------------|----------------------------------|--------------------------|--------------------------------|--|--------------------|-------------------------|--------------------------------|--|--------------------|-------------------------|-------------------------|
| Russia | 451 | 3.1 | 11,651 | 81.2 | 451 | 3.1 | 260 | 1.8 | 134 | 37 | 0.9 |
| Serbia | 10 | 1.4 | 400 | 56.8 | 20 | 2.8 | 10 | 1.4 | 4 | 3 | 0.6 |
| Slovakia | 36 | 6.6 | 972 | 179.1 | 44 | 8.1 | 385 | 71.0 | 7 | 3 | 1.3 |
| Slovenia | 3 | 1.5 | 400 | 193.5 | 12 | 5.8 | 142 | 69.2 | 1 | 1 | 0.5 |
| Spain | 60 | 1.3 | 5002 | 108.5 | 59 | 1.3 | 2408 | 52.2 | 37 | 35 | 0.8 |
| Sweden | 72 | 7.4 | 2600 | 265.9 | 72 | 7.4 | 390 | 39.9 | 6 | 3 | 0.6 |
| Switzerland | 23 | 2.8 | 1000 | 120.5 | 23 | 2.8 | 626 | 75.4 | 9 | 9 | 1.1 |
| Turkey | 33 | 0.4 | 1480 | 18.8 | 41 | 0.5 | 456 | 5.8 | 21 | 10 | 0.3 |
| Ukraine | 10 | 0.2 | 300 | 6.7 | 27 | 0.6 | 10 | 0.2 | 4 | – | 0.6 |
| United Kingdom | 200 | 3.1 | 10,290 | 159.0 | 200 | 3.1 | 478 | 7.4 | 28 | 2 | 0.1 |
| Total / | 2139 | 2.9 | 113,267 | 142.0 | 2282 | 3.6 | 27,505 | 37.1 | 629 | 327 | 0.9 |
| Mean [95% CI] | | [2.3–3.6] | | [107.4–176.7] | | [2.7–4.4] | | [26.7–47.5] | | | [0.6–1.2] |

FYROM: former Yugoslav Republic of Macedonia.

IVT skaičius, tenkantis 1 mln gyventojų per metus

Pacientų su išeminiu GSI ir gydytų IVT dalis, proc.

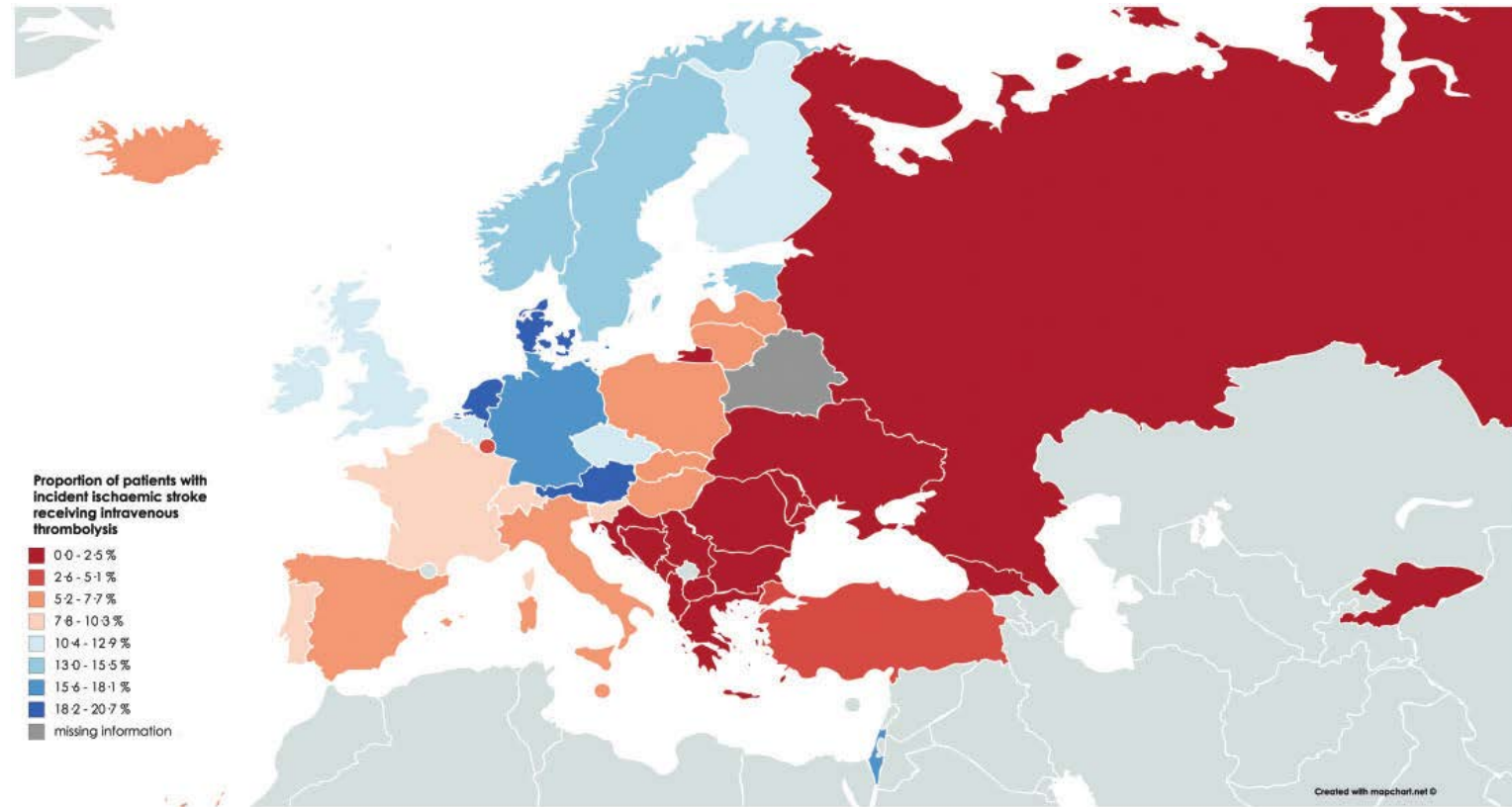


Figure 4. Choropleth map showing contemporary annual estimates of the proportion of patients with incident ischaemic stroke treated with intravenous thrombolysis (IVT) in 42 European countries (mean 7.3%; 95% CI 5.4–9.1).

MTE skaičius, tenkantis 1 mln gyventojų per metus

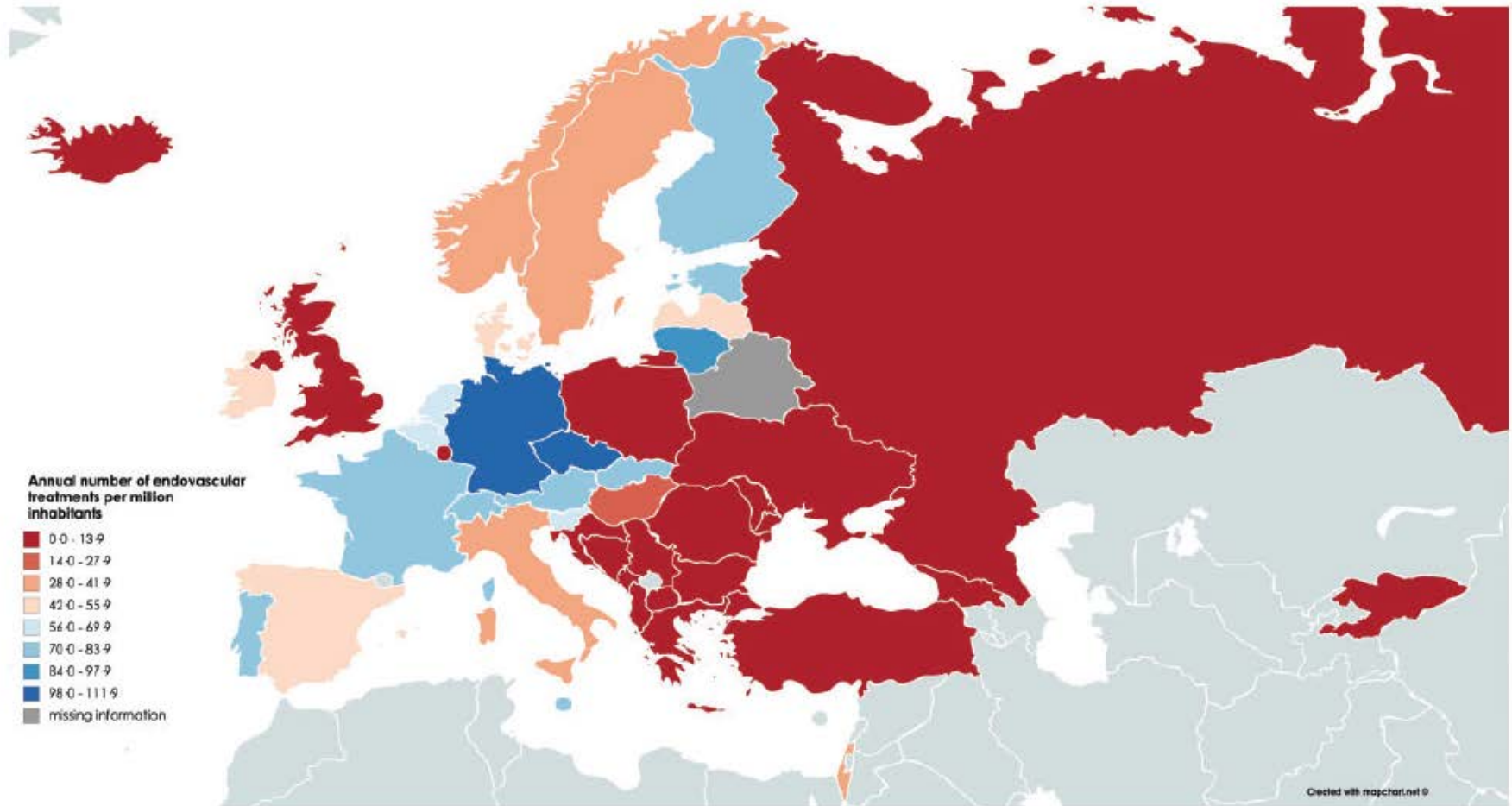


Figure 5. Choropleth map showing contemporary annual rates of endovascular treatments (EVT) for ischaemic stroke per million population in 43 European countries (mean 37.1, 95% CI 26.7–47.5).

Pacientų su išeminiu GSI ir gydytų MTE dalis, proc.

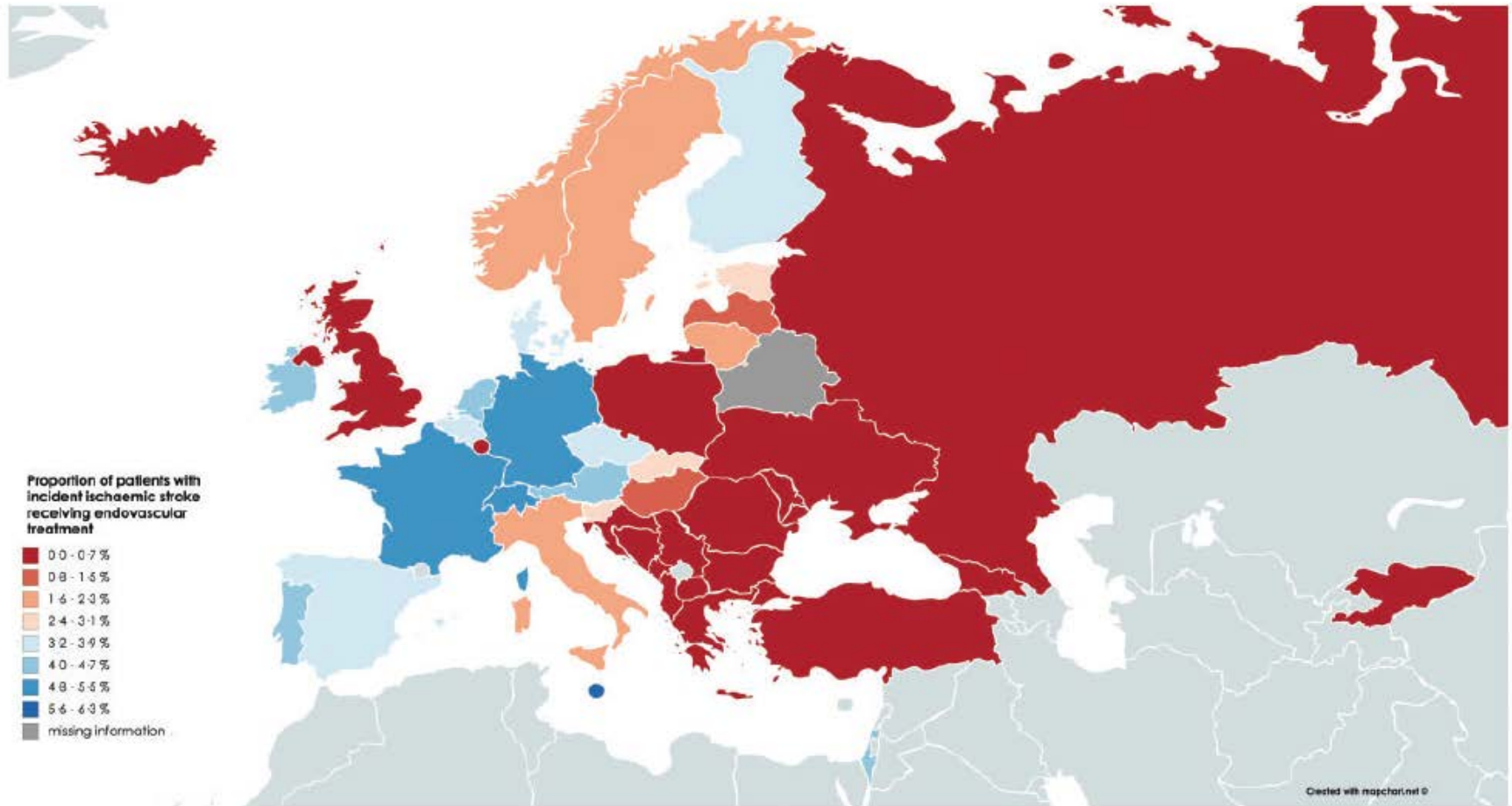


Figure 6. Choropleth map showing contemporary annual estimates of the proportion of patients with incident ischaemic stroke receiving endovascular treatment (EVT) in 42 European countries (mean 1.9%; 95% CI 1.3–2.5).

Ačiū už dėmesį

Insulto gydymo centrai



VLK informacija (2017 m.)

| | Insulto gydymo centrai (6) | Tarpinės pagalbos ligoninės (5) | Kitos ASPĮ | Visos ASPĮ |
|------------------|----------------------------|---------------------------------|------------|--------------------|
| TLK-10-AM I63, n | 4,634 | 1,348 | 4,913 | 10,895 |
| IVT taikyta | 846 (18,3%) [↑] | 75 (5,6%) | 3 (?) | 8,45% [↑] |
| MTE taikyta | 338 (7,3%) | 0 | 0 | 3,1% |
| Mirštamumas | 11,0% | 13,8% | 14,1% | 12,7% |

VLK informacija

2018 m. I-III ketvirčiai

(2017 m. I-III)

| | Insulto gydymo centrai (6) | Tarpinės pagalbos ligoninės (5) | Kitos ASPĮ | Visos ASPĮ |
|------------------|----------------------------|---------------------------------|---------------------|------------------|
| TLK-10-AM I63, n | 3,324 (3,452) | 888 (1001) | 3435 (3734) | 7649 (8187) |
| IVT taikyta | 675 (20,3%) 556 (16,1%) | 77 (8,7%) 50 (5,0%) | 6 (0,2) 3 (0,08) | 9,92% (7,44%) |
| MTE taikyta | 287 (8,6%) 246 (7,1%) | 0 | 1 0 | 3,8% (3,0%) |
| Mirštamumas | 10,2% (11,0%) | 13,5% (13,5%) | 14,01% (14,4%) | 12,3% (12,8%) |