

Statistical analysis

Toshiaki Ara

1 shokyo/kankyo -> PGE₂

1.1 simultaneous treatment

Simultaneous Tests for General Linear Hypotheses

Multiple Comparisons of Means: Dunnett Contrasts

Fit: `lm(formula = adjusted ~ drug1, data = dat_sim)`

Linear Hypotheses:

	Estimate	Std. Error	t value	Pr(> t)
3 - 2 == 0	-0.089918	0.004599	-19.55	2.12e-06 ***
4 - 2 == 0	-0.098440	0.004599	-21.40	1.24e-06 ***

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
(Adjusted p values reported -- single-step method)

1.2 sequential treatment

Simultaneous Tests for General Linear Hypotheses

Multiple Comparisons of Means: Dunnett Contrasts

```
Fit: lm(formula = adjusted ~ drug1, data = dat_seq)
```

Linear Hypotheses:

	Estimate	Std. Error	t value	Pr(> t)
3 - 2 == 0	-0.089918	0.004599	-19.55	2.12e-06 ***
4 - 2 == 0	-0.098440	0.004599	-21.40	1.24e-06 ***

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

(Adjusted p values reported -- single-step method)

2 shokyo/kankyo -> PGE₂ (conc-dependent)

2.1 shokyo

Simultaneous Tests for General Linear Hypotheses

Multiple Comparisons of Means: Dunnett Contrasts

```
Fit: lm(formula = adjusted ~ drug1, data = dat)
```

Linear Hypotheses:

	Estimate	Std. Error	t value	Pr(> t)
1 - 0 == 0	0.007369	0.011620	0.634	0.8615
10 - 0 == 0	-0.038685	0.011620	-3.329	0.0258 *
100 - 0 == 0	-0.111654	0.011620	-9.609	<0.001 ***

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

(Adjusted p values reported -- single-step method)

2.2 kankyo

Simultaneous Tests for General Linear Hypotheses

Multiple Comparisons of Means: Dunnett Contrasts

Fit: `lm(formula = adjusted ~ drug1, data = dat)`

Linear Hypotheses:

	Estimate	Std. Error	t value	Pr(> t)
1 - 0 == 0	0.003798	0.011976	0.317	0.977
10 - 0 == 0	-0.030709	0.011976	-2.564	0.080 .
100 - 0 == 0	-0.129395	0.011976	-10.805	<0.001 ***

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

(Adjusted p values reported -- single-step method)