

analyze_2

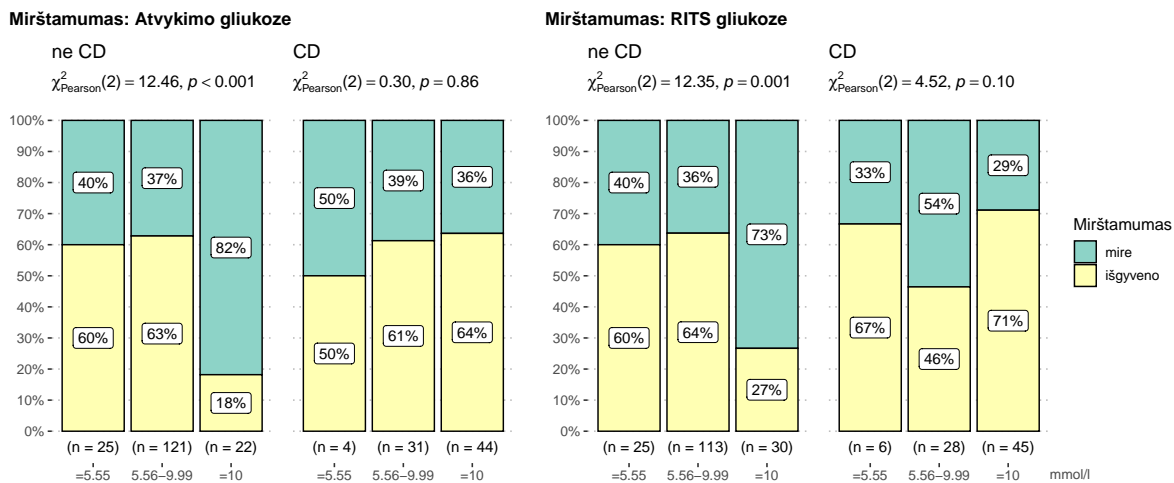
Table of contents

1	Duomenų analize	1
1.1	Glikemijos verčių ir mirštamumo vertinimas	2
1.2	Glikemijos verčių ir hospitalizacijos trukmės vertinimas	2
1.3	Glikemija ir prognozės skalės	3
1.4	Hiperglikemija ir kvėpavimo funkcija	5
1.5	Hiperglikemija ir kvėpavimo funkcijos nepakankamumo gydymo būdai	5
1.6	Hiperglikemija ir kraujotakos palaikymo būdai	8
1.7	Hiperglikemija ir pakaitinė inkstų terapija	10
1.8	Logistinis modelis	11
1.8.1	SAPS	11
1.9	SAPS + glu_fac	12
1.10	SOFA	13
1.10.1	SOFA + glu_fac	13
1.10.2	ISARIC4C	14
1.11	ISARIC4C + gliukoze 2 faktoriais	15
1.12	APACHEII	16
1.13	APACHEII + gliukoze 2 faktoriais	16
1.14	Modelis tik su Atvykimo gliukoze	17

1 Duomenų analize

Warning: NAs introduced by coercion

1.1 Glikemijos verčių ir mirštamumo vertinimas

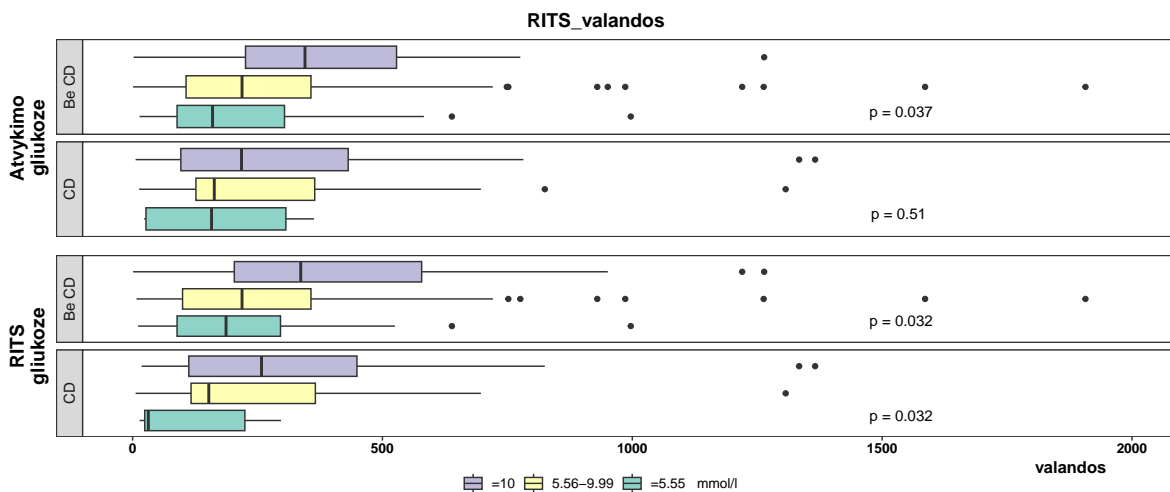


1.2 Glikemijos verčių ir hospitalizacijos trukmės vertinimas

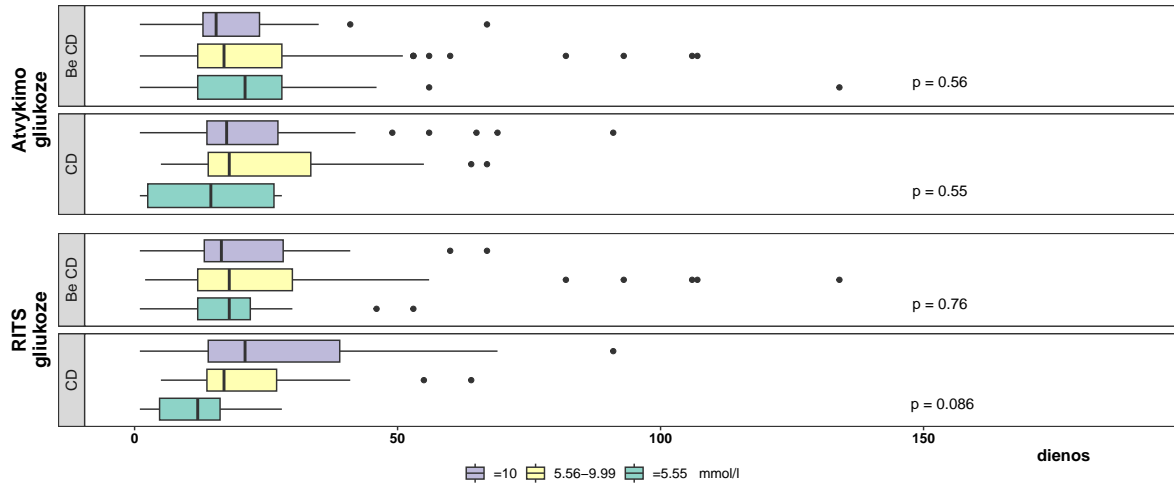
Grupinis

Bendras

RITS_valandos

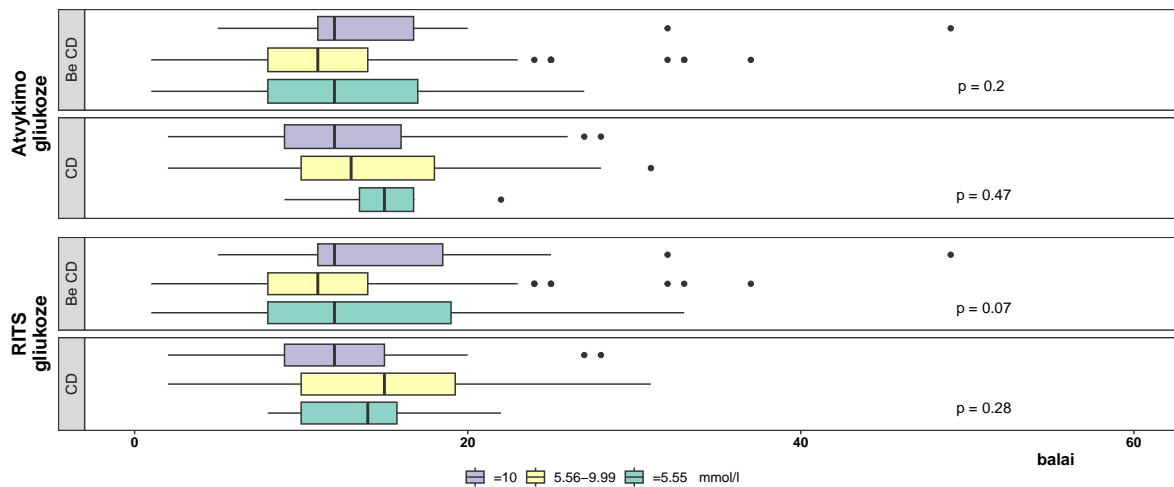


Lovadieniai

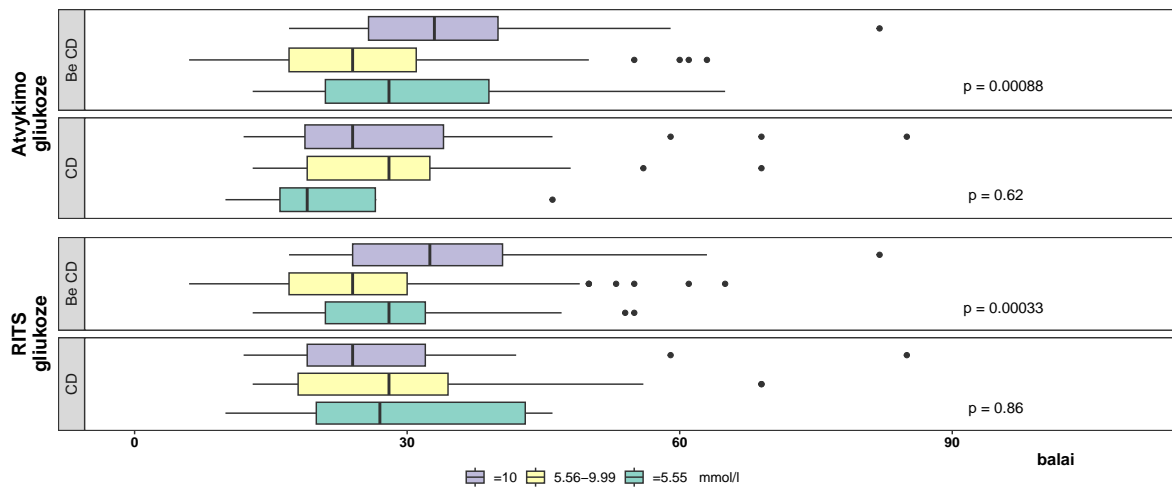


1.3 Glikemija ir prognozes skales

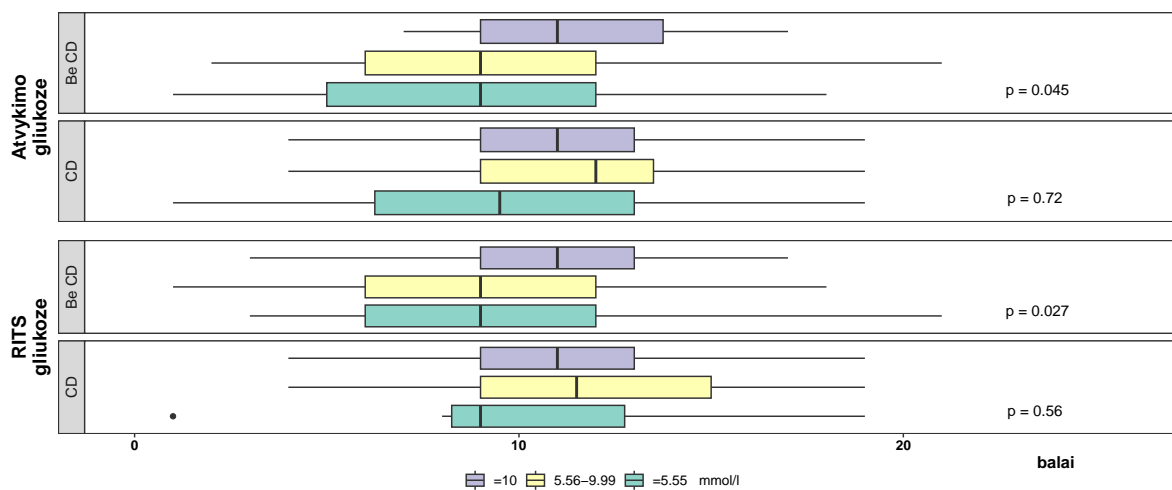
APACHEII



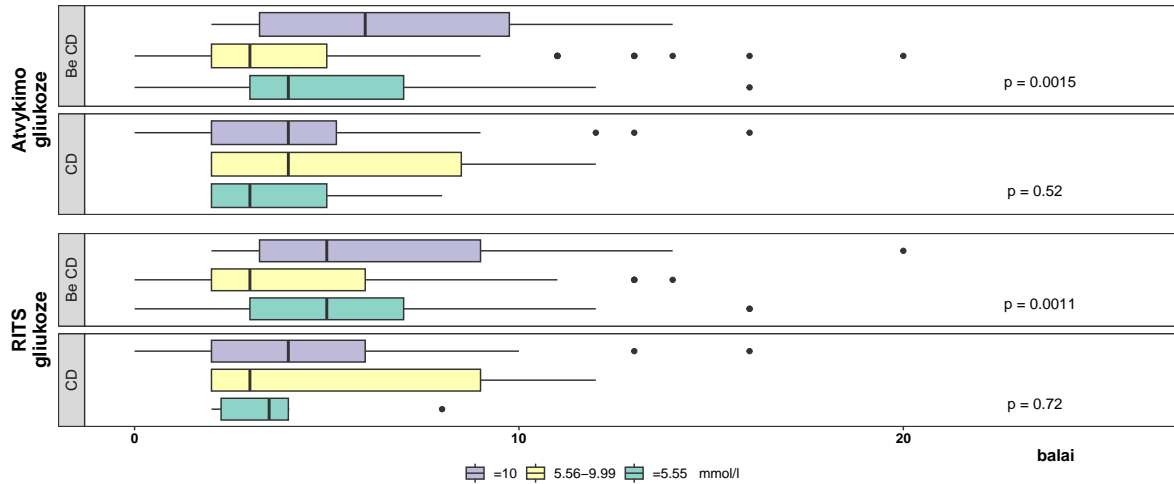
SAPS



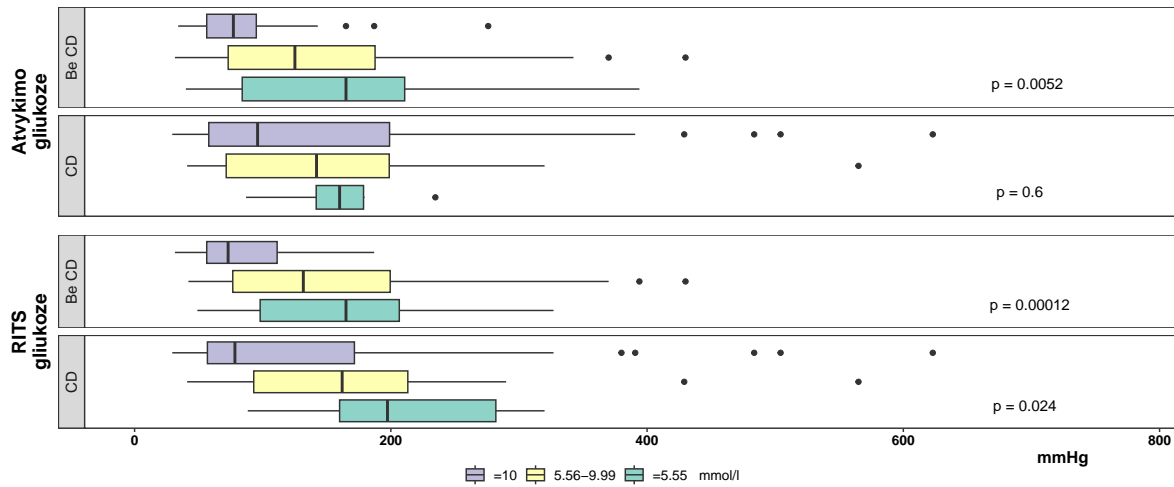
ISARIC 4C



SOFA



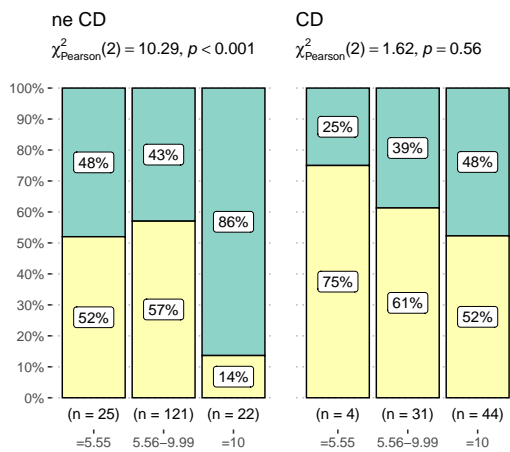
1.4 Hiperglikemija ir kvėpavimo funkcija



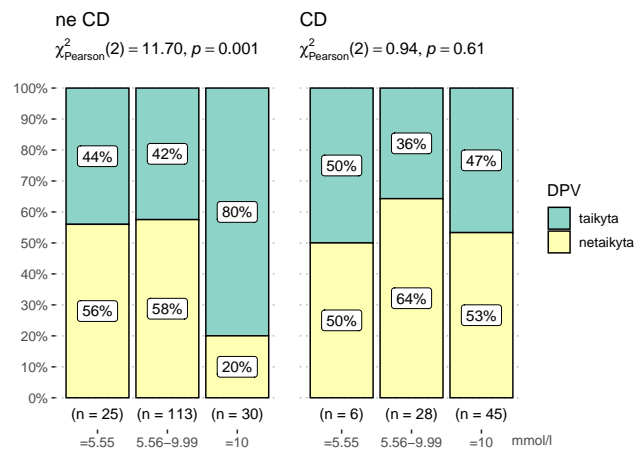
1.5 Hiperglikemija ir kvėpavimo funkcijos nepakankamumo gydymo būdai

DPV poreikis

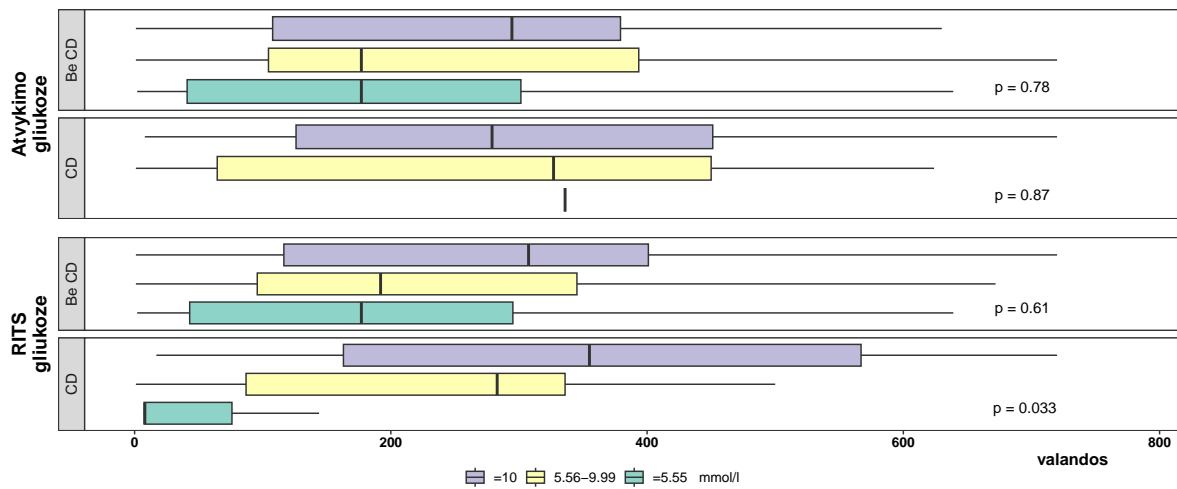
DPV poreikis: Atvykimo gliukoze



DPV poreikis: RITS gliukoze

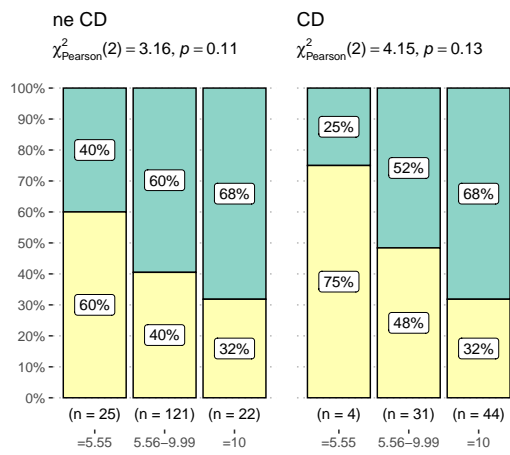


DPV valandos

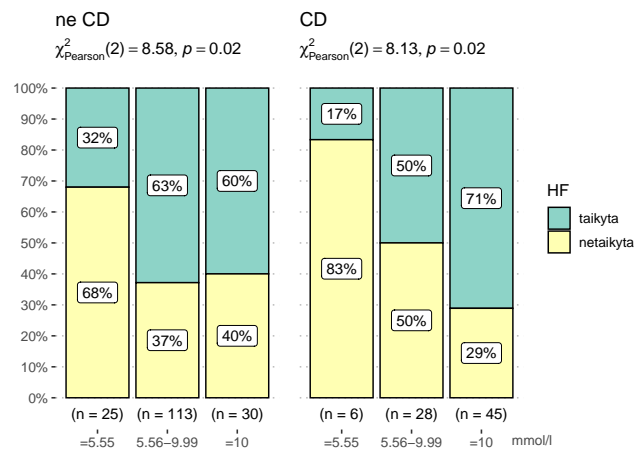


HF poreikis

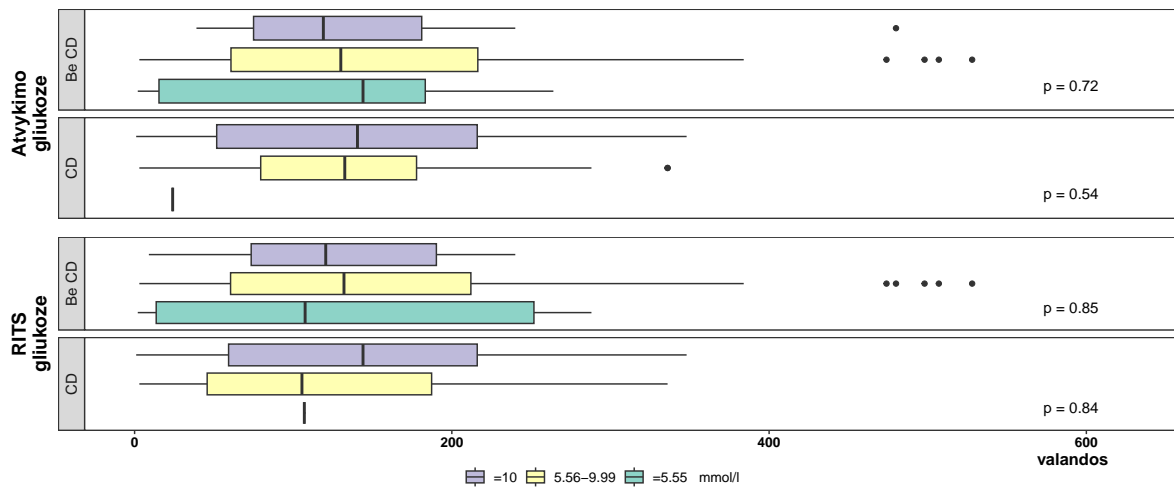
HF poreikis: Atvykimo gliukoze



HF poreikis: RITS gliukoze

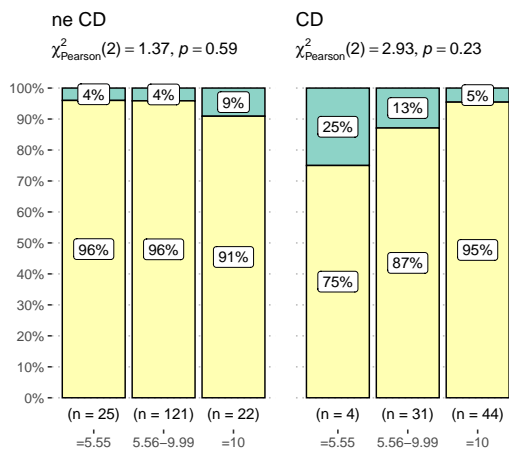


HF valandos

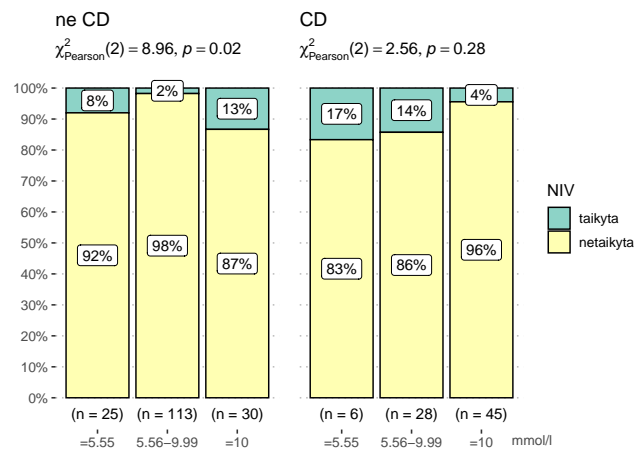


NIV poreikis

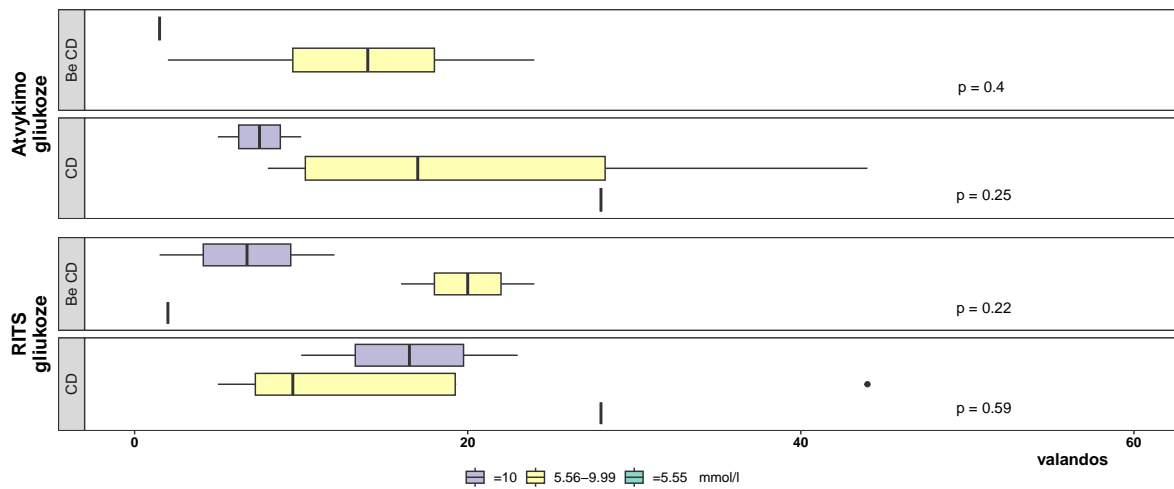
NIV poreikis: Atvykimo gliukoze



NIV poreikis: RITS gliukoze



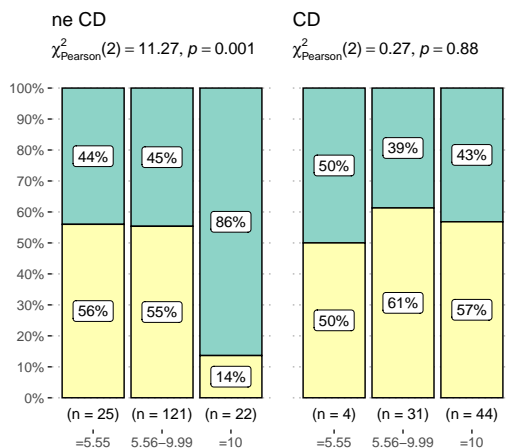
NIV valandos



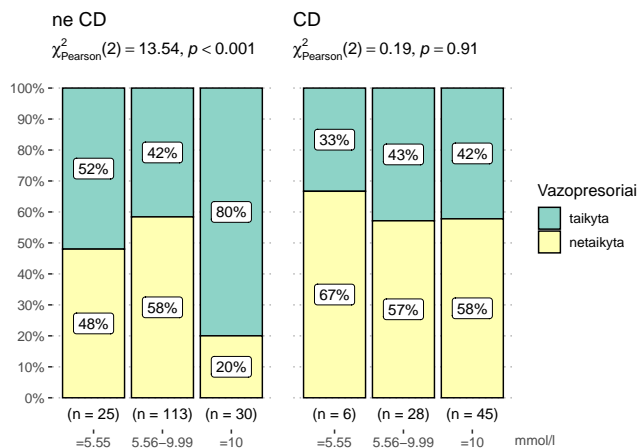
1.6 Hiperglikemija ir kraujotakos palaikymo būdai

Vazopresoriu poreikis

Vazopresoriu poreikis: Atvykimo gliukoze

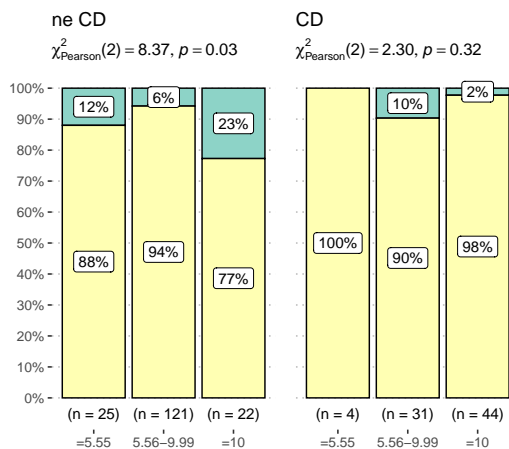


Vazopresoriu poreikis: RITS gliukoze

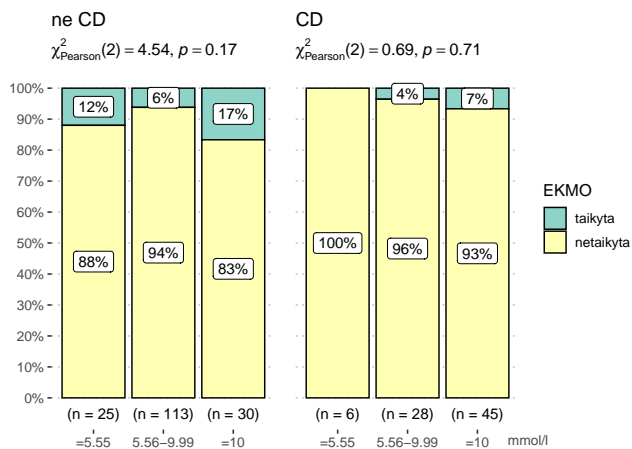


ECMO

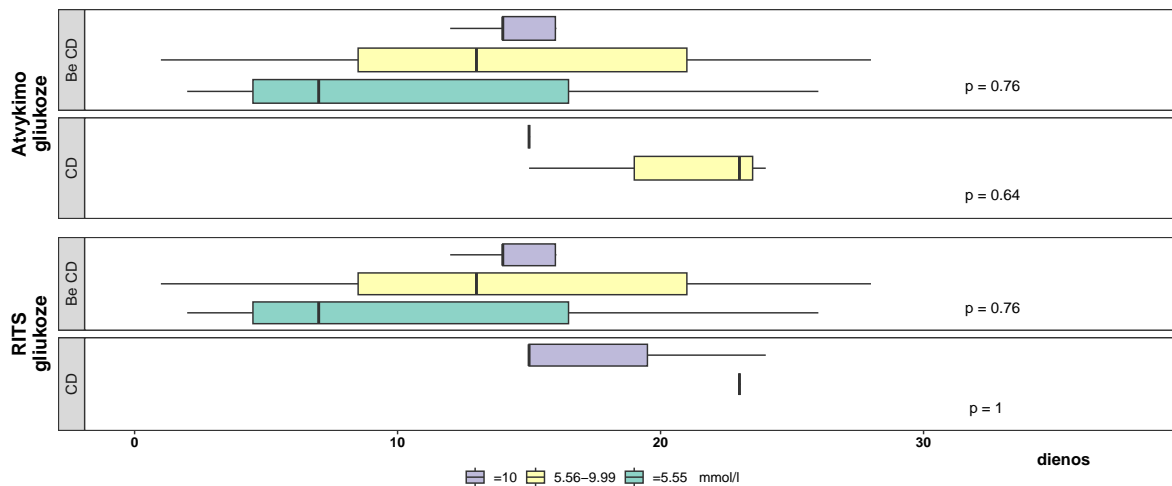
EKMO poreikis: Atvykimo gliukoze



EKMO poreikis: RITS gliukoze

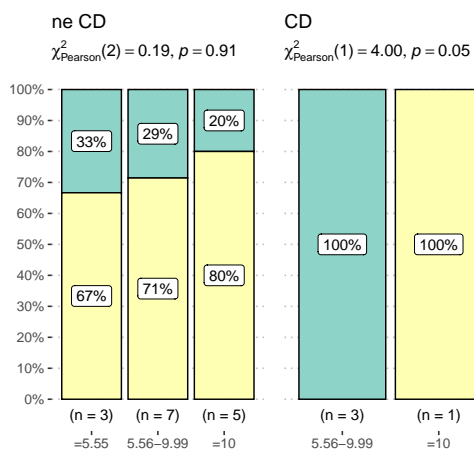


ECMO dienos

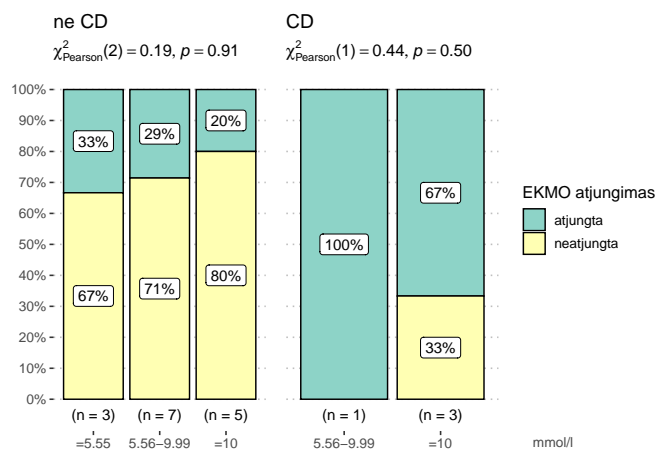


ECMO atjungta

EKMO atjungimas: Atvykimo gliukoze



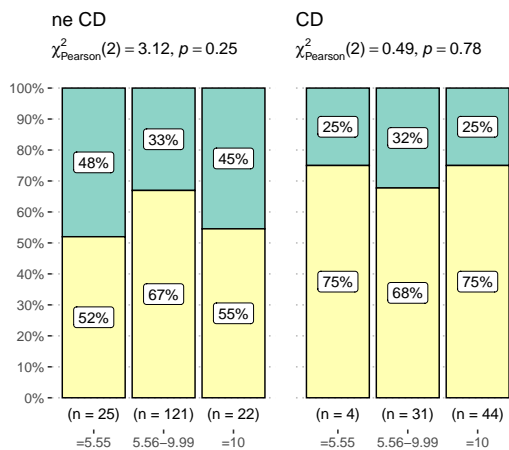
EKMO atjungimas: RITS gliukoze



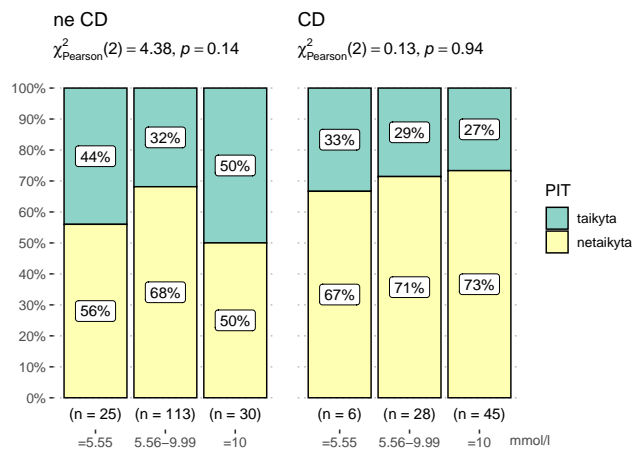
1.7 Hiperglikemija ir pakaitinė inkstų terapija

PIT

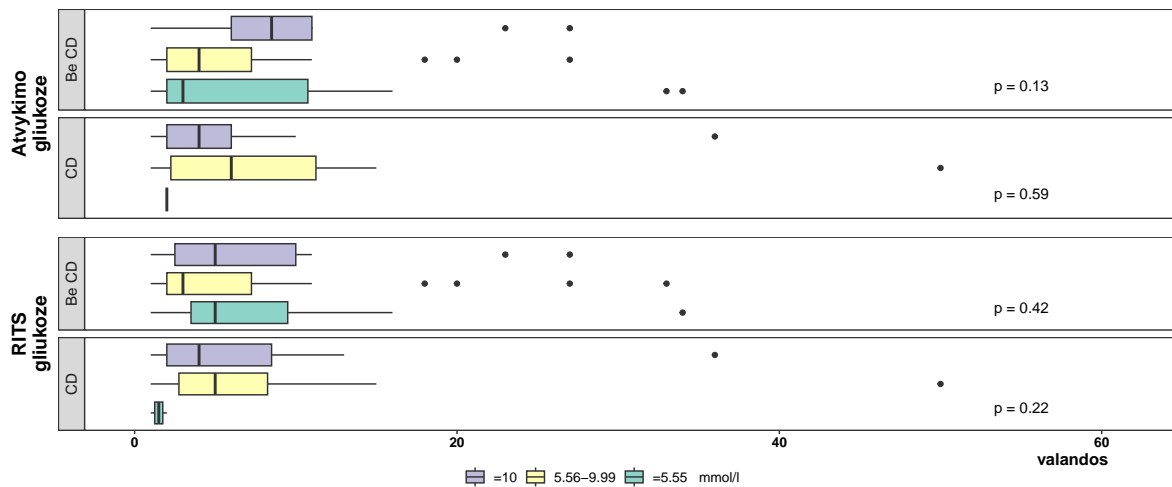
PIT: Atvykimo gliukoze



PIT: RITS gliukoze



PIT val



1.8 Logistinis modelis

1.8.1 SAPS

Confusion Matrix and Statistics

	Reference	
Prediction	X0	X1
X0	84	44
X1	7	29

Accuracy : 0.689
95% CI : (0.6122, 0.7589)
No Information Rate : 0.5549
P-Value [Acc > NIR] : 0.0003035

Kappa : 0.3372

McNemar's Test P-Value : 4.631e-07

Precision : 0.8056
Recall : 0.3973
F1 : 0.5321
Prevalence : 0.4451
Detection Rate : 0.1768
Detection Prevalence : 0.2195
Balanced Accuracy : 0.6602

'Positive' Class : X1

1.9 SAPS + glu_fac

Confusion Matrix and Statistics

Reference
Prediction X0 X1
X0 83 38
X1 8 35

Accuracy : 0.7195
95% CI : (0.6441, 0.7868)
No Information Rate : 0.5549
P-Value [Acc > NIR] : 1.063e-05

Kappa : 0.4081

McNemar's Test P-Value : 1.904e-05

Precision : 0.8140
Recall : 0.4795
F1 : 0.6034
Prevalence : 0.4451

Detection Rate : 0.2134
Detection Prevalence : 0.2622
Balanced Accuracy : 0.6958

'Positive' Class : X1

1.10 SOFA

Confusion Matrix and Statistics

	Reference	
Prediction	X0	X1
X0	85	53
X1	6	20

Accuracy : 0.6402
95% CI : (0.5617, 0.7136)
No Information Rate : 0.5549
P-Value [Acc > NIR] : 0.01637

Kappa : 0.2222

McNemar's Test P-Value : 2.115e-09

Precision : 0.7692
Recall : 0.2740
F1 : 0.4040
Prevalence : 0.4451
Detection Rate : 0.1220
Detection Prevalence : 0.1585
Balanced Accuracy : 0.6040

'Positive' Class : X1

1.10.1 SOFA + glu_fac

Confusion Matrix and Statistics

Reference

Prediction X0 X1
X0 84 47
X1 7 26

Accuracy : 0.6707
95% CI : (0.5932, 0.742)
No Information Rate : 0.5549
P-Value [Acc > NIR] : 0.001638

Kappa : 0.2952

McNemar's Test P-Value : 1.113e-07

Precision : 0.7879
Recall : 0.3562
F1 : 0.4906
Prevalence : 0.4451
Detection Rate : 0.1585
Detection Prevalence : 0.2012
Balanced Accuracy : 0.6396

'Positive' Class : X1

1.10.2 ISARIC4C

Confusion Matrix and Statistics

Reference
Prediction X0 X1
X0 78 33
X1 13 40

Accuracy : 0.7195
95% CI : (0.6441, 0.7868)
No Information Rate : 0.5549
P-Value [Acc > NIR] : 1.063e-05

Kappa : 0.4164

McNemar's Test P-Value : 0.005088

Precision : 0.7547
Recall : 0.5479
F1 : 0.6349
Prevalence : 0.4451
Detection Rate : 0.2439
Detection Prevalence : 0.3232
Balanced Accuracy : 0.7025

'Positive' Class : X1

1.11 ISARIC4C + gliukoze 2 faktoriais

Confusion Matrix and Statistics

Reference
Prediction X0 X1
X0 80 31
X1 11 42

Accuracy : 0.7439
95% CI : (0.67, 0.8088)
No Information Rate : 0.5549
P-Value [Acc > NIR] : 4.333e-07

Kappa : 0.4671

McNemar's Test P-Value : 0.00337

Precision : 0.7925
Recall : 0.5753
F1 : 0.6667
Prevalence : 0.4451
Detection Rate : 0.2561
Detection Prevalence : 0.3232
Balanced Accuracy : 0.7272

'Positive' Class : X1

1.12 APACHEII

Confusion Matrix and Statistics

Reference

Prediction X0 X1

X0 83 37

X1 8 36

Accuracy : 0.7256

95% CI : (0.6506, 0.7923)

No Information Rate : 0.5549

P-Value [Acc > NIR] : 4.994e-06

Kappa : 0.4218

McNemar's Test P-Value : 2.993e-05

Precision : 0.8182

Recall : 0.4932

F1 : 0.6154

Prevalence : 0.4451

Detection Rate : 0.2195

Detection Prevalence : 0.2683

Balanced Accuracy : 0.7026

'Positive' Class : X1

1.13 APACHEII + gliukozè 2 faktoriais

Confusion Matrix and Statistics

Reference

Prediction X0 X1

X0 82 30

X1 9 43

Accuracy : 0.7622

95% CI : (0.6896, 0.8251)

No Information Rate : 0.5549

P-Value [Acc > NIR] : 2.846e-08


```

          Kappa : 0.5045

Mcnemar's Test P-Value : 0.001362

      Precision : 0.8269
      Recall    : 0.5890
      F1        : 0.6880
      Prevalence : 0.4451
      Detection Rate : 0.2622
      Detection Prevalence : 0.3171
      Balanced Accuracy : 0.7451

      'Positive' Class : X1


Call:
NULL

Coefficients:
              Estimate Std. Error z value Pr(>|z|)
(Intercept)  -3.3805     0.5718  -5.912 3.38e-09 ***
APACHEII      0.2266     0.0420   5.395 6.85e-08 ***
`glu_fac 10`  2.2945     0.6858   3.346 0.000821 ***
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

(Dispersion parameter for binomial family taken to be 1)

    Null deviance: 225.37  on 163  degrees of freedom
Residual deviance: 159.74  on 161  degrees of freedom
AIC: 165.74

Number of Fisher Scoring iterations: 5

```

1.14 Modelis tik su Atvykimo gliukoze

```

Call:
glm(formula = Exitus_RITS ~ Atvykimo_glu, family = "binomial",
    data = analyze_nocd)

```

Coefficients:

	Estimate	Std. Error	z value	Pr(> z)	
(Intercept)	-1.96323	0.58663	-3.347	0.000818	***
Atvykimo_glu	0.22693	0.07593	2.988	0.002804	**

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

(Dispersion parameter for binomial family taken to be 1)

Null deviance: 230.01 on 167 degrees of freedom
Residual deviance: 219.86 on 166 degrees of freedom
AIC: 223.86

Number of Fisher Scoring iterations: 4

